

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

Puerto Rico

**FY 2024 Application/
FY 2022 Annual Report**

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I. General Requirements

I.A. Letter of Transmittal



GOBIERNO DE PUERTO RICO

DEPARTAMENTO DE SALUD

July 14, 2023

Shirley Payne, PhD, MPH
Director
Division of State and Community Health (DSCH)
Maternal and Child Health Bureau (MCHB)
Health Resources and Services Administration (HRSA)
U.S. Department of Health and Human Services (DHHS)
5600 Fishers Lane
Rockville, MD, 20857

Dear Dr. Payne:

The Puerto Rico Department of Health is submitting the Title V – Maternal and Child Services Block Grant Application for FY 2024 including the Annual Report for FY 2022. The information included is according to the Guidance–OMB No: 0915-0172 for this year Application and Annual Report. The Puerto Rico Department of Health is requesting a total of \$16,136,271.00 in federal funds to be matched with \$12,102,203.00 in state funds. No waiver is requested.

Thank you in advance for your consideration and approval of the requested funds. We look forward to continue working in partnership with the MCHB to improve the health and well being of the Puerto Rico MCH population.


If further information is required please do not hesitate to contact the MCH Director, Manuel I. Vargas Bernal, MD, MPH. He can be reached at (787) 765-2929 Ext. 4583 or by e-mail mivargas@salud.pr.gov.

Sincerely,


Carlos R. Mellado López, MD
Secretary
Puerto Rico Department of Health

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I.B. Face Sheet

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

I.C. Assurances and Certifications

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

I.D. Table of Contents

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

II. Logic Model

Please refer to figure 4 in the "Title V Maternal and Child Health Services Block Grant To States Program Guidance and Forms," OMB No: 0915-0172; Expires: January 31, 2024.

III. Components of the Application/Annual Report

III.A. Executive Summary

III.A.1. Program Overview

The Puerto Rico Department of Health (PRDOH) administers Title V Block Grant through the Maternal, Child and Adolescent Health Division (MCAHD) that houses the Maternal, Child and Adolescent Health Program or **MCAHP**, and the Children with Special Medical Needs Division (CSMND) that houses the Children with Special Health Care Needs Program or **CSCHNP**. PR Title V plays a lead role in MCH related health policies, statewide partnerships, health promotion, and coordinated family-centered services.

PR Title V uses quantitative and qualitative data gathering methods and relies on a wide array of stakeholders, including families and youths, to assess population needs, strengths, and resources to determine priorities and develop strategies for the 5 YR Action Plan. Based on the 5 Year Health Needs Assessment (2020-2025) the PR Title V selected nine priorities that remain unchanged.

PR TITLE V PRIORITIES (2020-2025)

Priority	Health Domain
Promote Health and Wellbeing in Women of Reproductive Age	Women/Maternal
Improve Birth Outcomes	Women/Maternal
Decrease Infant Mortality	Perinatal/Infant
Improve Preventive Health in Children	Child
Improve Health and Wellbeing of Adolescents	Adolescent
Increase the number of CSHCN who receive regular ongoing comprehensive health care within a medical home	CSHCN
Increase the number of YSHCN who receive adequate support and services for their transition into adult health care	CSHCN
Decrease the age when children with Autism Spectrum Disorders (ASD) receive their first diagnostic evaluation	CSHCN
Decrease the prevalence of Neural Tube Defects (NTD) at Birth	CSHCN

The PR Title V addresses priorities by providing services and implementing initiatives and projects including community health education in the seven Health Regions of the PRDOH. During this reporting year (2021-2022) the PR Title V staff returned to on-site office work and face-to-face provision of services. A summary of the key efforts and progress in each domain for **FY 2021-2022** is presented below.

Women/Maternal Health:

This domain addresses pre-conceptive, pregnancy and maternal health through individual and group interventions. At the individual level, the Home Visiting Program (HVP) – staffed by the Home Visiting Nurses (HVN) - offers case management and care coordination services, education, and support to women with medical and social risk factors associated with poor pregnancy outcomes. Participants are admitted during pregnancy and followed until the child is 2 years old. During 2021-2022, the HVNs provided services to 3,044 pregnant and parenting women distributed in 70 of the 78 municipalities in PR. It is worth noting that the number of pregnant participants who reported they had a dental care provider increased significantly, from 67.4% in 2020-2021 to 86.9% in the reporting year (2021-2022). This can be attributed to the intervention of the HVNs in providing education on oral health during pregnancy and coordinating dental health services for the participants. The HVNs also provided education, support, and limited care coordination to 3,085 pregnant women and mothers who do not qualify for the HVP or who are not able to participate

fully in the program.

At the community level, the Community Health Workers (CHW) and the Health Educators (HEs) reach women of reproductive age, pregnant and parenting women and their companions, and the general public mainly through group interventions in schools, health service provider sites, and communities. A major educational strategy is the Prenatal Course targeted at pregnant women and companions to promote healthy pregnancy and prevent risk factors. The course includes information and educational activities on the following topics: healthy lifestyles, prenatal care, risk behaviors, stages and changes in pregnancy, delivery planning, delivery process, signs and prevention of premature birth, caesarean birth, postpartum care, baby care, breastfeeding, birth spacing and family planning. During 2021-2022, the in-person course was offered in two modalities: four 1-hour sessions and a single 3-hour session. Another modality is the Virtual Prenatal Course (VPC) in video format that addresses the issues covered in the in-person prenatal course in an abbreviated manner. The VPC was successful in increasing participants' knowledge on the topics covered, described in the III. A.3. MCH Success Story narrative.

The women's health pocket guide ("My Health Planner"), a health promotion tool to encourage an annual preventive visit among women aged 10-49, was disseminated through health insurance companies, health care providers, MCAHP staff and collaborators. A QR code printed on the guide leads users to the "Mi agenda de salud" webpage (www.salud.pr.gov/CMS/433) for supplemental information. It also has a link to download and print a copy of the guide.

In May 2022, the first Perinatal Mental Health Awareness Day was observed in Puerto Rico. The Title V Mental Health Consultant was instrumental in writing and presenting the measure, which was passed by both the House and Senate as Act 6 of 2022. Its aim is to educate and increase awareness about the issues surrounding emotional and mental health during pregnancy, delivery, and the postpartum period. In this regard, the MCAHP and collaborators are responding to the need – stated by women and professionals alike- to address maternal mental health.

Perinatal/Infant Health:

A major intervention under this domain is the Perinatal Services, staffed by the perinatal nurses (PNs) that offer education and support on maternal and infant health to pregnant and postpartum women and their companions in birthing hospitals. The topics covered by the PNs include healthy pregnancy, newborn care, labor and childbirth, postpartum care, safe sleep, breastfeeding, pediatric preventive care, care of premature babies, safety, and family planning. They also promote the HVP and the prenatal and parenting courses and make referrals as needed. During this reporting year, the PNs reached 3,267 pregnant and postpartum women and 1,062 male and female companions.

The HVP, besides providing services to pregnant women and mothers (described in the WRA/maternal domain) delivered services to 1,090 infants (<12 months). Services include developmental screenings, Early Childhood Caries Risk Screening at 6 and 12 months, education to mothers about infant care, breastfeeding, and importance of pediatric visits. Services also include referrals to appropriate services and their completion.

The MCAHP continued promoting safe sleep practices through community education, professional trainings, and the prenatal and parenting courses. An important educational tool to promote safe sleep is the 3-minute video clip that is disseminated through social media and is available in the Facebook and webpage of the PR Department of Health. At the individual level, the HVNs offer education on safe sleep and record the baby's sleeping environment at each visit and provide guidance if the appropriate conditions are not met.

During 2021-2022, the multimedia campaign "Encuentro de mi vida" (Encounter of My Life) continued to spread the message to pregnant women and the community that pregnancy lasts 40 weeks, importance of prenatal adequate care and avoidance of risk behaviors as a strategy to decrease infant prematurity, morbidity, and mortality. The information can be accessed through (www.salud.pr.gov/encuentro_mi_vida). The information is organized into five sections: Prenatal care, Labor and delivery, Postpartum, Breastfeeding, and Infant care. Each section features fact sheets that can be viewed online, downloaded, or printed.

Child Health:

Improving child health encompasses the promotion of preventive visits, immunizations, oral health, emotional health, nutrition, physical activity, safety, and child development.

The two in-person Responsible Parenting Courses (a four-sessions 0-5 y/o and one-session 6/11 y/o) are important sources of information for parents on child health topics mentioned above according to their age and developmental stage. Pre- and post-test results showed increased knowledge among participants. For example, in each session of the 0 to 5 y/o parenting course there was an improvement in knowledge (1- pre 82 vs 93 post; 2- pre 79 vs 94 post; 3- 81 pre 90 post; 4- 71 pre vs 90 post). In the 6-11 y/o course completed by 340 participants the average post test score was 94% compared to 82% pre-test.

Besides the parenting courses, the MCAHP staff delivered public orientations and presentations on preventing unintentional injuries, oral health, preventive visits, immunizations, obesity and physical activity to individuals, professionals, and community groups including Head/Early Head Start parents and staff. During this reporting period, one PRDOH region (Bayamón) held the Oral Health Summit attended by 200 participants including nurses of the Department of Education and HS/EHS, representatives of WIC, Oral Health, CSHCN and MCAH Programs of the Bayamón Region.

The MCAHP also promoted child health through the “Encounter of My Life” webpage and the HVP. It must be noted that 86.6% of HVP child participants (24-month-old) had the complete vaccination series upon discharge from the program compared to 48% of children of the same age group in PR. This shows the effectiveness of the HVP’s education and care coordination efforts with participant families.

A key strategy to address child development, is the screening performed by the Title V HVP – through the Ages and Stages Questionnaires (ASQ-3) and the Stages Social Emotional Questionnaire (SE-2) to identify developmental delays in the pediatric participants as early as possible. In FY 2021-2022, the HVP screened 1,211 toddlers (12 to 24 months). Most screenings with a high-risk result (31) were in the social emotional test, not commonly used in primary pediatric medical care. This highlights the importance of the screenings done in the HVP, which identifies children requiring further assessment and specialized intervention to ensure they reach their full potential socially and emotionally. The screenings done in the HVP are not billed and do not appear in the GHP data.

Adolescent Health:

The Comprehensive Adolescent Health Program (CAHP) addresses adolescent health through the Positive Youth Development (PYD) framework that empowers youth to give voice and engage in health-related actions.

Adolescent preventive medical visits are a major focus in this domain. Strategies involve the promotion of the adoption of healthy behaviors and increasing awareness among youth and families of the importance of an annual healthcare visit. This is done through the school-based Youth Health Promoters Project (YHPP) composed of voluntary students from 6th to 8th grades that promote healthy lifestyles among their peers. The Youth Health Promoters (YHPs) participate in the program for three consecutive years and receive support, education, and training on youth health. During the reporting year, 649 students participated as YHPs in 50 public schools.

Preventive medical visits are also promoted through community educational activities and the “*Nivel Máximo*” (*Maximum Level*) *Multimedia Campaign*. On February 15, 2022, the new “**Vive al Máximo [saludable]**” social media campaign was launched which included 9 short videos (30 secs.) with accompanying messages and, two longer videos (45 secs) each one with a QRCode link to minivelmaximo.salud.gov.pr DOH webpage. The themes and messages were conceptualized and addressed to three different audiences: early adolescents, adolescents/youth adults and caregivers.

During 2021-2022, the CAHP emphasized the promotion of the prevention of bullying and increase youth mental health and wellbeing. Bullying and cyberbullying questions were incorporated into the Profile of the participants of the YHPP to better assess their experiences related to bullying. The adolescent multimedia campaign included bullying

prevention and mental health promotion.

The Youth Advisory Council (YAC)- composed of youths - is an important asset to the PR Title V. During 2021-2022, the YAC was granted a space in the DOH webpage to educate other youths as well as adults on adolescent health issues. During this period, the YAC created publications about youth health, preventive visits, and their role as advisors to the PRDOH. The YAC also provided feedback on a youth suicide prevention video created by the PRDOH Suicide Prevention Commission. Likewise, the YAC collaborated in the development of a Youth Wellbeing Congress of Sexual Risk Avoidance Grant. Furthermore, the YAC members received trainings on bullying, mental health, and WRA "My Health Planner" to enhance their knowledge to promote youth health. An interactive virtual activity was held with YAC new members on the priorities, objectives, strategies, and activities of each domain to enable them to understand how Title V is organized in PR and the importance of their engagement.

CSCHN Health:

The CSHCN Program is addressing the health and wellbeing of CYSHCN through an integrated system of care characterized by quality care coordination, family engagement and support, and successful health care transitions (HCT). During year 2021-2022 and under the standards of the NCQA Patient Centered Connected Care (PCCC) model, the program revised and updated its protocols and procedures related to care coordination and communication with community PCPs. Workforce capacity development was carried out around these topics. Being active and visibly present in the seven health regions of the island, the CSHCN program can positively impact the CSHCN system of care and support the development of medical home communities. The program also began to share the findings of the HCT Survey addressed to physicians, encouraging conversations of potential collaborations to reach out to physicians providing them with HCT tools that will support them during the HCT processes.

ASD prevalence continues to increase in PR (4.7% or 1 in 21, based on the 2023 MCH-JS). The increase of referrals for ASD evaluations together with the lack of specialized ASD professionals and the previous pandemic lockdown is causing the rapid incrementation of children in waiting lists for ASD evaluation. This is a barrier to comply with SPM 1: the early diagnosis and intervention of children with ASD. During reporting year, measures were implemented to help reduce ASD evaluation waiting lists at the Autism Centers. However, this is not enough, and additional strategies must be identified during application year. On the other hand, the PR-BDSPS continues to reach out to families and communities about the importance of folic acid intake to prevent NTD births.

Closing Remark

Transitioning back to pre-pandemic operations involved both on-site and virtual health promotion to reach out to individuals and families that may not be able to attend in-person educational activities.

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

Medical and clinical care for the MCA population is mainly directed through the Government Health Plan (GHP) but does not cover service coordination, health promotion and disease prevention. Title V funds are used to support these activities carried out by the MCAHP staff: Home Visiting Nurses (HVNs), Perinatal Nurses (PNs), Health Educators (HEs), Community Health Workers (CHWs), and Comprehensive Adolescent Health Program Coordinators (CAPHPCs). At the community level, staff offers education, outreach, prenatal and parenting courses, referrals, and youth peer-to-peer training and support. The PNs provide education and support on maternal and infant health to women in birthing hospitals. At the individual level, the HVNs of the Home Visiting Program identify participant's needs, develop plans, educate, and make referrals as needed.

Title V funds are also used to strengthen the PR system of care for CYSHCN and their families by increasing access to enabling and direct services and providing family centered care through the CSHCN Program at the regional and community level. The program also plans and implements strategies to reach CYSHCN and their families in collaboration with community-level partners. At the central level the program oversees surveillance, data collection, evaluation, and assessment activities to have the necessary information for decision making and plays a critical role in emergency planning and preparedness to respond to emerging public health threats and disasters that could potentially impact CYSHCN and their families.

III.A.3. MCH Success Story

The following stories illustrate PR Title V successes during the pandemic recovery period.

Genetics and Family Engagement. During reporting year our Family Representative, Coral Jimenez, was selected as one of the two co-leaders of the New York-Mid-Atlantic Regional Genetics Network (NYMAC) Project in PR together with pediatrician Dr. Norma Arciniegas. This project aims to address unique needs of families in PR due to the lack of genetic services, including genetic counseling. Various genetic educational activities with the participation of geneticists, genetic counselors, Family Voices, and our Family Representative, were provided to families, health care providers and medicine students. The activities addressed the importance of genetic services as well as genetic conditions that are particular of PR, such as the Hermansky Pudlack Syndrome. Families had the opportunity to talk individually with NYMAC's genetic counselors.

Our family representative also participated in the adaptation of videos in Spanish which provide information about genetic services to diverse Hispanic families in the states and territories. These videos are a collaboration between NYMAC and the Heartland Regional Genetics Network. Link to access videos is below.

<https://youtube.com/playlist?list=PLB-nW5NfLt1BAIV1N7aFrHN175nixa7mg>

A Virtual Prenatal Course. To face COVID-19 pandemic constraints, the MCAHP created the Virtual Prenatal Course (**VPC**) in video format that covers all topics of the in-person prenatal course “A Baby on its Way” in an abbreviated form. Launched in April 2022, the **VPC** – that includes sign language - is an innovative way to reach pregnant women and others in a concise, clear, visually attractive, and culturally competent manner that can be accessed through computers, tablets, or cell phones at any time and at any place. Evaluation results (April-August 2022) from 867 participants - of whom 683 were adult and adolescent pregnant women – show gains. The salient ones are: 1) Increased levels of knowledge from 6.0 pre-test to 6.6 post-test score; 2) High satisfaction (over 80%) with content and delivery; 3) Self-confidence about pregnancy health, labor process and newborn care. Participants' comments shown below exemplify some of these gains:

“...I did not know that you can make a plan [labor] and consult the physician, that draw my attention and I will put it into practice.”

“I feel confident and safe with you all, I saw many things in the video that my gynecologist had not explained.”

“I am very grateful of this course because it is educational and clarifies many doubts to us first time mothers.”

“The course was great; I am 38 years of age, and this is my third pregnancy but still I feel doubts and fear of labor. Thank you very much for your help through this course.”

Following is the link for the virtual prenatal course:

<https://www.salud.pr.gov/CMS/587>

III.B. Overview of the State

The Puerto Rico Department of Health (PRDOH) administers the Title V Block Grant that consists of the Maternal, Child and Adolescent Health Program or **MCAHP** housed in the Maternal, Child and Adolescent Division (MCAHD) and the Children with Special Health Care Needs Program or **CSHCNP** located in the Children with Special Medical Needs Division (CSMND).

To place Title V efforts in context one must first understand the general conditions of Puerto Rican society that play a crucial role in the health and wellbeing of populations.

Puerto Rico (PR), a territory of the US, is divided into 78 jurisdictions known as municipalities, each headed by a mayor. Vieques and Culebra are offshore municipalities whose residents travel to the Great Island (PR) in ferry for secondary and tertiary health care and other services.

Every four years, a governor, 28 senators, and 51 House members are elected to serve in the PR government. A non-voting delegate to the US House of Representatives is also elected. Puerto Ricans are US citizens, serve in the US military, and contribute to Social Security and Medicare but are not eligible to receive the Earned Income Tax Credit that gives refunds to low-income workers. From 2021, PR residents qualify for the Child Tax Credit if they have one or more children.

The governmental structure has three major branches: the executive (called Central government), the legislative and the judicial. Each major state agency is divided into a Central office and Region offices distributed across PR.

Population

Puerto Rico is an area of about 3,500 square miles and a population of 3,263,584 persons (ACS 2021) that tend to cluster in urban areas.

Puerto Rico is mainly a Spanish speaking country where most of its residents are Puerto Ricans followed by other foreign Hispanic ethnic groups like Dominicans and Cubans. Regarding racial composition, there have been drastic changes in race identification when one compares the 2010 and 2020 Decennial Census. The number of people that identified themselves as only white decreased from 75.8% in 2010 to 17.1% in 2020 but increased to 28.1% in 2021. Meanwhile, the number of persons that selected more than one race increased significantly from 3% in 2010 to 50% in 2020 but decreased in 2021 to 35.8 %. According to race experts in PR, increased awareness of the African heritage and stronger identification as a Black Puerto Rican may have contributed to changes in people's racial identification.

In the 2010 Census, people in PR may have opted to report their race as white (despite skin tone) due to an unstated contempt for everything associated with being dark or black skinned. For example, in PR people make a distinction between “bad hair” (kinky hair linked to being black) and “good hair” (straight hair linked to white and Indio). Although new generations identify themselves as black, the euphemism “de color” (literally of color) is commonly used as the word black is seldom used as a direct term of reference. There is also a generalized denial of racial prejudice and discrimination on the island. While it is not possible to explain in depth the manifestation of racism in PR, suffice is to say that it takes a covert form exemplified by sly comments and racial jokes (often seen as harmless) in day-to-day interactions. On an institutional level, dark/black skinned people are underrepresented in the main media outlets and high-status positions in both the corporate world and government, according to the PR Civil Rights Commission.

It must be noted that race is a culturally grounded concept that varies from one society to another. Race taxonomies in PR are based on phenotype traits such as texture of hair, skin tone, and lip and mouth shape and intermediate categories exist between white and black not represented in the US Census. Some examples are: “indio” (literally Indian, light brown and brown skinned with straight hair), “jabao” (fair skinned with kinky hair), and “trigueño” (light to dark-brown skinned). Besides Census and federal race categories, experts on the race in PR propose the use of

local-specific racial categories for gathering data to better determine racial disparities. Indeed, research (Institute for Interdisciplinary Research at the University of Puerto Rico) reveals the association of skin color or tone with health disparities.

PR has been experiencing population loss in the last decades. The population decreased by 462,205 (12.4%) from 3,725,789 000 in 2010 to 3,263,584 in 2021. Two main factors are linked with population decline. First, the natural population growth continues to decrease due to declining natality and fecundity rates. Second, the migration of people to the US mainland in search of better job opportunities and living conditions that intensified after Hurricane María in 2017.

The MCA population constituted 38.7% of the total 3.2 million population in 2021. The MCA population composition was as follows: 0.6% infants; 7.1% children 1-9 years of age; 11.5% adolescents aged 10-19 (5.8% males and 5.6% females) and; 19.5 % reproductive age women between the ages 20-49.

Education

The 2021 PRCS (1YR estimate) reports that people 25 years and over with less than 9th grade was 12.9% and those with a high school diploma was 28.0%. Of those 25 years and over with post-secondary education, 11.7% had an associate degree; 20.5% a bachelor's degree and; 7.9% a graduate or professional degree.

Student enrollment (kindergarten to 12th grade) in the public system diminished greatly from 544,076 in 2006 to 259,535 in 2021. Between 2006 and 2018 about 508 public schools closed across the island. According to the report *"Population Decline and School Closure in Puerto Rico"* (Center for PR Studies, May 2019), 65% of public schools in the rural areas closed compared to 35% in the urban areas, meaning that rural areas were the most impacted by the closures. Students were relocated to other schools in the same municipality with distances farther away from their communities.

This school year (2022-2023) school year, public schools faced difficulties as the PR Department of Education have over 2000 fewer teachers. This is due to the massive retirement of teachers as those retiring in incoming years will receive a lower amount in pensions as stipulated by the PR Debt Adjustment Plan (DAP).

Health Care System

In the 1990's public healthcare was transferred from the government to contracted private insurers to provide health care services on a capitated payment plan. The PR Health Insurance Administration (PRHIA or ASES, Spanish acronym) oversees and negotiates contracts with private insurers.

The Government Health Plan (GHP) integrates physical and mental health in one facility, expands preventive medicine and screening, and provides direct access to specialists without need for referral within a Preferred Provider Network. The GHP is financed by a combination of state, municipal and federal funds (Medicaid and SCHIP). Medicaid funding to PR is limited to a fixed amount regardless of the eligible population medical needs, unlike the states that are set based on per capita income. ACA funds (non-recurrent) were added to the GHP for Medicaid assigned funds and several benefits such as family planning and contraception methods services were added to GHP's coverage. Medicaid assigned additional funds to cover GHP's expenses on health services, especially during the pandemic crisis.

The GHP has a Special Coverage Registry (SCR) for CSHCN. Enrollees have the option to choose the providers for services within the Preferred Provider Network of their PMG or their Health Plan's General Network. Medications, laboratory tests, diagnostic tests and other related procedures specified are part of this coverage. The PR-Medicaid Information Management System shows 60,149 children 0 to 17 enrolled in the SCR in 2022. The GHP also has an SCR for ASD. When ASD is suspected, children are enrolled in temporary coverage for up to 6 months for diagnostic interventions. If the diagnosis of ASD is certified by one of the following GHP providers: neurologist, psychiatrist, developmental pediatrician, or clinical psychologist the child is included in the ASD Special Coverage

Registry. PRHIA 2022 database shows 3,091 children enrolled in the ASD-SCR.

In 2021, most MCA populations were insured mainly through the GHP. The combined insured percentage (private and public) and GHP specific are as follows: 91 % of women of reproductive age (48.9 % GHP); 93.1 % infants (61.5 % GHP); 97% children (64.8 % GHP); 94.5% adolescents (53 % GHP).

Puerto Rico passed Act No. 14- 2017 - “Incentives Act for the Retention and Return of Medical Professionals”- to provide income tax incentives (4% fixed rate) to retain practicing physicians and to attract those who migrated to the US.

To address the use of opioids, the Prescription Monitoring Program for Controlled Substances (under Law 70- 2017, Monitoring the Prescription of Controlled Substances) was implemented in 2018, to maintain a system of electronic prescription monitoring of controlled substances dispensed in PR.

The health system in PR continues to face difficulties due to the closing of specialty and sub-specialty medical programs, migration of health professionals (physicians, nurses, and others) and hospital crises (staffing, equipment, work conditions). For example, the University of Puerto Rico School of Medicine lost the Neurosurgery Residency Program (the only one existing in PR) which means that medical residents must relocate to the US. In September 2022 one birthing hospital in the Fajardo Health Region closed the delivery room and the NICU due to staff shortages and delays in insurance payments.

Social and Economic Conditions

In the last decades PR has been experiencing adverse socioeconomic conditions. Between 2006 and 2019 employment fell by 22% according to the Bureau of Labor Statistics (BLS). Concomitantly, the labor force participation rate declined from 49% in 2006 to 43.6 % in 2022. There was also a reduction of 78,000 persons or 4.8% who were neither working nor looking for work in 2022 compared to 2021.

Lack of employment is accompanied by income levels that in PR are still far behind those of the states. The per capita income for PR in the 1YR 2021 PRCS was \$14,468 compared with the US \$38,332. The 1YR 2021 PRCS median household income was \$22,237, less than half of Mississippi (\$48,716), the state with the lowest US median household income in 2021.

Poverty is a significant problem in PR affecting women, children, and families. In 2021, the poverty rate in PR (40.5%) was higher than in the US (11.6%) and higher than Mississippi (18.1%). Children under 18 years of age living in poverty in PR were 50.1% in 2021. Family structure influences poverty rates as single female-headed families tend to be poorer than married-couple families. While the percent below poverty level in the 2021 PRCS in married-couple families with children was 24.8%, the percent of families with children headed by a female with no husband present was 69.6%. Residents of rural areas in PR have higher poverty rates than those living in urban areas. High poverty rates and low-income levels lead families to rely on public assistance programs for survival. The 1YR 2021 PRCS reports that 49.5% of households in PR received nutritional assistance benefits compared to 12% in the US.

Increases in the cost of living deepen the economic hardships of families by reducing their purchasing power. Between February 2022 and February 2023 there was an overall 5.8% increase in the Consumer Price Index in PR. During this period, there have been increases in food prices (11.6%). Foods with the highest increases are food consumed at home (13.6 %); cereals and cereal products (14.1 %); dairy products (12.7 %); fruits and vegetables (21.8%). Given this increase the purchasing power of a dollar in February 2023 was 75 cents a drop of 5 cents from the previous year (PR Department of Labor and Human Resources). This increase is compounded by the high costs of gasoline (\$1.23-1.28 per liter regular) and electricity (16.8% per kilowatts). Frequent power outages and massive blackouts also affect the quality of life of residents and put at risk people who depend on health-related electronic devices.

In many municipalities, mass transportation is unavailable, and people rely on private transportation services (12

passenger vehicles) called “carros públicos” (public cars) that may not be available after 2 PM or even earlier. Those who have their own private cars may have to drive a long distance from and to their homes to work, study and receive services. To cover gaps in transport, there are municipalities that provide transportation mainly to the Greater Metropolitan Area to people in need of specialized health services. While mass transportation in San Juan municipality, - capital of PR - is available, there are limitations as the waiting time in some routes can be anywhere between one to two hours. The Urban Train only covers San Juan and Bayamón municipalities and lacks sufficient connecting buses to and from its 16 stations.

Like families, the PR government has been experiencing severe economic difficulties for almost a decade: a public debt of more than \$70 billion, revenue loss, high GHP expenditure, depletion of pension funds, and insufficient liquidity to operate and meet its obligations. To face the crisis, the PR government has taken measures to reduce costs and increase revenues over the past years. Some of the measures are budget cuts to state agencies, school closings, reduction in subsidies to municipalities and NGOs, and tax increases. Measures related to government employees include lay-off of public workers (Law 7, 2009), increases in employees’ contributions and retirement age (Law 2013) and fringe benefit reductions and mobilization across agencies (Fiscal Compliance Act of 2017).

In 2016 the US Congress enacted the PR Oversight, Management and Economic Stability Act (PROMESA), installing the Financial Management and Oversight Board (FMOB) with decision-making power on all fiscal matters. In May 2017, the Oversight Board filed in the federal district court for debt relief under Title III of PROMESA, a form of bankruptcy to restructure PR fiscal liabilities. The court proceedings lasted five years and ended with the approval of the Debt Adjustment Plan (DAP) that became effective on March 15, 2022.

The high cost of living, low wages, and proposed changes to the formula for determining pensions caused indignation among public workers. From November 2021 through February 2022, public workers from the Central Government and Public Corporations carried out a series of actions claiming what they called “*dignified retirement*” and “*wage salary justice*”. “Dignified retirement” meant zero pension cuts and no changes to the formula determining the amount an employee would receive upon retirement. “Wage justice” claims aimed at wage increases in the context of rising cost of living. The main course of action was absenteeism from work, thus there was a “blue flu” (police officers), “orange flu” (medical emergencies), “red flu” (firefighters), “white flu” (hospital health workers/nurses), and “teacher flu” (teachers at the public school system), among others. This strategy was accompanied by protests by each group and one collective manifestation. The governor offered each group a salary hike ranging from \$500 dollars to \$1,000 dollars per month.



Amid the fiscal crisis, Hurricane Maria, with 155 mph winds struck PR on September 20, 2017. The hurricane caused billions of dollars in damage leaving behind widespread destruction of homes, businesses, roads, highways, and public and private institutional facilities. The wind force destroyed Puerto Rico’s energy grid causing the longest blackout in US history. Research on the deaths related to the hurricane place the death toll at approximately 3,000

people. Nearly three years (2020) after the hurricane, there were still thousands of houses with blue tarps, damaged roads in rural and urban areas, a considerable number of damaged traffic lights in the Metro Area, and many closed small businesses all over the island. Yet, it was not until 2020 that FEMA disbursed the funds for home repairs. However, there have been problems with home repairs and about 6,000 homes still have roofs covered with tarps in early 2023. The hurricane's devastation also pushed people out of Puerto Rico to the US mainland.

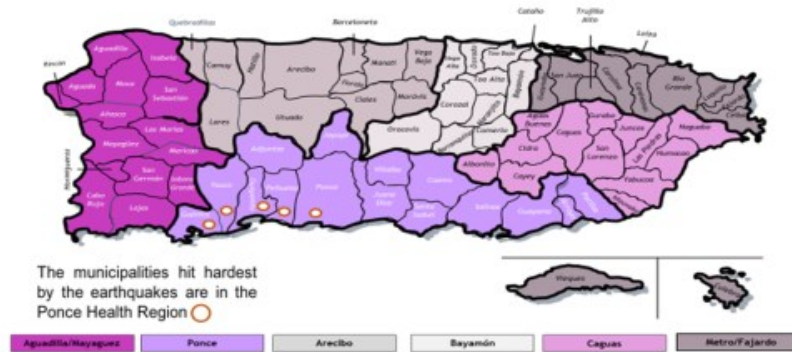


A sociohistorical event known as “the Puerto Rican Summer of 2019” occurred during the month of July 2019. For 12 days, massive protests of people from all walks of life, ages, and different parts of the island took place clamoring for the resignation of Governor Ricardo (Ricky). The protests arose in response to the leak of chat messages between governor Roselló and 11 all-male top aides and associates that provoked people's anger and indignation as these included insults, mockery, and contempt for victims of Hurricane María, LGBT community, people with obesity, women, political opponents, and celebrities. Roselló resigned on August 2, 2019, becoming the first governor of PR to ever resign.



While still struggling to recover from the devastation caused by Hurricane María, in early January 2020 PR was hit by two major earthquakes. On January 6, the day of the three kings' day celebration, an earthquake of 5.6 magnitude struck the southwestern region. Ironically, this is one of the most important celebrations in the island in which children receive gifts from the wise men but this time - for many children and families - it became a sad day hardly ever to be forgotten. The day after, on January 7, an earthquake with a magnitude of 6.4, the most powerful earthquake in 102 years, hit Puerto Rico with its epicenter located once again in the south/southwestern regions. Hours later, it was followed by an aftershock of 6.0 magnitude. The most affected areas in the south/southwest were the Guánica, Ponce, Peñuelas, Guayanilla, and Yauco municipalities which are in the PR DOH Ponce Health Region.

PRDOH HEALTH REGIONS



The southwest is one of the poorest areas in Puerto Rico. The poverty rates for the five municipalities hardest hit by the quakes were higher than that of PR (43.1%) back in 2020: Guánica (63.8%), Ponce (50.9%), Peñuelas (56.5%), Guayanilla (55.6%), and Yauco (48.4%). Child poverty in some of these municipalities was higher than that of PR (57%). For example, child poverty in Guánica stood at 83% while Ponce and Guayanilla had 69% rates.

The quakes damaged more than 8,000 houses of which about 2,500 became uninhabitable, according to the PR Department of Housing, thus leaving thousands of people homeless. Nearly half of the businesses were forced to close - some temporarily while others permanently. There were losses to the infrastructure such as roads, bridges, government buildings and dams. Besides damage to homes and buildings, there were mud slides and an iconic tourist attraction in the Guayanilla municipality simply disappeared.



Immediately after the quakes, families, and individuals across the south/southwest set up camps along roadsides, home front yards, private farms, town squares, parking lots, and basketball courts. People also moved to official shelters and/or government tent camps once opened. People camped out for two main reasons. On the one hand, their homes suffered extensive structural damage (collapsed, about to collapse or had severe fissures). On the other hand, many people, despite having no major home structural damage or no damage at all, slept outside because of fear to sleep in their homes due to the constant tremors.



Puerto Rico's main power plant (Costa Sur) that supplies energy to the northern regions was severely damaged and was out of operation. Economists in Puerto Rico estimated that the economic losses totaled more than one billion dollars.

Schools in the affected area suffered extensive damage, some of which were at risk of collapse or collapsed as was the case of the Agripina Middle-School in the Guánica Municipality, a participating school of Title V school-based Youth Promoters Program. The collapse of this school had an impact on students and their families that woke up the morning of January 7, to see their school in crumbles.



Classes in the public school and the private system across PR were suspended so the buildings could be inspected. In Puerto Rico, many schools have what structural engineers call a “short-column design” which buckles instead of swaying in an earthquake. Over 90% of all public schools were built before the 1970's and 1980s and do not comply with current seismic safety standards. The re-opening of public schools was a slow process that took several weeks and even months. Parents and teachers alike did not trust the school inspections as these were walk-in to assess visible signs of damage from the earthquakes but did not certify that a school could withstand a future earthquake magnitude 6.5 or higher.

Beyond economic costs and home displacement, the earthquakes caused sadness, distress, anguish, and uncertainty as people's lives in the municipalities hit hardest were completely disrupted. For many people in these municipalities, it was like setting the clock back right after hurricane María, but this time the event did not stop as the southwest continued shaking throughout 2020 with tremors ranging from 2.3 to 5.4 magnitude or higher.

Amid earth tremors, the COVID-19 pandemic reached Puerto Rico in March 2020. Initially, the PRDOH Secretary and the Chief Epidemiologist mishandled and downplayed the risk to the island's residents which led to their resignation in mid-March. PR was one of the first US jurisdictions to order (EO 2020-20) a strict lockdown to protect the health system and halt the spread of the virus. The lockdown- effective March 15 - involved shutting down non-essential services including public mass transportation, a night curfew (9 pm to 5 am) and school closings. Essential services included: grocery stores, pharmacies, gas stations, convenience stores, banks, health care, and restaurants/eateries (could only operate for take-out orders and deliveries). During the day, people could leave their homes only to work in essential services; buy food, hygiene products and medicines; get gasoline; or go to the bank or laboratory and/or physician's office. Central government public workers would remain home with full pay and benefits until further notice. Some employees, consultants and professional services could work remotely if necessary.

Subsequently, the PR government issued a pandemic-related executive order every 15 days modifying some of the restrictions and curfew hours while requiring the use of masks in businesses, offices, and all public places. The re-opening of activities was done in three phases. Phase one (May 1, 2020) involved opening of outdoor activities, and certain economic sectors while maintaining the 7 pm- 5 am curfew. New commercial permitted activities included:

barbershops, beauty salons, automotive sales, and extended the operating hours of auto repair shops, tire centers, and hardware stores. Parks, athletic tracks, beaches, gyms remained closed. All businesses were ordered to remain closed to the public on Sundays. Phase two (May 25, 2020) extended the operating hours of businesses already opened and the re-opening of the ones that were closed. The permitted activities included: restaurant dining rooms (at 25% capacity), barbershops/beauty salons by appointment and malls and retail stores at 50% capacity. It also included the utilization of recreational boats, public use of beaches, natural reserves, and golf courts. Phase three (June 16, 2020) re-activated most of the economic sectors and allowed to open gyms, movie theaters, bars, spas, museums, and casinos. The order allowed restaurant dining rooms to operate at 50% capacity. Public transportation also re-opened, and people could once again ride in buses and the urban train. The curfew remained in place being in effect from 10 pm to 5 am. Elective surgeries banned previously were permitted.

Thereafter, the government modified pandemic restrictions according to the positivity rate and all were lifted in 2022 including the use of face masks except in schools, public offices, and health facilities.

The COVID-19 pandemic impacted Puerto Rican society in various ways. The sharp reduction in economic activity had adverse effects on small businesses that struggled to stay afloat, and many were forced to close permanently. Reduced economic activity also resulted in reduced hours and job loss. In 2020, more than 467,000 people filed unemployment claims including the self-employed. Problems with unemployment claims caused distress among displaced workers as phones were not answered and the online site of the PR Labor Department was not working properly. PR lost more than 70,000 jobs in 2020 as reported by the Labor Department.

Today (2023) businesses in PR continue to grapple with a shortage of workers that began back in 2020 during the second and third reopening phases. It is very common to see signs in supermarkets, restaurants, and other businesses advertising job openings and higher wages. According to experts, the pandemic brought about changes in workers' views on quality of life and they are exerting some power to bargain for better working conditions and wages.

School closures and distant learning during the pandemic posed big challenges for many families with children. Distance schooling posed a problem for many children, adolescents, and families as only 54% of households in PR have access to the internet and 62% have a computer at home, according to the PRCS 2013-2017. Consequently, public school students from the poorest sectors were unable to engage in distance learning because they were not provided with computers as planned by the Department of Education or because of connectivity issues (no access to internet or poor unstable service). Students unable to engage in distance learning were provided with printed learning modules.

In addition, many working parents, especially those with low-income, were unable to work from home as they have jobs that require their presence in the workplace. How working parents - regardless of their income level - coped with childcare is yet to be known as there is no research in Puerto Rico that assessed this issue during the pandemic. Given that many grandparents in Puerto Rico provide childcare (all day or after school hours) how being at high risk affected their role in childcare deserves attention.

Another effect was food insecurity among students in the public-school system that depend solely on the school breakfast and lunch program to consume a healthy meal. Due to school closures this service was not available in Puerto Rico during 2020.

The pandemic led more families to rely on the Nutritional Assistance Program (NAP) for food assistance. Before the pandemic (February 2020) about 715,339 families were enrolled in the NAP. By May 2020, the number of families receiving food assistance had increased to about 759,551 or 44,212 more families.

Registering newborns in the Demographic Registry was also a difficulty faced by families as the service went online, and many had problems understanding the instructions on how to use the platform, unstable internet, or no internet. The process itself was hard to follow. First, families had to access Online Renovations, then go to the Demographic Registry site to fill out a virtual form to solicit registration of an infant. Afterwards, they would receive an appointment

at their local Registry Office to go in person to register the baby. Generally, it took more than 5 months to be able to register the babies. This caused much trouble and anxiety among families as the birth certificate is required by the WIC and Medicaid to receive service.

Hospitals experienced reductions in room occupancy and emergency visits due to people's fears of becoming infected and the ban on elective surgeries. For example, in early April 2020 room occupancy was 38% according to the Association of Hospitals, which led to the reduction of working hours and temporary layoffs of hospital workers including nurses and physicians. The PR government provided aid to hospitals to offset this situation. Over time, hospital use by non-COVID-19-patients increased as more people trusted the preventive measures taken and the restart of elective surgeries and other procedures. The pandemic also affected medical offices whose operational costs increased by 20% or more, according to the President of the College of Surgeons.

From March 2020 to April 26, 2023, PR had a total of 448, 572 confirmed COVID-19 positive cases and 667,151 probable cases, according to PRDOH data. Massive and local-specific vaccinations (stadiums, churches, community centers, supermarkets, pharmacies, town squares, hospitals, shopping malls) were held across PR. By May 26, 2022, 87.4% of the population 5 years and over had completed the COVID-19 vaccines while 61.1% of those 12 years and over had the booster shot, as reported by the PRDOH.

While recovering from the pandemic, Hurricane Fiona (category 1) struck PR on September 18, 2022. The strong winds and heavy rain (6 to 30 inches) caused mudslides, flooding, a general blackout, damage to homes and about 1,000 people trapped across PR. Fiona's effects brought memories of what people went through in the aftermath of Hurricane María, five years ago – hardships, losses, despair, and sadness.



PR Society Strengths

The people of PR despite economic hardships do have cultural strengths like a sense of humor (helps to cope with stressful conditions), reciprocity and generosity. Kinship ties provide emotional and financial support (may include housing) to women and children as resources are pooled, borrowed, and shared. Grandparents (as well as other kin) are very influential in parents' and children's lives. It is common for grandparents to provide unpaid childcare to working mothers and/or at times of need. They also enjoy taking their grandchildren out and having them stay in their homes overnight.

There is a wide variety of informal and formal organizations geared to improve life through cultural promotion (arts, music, dance), neighborhood revitalization, environmental protection, youth development, and community development (may include micro enterprises, health promotion and community/home vegetable gardens) and alternative education to school dropouts. Other important assets are a strong cooperative movement, ecological movement, and the resurgence of agricultural work among young generations (under 40 years of age). A skilled and semi-skilled labor force that has been and still is sought after in the US is also an asset.

The strengths and resiliency in PR become most evident during critical events. In the aftermath of Hurricane María in 2017, the non-governmental agencies (NGO's) were highly instrumental in helping people as they distributed food, water, water filters, solar lights and other supplies in shelters and communities. Very importantly, people themselves displayed generosity and resourcefulness as neighbors shared food, water, ice and even power from generators through extension cords. In some communities, neighbors shared their own money to pay private electricians to restore energy. All over the island, people turned to cultural practices like music, songs, phrases (like "Puerto Rico se Levanta" - Puerto Rico Rises) and the Puerto Rican flag as symbols of strength and resolve to help overcome the pain and desolation caused by the storm.

When the earthquakes hit PR the NGOs, professional associations, foundations, faith organizations, public school teachers, and the academia played a key role in the provision of assistance – medical, psychological, educational, temporary housing - to the families and individuals affected. Very importantly, citizens and groups across PR collected supplies and foodstuffs which they delivered to families and individuals in the affected areas.

During the COVID-19 pandemic individual citizens, NGOs, health professional associations, and faith organizations once again became key players. Some groups distributed prepared meals and/or bags of foodstuffs to people in need like the homeless, the elderly, and the extremely poor including children and families. Technological groups developed and distributed face shields among health professionals. NGOs continued providing interventions and support to programs' participants through emergency lines and social networks. Health organizations held virtual conferences on COVID-19 signs and symptoms, how it is spread, and what to do to decrease the risk of contagion.

PR Title V Roles, Challenges and Strengths

The issues highlighted in this overview illustrate that the greatest challenge in PR is the overall societal context that impacts the health trajectories of the populations served. The strengths and capacities of the PR Title V have made possible the promotion of health and wellbeing despite adverse social and economic conditions.

The Life Course (LC) approach that interconnects time, context, and process has been useful in addressing population health and wellbeing. Under this perspective health is considered a life-long process that starts in the fetal stage and ends in death. Trajectory, transition and turning point are central concepts within this framework. A trajectory refers to sequences or long-term patterns in life and a transition refers to any change or changes in state within trajectories. A turning point is an event that results in a change of direction in people's life trajectories. Trajectories in different domains of life (e.g., family, education, work, health) are interconnected and reciprocally affect one another within changing socio-historical contexts.

In 2013, the PR Title V developed its own Life Course Scheme aligned to: a) some of the principles of the Life Course (agency, linked lives, context, and timing); b) health trajectories processes (cumulative effects); and c) MCHB goal of eliminating health disparities and achieving equity.

The PR Title V LC Scheme is composed of six interrelated elements: 1) **Human Agency** – populations have strengths and are active participants of their life course through their choices and actions within the opportunities and constraints of society; 2) **Context** – people's lives and health are shaped by historical events, physical environment, social conditions known as social determinants of health (SDH), and cultural norms/values both at the macro level – of the larger society and micro level of neighborhoods/communities; 3) **Linked Lives** - people's lives are linked within familial and community settings across different life stages; 4) **Cumulative Effects** -individuals and groups accumulate advantages or disadvantages over time; 5) **Timing**- events and transitions are likely to be experienced in different ways depending on the life stage at which they occur; 6) **Equity** -strategies and actions are geared toward empowering populations through health literacy as well as enhancing their opportunities by means of advocacy and networking.

PR Title V has played a lead role in several important health related initiatives and public policies propounded by the DOH.

PUBLIC POLICY EXAMPLES

Law 186 (2016): PR Maternal Mortality Epidemiologic Surveillance System

Administrative Order 336 (2015): Compels hospitals to establish a Breastfeeding Support Program as requirement for hospital operation licensed by SARAFS.

Administrative Order 357 (2016): Requires hospitals to change their measurements for pediatric patients to the metric system and to change their weighing equipment so to only measure grams and kilograms.

Administrative Order 359 (2016): Creates the Youth Advisory Council (YAC).

Administrative Order 369 (2017): Policy for testing symptomatic and asymptomatic pregnant women for Zika.

Administrative Order 388 (2018): Guidelines for the Evaluation and Management of Infants Born to Mothers with Laboratory Evidence of Possible Zika virus infection during pregnancy.

Regulation 9184 (2020): Licensing regulations require birthing hospitals operating in PR to implement a Hard Stop Policy to reduce non-medically labor inductions before 39 weeks gestation in accordance with the recommendations of the American College of Obstetricians and Gynecologists (ACOG). The written Hard Stop Policy must be visible and accessible in the hospital areas that provide services to pregnant women. The hospital must offer information to pregnant women through printed materials. The hospital must also design and implement continuous evaluation processes as well as submitting an annual report to the Auxiliary Secretariat for Regulation and Accreditation of Health Facilities (SARAFS, Spanish acronym) evidencing compliance with the Hard Stop Policy.

An important asset of PR Title V is leadership through committees and coalitions including the Regional Boards (RBs). The RBs - composed of representatives from government and non-government entities, and community – are located in each of the 7 DOH Health Regions.

Having a broad and strong network of partners within and outside the health field (NGOs, medical associations, health organizations, parents' organizations, among others) is also an asset. The PR Title V supports the efforts of partners through staff participation in task forces, committees, and alliances.

The PR Title V has a well-established health promotion component that includes massive media campaigns, community education, parenting and prenatal courses, and professional training. It also involves the creation of educational materials. An example is the **Passport to Health**, a booklet for families about children's growth, development, and signs of developmental delays through which to document the child's health and services. Another example is **My Health Planner**, a WRA care pocket guide (based on the WRA Preventive Health Services Guidelines) for women to document and track their preventive health care.

The greatest strength of PR Title V is a highly committed workforce and capacity to respond speedily to critical events Puerto Rico has experienced in the last five years that impinged on the health of populations. A summary of these events and the way PR Title V grappled these crises is presented below.

Zika Epidemic (2016): Implementation of two CDC funded projects: a) The *Zika Active Pregnancy Surveillance System (ZAPSS)* monitored pregnant women with laboratory evidence of Zika infection and prenatally or perinatally exposed infants born to these women.; b) the *Zika Postpartum Emergency Response Survey in Puerto Rico (PRZPER I and II)* conducted a rapid population- based assessment of maternal behaviors, experiences and attitudes related to Zika virus exposure among recently pregnant women in PR.

PR Title V staff received training on the Zika virus and disease, transmission, and prevention enabling them to provide accurate Zika information to women, families, and communities. They also promoted early prenatal care and testing for Zika in pregnancy as well as referrals to the CSHCN program for developmental surveillance and coordination of specialized services.

Hurricane Maria (2017): The PR Title V staff- even those who suffered personal losses- worked tirelessly to help

MCA/CSHN populations and families across Puerto Rico in the aftermath of the catastrophe. The staff played a key role in identifying the emergent storm-related needs of MCA/CSHCN populations in shelters, households, and communities. The Register for Technology-Dependent Children was developed and implemented (2017) to register and follow-up families with a technology-dependent child. Due to their knowledge and community networks, the HVNs played a leading role in the municipalities they serve by becoming the main liaison for the mitigation and recovery efforts directed to families.

Educational materials were developed on emergent public health threats and their prevention (e.g., leptospirosis, safe food storage, personal hygiene, hand washing, and breastfeeding during emergencies). The staff also collaborated with partners in developing protocols and offering trainings to community leaders, teachers, and health professionals on the identification and management of common health conditions and the prevention of unintentional injuries after a disaster. The “HOPE after Hurricane” session of the Alliance for Climate’s Education was translated and adapted to allow youth in PR to better understand and respond to their own emotions during and after a hurricane.

Earthquakes (2020): The PR Title V collaborated with the PRDOH Office of Public Health Preparedness and Response in the revision of guidelines. Title V staff tended to the needs MCA/CSHCN populations and families in shelters and communities, coordinated services and helped them face the disaster and its effects including constant fear, insecurity, and sense of loss. They also collaborated and shared resources with partners to offer urgent medical care, basic hygiene materials, psychological aid, stress management, breastfeeding practices, safe infant feeding practices, children’s safety, and health education in general. They also used and disseminated educational materials on how to cope with stress and secondary trauma. The staff adapted the Hope after Hurricane to the seismic events for use with youth and provided education on emergency backpack and earthquakes.

The HVN’s (live in the same municipalities they serve) in the affected areas despite experiencing personal losses and difficulties, assessed the basic and housing needs of program participants and continued providing education and support including psychological first aid techniques. They also assured those pregnant women participants keep up their prenatal care, detect any signs of complications, and those infants and children receive adequate care.

The Ponce Pediatric Center (Ponce Health Region) continued providing services to CSCHN children/youth and families once it assessed the damage to the physical facility. To ensure safety they developed an evacuation plan for staff and center’s services recipients. It also held special meetings with staff to allow them to vent feelings, emotions, and concerns.

COVID-19 Pandemic (2020): The PR Title V adjusted strategies, activities, and timelines across all domains to handle the pandemic. Most importantly, immediate steps were taken to face a situation that posed a different challenge than previous critical events due to the high risk of infection.

The PR Title V developed recommendations for staff protection including instructions to maintain physical distance in the community or if the staff presented any symptoms. To assure understanding and compliance, the PR DOH protocol for on-site office work was presented to all staff through virtual conference. All staff teams held virtual meetings to discuss plans, interventions, assessments, protocols, and concerns.

Services were provided remotely. For example, the PR Title V Home Visiting Program (HVP) provided case management, education, needs identification, emotional help through telephone calls and other technologies. The clinical services provided by the Pediatric Centers and Autism Center to the CSCHN populations and families were done through tele-health activities.

The staff, in collaboration with partners, developed virtual conferences and webinars such as the virtual conference on COVID-19 and pediatric care that was attended by pediatricians from PR and abroad.

Videos on a variety of health topics were also produced to promote health during the pandemic. Most noticeable was the creation of a 24-minute digital prenatal course. Prior to the pandemic, the staff had been offering a 4-

session Prenatal Course “A Baby on its Way”, targeted at pregnant women and their companions to build knowledge and provide tools to maintain a healthy pregnancy, prevent risk behaviors, increase the chances for a healthy delivery and appropriate baby care. The in-person course was suspended in March 2020 to comply with COVID-19 measures. The virtual prenatal course covers all the topics in an abbreviated fashion.

The health educational materials created by the PR Title V are available online at the PRDOH website, Google Drive, You Tube, and the websites of health partners.

Presently, PR Title V is back to normal operations involving both virtual and in-person health promotion that allow reaching out to people and families that may not be able to attend educational activities.

III.C. Needs Assessment

FY 2024 Application/FY 2022 Annual Report Update

PROCESS DESCRIPTION

The MCAHP and the CSHCNP continue to evaluate the 2020–25 State Action Plan (SAP) using the Plan–Do–Study–Act Cycle (PDSA) for this Health Needs Assessment Update (HNA) to facilitate constant monitoring and identification of recommendations, to enhance the strategies included in the SAP. The Title V evaluators conducted a text analysis of the data acquired during the PDSA, reporting their findings and suggestions to the HNA Steering Committee (HNASC) for the SAP's final modification.

Also, a chi-square trend analysis was carried out to evaluate the progress of the indicators by domain, including the Average Annual Percent Change (AAPC) to ascertain whether indicators had increased or decreased. For several indicators, there was not enough data for the observed years to conduct a trend analysis. Because of this, some indicators were excluded. Other data sources that monitored the same indicator were employed when it was practical to do so. Table 2 in the supporting documents lists the indicators and additional data sources that were not used in the analysis.

The HNA also includes a staff assessment addressing perception and readiness regarding family engagement (FE). The customized instrument was built on the Family Engagement Guide from the National Institute for Children's Health Quality (NICHQ) to assess readiness and the Family Voices FESAT to assess the degree of FE in the MCAHP and CSHCNP programs. Cronbach's Alpha (CA) was used to evaluate the consistency of the instrument's items (the closer the coefficient is to 1.0, the greater the internal consistency of the items on the tier).

Considering the results of this HNA and the comments made in the Public Input, the HNASC evaluated and amended the SAP (for more information, see section III.F. Public Input). The priority needs remained as proposed in 2020 HNA. The results of this HNA led to the examination, updating, or elimination of some SAP strategies.

HEALTH STATUS BY DOMAIN: CHI-SQUARE FOR TRENDS ANALYSIS

Below are the main results of the trend analysis. The detailed analysis tables by domain can be found in the supporting document.

According to 2021 American Community Survey (ACS) the number of WRA was 822,004 (10 to 14 y/o: 10.7%; 15 to 19 y/o: 11.7%; 20 to 24 y/o: 13.2%, 25 to 34 y/o: 26.5%, and 35 to 49 y/o: 38%). 2022 Vital Statistics (VS) reports 19,151 live births (LB), a 1% decrease since 2021 (19,336 LB). Most births occur in women between 20 and 34 y/o (81.1%), followed by women 35 y/o or older (12.8%), and teens 10 to 19 y/o (6.14%). ACS 2021 reports that the total number of infants was 18,389, representing less than 1% of the total population. There were 233,247 children 1 to 9 y/o that represents 7% of the total population. The number of adolescents 10 to 21 y/o was 461,498 that represents 14% of the total population (10-14 y/o: 38.6%; 15-17 y/o: 25.2%; 18-19 y/o: 17.2%; 20-21 y/o: 19%). About 91% of the WRA, 93% of infants, 97% of children, and 94.5% of adolescents 10 to 21 y/o were insured during 2021 (ACS). About 67% of LB are from mothers covered by the government health plan (VS 2022).

Preventive medical visits in the past year in women 18 to 44 y/o (NPM 1) significantly decreased by 4.1% between 2018 to 2021 (Table 3). Significant improvement was observed in the neonatal abstinence syndrome rate (AAPC: -18.9) and teen birth rate of 15 to 19 y/o (AAPC: -8.7%). However, a significant increase of 34% was observed in severe maternal morbidity rates. Preventive dental visits during pregnancy (NPM 13.1) significantly decreased (AAPC: -3%). However, the NOM related to this NPM, children 1 to 17 y/o who have decayed teeth or cavities in the past year, showed a significant increase (AAPC: 3.2%).

All three NPMs related to a safe sleep environment (NPM 5A, 5B, 5C) improved between 2018 to 2021 (Table 4), however, only the percentage of infants placed to sleep on their backs (AAPC: 8.3%) and without soft objects or loose bedding (AAPC: 7.4%) improved significantly. None of the NOMs related to these NPMs showed significant

changes. Although SUIDs rates increased by 20%.

Form CMS-416 for the Annual EPSDT Participation Report showed a significant increase (Table 5) in oral preventive visits on children 1 to 17 y/o (AAPC:5.7%). However, children 1 to 17 y/o who have decayed teeth or cavities in the past year, showed a significant increase (AAPC: 3.2%).

YRBSS 2019 reported a 44% decrease of adolescents, ages 12 to 17 y/o, who are bullied or who bully others (NPM 9). However, since data is not available for three consecutive years, AAPC and significance could not be calculated. Despite this decrease, adolescents' suicides increased by 35.7% during the study period, although it was not significant. The EPSDT Form showed a significant decrease (Table 6) in preventive medical visits during the past year on adolescents 12 to 17 y/o (AAPC: -1.3%). Related NOMs showed an improvement, but only the teen birth rate was significant (AAPC: -8.7%).

According to the 2023 MCH-JS, approximately 117,607 (21.5%) children ages 0 to 17 years in PR have special health care needs. Results also show that the prevalence for ASD in children 3 to 17 years of age is 4.7% (1 in 21); that 53.1% of CSHCN ages 0 to 17 receive care under a medical home; and that 22.2% of YSHCN ages 12 to 17 receive the services they need for a successful health care transition. Because many indicators from the 2019 MCH-JS must be interpreted with caution, comparison between MCH-JS years 2019 and 2023 was not considered. Based on the PR-CSHCN survey (2015), 18.6% of children ages 0 to 17 had a special health care need; prevalence for ASD was 2.5% (1 in 40); 30.8% of CSHCN ages 0 to 17 received care under a medical home; and 24.7% of YSHCN ages 12 to 17 receive the services they need for a successful health care transition. According to the 2019 MCH-JS, 11.2% of children with ASD were diagnosed before their 36th month of age.

PDSA SUMMARY:

The PDSA findings are summarized and focused on the areas the HNASC felt needed additional SAP review. Refer to the tables in the supporting documents for more information.

Women/Maternal Health

The pandemic's constraints interrupted the HVP educational interventions and schedules, but HVNs offered education and risk assessment via telephone or chat. Additionally, 3 Regional Boards (RBs) were inactive.

Healthcare providers have already received the Preventive Care Guidelines, while the Prenatal Healthcare Services Guidelines need to be updated. All activities for promoting person-centered services among healthcare professionals and WRA are completed. As a result, the SAP will no longer include any strategies relevant to these subjects.

The committee identified activities for two strategies: outreach and referral of pregnant women to initiate prenatal care, and strengthening collaborations to develop strategies that promote preventive oral health care visits in pregnant women. These two strategies did not record activities during this PDSA.

Due to the lack of staff who could summarize data into reports and oversee case review sessions, the Maternal Mortality Surveillance System (SiVEMMa) and Committee-related activities were on hold. However, MCAHP applied for a CDC grant to address health inequities by creating and implementing data-informed strategies to prevent pregnancy-related deaths and reduce disparities. Training for PNs is in process for SiVEMMa data extraction.

Perinatal/Infant Health

Social media, short videos, and the prenatal care website "Encuentro de mi vida" (Encounter of My Life) were used to promote topics of interest due to the ongoing pandemic restrictions during the first half of the FY. Changes in the service delivery model during the pandemic required HVNs to provide education virtually, making it harder for the HVN to verify the safe sleep or safety measures the family has in place. Access to patients was limited in response to public health threats or other emergencies. Therefore, the PNs had a limited time window to visit the patients. A PNs Procedures Manual, which includes a section on strategies to improve communication with patients, is under

development.

The decision not to renew the contract with the advertising agency was made because of internal PRDOH protocols impeding processes. The "Encuentro de mi vida" webpage, however, will be included in a section of the PRDOH's official website.

No activities were noted for two strategies. To promote successful breastfeeding initiation in hospitals, the 10 Baby Friendly Hospital Steps strategy was changed, and the committee suggested activities to work with MCAHP stakeholders to train hospital staff on infant safe sleep, combining these two strategies.

The community engagement team, HVNs, and PNs engage the community with relevant subjects linked to this domain. Four strategies were combined, focusing on educating the public about safe sleep practices, premature delivery signs and symptoms, unintentional injury, and breastfeeding.

Child Health

The lack of a Pediatric Consultant during the first half of this FY made it difficult to implement and follow up all strategies proposed in the SAP.

The pandemic-related restrictions limited the activities of CHWs, HEs, and HVNs in the community. After the restrictions were over, CHWs and HEs offered education to participants in parenting courses, and HVNs provided education about healthy lifestyles adopted by the family.

Two strategies that promote early identification of infants at higher risk for caries had no activities recorded in the PDSA. The HNA Committee kept the strategy that promotes the use of the screening tool adding a collaboration with the FQHCs for an early referral to a dental home.

MCAHP completed disseminating the Pediatric Preventive Health Care Guidelines among the public, academia, health professionals, and health insurance companies, eliminating this strategy from the SAP.

Adolescent Health

Pandemic-related restrictions and the impact of Hurricane Fiona caused changes in schools schedule and rescheduling of YHPP meetings. The updated YHPP profile includes questions about risk behaviors, exposure to violence, and emotional stability considered "flags" that call for school intervention. Three schools were apprehensive about cooperating with the CAHP regional coordinators to confirm these flags and make referrals.

The participation of youth in the Youth Advisory Council meetings, or other workgroups that address youth mental health and wellbeing is difficult due to the schedule and time constraints of school or employment.

The "Nivel máximo" website and campaign were part of the contract that was not continued with the advertising agency. The PRDOH will upload all campaign materials to its official website.

The Got Transition strategy in the second objective was modified to identify a guide to assist youth transition from pediatric to adult healthcare services since CAHP was not able to effectively communicate with CSHCND to continue collaboration with their committee.

CSHCN

The PR priorities for the CSHCN domain are medical home (NPM11), transition to adult health care (NPM12), early identification and diagnosis of ASD (SPM1) and reducing the prevalence at birth of folic acid preventable NTD (SPM2). Below is the progress report for the NPM11 and NPM 12 strategies and activities.

The SAP is revised annually and monitored every 3-4 months. The SAP for year 2020-2021 was comprised of eight (8) strategies to address the NPM 11 priority with a total of 21 activities. During the reporting year, some strategies were upgraded, others had their activities updated, and others were completed but activities continue to be ongoing. Strategies upgraded means that the strategy was accomplished and advanced to a higher level. Below is a description of strategies' progression.

The strategy “Develop an evidence-based interdisciplinary coordination system within the CSHCN Program” was upgraded to “Update and implement the programmatic care coordination activities recommended by the QIC for the program”. The strategy “Develop a system at the RPCs to identify CSHCN families’ needs and guide them to the proper services” was upgraded to “Implement the pilot-project initiative at the RPCs for the identification of CSHCN families’ priority needs and support”. For the strategy “Increase communication between CSHCN Program providers and referring pediatricians”, activities related to medical record audits and literature review for the identification of best communication models was completed. New activities were integrated to the strategy addressing staff capacity development. Likewise, for the strategy “Monitor tele-health services”, the initial monitoring activities were completed, however, due to the advance of telehealth processes at the CSHCN Program and the changes of the Covid-19 pandemic, updated monitoring activities were added. The strategy “Have the availability of a network of services for CSHCN and their families” was accomplished with the creation of the online resource directory. This activity has been excluded from the 2022-2023 SAP but continues as an ongoing activity. The strategy “Improve data collection on children served at the CSHCN Program” was accomplished with the creation of a REDCap platform and continues as an ongoing activity.

As for the year 2021-2022, the revised medical home plan resumed with seven (7) strategies and 24 activities. These strategies and activities are focused mostly on care coordination, family-centered care, and family support. Two new strategies were added: “the use of the Family-Centered Coordinated Care Model (CCCCF) as a work frame in the program”, and “Promote families’ inclusion and participation”. As of March 2023, forty-two (41.6%) of these activities were completed, which increases to 54.2% if the ongoing activities are added. Two (2) activities had not been started (8.3%) and seven (7) were in progress (29.2%). All inactivated activities (10) were completed. The seven activities “in progress”, as well as the activities “not started”, were included in the 2022-2023 SAP. For details on strategies for 2021-2022, please refer to the supporting document provided.

The SAP for the year 2020-2021 to address HCT had three (3) strategies and 5 activities. During last year, one strategy had its activities updated (“Increase physicians’ awareness about transition processes”), one was completed and continues as an ongoing activity (“program’s providers to support YSHCN in the process of transition”), and one was completed (“Transition Survey to Physicians”). Information collected through the transition survey provides a basis to reach out to physicians about this topic.

For the year 2021-2022, the HCT revised plan was resumed with a total of four (4) strategies and 13 activities. Strategies are “Increase physicians’ awareness about transition processes”, “Expand the network of transition services and support for YSHCN”, “Strengthen protocols for transition processes at the CSHCN Program”, and “Have a formal educational plan for YSHCN in the transition process at the CSHCNP”. As of March 2023, four (30.8%) of the activities were completed, five (5) had not started (38.5%), and four (4) (30.8%) were in progress. Activities in progress or not started were included on the 2022-23 SAP. For details on strategies for the year 2021-2022, please refer to the supporting document provided.

PDSA conclusion

This second round of the PDSA allowed the HNASC to identify challenges and needs to improve or overcome in the SAP.

The pandemic restrictions presented the biggest challenge. The complexity of the PRDOH process, the transfer of all “Encuentro de mi vida” and “Nivel Máximo” content to the PRDOH website while maintaining the search information’s appeal, simplicity, and usability, as well as a lack of personnel to fully address SiVEMMa activities, were other challenges noted in this PDSA.

Some areas for improvement or needs that will result in successful interventions include educational resources and continuous training or updates in breastfeeding, safe sleep, oral health, and unintentional injury prevention for the outreach team, HVNs, and PNs. There is also the need for educational materials, including incentives, for more effective interventions. Long-term relationships with stakeholders were evident in the PDSA; however, achieving

better communication with key stakeholders was also noted.

The virtual prenatal care course was a functional tool to reach pregnant women during the pandemic restrictions. Pre and post-tests revealed an improvement in participant knowledge once the community outreach team resumed in-person interventions. The new "Mi agenda de salud" workshop has begun effectively. The HVP resumed their in-person interventions, including the educational and support component as well as the needed screens. The YHPP started this school year, allowing the administration of the new YHP profile survey for the first time. YAC has been very active in its activities, especially in the new group that is working on youth mental health under the model of Collective Impact. Long-term relationships with the right partners were the most outstanding success in the PDSA.

TITLE V FAMILY ENGAGEMENT

A survey was conducted to assess perception of FE among MCAHD and CSHCNP staff. Two metrics were assessed: program readiness for FE (NICHQ) and FE at the system level (FESAT, Family Voices). Both questionnaires were translated to Spanish, pre-tested, validated, and tested for internal reliability.

310 staff members participated in a survey during October to December 2022, with a 70% response rate for the CSHCNP and 88% for the MCAHD. The statistical significance could only be measured for the FESAT, as it was based on scores. For FE readiness, the cells were too small to allow for accurate confidence intervals or p-values.

The total of participants was 55.2% from MCHAD and 44.8% from CSHCNP (Figure 1). When categorizing participants by job roles, 47% of the staff fell under the MCH-pyramid's enabling services, 34.5% under public health services and systems, and 18.4% under direct services (Figure 2). However, many of our staff members offer services across the pyramid levels. For that matter, results of inferential analyses under this group category were not considered. Most participants come from the regional level (MCAHP: 84.8%; CSHCNP: 84.2%), which is expected given that the staff members assigned at the central level are primarily administrative or in public health services and systems (Figure 3).

Figure 1: Percentage of staff distribution between programs of Title V

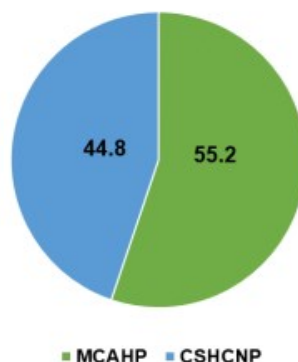


Figure 2: Percentage of staff distribution by Title V Pyramid Levels

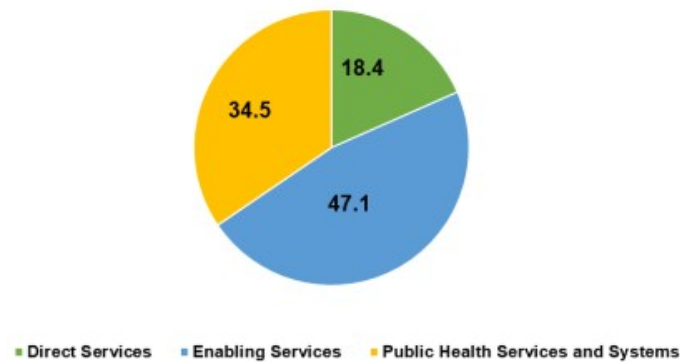
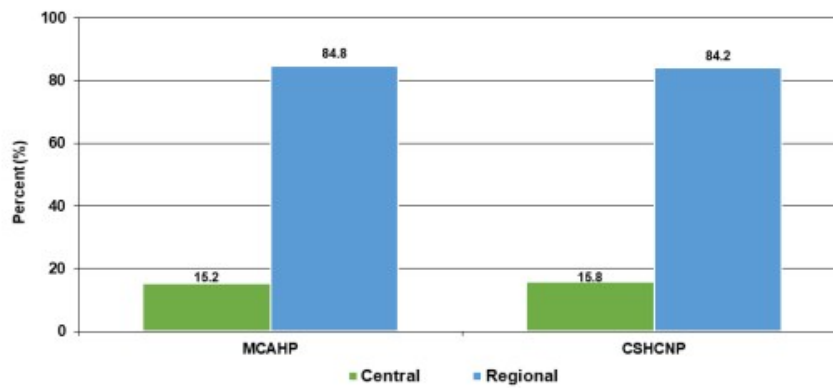


Figure 3: Percentage of staff by programs location



Most of the CSHCNP (80%) and MCAHD (78.6%) staff reported that their programs have a written policy that requires the inclusion and participation of families in its initiatives and processes (Figure 4). About 82% of the CSHCNP staff said that their program had at least one family representative, which doubles what MCAHD staff (40.9%) reported (Figure 5).

Figure 4: Percentage of staff that reports that the program has a written policy that requires the inclusion and participation of families in its initiatives and processes

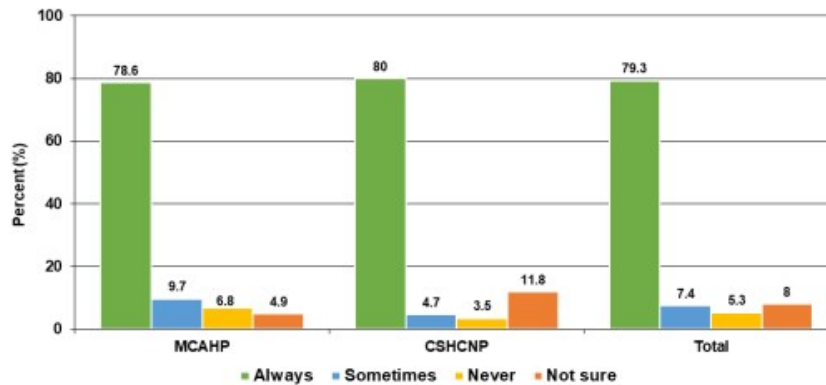
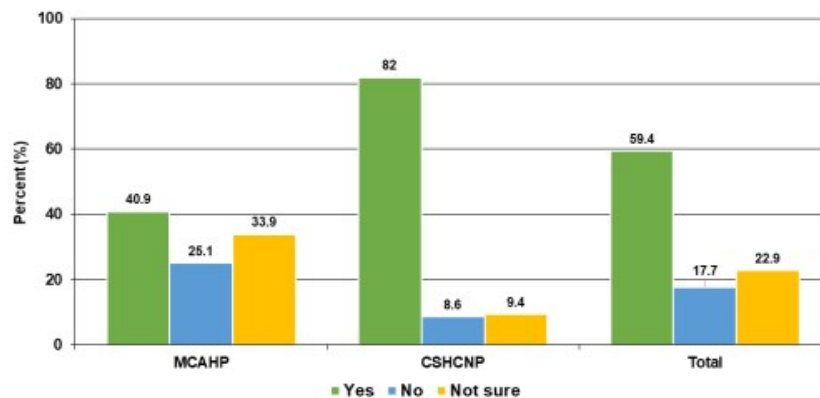


Figure 5: Percentage of staff that reports that the program has at least one family representative



Family Engagement Readiness

FE readiness was measured by three tiers with CA internal reliability coefficients of 0.817 to 0.923:

1. Perspective on the contribution of families (4 items; CA=0.817).
2. Efforts for the inclusion of families (5 items, CA=0.923).
3. Knowledge about the role of family representatives (3 items; CA=0.894).

The assessment of FE readiness was based on the proportion of staff members who agreed with every item on a tier. Individuals who did not agree were examined independently, and those who responded that a situation did not apply to all items were not considered in the denominator.

About 97% of the staff members "strongly agree" or "somewhat agree" to each item in the first tier (Figure 6). This indicates that they concur that families offer knowledge and distinctive lived experiences and that their opinions are just as valuable as those of professionals. As a result, they value families' participation in the formulation of programs and public policy because they bring a crucial component to the work team that no one else can. When this tier was stratified into groups based on the MCAHP or CSHCNP or program location (regional or central), the differences

were small (Figures 7 to 8). About 69% of the individuals who did not “Strongly agree” or “Somewhat agree” in all the items of this tier, did concur in at least 3 of the 4 items.

Concerning the efforts made by the staff to include the families, 97.3% reported "strongly agree" or "somewhat agree" to each item in this tier (Figure 6). To create an atmosphere where families feel supported, comfortable, and confident to speak freely, the staff convey to others how much they value the families' contribution and knowledge. In doing so, they create a respectful listening environment. The staff is willing to put the suggestions made by families into effect and feels comfortable giving them tasks. Differences were observed when comparing central (88.9%) and regional levels (98.5%) (Figure 10), while differences by programs were small (Figures 9). About 74% of the individuals who did not “Strongly agree” or “Somewhat agree” in all the items of this tier, agreed in at least 4 of the 5 items.

In terms of the knowledge of the staff about the role of family representatives, 92.1% reported “strongly agree” or “somewhat agree” to each item in the third tier (Figure 6). This indicates that they are willing to put into action the ideas that the family representatives contribute, are clear about what is required and expected of family representatives and provide families with guidance on how to create goals for their work as representatives. There were differences between MCAHP (96.7%) when compared with CSHCNP (86.4%) and central level (79.2%) when compared with the regional level (93.7%) (Figures 11 to 12). About 53% of the individuals who did not “Strongly agree” or “Somewhat agree” in all the items of this tier, agreed in at least 2 of the 3 items.

Figure 6: Distribution staff readiness for family engagement by tiers

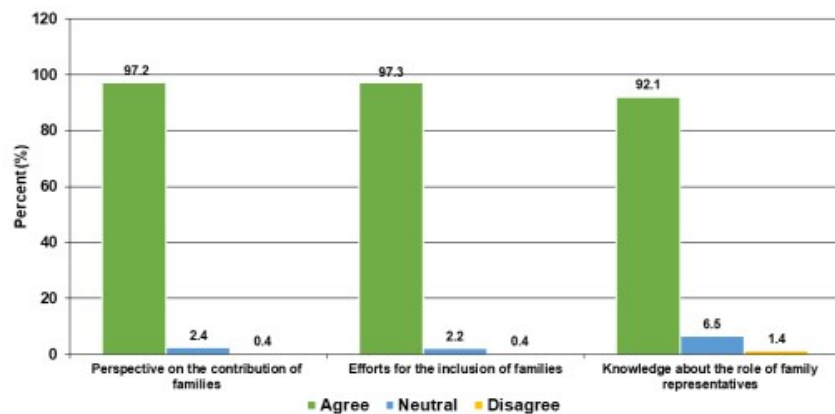


Figure 7: Perspective on the contribution of families by programs

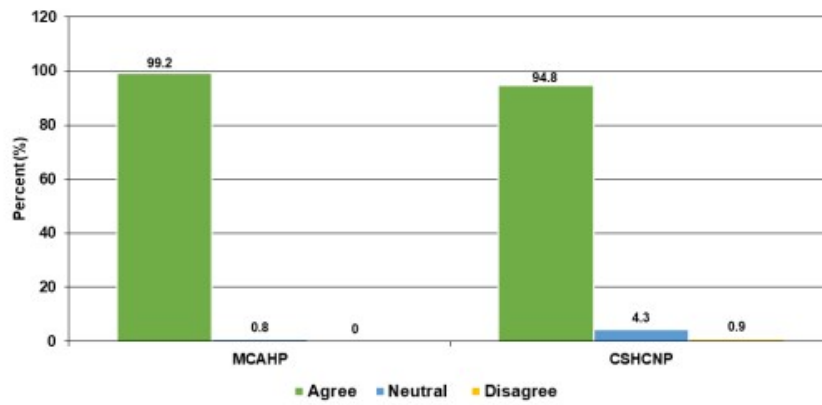


Figure 8: Perspective on the contribution of families by location of staff

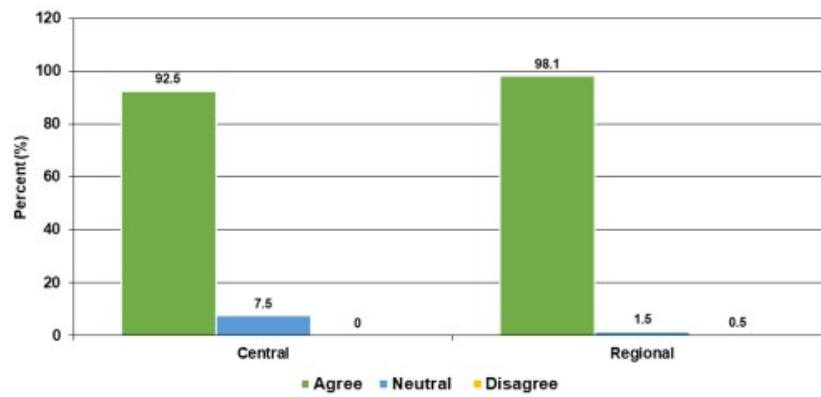


Figure 9: Efforts for the inclusion of families by programs

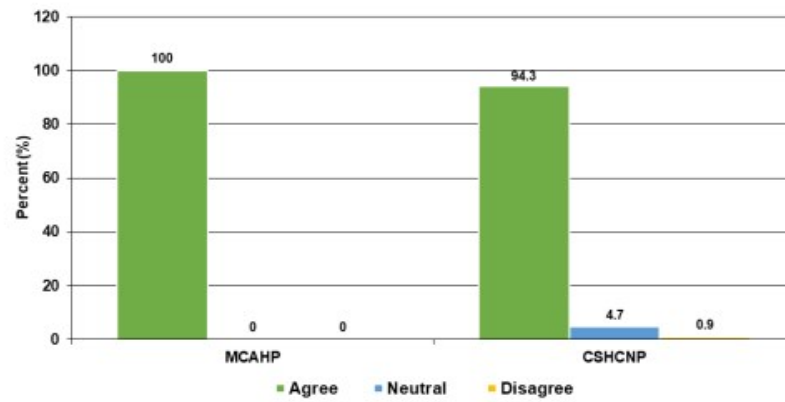


Figure 10: Efforts for the inclusion of families by location of staff

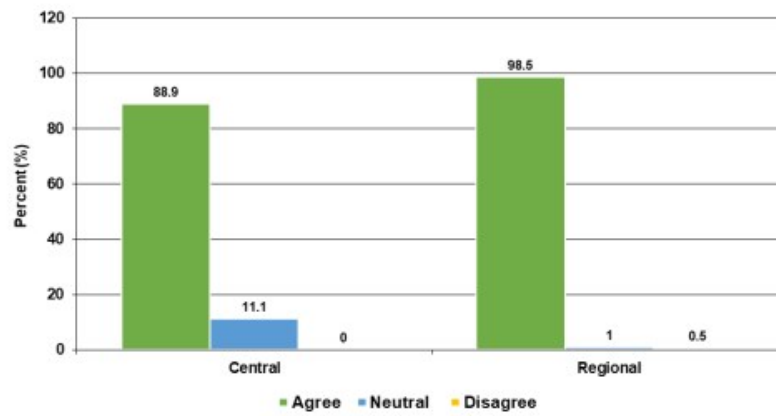


Figure 11: Knowledge about the role of family representatives by programs

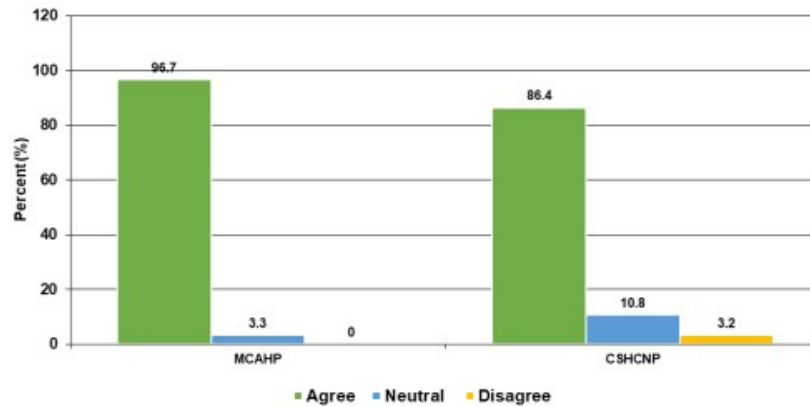
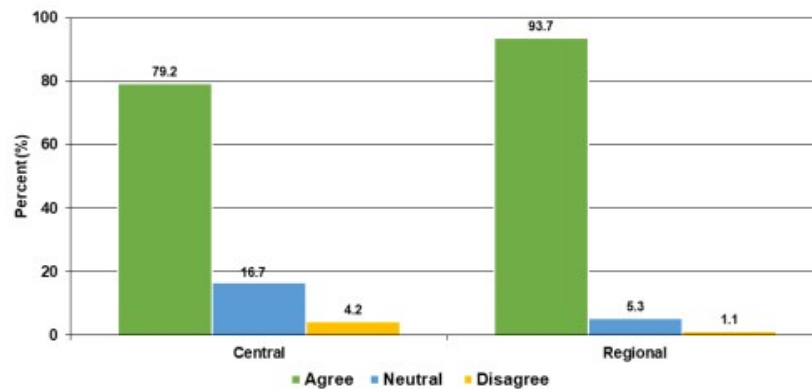


Figure 12: Knowledge about the role of family representatives by staff location



Family Engagement in Systems Toolkit (FESAT)

The FESAT is designed to evaluate family involvement in policies, programs, and other system-level activities. It is based on a framework of four strategic domains, with each item given a score of "Never" = 0, "Rarely" = 1, "Sometimes" = 2, "Usually" = 3, and "Always" = 4. The total Family Engagement Score (FES) is the average of the domains, with the CA ranged from 0.611 to 0.955 between each item:

1. Commitment: Family engagement is a core value at the program (5 items; CA=0.611).
2. Transparency: Family access to relevant knowledge and support (5 items; CA=0.849).
3. Representation: Engaged families reflect the diversity of the community served (5 items; CA=0.864).
4. Impact: Initiative highlights on how the program has been transformed now that families are involved (6 items; CA=0.955).

The FES is 55%. The two domains with the highest scores were "Transparency" (60.7%) and "Impact" (58.5%), with "Representation" (50.5%) and "Commitment" (48.5%) coming in last (Figure 13).

When programs are considered (Figure 14), the FES in the CSHCNP (62.1%) is significantly higher ($p < 0.05$) than

the MCAHP score (47.1%). This is also evident in the individual areas (Commitment: 58.4% vs 31.2%; Transparency: 66.3% vs 56.2; Representation: 55.9% vs 46.1; Impact: 66.6% vs 52.6%), where the CSHCNP scores are significantly higher ($p < 0.05$) than the MCAHP scores.

When compared to the central level (45.4%), the FES is significantly higher at the regional level (56.7%) (Figure 15). For Transparency (62.4% vs 51.3%), Representation (52.6% vs 39.2%), and Impact (61% vs 47.1%), the disparities are significantly higher for the regional level ($p < 0.05$). Commitment is likewise higher at the regional level (49.3% vs 43.7%), although the difference is not statistically significant ($p > 0.05$).

Figure 13: Family Engagement in Systems Toolkit (FESAT) Final Scores

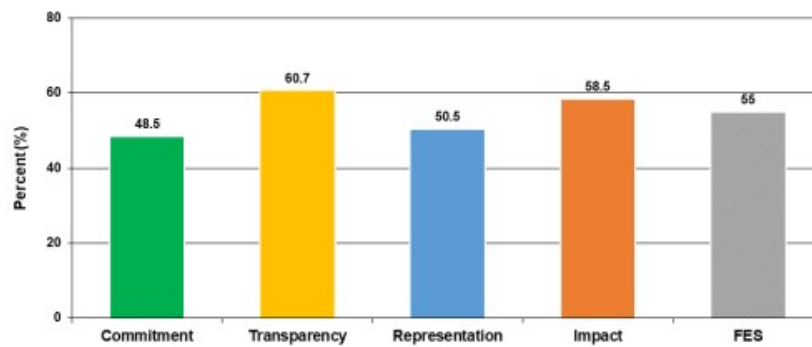


Figure 14: Family Engagement in Systems Toolkit (FESAT) final scores by programs

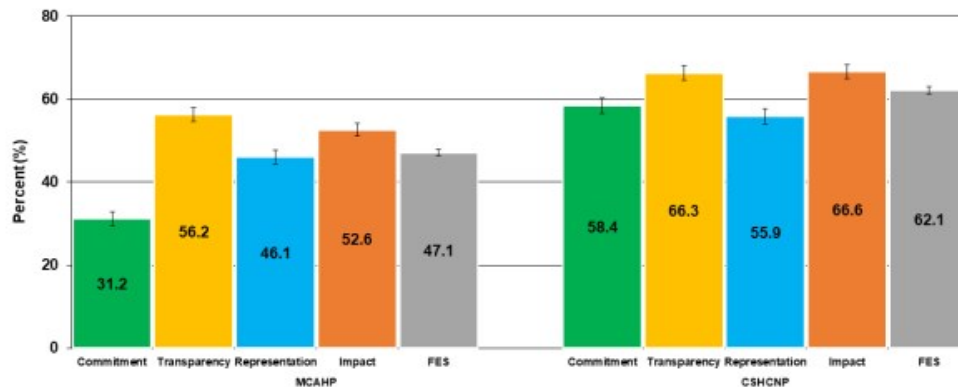
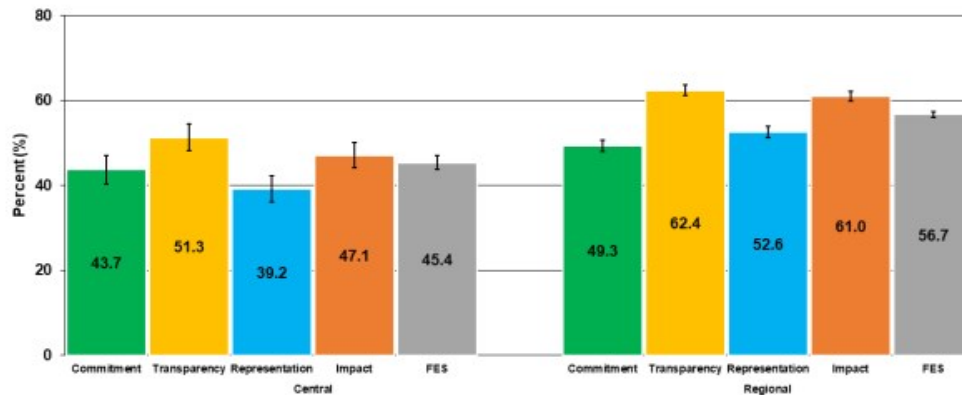


Figure 15: Family Engagement in Systems Toolkit (FESAT) final scores by staff location



Levels of Family Inclusion or Participation in the Programs: Qualitative Analysis

The survey started with open-ended questions about participants' perceptions of family inclusion and participation. To determine if respondents' perceptions had changed, identical questions were repeated at the end of the survey. Qualitative analyses coded responses as passive participants (level 0), supporters of a family member (level 1), program participants who support other families but are not involved in the system's planning or decision-making (level 2) and involved in the system or program's planning or decision-making (level 3). When a participant's perspective level increased at the end of the survey, a positive change was considered. Staff perspectives on family inclusion and participation in levels 1 to 3 increased when compared to the questions at the beginning of the survey.

Overall, 15% of the staff had a different opinion at the end of the survey (Figure 16). This positive change was higher for MCAHP staff (18.6%) when compared with CSHCNP staff (9.8%). As shown in Figure 17, staff at the central level were more likely to experience some positive change (20%) compared to the staff at regional levels (14.2%).

About 28% of the staff overall have shown a positive change in their perspective on what family participation in the programs entailed (Figure 18). There is almost no difference between programs (MCAHP: 28% and CSHCNP: 28.6%). When compared to the regional level (27.9%), the positive change was slightly higher (Figure 19) at the central level (30%).

Figure 16: Levels of change of INCLUSION

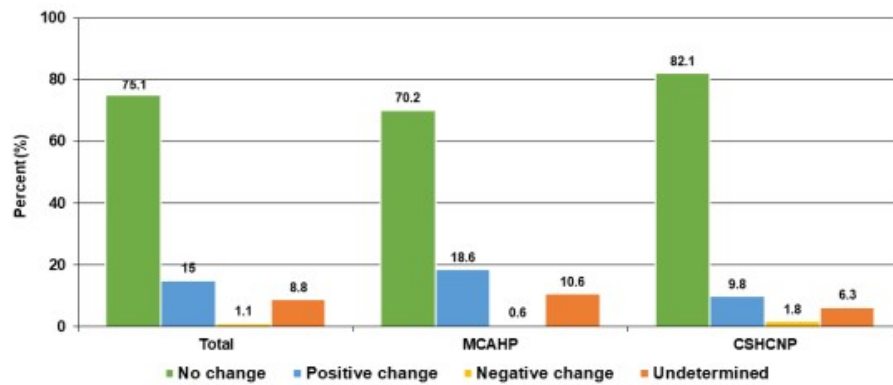


Figure 17: Levels of change of INCLUSION by staff location

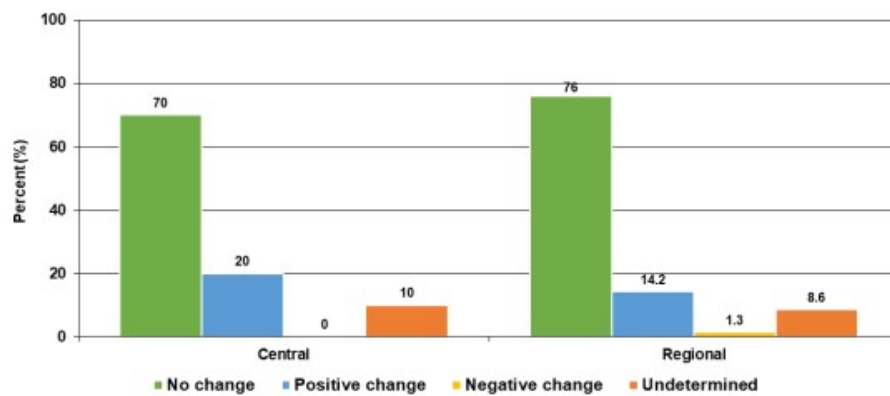


Figure 18: Levels of change of PARTICIPATION

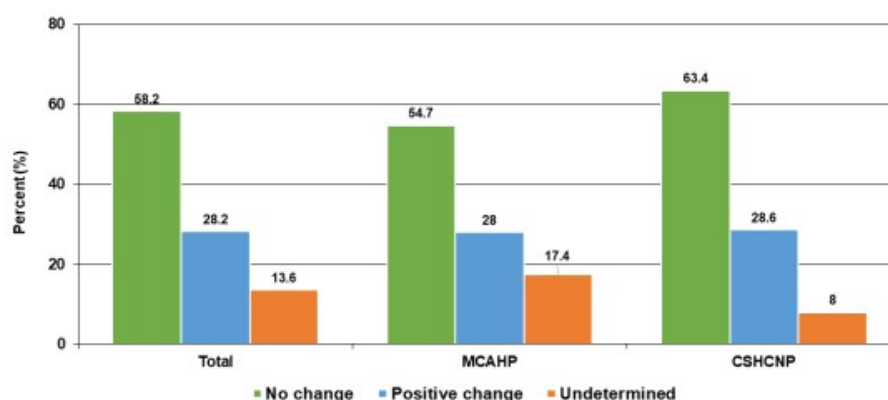
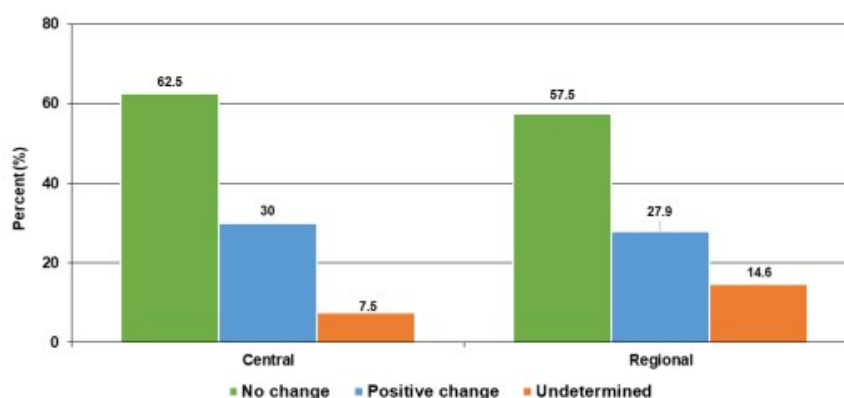


Figure 19: Levels of change of PARTICIPATION by staff location



FE Conclusions

The YAC, CSHCN Family Representative, and FESAS have evidence that it is beneficial to consider the opinions and experiences of families during decision-making processes and developing initiatives that impact the population served. We aim to increase this awareness across all PR-Title V programs.

In terms of readiness, about 90% of the staff members reported being ready to include families as part of their processes. However, the FESAT demonstrated that there are areas in which changes are needed to fully implement FE.

The survey's implementation was an educational intervention that resulted in positive changes in employees' attitudes towards family inclusion and participation.

The PR Title V Community and Family Engagement Team (CFET) will use the survey findings to create interventions to impact staff regarding Family Education (FE). The CFET will assess the staff's levels of inclusion and participation regarding the FESAT results and FE readiness tiers. Tailored interventions will consider the differences found, allowing for examination of the needs of each area. The current FESAT will act as a baseline for tracking progress of

FE within PR-Title V programs.

To discuss how FE can be achievable inside the programs, taking family buy-in into account as part of the interventions, the CFET will work on "Family Engagement Sessions" in the coming steps. As a long-term outcome, the interventions created with the input of staff members and families will make it possible to appoint a family liaison who will serve as the Family Network coordinator and lead staff members and families on how to work together.

CHANGES IN ORGANIZATION STRUCTURE AND LEADERSHIP:

The PRDOH and PR Title V Programs' organizational structure and leadership are undergoing changes, with final structural modifications expected in the last quarter of 2023. The framework remains unchanged.

TITLE V PARTNERSHIPS, COLLABORATION, AND COORDINATION:

MCAHP/ CSHCNP enhance health promotion and leadership through formal agreements –committees, task forces, and alliances, coalitions, cross coordination, resource, and data sharing– with other federal, state, and local agencies.

A major focus of MCAHP/ CSHCNP is to strengthen family partnerships. For details see Section III.E.2.b.ii.

Following an updated list of MCAH/CSHCN Programs partners:

Other MCH Investments:

1. MIECHV
2. SSDI

Other federal investments:

1. CDC (PRAMS, HIV/STDs Prevention Division, PR-SET-NET, EHDI-IS)
2. Centers for Medicare and Medicaid Services
3. Early Intervention Program
4. Immunization Program
5. Personal Responsibility Education Program
6. Sexual Risk Avoidance Education Program
7. WIC Program

Other HRSA programs:

1. HRSA Funded Health Centers
2. Ryan White HIV/STD Program
3. Early Hearing Detection and Intervention Program

State and local MCH programs:

1. Autism centers
2. MCAHP regional offices
3. Regional pediatric centers

Other programs within the State Department of Health:

1. Administration of Mental Health and Anti-Addiction Services
2. Chronic Disease and Health Prevention Programs
3. Demographic Registry Office
4. Emergency Medical Services for Children
5. Office of Informatics and Advanced Technology
6. Office of Public Health Preparedness and Response
7. Office of Regulation and Certification of Health Professionals

Other governmental agencies:

1. Education Department
2. Family Department
3. Head Start and Early Head Start Programs
4. Insurance Commissioner Office
5. PR Health Insurance Administration
6. PR Institute of Statistics

Tribes, Tribal Organizations, and/or Urban Indian Organizations:

Not applicable for PR.

Public health and health professional educational programs and universities:

1. Health and Justice Center, San Juan Bautista School of Medicine
2. Institute on Developmental Disabilities, UPR Medical Science Campus
3. Medical Science Campus, University of PR
4. PR Family to Family Health Information Center
5. PR-Neonatal Screening Laboratory
6. UPR University – Agricultural Extension

Other state and local public and private organizations that serve the state's MCH population:

1. AAP Puerto Rico Chapter
2. APNI
3. ASI
4. Association of Primary Health Care of PR
5. Highway Safety Commission
6. Hospital Association
7. Institute for Youth Development
8. La Leche League PR
9. March of Dimes
10. Maternal Fetal Medicine Specialist
11. MAVI
12. Oral Health Alliance
13. PR Boys and Girls Club
14. PR Breastfeeding Coalition
15. PR Pediatric Society
16. PR Society of Pediatric Dentistry
17. PR-ACOG
18. Pro Familia (Planned Parenthood)
19. Promani
20. Proyecto Lacta
21. Proyecto Nacer
22. Quality Office of La Fortaleza
23. SER de PR
24. United Way
25. Women and Patient Procurator

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

[2023 Application/2021 Annual Report – Needs Assessment Update](#)

[2022 Application/2020 Annual Report – Needs Assessment Update](#)

[2021 Application/2019 Annual Report – Needs Assessment Summary](#)

III.D. Financial Narrative

	2020		2021	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	\$15,800,897	\$14,922,501	\$15,785,792	\$13,019,416
State Funds	\$11,850,673	\$12,410,969	\$11,839,344	\$11,456,696
Local Funds	\$0	\$0	\$0	\$0
Other Funds	\$0	\$596,071	\$0	\$759,133
Program Funds	\$228,880	\$410,692	\$446,415	\$74,874
SubTotal	\$27,880,450	\$28,340,233	\$28,071,551	\$25,310,119
Other Federal Funds	\$17,325,276	\$9,661,573	\$19,336,365	\$11,473,958
Total	\$45,205,726	\$38,001,806	\$47,407,916	\$36,784,077
	2022		2023	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	\$15,856,806	\$14,109,864	\$15,906,262	
State Funds	\$11,892,605	\$11,786,553	\$11,929,696	
Local Funds	\$0	\$0	\$0	
Other Funds	\$395,880	\$1,127,211	\$296,168	
Program Funds	\$124,000	\$229,892	\$255,000	
SubTotal	\$28,269,291	\$27,253,520	\$28,387,126	
Other Federal Funds	\$16,520,136	\$8,476,854	\$6,842,469	
Total	\$44,789,427	\$35,730,374	\$35,229,595	

	2024	
	Budgeted	Expended
Federal Allocation	\$16,136,271	
State Funds	\$12,102,203	
Local Funds	\$0	
Other Funds	\$159,838	
Program Funds	\$518,000	
SubTotal	\$28,916,312	
Other Federal Funds	\$6,537,108	
Total	\$35,453,420	

III.D.1. Expenditures

The Finance Office and the Office of Federal Affairs of the PR Department of Health maintain budget documentation for Title V funding and expenditures consistent with Section 505(a)(1).

The PRDOH manages the MCH Block Grant Funds through two Divisions each specialized in each MCH Component with a structure developed for this purpose. PRDOH assigned the administration and management of the Block Grants Funds through the Maternal, Child and Adolescent Health Division (MCAHD) and the Children with Special Medical Needs Division (CSMND). The MCAH Division is responsible of the Component A funds earmarked for the provision of services to pregnant women, mothers and infants; and Component B funds earmarked for the provision preventive services for children. The CSMND is responsible for the provision of services for the CSHCN. Each Division works in collaboration for the services and initiatives in common but maintains a separated administration of the funds as allocated by the 30-30-10 requirement. Detailed narratives from each Division's expenditures are included below.

Expenditures of the State Maintenance of Efforts funds during the budget period of this report were computed from the local funds used for services against Catastrophic – Remediable Diseases (Program that provide funds to cover for special medical treatments provided in specialized institutions locally and in the states which were not covered by health insurances or other sources) in the pediatric population (0-21 y/o) during FY 21-22 (\$7,506,568.08); and woman (22-49 y/o) during FY 21-22 (\$4,279,985.07). A total of \$11,786,553.15 from local funds are considered as the MOE (see Supporting Documents). The PR MOE assigned surpasses the requirement of FY1989 (\$10,226,318).

Maternal Child and Adolescent Health (MCAH) Division

The MCAH Program provides services to the population based in a coordinated care structure. At first level our Regional teams identify the 3-target population in the outreach and referred them according to their particular needs and ages to the different areas of services provided by the MCAH Program, other governmental agencies or community-based organizations. This structure has been helping us to provide an integrated service, educating the community, raising awareness and facilitating the access of services to improve the health and social wellbeing. Our coordinated structure improves the delivery of services and increase quality; enable the access of services, reduces costs and helps to ensure the carry out of the essential public health services.

Under the coordinated structure a health/community professional provides various services to different MCAH populations groups as established by the reporting domains. Funds were budgeted accordingly to the federal requirements and considering the behavior of the expenditures from previous years. At the end of each Budget Year, we are able to identify the professional and population served within the different groups of the MCAH population, allowing us to determine the expenditures by type of individuals served and pyramid level. The expenditures are allocated based on the population served and the category of services provided with constant monitoring to verify the compliance with the 30-30-10 requirement.

The reported FY22 expended columns in Forms 3a and 3b reflect the expenditures registered according to each pyramid level and the 30-30-10 requirements. The MCAHD expended 70% of the allotted funds for Component A&B during FY22, a total of \$7,743,133.66 which represents a 49% of the total MCH Block Grant. There were no differences in Form 2 between budget and expenditures columns for the FY22 of more than the 10%. Note for minor difference were included in Form 2.

All the positions for the HVN's were covered during this FY with Transitory positions and a Human Consultant firm was contracted to maintain and fill any vacancies. A 54% of the FY22 allocated funds for the Components A&B were invested at the main level of the Title V pyramid, Public Health Services and Systems.

The MCAH will continue with the implementation of the strategic plan developed to improve and reinforce the infrastructure to carry out the provision of the essential public health services. With this plan we expect to maintain the

investment in the workforce, continue with the outreach of the MCAH services and working plan, and fully expended funds in the future.

As reported in Forms 3a and 3b the detailed expenditures of the MCAH Division for FY22 are as follows:

The expenditures for Individual served for the Components A&B are as follows:

A total of **\$2,862,390.32** was dedicated to the Component A population for woman and infants less than 1 yr. The amount of **\$4,530,192.05** was invested in the Component B for children 1 to 21 years.

The MCAH Division under the established working plan does not provide Direct Services. Services as preventive, primary or specialty care visits, to pregnant women and children, dental care, birth control methods, pharmacy and laboratories services among others are provided by the GHP.

An investment of **\$3,205,575.16** for enabling services which includes all services provided under the Home Visiting Program and services provided by the Perinatal Nurses. Under this category are included the salaries and benefits of the health care professional who provided these services. Services under this category are not included in the State Plan submitted to CMS neither provided through any other source.

The amount of **\$4,187,007.20** was dedicated to the main level of Public Health Services and Systems. This includes activities and infrastructure to carry out the essential public health services under MCAH Division like the evaluation and monitoring section, needs assessments, Prenatal and Adolescent Health Campaigns. Also, salaries and benefits of personnel like the Consultants and Physicians who helps with the policy and standards development, program guidelines and planning are reported under this category. This level includes the professionals like the CHW's, Health Educators and Social Workers who facilitate the dissemination and the implementation of the Program initiatives in the community. Also, production and development the materials to complement all the MCAH Initiatives are considered under this category. The investment in the administration of funds and the Program Management is considered as infrastructure as well as the development of the workforce capacity. This level as previously stated is the main level under the MCAH Program.

Other Federal Funds expenditures under MCAH are reported in Form 2.

Children with Special Medical Needs (CSMN) Division

A. Expended

Federal Allocation: \$6,366,729.96

The total expenditure of Title V funds for FY 2022 was \$6,366,729.96. The amount breaks down as follows:

1. Direct Services: \$443,515.06. The amount breaks down as follows:
2. Pharmacy: \$58,534.96. Payment of special formulas for children and youth with inborn errors of metabolism ages 6-21 years.
3. Physicians/Charges: \$334,451.80. Payment of specialty clinical providers such as plastic surgery, orthodontia and orthopedic surgery, for services provided through a formal process similar to paying a medical billing claim.
4. Durable Medical Equipment: \$50,528.30. Payment of earphones not reimbursed by public or private payers.
5. Enabling services: \$4,875,920.28 Salary and operational support to Regional Pediatric Centers to enable CSHCN access health care, case management, care coordination and referrals.
6. Public Health Services and Systems: \$1,047,294.62. Needs assessment, program planning, implementation and evaluation, and policy development activities.

Other funds: \$1,127,211.22

The total expenditure of other funds for FY 2022 was \$1,127,211.22. The amount breaks down as follows:

1. Enabling services: \$1,127,211.22. The amount breaks down as follows:

a) \$152,000.00 for the operational support of the newborn screening laboratory

b) \$975,211.22 for the operational support of the Regional Pediatric Centers

Program Income: \$229,891.97

The total expenditure of Program Income funds for FY 2022 was \$229,891.97 for operational support to Regional Pediatric Centers to enable CSHCN access health care, case management, care coordination and referrals (enabling services).

Other Federal Funds: \$2,650,223.70

The total expenditure of other federal funds for FY 2022 was \$2,650,223.70. The amount breaks down as follows:

1. \$248,277.36, EHDI, for activities directed to reduce the lost to follow up and documentation of infants after the newborn hearing screening; and
2. \$1,684.05, BDSPS, for population-based birth defects surveillance and prevention activities.
3. \$153,731.13 PR EHDI, to complete and implement a sustainable, Early Hearing Detection and Intervention Information System (EHDI-IS) capable of accurately identifying, matching, collecting, and reporting data on all occurrent births that is unduplicated and individually identifiable through the three components of the EHDI process (screening, diagnosis, and early intervention).
4. \$1,168,086.65, Zika MCH Services Program, for activities directed to ensure that community-based, comprehensive high-quality health and social services are available to infants and children affected by ZIKV and their families
5. \$1,078,444.51 Zika CMS Health Services Program, to support a system of care that assures that community-based, comprehensive high-quality health and social services are available to infants and children affected by ZIKV and their families.

III.D.2. Budget

Program allocations have taken into account the 30-30-10 requirements established by Title V. The FY 23 budget distribution for components reflects: 60% to the Components A&B and 40% to CSHCN including the no more than 10% for administration of funds. Efforts are made to match funds according to the identified needs through the three groups of individuals that comprise the Maternal and Child Health Services Block population.

Puerto Rico assures that the MCH funds are used for the purposes outlined in Title V, Section 505 of the Social Security Act. Traditionally for components A&B, a fair method has been used to allocate Title V funds among individuals and geographic areas having unmet needs. The fair allocation of funds is guided by an Integrated Index of Maternal and Infant Health Status (IIMIHS) developed by the MCAH Division to assess the health needs of the target population by municipality. One of the benefits of using this Index is that the information necessary to evaluate each of its variables is available on an ongoing basis through analysis of birth and death files.

PRDOH assigned the administration and management of the Block Grants Funds in two Divisions: Maternal, Child and Adolescent Health (MCAH) Division and the Children with Special Medical Needs (CSMN) Division. The MCAH Division is responsible of the Component A funds earmarked for the provision of services to pregnant women, mothers and infants; and Component B funds earmarked for the provision preventive services for children. The CSMN Division is responsible for the provision of services for the CSHCN.

Compliance with the 30-30-10 requirements;

Allocations of funds by MCH Population Groups are as follows:

Amount requested \$16,136,271(as assigned for BY 2022-23)

- a) \$3,630,660 (22.5%): for the provision of services to pregnant women, mothers and infants.
- b) \$4,840,881 (30%): for the provision of preventive services for children.
- c) \$6,051,102 (37.5%): for the provision of services to CSHCN.
- d) \$1,613,627 (10%): From this amount, 5% is for grant administration of

Components A and B; and 5% for administration of the CSHCN program.

Budget allocation:

The MCAH Division allocates the funds up to 55% of the total Block Grant considering the behavior of the expenditures of previous years as explained in the Expenditures Section for both components. The CSMN Division allocates a 35% of the total of the Block Grant for CSHCN services.

Administration:

Up to 10% of the federal allocation is earmarked for the administration of the Grant.

For both Divisions up to a 10% of the total grant is assigned for the administration of for each individual budget: 5% MCAH Division and 5% CSMN Division. The total of 10% assigned will be invested to support salaries, benefits, office supplies and equipment of staff in charge of the administration and fiscal management of each allocation, newspaper advertisements for the public review of the annual Progress Report, information systems, mailing, AMCHP annual membership and others.

Maintenance of Effort: Puerto Rico follows the maintenance of effort requirements as described in Section 505(a)(4). For Budget Period 22 the local funds appropriations used for the services against catastrophic remediable diseases provided locally and in the States to children's (0 -21 y/o) and WRA (22- 49 y/o), Autism Program and Regional Pediatric Centers are presented as the MOE. The local funds (\$11,786,553) used to provide special medical services to the MCH population surpasses the requirements for the Puerto Rico FY's1989 Maintenance of Effort (\$10,226,318).

Local funds assigned to the Office for Services against Catastrophic Remediabale Diseases during FY 2022 covered services provided to 6 infants (0-1 y/o) (\$2,185,250), 37 children (1-21y/o) (\$5,321,318), 35 females (22–49 y/o) (\$4,279,985). See supporting documents for details. Services to CSHCN were also provided in the Pediatric Centers and the Autism Centers with local funds (\$1,895,880). Similar amount of funds are expected for FY24.

For this Budget we need to keep in mind that in 2016 the US Congress enacted the PR Oversight, Management and Economic Stability Act (PROMESA), installing the Financial Management and Oversight Board (FMOB) with decision-making power on all fiscal matters. That means that the Local Government Budget is the one approved by the FMOB, and during previous years it has changed in different occasions. The local funds allocated for the Program for Services against Catastrophic Remediabale Diseases and other local funds allocated for services to the MCA population may be presented for the MOE.

As described, the efforts of the Commonwealth of Puerto Rico surpass the matching requirements of Puerto Rico FY's 1989 Maintenance of Effort (\$10,226,318). The table below summarize funds provided by the State for programs providing services to the MCA population.

**State Funds Requested to Support Programs Addressing Different MCH Needs
2023-2024**

Program/Service	State Allocation
Government Health Plan (GHP) ¹	\$919,331,000.00
Infant and Toddlers with Disabilities- Part C IDEA MOE ²	\$2,100,000.00
Infant and Toddlers with Disabilities ²	\$750,000.00
Services Against Catastrophic Remediabale Diseases	\$8,238,000.00
Integrated Services for Sex Abused Children	\$1,000,000.00
Regional Pediatric Centers ²	\$159,837.00
Emergency Medical Services for Children	\$60,000.00
Autism ²	\$750,000.00
Pediatric Hospital, Equipment and Cancer Treatment for children	\$2,860,000
In-Kind-Administration- Space in Facilities and Utilities	\$200,000.00
Total	\$935,448,837.00

1. Estimated proportion for primary preventive services according to FMOB.

2. Funds used for CSHCN population.

In addition to MCH dollars and the State funds listed above, there are other federal sources of funds that contribute to the achievement of the MCH outcomes. These other federal funds are included in Form 2. Additional detailed budget information of each Component is included below.

Additional detailed earmarking by pyramid level and other federal funds:

FY24 budget for Components A&B is \$9,681,763, a 60% of the total MCH Block Grant budget. An estimated 55% (8,874,949) was assigned for services provision in both components and 5% (\$806,814) for administration of the funds.

Budget for Individual served for the Components A&B in FY24 are as follows:

A total of \$ 4,034,068 (25%) assigned for the Component A: woman and infants less than 1 yr. The amount of \$4,840,881 (30%) directed to the Component B for children 1 to 21 years.

Under Components A & B no Direct Services are provided. For FY24 the amount of \$4,840,882 was assigned to provide the enabling services and \$4,840,882 for level of Public Health Services and Systems. Other earmarked FY22 federal funds were reported in Form 2.

Children with Special Health Care Needs (CSHCN)

Federal Allocation: \$6,857,915.00 (42.5% of the total federal allocation)

Of the Title V Federal Allocation for FY 2024, the amount earmarked for CSHCN is \$6,051,102.00 (37.5%). In addition, an allocation of \$806,813.00 (5%) is earmarked for CSHCN Title V administrative costs (fiscal and administrative support for management of the CSHCN Title V allocation).

The \$6,051,102.00 breaks down as follows:

1. \$421,527.99 are earmarked for direct services for CSHCN including payment of specialty clinical providers such as neurosurgery, plastic surgery, orthodontia and orthopedic surgery, and earphones not reimbursed by public or private payers.
2. \$4,634,198.59 are earmarked for enabling services (salary and operational support to the Regional Pediatric Centers and Autism Centers to enable CSHCN access health care, case management, care coordination and referrals). operational support to the Birth Defects Surveillance and Prevention System activities including those related to CSHCN domain state priority: Reduce the prevalence at birth of neural tube defects; for operational support to the Hereditary Diseases Detection, Diagnosis and Treatment Program activities, and to support the newborn screening for CCHD; and
3. \$995,375.42 are earmarked for new public health services and systems activities including improving the efficiency and effectiveness of the billing and collection processes for services provided; workforce development; policy development and quality assurance and improvement activities related to the following CSHCN domain selected priorities: a) Increase the number of CSHCN who receive regular ongoing comprehensive health care within a medical home; b) Increase the number of CSHCN aged 12 to 17 years who receive adequate support and services for their transition to adult health care; and c) Decrease the age when children at risk for Autism Spectrum Disorders (ASD) receive their first diagnostic evaluation.

Other funds: \$159,837.54

The amount of nonfederal state funds budgeted for FY 2024 to support services for CSHCN is \$159,837.54 for the operational support of the Regional Pediatric Centers (salaries).

Program Income: \$518,000.00

The estimated amount of program income funds for FY2024 is \$518,000.00. The amount breaks down as follows: a) \$ 466,200.00 (90%) for operational and administrative support to the RPCs and the Autism Centers and b) \$51,800.00 (10%) for administrative costs.

Other Federal Funds: \$401,000.00

The amount of other federal state funds budgeted for FY 2024 is \$401,000.00. The amount breaks down as follows:

1. \$235,000.00, EHDI, for activities directed to reduce the lost to follow up and documentation of infants after the newborn hearing screening.
2. \$166,000.00, PR EHDI, to complete and implement a sustainable, Early Hearing Detection and Intervention Information System (EHDI-IS) capable of accurately identifying, matching, collecting, and reporting data on all occurrent births that is unduplicated and individually identifiable through the three components of the EHDI process (screening, diagnosis, and early intervention).

CSHCN Budget Grand Total: \$7,936,752.54

III.E. Five-Year State Action Plan

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

State: Puerto Rico

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

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

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

III.E.2. State Action Plan Narrative Overview

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

The Title V program responsibilities are assigned to the Maternal, Child and Adolescent Health Division (Component A&B) and to the Children with Special Medical Needs Division (Component C) according to the operational structure of the Health Department.

The MCAHD uses the life course model as the framework for the approach of all strategies and activities and in collaboration with our partners/stakeholders as allies, working towards our goals and objectives. The better the health condition of a WRA, the healthier the baby will be. Adequate care of the baby will result in a healthier adult. The oral health status of the pregnant woman impacts the fetus and oral hygiene established in infancy has a lifetime protective effect. Our services are directed to empower and support the population toward reaching a healthier status: 1-HVP by nurses to high-risk pregnant women and follow-up of mother and child until the baby reaches 2 y/o; 2-Outreach activities by CHWs, HEs, and PNs to guide the population to obtain appropriate services, deliver one to one health education and provide the Prenatal and Parenting courses; 3- Youth Health Promoters program and the YAC under the PYD model, allow youth empowerment, contribution with their peers and participation in the development and implementation of MCAHD strategies.

The Maternal Mortality Review Law was an accomplishment of our team, providing the tools to help identify preventable causes of death that will serve to prioritize the strategies chosen toward promoting healthier WRA. In addition, the WRA health services guidelines implementation as public policy by the DOH will help foster improved quality care based on evidence and changes in the delivery care system. The FIMR and LOCATe (CDC instrument for hospital maternal and neonatal services level) are other interventions that serve to identify further strategies to implement with the purpose of improving IM&M areas.

PR-PRAMS was awarded in May 2016, starting the first survey in July 2017. The main purpose of the study is to collect data on health status, maternal attitudes, behaviors, and experiences that occur before, during, and after pregnancy. The study is carried out using a questionnaire sent by mail, a web survey, or a telephone interview with a sample of mothers obtained from the Demographic Registry. The participants of PR-PRAMS are women who had a live birth in the last 2-6 months and who are residents of Puerto Rico. The core information collected by PR-PRAMS includes the following topics: prenatal care, health insurance coverage, birth control, nursing, safe baby sleep, infant development, and gender-based violence, among others. In addition to the core information collected, PR-PRAMS also included specific supplemental questionnaire modules addressing public health emerging issues such as Zika, Opioid use, COVID-19, and natural disaster effects, as needed.

PR-PRAMS findings help to identify groups of women and infants at high risk of developing health problems, monitor changes in health status, measure progress in improving maternal and infant health, and plan successful services and programs for women and their children. The information collected will also enable informed decision-making and resource allocation to support effective and quality programming and public policies to reduce maternal and infant morbidity and mortality.

The MCAHD has multiple partners that actively collaborate in the achievement of our goals and objectives, among them: UW; MOD; Hospital Association; ACOG and AAP local chapters; UPR School of Medicine and Public Health School; Ponce Medical School; Primary Health Care Association; CBOs; Federally Qualify Health Centers (330); PRHIA; WIC; LLL; Department of Family Welfare; and the Department of Education. Our staff has a leading role in facilitating the accomplishments of the FIMR, and MMR; also, actively participates in the MOD Programmatic Committee, Children Justice Act Council, Normative Policies for Head Start Council (Family Welfare Department), and Emergency Medicine Pediatric Council.

This collaborative work allows us to share the needs of the population and support policy changes in the system to improve access and quality of care. It also allows the delivery of information that empowers the population to receive

the services required and has served as a bridge for them to identify available resources.

The CSMND has the vision of an integrated, community-based, family centered system of care that leads to the health and wellbeing of CYSHCN and their families. The division uses the MCH pyramid framework to organize staff and programmatic activities within the three level of the pyramid: 1- public health services and systems, 2-enabling services, and 3- direct services, ensuring that the MCH essential public health services are provided. Approach of strategies and activities are based in various models such as the socio-ecological model, strength-based approach, and the life course model. The division strongly believes in strengthening internal and external collaborations to accomplish the established objectives and goals.

At the central level, a specialized workforce labors daily to strengthen the CSHCN public health services and systems supporting surveillance systems and data analysis, special registries, evaluation and quality improvement, program coordination, workforce development and health education, key partnerships and collaborations development, and policy development. Staff communication and interaction within the three levels of the MCH framework reinforces and strengthen team effectiveness, assuring the ten MCH essential services are carried out for the CSHCN population. The programs and projects at the CSMN Division central level include: the PR-CSHCN Program, the PR-Birth Defects Surveillance and Prevention System (PR-BDSPS); the Surveillance of Emerging Threats for Mothers and Babies System (PR-SET-NET); the PR-Hereditary Diseases Detection, Diagnosis and Treatment Program (PR-HDDDT Program); the PR-Universal Newborn Hearing Screening Program (PR-UNHS Program); the Technology Dependent Children and Youth Registry (TDCY Registry); and the Autism Registry.

At the community level, the PR-CSHCN Program provides enabling services through seven (7) Regional Pediatric Centers (RPCs) and two (2) Autism Centers. The program offers workforce and operational support to pediatric clinics that empowers CSHCN families to access health care services. Services include, but are not limited to, case management, care coordination, referrals, transportation, family engagement and support and eligibility assistance. The RPCs workforce includes pediatricians, nurses, social workers, care coordinators, family engagement and support advocates (FESAs), psychologists, nutritionists, speech and language pathologists and therapists, occupational therapists and assistants, and physical therapists and assistants. The Metro RPC also provide pediatrics subspecialty services, filling a gap in the PR system of care for CYSHCN.

The PR-CSHCN Program provides state-level leadership and partners with families and other stakeholders to achieve its vision of a system of health care that meets the needs of CSHCN and their families. It also provides leadership during emerging public health threats and disasters, by participating in coordinated responses to save lives and prevent unfavorable outcomes to vulnerable populations. Examples of these are the program's interventions and support during the 2016 Zika epidemic, 2017 hurricanes, 2020 earthquakes, and Covid-19 pandemic and lockdown. Interventions are described in previous annual reports.

Other examples of collaborations are the PR-PKU Association and the PR-HDDDT, which together participate in the identification of strategies to address the needs of the PKU population. MAVI and the Office of Advocacy for People with Disabilities, have both collaborated in the YSHCN assessments and surveys. APNI collaborates by supporting health and services promotion, research, and by enhancing family engagement. The PR Family to Family Health Information Center provides information to NICU families that promotes the PR-CSHCN Program. The PR-Neonatal Screening Laboratory and the PR-HDDDT work together to coordinate services for infants with positive newborn screening test results. The Child Care Program, Early Head Start and Head Start Program housed in the Puerto Rico Family Department, collaborates in the early identification of children with ASD and other DD. The Puerto Rico Department of Education collaborates with the early identification and diagnosis of children with ASD, and the identification of technology dependent children.

The priorities for the current five year-cycle for the PR-CSHCN Program domain are: 1) increase the number of CSHCN served in medical homes and having a successful transition to adult health care; 2) increase the number of children with ASD who are identified and diagnosed before 36 months of age, and 3) reduce the prevalence at birth

of folic acid preventable NTD. The strategic approach to address priorities is based on the enhancement of care coordination and family engagement, continuous quality improvement, workforce capacity development, community health education, and system development through collaborations and agreements with key stakeholders and community resources.

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

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

The Maternal, Child and Adolescent Health Division (MCAH) and the Children with Special Medical Needs Division (CSMN) are comprised by Health and Social Skilled Professionals. Both Divisions recruits experienced and specialized professionals to carry on the objectives and services within the population. Therefore, these workforces, development and human resources approach are required to be able to provide quality specialized services.

MCAHD is a multidisciplinary team of professionals dedicated to provide quality services to the maternal, infant and adolescent population. The MCH Block Grant in Puerto Rico is administered by the director of the Maternal, Child, and Adolescents Health Division (MCAH), Dr. Manuel I. Vargas Bernal. Dr. Vargas is a physician with a specialty in obstetrics and gynecology, a master's in public health and sound experience in grant development and administration, supervision of public health programs, and program evaluation. Dr. Vargas has been active in the field of maternal and child health for 40 years. Currently, Dr. Vargas successfully guides 7 public health programs aimed at the population of women, children, and adolescents, which are funded by HRSA, Department of Families and Children, Department of Education, among others. Dr. Vargas has also been an active collaborator with other public health leaders in the publication of several scientific articles in peer-reviewed journals. The Under-Director (1 FTE) has a Doctoral Degree in Public Health with a major in Health Systems Analysis and Management, also a Master's in science with a major in Evaluation Research with former experience as Title V evaluator and Early Intervention Program Coordinator.

At Central Level the team is composed by 9 regulars (8.96 FTE) positions including the PR MCH Block Director, MD, MPH. The 16 (12.77 FTE) Professional Services Contracts are at Central Level, all of them skilled public health professionals and highly experienced in MCAH population.

In the field of data gathering and epidemiology, the PR MCH Block Grant epidemiology efforts has been leading by Ms. Marianne Cruz Carrión. Ms. Cruz has a master's degree in epidemiology from the Medical Sciences Campus of the University of Puerto Rico. For more than 18 years, Ms. Cruz has overseen the MCAH data collection, surveillance analysis and accountability duties. Ms. Cruz has been the SSDI Coordinator for Puerto Rico for the past 5 years and her experience and analytic skills are part of the strength for the MCAH Division. The Evaluation and Data Analysis Section is composed of: One Biostatistician, MPH; Two Epidemiologists, MS (1.25 FTE); Two Evaluators, MS; and a Cultural Anthropologist with a PhD. Three Physicians: MD Associate Director for Adolescent Health; MD, FACOG Ob-Gyn Consultant and MD, MPH Pediatric Consultant. Other contracted positions include Positive Youth Model Coordinator, MA; Curricula Consultant, MHE, PhD; HVP Coordinator MPHE, MAEd, MIS; and the Mental Health Consultant, PhD.

In addition, our team provides services from Central Level and 7 Regional Offices (ROs). As of July 1, 2023, workforce consists of 152 regular/transitory/subcontracted employees and 16 professional services contracts. Total of 134 (FTE) regular/transitory employees are located at the RO's, including 83 Home Visiting Nurses (HVN), 18 Community Health Workers (CHWs), 7 Perinatal Nurses, 7 Adolescents Coordinators (SWs) and 5 Community Health Educators (CHEs). The MCAH ROs teams are comprised of a MCAH Regional Director (RD), HVNs Supervisor, SW, CHE, HVNs, CHWs and clerical support staff.

Previous year's intense work has continued to fill key vacant positions. As to date we have in place HVNs in 68 of 78 municipalities including the two small island municipalities of Vieques and Culebra; 5 municipalities are cover with MIECHVP. Seven CHWs with flextime enhance the services provision in the community. Some challenges in the Workforce area prevails like: Vacant position for RD in Caguas; the Island's fiscal situation; and the uncertainty in the applicability of the Single Employer Law. A human resource consulting firm was contracted with the purpose to help with a speedy recruitment of needed personnel as temporary until all governmental procedures are completed. MCAHD are continuously identifying emerging needs and topics to schedule trainings for staff to improve the workforce development capacity. Monthly meetings are conducted at Central Level to discuss emerging issues,

community issues/feedback and share other programmatic and administrative information. MCAH continuously expands the scope of cultural competency and produces culturally sensitive educational materials for the population, with this purpose a Cultural Anthropologist is part of our team.

Some of the training developed and provided for the MCAHD staff are: *New HVP staff orientation, Infant CPR Anytime, Oral health screening, Motivational Interview techniques, Value and benefits of the Home Visiting Program, Trainings in Prenatal Course, Positive Parenting 0-5yrs and 6-11yrs for the CHWs, Early Childhood Caries (ECC) risk screening, Interactive lesson on the management of crying babies with SBS simulation doll, updated Safe Sleep Course, among others.*

TRAINING FOR HVP STAFF

Home Visiting Nurses (HVNs), Regional Supervisors, Perinatal Nurses and Home Visiting Program (HVP) Central Level staff participate in in-service training on a regular basis to ensure they have the most updated information regarding MCH issues and have the tools and skills needed for effective interventions with their participants. In the reporting period most training sessions were offered via Zoom or Microsoft Teams, except as noted. Most sessions were offered by Title V staff; other resources are noted in the table.

Trainings to HVP Staff, 2021- 2022

Date	Topic	Audience	Resources
August 2021	Roundtable discussion: Home visits in times of COVID-19 (one session per region)	HVNs	HVP Coordinator, Evaluator and Mental Health Consultant
August 2021	Roundtable discussion: Supervising the HVNs in times of COVID-19	Regional Supervisors	HVP Coordinator, Evaluator and Mental Health Consultant
August 2021	Roundtable discussion: Perinatal education in times of COVID-19	Perinatal Nurses	HVP Coordinator, Evaluator and Mental Health Consultant
September – November 2021	<p>Home Visiting Program onboarding training (virtual except as noted):</p> <ul style="list-style-type: none"> • Introduction to the HVP I <ul style="list-style-type: none"> ◦ Biopsychosocial approach & case management model ◦ Life Course ◦ The first two years of life ◦ Trauma-informed care • Introduction to the HVP II (in-person) <ul style="list-style-type: none"> ◦ Emotional wellbeing ◦ Motivational interviewing • OB/GYN topics, pregnancy, labor, and postpartum care (2 sessions) • Substance use in pregnancy • Alcohol and tobacco screening instruments – administration and interpretation • Identification and handling of sexual and gender-based violence • Care of the infant and toddler (includes safe sleep, feeding, injury prevention, growth and development) (3 sessions) 	Newly hired HVNs	<p>HVP Coordinator, Evaluator and Mental Health Consultant (except as noted)</p> <p>Fajardo/Metro Regional Director (OB/GYN)</p> <p>Rape Crisis Center</p> <p>Pediatric Consultant</p>

	<ul style="list-style-type: none"> ASQ Administration and interpretation (in-person) Integrative session: protocols and documentation (in-person, 2 sessions) 		Developmental Deficiencies Institute, UPR
October 2021	Supervision and the Law	HVP Coordinator HVP Evaluator Regional Directors Regional Supervisors	PRDH Legal Affairs Office
October 2021	Contraceptive methods update	HVNs Regional Supervisors	MCAHD Health Educator
December 2021	Handling Interpersonal Violence in Emergency Situations	HVP Coordinator	Health and Justice Center, San Juan Bautista School of Medicine
February 2022	Poisoning Prevention	HVNs Regional Supervisors	PR Poison Control Center
December 2021 – August 2022	MCH Workforce Development Center Learning Institute training and webinar series	HVP Evaluator Title V Epidemiologists Title V Evaluator SISA YAC Coordinator	The University of North Carolina at Chapel Hill
March 2022	Diversity, Inclusion and Equity	HVP Coordinator	PRDOH Public Health Academy
March 2022	Implicit Bias in Health Care Services	HVNs Perinatal Nurses Regional Supervisors	March of Dimes
March 2022	National Home Visiting Virtual Summit	HVP Coordinator HVP Evaluator HVP Mental Health Consultant	Start Early
April 2022	Ethics in the Coordination of Health Services	HVP Coordinator	PRDOH Public Health Academy
April 2022	HIV Infection in Women	HVNs Perinatal Nurses	Maternal Infant Center, Medical Sciences Campus, UPR
May 2022	Public Health Emergencies	HVP Coordinator	PRDOH Public Health Academy
May 2021	Evaluation: Results-oriented Management	HVP Coordinator	PRDOH Public Health Academy
May 2022	Maternal Mental Health	HVNs	Title V Mental Health Consultant
June 2022	Family Engagement in Title V Activities	HVNs Perinatal Nurses	SISA YAC Coordinator and CSHCN Evaluator

Regional supervisors hold regular meetings with the HVP Coordinator, Evaluator, and the Title V Mental Health Consultant. The focus of these meetings is to present new information that pertains to the program, discuss challenges and successes, weigh options to overcome any challenges, and facilitate uniformity and quality of implementation of the program model at the local level. Since March 2020 these meetings have taken place via Zoom/Teams and in person according to COVID-19 protocols and to facilitate personnel attendance.

Comprehensive Adolescent Health Program (CAHP) Staff

CAHP personnel met monthly to share experiences and knowledge to improve work with youth, report regional and central level work, review YHPPs curriculum, discuss youth surveys and studies, design workshops and increase workforce capacity through continued education (CE).

Trainings to CAHP Staff, 2021-2022

Date	Title	Offered by	Purpose
August 20, 2021	Suicide prevention in children and youth.	Suicide Prevention Commission	Get updated information about this topic to identify risks in youth who participate in the CAHP workshops.
August 24, 2021	Cyberbullying	APS Health Care	Learn more about this topic in order to educate youth in the YHPP schools.
September 10, 2021	Self-care strategies for suicide prevention.	Suicide Prevention Commission	Reinforce information about self-care, better manage of full consciousness dynamics.
December 10, 2021	Domestic Violence intervention protocol	Center for Assistance to Rape Victims	Get knowledge about the established protocols in case of domestic violence event in the adolescent population.
December 17, 2021	Emotions	MCHAD Mental Health Consultant	Learn about dealing with emotions and to bring employee support.
January 2022	Comprehensive Adolescent Health	Pan-American Health Organization (PAHO)	Review information about adolescent development, the brain, adolescent behaviors, and healthy eating.
January 10-13, 2022	Post-pandemic brain health and cognitive functioning update.	SINAPSIS Group	Expand knowledge about brain development, the human being's ability to process information and their ability to adapt to different situations.
February 2, 2022	Anxiety management due to COVID emergency: plan and action.	Dra. Rosaura Orengo Aguayo MUSC Charleston, SC	How to manage stress and emotions due to COVID pandemic and the process to back to school.
February 11 & 28, 2022	Grief: let's achieve empathy while taking care of our mental health.	Senior Training & Consultation Specialist -MHTTC	Provide emotional support if a situation of loss occurs in the health promoters group or in the schools.
March 4, 2022	Care, self-care strategies	Suicide Prevention Commission	Learn strategies to have better mental health for both, the youth and the school staff.

March 11, 2022	Anxiety: how it's perceived in adolescence and childhood	Senior Training & Consultation Specialist -MHTTC	Learn to identify situations that can be addressed by school personnel from the benefit of youth promoters.
April 22, 2022	Human Rights	Human Rights Commission	Learn about this topic to discuss it with the promoters since is part of the YHPP curriculum.
June 14, 2022	Suicide ideations	Suicide Prevention Commission	Get knowledge about the suicidal ideation manifestations to recognize the signs in youth if there are any cases in the YHPP schools.
June 21, 2022	Self-injury among adolescents	Senior Training & Consultation Specialist -MHTTC	Identify trauma manifestations in adolescents.
June 22, 2022	Opioid use disorder and stigma	Opioids Program PR Department of Health	Raise awareness about this topic and mental health conditions related to opioids use.
June 23, 2022	Self-care	Senior Training & Consultation Specialist -MHTTC	Learn about spaces to maintain mental health for both, youth and coordinators.
June 27 & 29, 2022	Cuídalos	PR-PREP	Get tools and information about sexuality to educate parents and youth.

Health Educators and CHWs

As stated elsewhere, during the past funding period, the MCAH Division had 5 Health Educators and 18 Health Promoters (CHW) in the regions of Arecibo, Bayamón, Caguas, Mayagüez/Aguadilla, San Juan, Fajardo and Ponce. Health promotion and education staff participated in trainings and professional development activities. The capacity building activities were offered in a variety of formats (face to face, distance, individualized by modules). The topics covered by the in-service trainings include Neonatal health and conditions, Breastfeeding, Safety practices for infants and children, Perinatal emotional support, Oral care, Domestic violence identification and prevention, among others. The following table summarizes a selection of trainings provided to health educators and health promoters by training format.

Trainings to HEs and CHWs Staff, 2021-2022

Topic	Face to Face	Distance	Learning Module
Oral Health		X	
Family planning methods		X	
Title V Action Plan 2020-2025		X	
Poisoning prevention		X	
Technical and educational competencies	X		
Visual/technological skills in the development of educational materials		X	
"Mi agenda de salud" - educational strategy for women's health		X	
Opioid use during pregnancy		X	
Prevention measures for COVID-19 and other communicable respiratory diseases	X		
Immediate response to suicidal behavior		X	
Gender perspective promotion and integration into daily work environment	X		
Respect for diversity and multiculturalism in gender equality work	X		
Male participation in gender equality process, discrimination, and violence prevention	X		
Violence against women: Domestic violence and stalking	X		
Understanding Trauma: Empowering service providers to provide support to victims of domestic and sexual violence	X		
Legal tools to eliminate discrimination in worksites	X		
Violence, aggression and sexual harassment in school and work settings		X	
Health communication: breaking the misinformation gaps	X		
Sexual Transmitted Infections		X	

CSHCN Workforce Development

As of May 2023, the CSHCN Title V workforce at the central level consists of eight (9) regular/transitory positions, including the interim CSMND director (9 FTE), and 21 professional services contracts (19.2 FTE). Fifteen (15) of the 21 contracts are public health specialized professionals, information system specialists/technicians, or family representatives as follows: one (1) evaluation specialist, one (1) epidemiologist who is in front of the PR-BDSDS, one (1) clinical data collector, three (3) information system specialists/technicians, one (1) HIPAA consultant, one (1) pediatrician consultant and telehealth coordinator, three (3) program coordinators (TDCY Registry, HDDDT Program and ASD Registry), one (1) care coordinator for the PR-BDSPD, one (1) data manager, and two (2) family representatives (total of 13.2 FTE). The remaining six contracts (6 FTE) are professionals related to billing and accounting. The PR-UNSHP, although not under Title V funds, is located at the CSMND and is comprised of an epidemiologist, one program coordinator, two care coordinators, a program coordinator for the EDHI information system and an evaluator. One of the Title V family representatives works full time for the PR-UNSHP. PR-UNSHP team works in collaboration with Title V programs.

At the regional level the CSHCN program consists of seven Regional Pediatric Centers and two Autism Centers. As of May 2023, the regional level had a total of 41 regular/transitory positions (41 FTE) and 124 professional services contracts (102 FTE) under Title V. Professional services contracts are mostly health and social care providers,

physicians, and administrators: 2 audiologists, 14 care coordinators, 8 nurses, 15 speech and language pathologists, 3 speech therapists, 8 pediatricians, 4 nutritionists, 6 FESAs, 16 clinical psychologists, 8 physical therapists (one is a PT assistant), 9 occupational therapists (one is an OT assistant), 10 social workers, 4 administrators. These professionals enable CYSHCN and their families to access health care and improve health outcomes, filling gaps in the PR health care system.

At the regional levels FTEs are distributed as follows:

Regional Pediatric Center (RPC)/Autism Center	FTE
Arecibo RPC	17.03
Bayamón RPC	17.13
Caguas RPC	17.03
Fajardo RPC	7.85
Mayaguez RPC	16.26
Metro RPC	33.52
Ponce RPC	22.36
Metro Autism Center	7.6
Ponce Autism Center (CEPA)	4.3
Total	143.08

The CSHCN program also provides plastic surgery and audiology in a fee for service (FFS) basis. Through an agreement with the UPR Medical Science Campus, clinics are provided at the Metro RPC in the following pediatric specialties: ophthalmology, neurosurgery, orthodontics, and orthopedic surgery.

The seven RPCs and Autism centers have an internal care coordination system to ensure every child receives the service they need even if not available at the RPC where the child belongs. For example, if a child is referred to physical therapy and the RPC has no availability for that service, the child is referred to the nearest RPC with an available physical therapist or to the community, as preferred by the family. The RPCs internal care coordination system, as well as care coordination for services in the communities, are being reinforced during present and application year.

During reporting year, activities related to workforce capacity development were carried out in a face-to-face modality. Topics provided were linked to the SAP for year 2021-2022 and based on previous work done by the QIC. Table below shows the capacity development activities, topics, dates, audience, and number of participants.

Topics	Staff	Date	Number of participants
<ul style="list-style-type: none"> Family centered care coordination model Impact of care coordination Care coordination protocols and flowchart Identifying families' priority needs and providing support "Learn the Signs, Act Early" Importance of folic acid intake 	Regional care coordinators	March 3, 2022	14
<ul style="list-style-type: none"> Family centered care coordination model Family engagement and support Kristin L. Carman's continuum of patient/family engagement model Identifying families' priority needs and providing support "Learn the Signs, Act Early" Importance of folic acid intake 	FESAs	March 25, 2022	6
<ul style="list-style-type: none"> Family centered care coordination model Contacting and communicating with community pediatricians and PCPs Guidelines to protect privileged health information (PHI) Encryption procedures "Learn the Signs, Act Early" Importance of folic acid intake 	Health care providers, care coordinators, FESAs, Administrative and central level staff	April 4,12,19, 22,26,28 and May13,2022	168

Workforce capacity development will continue during application year focused on family/professional partnerships, family engagement and health equity. Other topics will be provided and/or discussed with staff as needed such as status of ESMs and strategies to improve results, relevant surveys' findings, CSHCN program updates, and dialogues about staff barriers and satisfactions. In addition, every health care provider, including social workers, must comply with the continued education required to renovate their professional licenses every three years, as well as maintaining their NPIs and Good Standing documents.

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

Over the last decade, PR Title V has pursued family engagement to promote health and wellbeing of all MCA populations. Having experienced setbacks and intermittent family participation in the planning, implementation, and evaluation of programs, services and policies led us to seek new ways to engage families as partners. Consequently, we applied for technical assistance from the MCH Workforce Development Center (WDC) to better address family inclusion and participation. From October 22, 2021, to February 24, 2023, we participated in the MCH WDC Learning Journey to identify tools and strategies to establish effective and sustainable family engagement activities and staff-family partnerships across domains.

The PR Title V Community and Family Engagement Team (CFET) was organized to lead this project. The CFET is composed of nine members from the MCAH and the CSHCN divisions. Marianne Cruz, SSDI Coordinator and Milaida Hernandez, CSHCN Evaluator, are the Team Co-leads that provide leadership, respond to WDC requests, convene meetings, and assure the team moves forward in its initiative.



The aim of CFET is to partner with families to identify and implement strategies that will improve systems and processes to include families in all levels of our programs and policies to make them more effective, efficient, and responsive.

Families and communities need a Title V system that understands and responds to their needs and includes them in the process of decision-making. There is a culture of seeing families as passive entities who receive services from the government (paternalism). Probably because of the ill-conceived concept that families don't have much to contribute because they need more than what they can give or contribute.

We envision as Title V leaders to see families and communities in Puerto Rico who are empowered, engaged, and working together with our staff to support and address the needs of the MCA population. Two main assumptions underlie this new path we have taken: 1) Evidence supports that family engagement (FE) is an effective mechanism to understand and address MCA health and health care inequities; 2) Including family partners and people with lived experience across TV domains will progress towards a culture of family engagement in care, services, and programs that ensures the active participation of families at all levels.

The CFET under the guidance of the MCH WDC fulfilled the following main activities:

- Participated in all 20 virtual training sessions and meetings of the WDC Learning Journey, and an intense in

person training carried out in PR from February 8 – 11, 2022. These trainings and meetings allowed us to clarify ideas, identify strengths and challenges, organize our work, follow up on tasks, prioritize activities, and understand the role each CFET member plays, among others.

- Created a Logic Model that includes our goal, assumptions, short and long-term outcomes, project's phases, and timeline to foster change in the Title V leadership and staff mindset. For details see Logic Model in the Supporting Documents.
- Organized strategies and activities to foster staff-family partnerships into four interconnected phases. These are:
 - **Phase One:** Involves the identification of evidenced family engagement initiatives; the identification of an equity framework; and the assessment of PR Title V staff's knowledge, attitudes, and practices regarding family engagement.
 - **Phase Two:** Involves identifying strategies to increase PR TV staff family engagement buy-in and providing education and open dialogues spaces on family engagement with the staff.
 - **Phase Three:** Involves assessing families' attitudes and perceptions regarding family engagement; identifying strategies to increase families' buy-in; and providing education to families and community partners.
 - **Phase Four:** Involves the establishment of a Family Network; the integration of an equity framework to the PR State Action Plan; and the hiring of a Family Liaison.
- Produced a One-pager that lays out the goals and timeline of the project targeted at the Title V leadership and staff. The One-pager is used to introduce (as a presentation letter) the project to staff and leaders and promote change. It was developed and piloted with staff of other programs within the PRDOH to receive their feedback in order to make necessary changes to the document.
- Developed a Staff Assessment Tool to assess staff's knowledge, attitudes and practices regarding family and community engagement. The tool consists of both close-ended questions and open-ended questions. We piloted the tool with 7 Title V collaborators to receive their input. Based on their feedback the CFET Team revised and made the necessary changes.
- Distributed the self-administered Staff Assessment Tool to 392 staff from the MCAH and the CSHCN divisions. Between October and December 2022, 310 staff answered the questionnaire whose answers give us a glimpse of their knowledge, perceptions, and practices in relation to partnering with families. For details on the analysis of results see Needs Assessment Report Update.
- Completed Phase One involving the review of our past work, other states' similar initiatives, and staff assessment on family engagement in PR Title V.

Submerging ourselves in this initiative both as persons and as team members have been a learning experience that brought about gains in our capacity to promote family engagement in PR Title V. The most significant gains during this process of receiving coaching from the MCA WDC and working together as a team are:

- Firstly, the tools shared by the MCH WDC helped to organize the ideas, prioritize activities, identify areas that need to be addressed and improved, and what actions or activities are more challenging. Therefore, this new family engagement project is more structured compared to previous initiatives that is an advantage in itself.
- Secondly, the staff assessment tool helped us to develop a profile to describe PR Title V staff knowledge, attitudes and perceptions on family engagement as an important step for the promotion

and implementation of family-staff partnerships.

- Lastly, a CFET micro-culture has emerged that is characterized by diversity (background, generations, lived experiences), non-hierarchical mode of team work, participatory decision-making processes, freedom to express opinions and bring up ideas, and shared values of respect, equity, and seeing families as critical resources in all endeavors. This is the organizational culture we hope to foster in relation to staff-family partnerships in the PR Title V.

The CFET will continue receiving support and guidance from the WDC through the Personalized Workforce Development to accomplish phases two and three while addressing several potential challenges that we have identified. These challenges are: 1) how to approach staff that reject family inclusion and participation; 2) resistance to change; 3) staff not knowing how to implement family engagement activities in their programs.

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

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

The PR Title V Program has the support of a group of high skilled health professionals that collect, organize, analyze, and bring support and expertise to MCH data under the Maternal, Child and Adolescents Health Division (MCAHD) and the Children with Special Medical Needs Division (CSMND). The following table, shows a brief description of this epidemiology workforce:

MCAH and CSHCN Program Epidemiology Workforce Description

Position/Title	Education/Training	Program	FTE's	Funds
Director	MD, OB/GYN MPH	Title V	1	Title V
Under Director	Dr.PH, Health System Analysis and Management MS, Health Systems Research and Evaluation	Title V	1	Title V
SSDI Coordinator	MS, Epidemiology	SSDI	0.75	SSDI
MEU Coordinator	MS, Epidemiology	Title V	0.25	Title V
Pediatric Health Epidemiologist	MS, Epidemiology	Title V	1	Title V
Evaluator	MS, Health Systems Research and Evaluation	Title V	1	Title V
Evaluator	MS, Health Systems Research and Evaluation	Title V	1	Title V
Biostatistician	MPH, Biostatistics	Title V	1	Title V
Biostatistician	MPH, Biostatistics	PRAMS	In kind	
Cultural anthropologist	PHD, Anthropology	Title V	0.86	Title V
Pediatric Consultant	MD, Pediatrician MPH	Title V	0.86	Title V
OB/GYN Consultant	MD, FACOG Obstetrician and Gynecologist	Title V	0.26	Title V
Associate Director Comprehensive Adolescent Health Program	MD	Title V	1	Title V
Data Manager	MS, Environmental Health	PRAMS	1	PRAMS
Early Intervention Program Coordinator (Part C of IDEA)	MS, Health Systems Research and Evaluation	Early Intervention (Part C of IDEA)	1	Part C of IDEA
Evaluator	MS, Health Systems Research and Evaluation	Early Intervention (Part C of IDEA)	1	Part C of IDEA
Data Manager	MBA, Human Resources	Early Intervention (Part C of IDEA)	1	Part C of IDEA
Child Development Consultant	MD, Pediatrician, Developmental Pediatrics	Early Intervention (Part C of IDEA)	0.83	Part C of IDEA
Evaluation Specialist	Dr.PH, Health System Analysis and Management MS, Health Systems Research and Evaluation	CSHCN Program	1	Title V
Program Coordinator and Epidemiologist	MS, Epidemiology	PR-BDSPS	1	Title V

Data Manager	MPH, Biostatistics	PR-BDSPS	1	Title V
Family Representative	Person with lived experience	CSHCN Program	1	Title V
Surveillance Lead and Program Coordinator	MPH, Epidemiology	EHDI-IS	1	CDC
Data Manager	MS, Epidemiology	EHDI-IS	1	CDC
Information System Evaluator	MS Demography / Biostatistics	EHDI-IS	1	CDC
Epidemiologist and Surveillance Coordinator	MPH, Epidemiology	PR SET-NET	1	CDC
Data Quality Team Lead	MS, Epidemiology	PR SET-NET	1	CDC
Data Manager	MPH, Biostatistics	PR SET-NET	1	CDC
Data Manager	MS, Demography	PR SET-NET	1	CDC

The MCH Epidemiology staff resumed their Title V full daily work activities in person, including meetings, workshops among others as the COVID cases showed a decrease and with no more governmental COVID restrictions. However, the staff maintained the virtual modality, if the conditions required the work remotely and all the safety measures. All the activities related to gather information and data needed for Title V indicators, remains the same, using virtual and electronic platforms. This process resulted into a more effective and quick method to obtain the information and data needed for the Title V annual report.

MEU

The Title V Monitoring and Evaluation Unit (MEU) is responsible of the management and analysis of MCH data in the Title V program. The MEU has developed instruments to gather information for those MCAH indicators with limited data source and/or information needed for monitoring and measure progress toward the established Title V MCH Block Grant NPMs and NOMs, when not included in the national surveys. The MEU is composed of the following professionals: two Epidemiologists (one is the SSDI/MEU Coordinator) and a Biostatistician who oversee quantitative research and analysis on MCAH health issues, as well as PRAMS data analysis (in kind), the Evaluator that assists in the development of the SPMs and the ESMs, and the Cultural Anthropologist who is in charge of qualitative research and analysis. The MEU is supervised by the MCAHD Director.

The other Evaluator, under Title V, is responsible for the Home Visiting Program (HVP) data, including the development of instruments to collect and analyze data that monitors some of the Title V indicators, and also, is involved in the process of SPM's and ESM's development.

Title V Consultants

Pediatric Consultant (PC)

A new Pediatric Consultant (PC) has been identified and is contracted since July 2022. The PC provides expertise, support and interpretation of the MCH data and collaborates in the development of strategies for the perinatal/infant and child domains in the Title V State Action Plan (SAP). She also does follow-up to some initiatives that impact the health and wellbeing of the pediatric population, according to the SAP. These are:

1. PR Fetal and Infant Mortality Review complementing local population-based fetal and infant mortality data to identify system-related risk factors for fetal and infant mortality and to generate recommendations to address them.
2. Support to the Breastfeeding Promotion Collaborative Group meetings and fostering collaborative efforts between its members to promote the numerous benefits provided by choosing breastfeeding.
3. Promotes the revision and update of the PR Preventive Pediatric Health Care Service Guidelines according to the “Bright Futures” and the American Academy of Pediatrics recommendations to deliver high-quality preventive health care that have an impact on child health and well-being.
4. Collaborates as member of the Normative Policy Council for Head Start and Early Head Start of the Child Care Program of the Department of the Family of PR, allowing the opportunity to offer resources developed by MCAHD (Parenting and Prenatal courses) to the population they serve, as well as collaborate in the development of their policies.

OB/GYN Consultant

In terms of the women in reproductive age (WRA) and maternal population, the MCAHD has an OB/GYN Consultant, who provides support and collaboration in some of the initiatives developed for this domain. Her expertise is also an essential part of the PR SAP development, specifically among the strategies developed to address maternal health, such as:

1. Revision and update of the Preventive Health Services Guidelines, for WRA and for Women during the Preconceptional, Prenatal and Post-Partum time periods, considering recommendations of federal and state government health agencies.
2. Leads the Maternal Mortality Review Committee that review maternal deaths to make recommendations for preventive actions protected under the PR Maternal Mortality Epidemiological Surveillance System Act (Act 186, 2016) which provides the legal tools for the collection of data needed for a complete review of maternal deaths in PR.

Comprehensive Adolescent Health Program (CAHP) Associate Director

In terms of the adolescent population, the CAHP of MCAHD, addresses adolescent health and optimizes the development of the physical, mental, social and spiritual potential of all PR adolescents. It uses the MCH data to trace initiatives that promotes the health and wellbeing among the adolescent population. The Associate Director of this program, strongly collaborates in the development of these initiatives and strategies that are part of the PR SAP and also provides support and interpretation of the MCH data by:

1. Ensures the adequate functioning of the Youth Health Promoters (YHP) Project (6th to 8th grade), a Positive Youth Development (PYD) initiative, including the activities related with the implementation of a questionnaire to measure the PYD core assets of YHPs at the end of each year.
2. Supervises the Youth Advisory Council (YAC under AO #359, October 2016), which is an entity of the DOH related to the PYD and the implementation of policies and projects that are directed to promote health and wellbeing in youth.
3. Ensures the implementation of the Health Literacy Toolkit to increase youth capacity to make informed and appropriate decisions relating to health care.
4. Serves as a liaison between the Department of Education and the MCAHD to collaborate in some other initiatives related with adolescent health.

Pregnancy Risk Assessment Monitoring System (PRAMS)

PRAMS is an ongoing, site-specific, population-based surveillance system designed to identify groups of women and infants at high risk for health problems, to monitor changes in health status, and to measure progress towards goals in improving the health of mothers and infants. It began in the PR MCAHD in 2016 with the Zika Postpartum Emergency Response Survey.

Project Coordinator

The Project Coordinator have primary responsibility for the day-to-day management of PRAMS. Some of her duties and responsibilities are to:

1. Provide overall management of PRAMS including participate in CDC site visits training programs and workshops.
2. Oversee the development of the protocol's state-specific sections and the state's questionnaire.
3. Organize the Steering Committee and convene and attend meetings.
4. Oversee data collection procedures and participate in the analysis and dissemination of PRAMS data.

Data Manager

The Data Manager executes the day-to-day activities of PRAMS in collaboration with the Project Coordinator and CDC; conducts data collection, data management and assist in maintaining inventory and supplies. In collaboration with the MEU Biostatistician, she conducts some data analyses that results in important indicators used in Title V such as breastfeeding and safe sleep.

PR Early Intervention Program (PREIP)

PREIP is authorized by the Part C of the Individuals with Disabilities Education Act (IDEA). It provides services to infants and toddlers, birth to three years old, with disabilities and their families according to federal and state regulations. PREIP has seven regional offices island-wide within the seven health regions that comprise the PR DOH, as well as in MCAHD.

Program Coordinator

PREIP is overseen by the Program Coordinator that ensures that all participants and their families receive the services according to the regulations. She also serves as a liaison between Part C and other programs within the MCAHD, the DOH and other agencies.

Program Evaluator

The Evaluator has the following responsibilities:

1. Designing and implementing the procedures for data collection and analysis to accurately support the data-driven decision-making processes of PREIP.
2. Leads the Supervision and Monitoring Unit (SMU) which executes the monitoring activities needed to complete federal and state reports on PREIP's annual performance on all indicators.
3. Ensures that the data collected to support other programs is valid and reliable.

Data Manager (DM)

DM works alongside the Program Evaluator to:

1. Collects data from all regional programs ensuring that procedures established by the Evaluator are implemented as intended.
2. Ensures the data is accurate and reliable prior to sharing with the Evaluator for analysis.
3. Collects Part C data to support other program's data collection and reporting activities (Department of Education, SSDI Core Minimum Dataset, and Title V Form 5b/population served)
4. Requests a report to all regional supervisors which are then consolidated into one PREIP report.

Child Development Consultant

The Child Development Consultant leads the activities for the Continuous System of Personnel Development required by IDEA. Other responsibilities are:

1. Provides guidance for the implementation of the best practices in early intervention to improve child

outcomes.

2. Designs material for supporting the personnel and conducting webinars and other educational activities related to the evaluation of eligibility determination and assessment of the child and family, the development of functional outcomes in the Individualized Family Service Plan, and the Child Outcomes Summary Form.
3. Reviews the Program's documentation related to these areas, as needed.
4. Provides general counseling in pediatrics and child development to the Part C State Office Team and PREIP's stakeholders.

CSHCN Program

Evaluation Specialist:

Leads the monitoring and evaluation of the CSHCN-SAP strategies and activities, ESMs, CSHCN Program performance and the implementation/performance of any other initiative for the CSHCN domain. Assures the collection of quantitative data and qualitative information for the Title V CSHCN annual report:

1. Responsible of the design, implementation, interpretation, and reporting of the CSHCN domain five-year needs assessment as well as the HNA updates.
2. With the collaboration of the RPCs, APNI, and other entities collects qualitative information and quantitative data from families, including families that are hard to reach.
3. Proposes potential ESMs based on the PR-SAP strategies and activities and assures ESM comply with the Evidence Center recommendations.
4. Participates of the SAP development to ensure strategies and activities are feasible and measurable.
5. Works together with the MCAHD MEU when reporting Title V annual data and works in mutual collaboration with the PR-UNHSP, the PR-HDDDTP, and the PR-BDSPS.
6. Collects CSHCN domain information to be reported in the Title V annual report and participates in the grant writing.

Family representative

The family representative is a key component during the development of studies' methodology designs and variable selection. Some of her roles are:

1. Participates in the design of surveys and needs assessment addressed to the CSHCN population and their families, including the five-year HNA and updates, to offer her input as part of the population.
2. Participates in the interpretation of families' surveys' findings.
3. Participates in the development of the CSHCN domain SAP and/or other action plans.

CDC epidemiology staff described in the table work in collaboration with the CSMND and share data as needed. These are described in more detail in the "Other MCH Data Capacity Efforts" section.

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

The PR Title V MCH Block Grant Program must have reliable data to prioritize and adequately address health problems and to obtain information relevant for public policy, program development, evaluation, and improvement to enhance health and wellbeing.

The primary purpose of the Puerto Rico State Systems Development Initiative (PRSSDI) is to develop, enhance, and expand the PR Title V Maternal, Child and Adolescent Health (MCAH) data capacity for informed decision-making and resource allocation to support effective, efficient, and quality programs for women, infants, children, and youth, including children and youth with special health care needs.

The PRSSDI assists in building and expanding MCAH data capacity for the 5YR Health Needs Assessment (HNA) and updates. The HNA includes the selection of priorities and supporting data needs for the Title V MCH Block Grant Application/Annual report. This entails developing and tracking data for national outcome measures (NOMs), national performance measures (NPMs), state performance measures (SPMs), and evidence-based/informed strategy measures (ESMs). The HNA must rely on a strong network of collaborators.

The PRSSDI strengthened collaborations with government and non-government organizations, creating the HNA Advisory Committee (HNAAC) that plays a key role in developing the Title V State Action Plan (SAP) and its annual review. Most agencies that comprise the HNAAC also provide needed data for monitoring Title V MCH Block Grant indicators.

The PRSSDI also created the HNA Steering Committee (HNASC) which is composed of the Monitoring and Evaluation Unit (MEU) researchers (SSDI Coordinator, Biostatistician, Epidemiologists, and Health Program Evaluator), Pediatric Consultant, Cultural Anthropologist Consultant, Comprehensive Adolescent Health Program Director, MCAHP Director, CSHCNP Evaluator, Title V Home Visiting Program Coordinator and Evaluator, and MCAHP Psychologist. Based on the input from the HNAAC, the HNASC engages in the selection of state priorities and the development and review of the SAP.

Accomplishments and Barriers

A major accomplishment was the PRSSDI's partnership support in the implementation of the Jurisdictional MCH Survey (2023 MCH-JS) under the direction of the MCHB to provide standardized national data and information for reporting on Title V MCH Block Grant Report measures.

A staff assessment was conducted for 2023 HNA that addressed perceptions and readiness for Family Engagement (FE). Conducting the survey was an educational intervention that resulted in positive changes in staff attitudes toward family involvement and participation. In the next steps, the PR Title V Community and Family Engagement Team (CFET) will work on "FE Sessions" aimed at talking with staff about how FE would be possible within programs.

The evaluation of the Title V SAP 2020-2025 through the Plan, Do, Study, Act (PDSA) approach continues during this FY. During the PDSA approach, Title V evaluators assessed activities for each of the strategies within the priorities of the SAP. This helped determine which activities or strategies were on track and which needed to be adjusted. The results of the 2023 HNA allowed the HNASC to review and update the 2020-2025 plan SAP.

The PRSSDI continues to work on improving the quality of data needed to produce the Title V MCH Block Grant Application/Annual report. Combining billing information from the PR Health Insurance Administration (PRHIA) and the PR Health Insurance Commissioner Office (PRHICO) captures two important sources of MCAH data. Obtaining reliable data from PRHIA promptly was a challenge that PRSSDI was able to solve by including Medicaid in the collaboration and considering the use of the Medicaid Management Information System (MMIS) instead of MedInsight. As a result, data could be submitted much more quickly and with higher quality. To ensure the quality of data submitted by PRHICO, an Excel form was created with validations that allowed private health insurance to provide reliable data and reduce reporting burden.

The Demographic Registry Office (DRO) has been transitioning death registrations through a digital platform, which

was launched in 2021. However, this conversion resulted in many data quality setbacks, which impacted the availability of death data. Mortality data for 2022 were not available to report in the Title V MCH Block Grant Application/Annual report, and mortality data for 2021 were preliminary because not all variables were available for reporting infant, neonatal, post-neonatal, or perinatal deaths. In addition, data linkages were compromised in the absence of valuable information to complete the linkage. The PRSSDI is in constant contact with the DRO to obtain the latest updates on death data.

Goals and Objectives

To improve the Title V MCAH Services Block Grant's data infrastructure, four goals are included in the PRSSDI.

Goal 1: Strengthen capacity to collect, analyze, and use reliable data for the Title V MCH Block Grant to assure data-driven programming.

For 2025 HNA, MEU has begun to determine the methodology for identifying the needs of the MCAH population, and secondary databases that can be used for this purpose. An Exploratory Survey is being developed with the primary purpose of hearing the voices of families, the community, and collaborators and providing a framework for the data needed to help identify the needs of the MCAH population.

Leading the efforts of the ongoing HNA provides the PRSSDI with the advantage of directly supporting each step of the HNA process. The 2023 HNA Plan-Do-Study-Act (PDSA) assessment facilitated ongoing monitoring and identification of recommendations to enhance the strategies contained in SAP. The HNA also included an assessment of staff perceptions and readiness related FE.

To ensure stakeholder input on MCAH and CSHCN priorities, strategies, and activities, the PR Title V Block Grant Program State Snapshot was translated into Spanish. In addition, the SAP evaluation form was developed and made available through a link for stakeholders to determine whether the identified strategies are contributing to achieve the priorities identified in the SAP and to make recommendations and suggestions for new approaches for each strategy in the current SAP. For more details, please refer to section III.F. Public Input of this report.

The PRSSDI met with the HNASC to discuss the 2023 HNA results in conjunction with SAP's input from the HNAAC. The SAP priorities and strategies were assessed based on resource allocation (MCAHP capacity), availability of data sources, types of interventions, and MCAHP stakeholder collaboration. The results of the 2023 HNA prompted the HNASC to review, update, or eliminate some of the SAP strategies. Similar procedures were implemented in the CSHCNP.

The PRSSDI provided data and information for the submission of the Title V MCH Block Grant Application/Annual report. Because PR is not included in many national surveys, several NPMs and NOMs are not included in the Federally Available Data (FAD). Therefore, the PRSSDI requests data from several governmental agencies, mostly within the PR Department of Health (PRDOH), but it also includes agencies outside the organization, to provide the most reliable data for these indicators. Vital Statistics (VS) and Public Use Microdata Sample (PUMS) are also analyzed by PRSSDI to measure some Title V indicators. The PRSSDI also lead the development and analysis of questions necessary for NPMs with no FADs, as well as ESMs, for the following years. These questions are part of an MCAH Module that is included in the PR Behavioral Risk Factor Surveillance System (PRBRFSS).

Goal 2: Strengthen access to, and linkage of, key MCH datasets to inform MCH Block Grant programming and policy development and assure and strengthen information exchange and data interoperability.

The DRO uploaded the 2022 birth and fetal death databases, along with the 2021 death database, to the shared folder with the PRDOH. During the linkage process, the PRSSDI discovered data entry errors or inconsistencies and were reported to DRO for appropriate action.

The DRO is also working to transition birth registrations to a digital platform, and this task will be undertaken by birthing hospital staff. The PRSSDI is working with the DRO to provide input on the necessary information (state

added) that must remain on the birth certificate after digital registration is implemented.

The PRSSDI met with DRO, Medicaid, and WIC to identify other mechanisms that may enhance data sharing. New fields that include risk factors for eligibility in WIC, hospitalizations or emergency room claims, preventive visits, and breastfeeding status, were included to enhance the quality of the data linkage.

The PRSSDI performed deterministic and probabilistic record linkages of live births data, WIC, and Medicaid. The 2022 Medicaid and birth linkage had 90% matched cases according to MMIS. The record linkage between 2022 live births and WIC had 82% of the cases matched. The linkage of 2022 birth and death was not performed due to lack of information. An evaluation of the matching file was performed, and all cases were true linkage.

Goal 3: Enhance the development, integration, and tracking of health equity and social determinants of health (SDoH) metrics to inform Title V programming.

The PRSSDI tracked the following SDoHs stratified by age group, education, geographic area, sex, and type of health insurance: Adolescents who sought preventive health care in the past year, pregnant women who received early and adequate prenatal care, preventive visits among women aged 18 to 44 years, women who sought preventive dental care during pregnancy, and children aged 1 to 17 years who sought preventive dental care in the past year. An Excel form facilitated data entry, analysis, and graphical representation of each indicator. The AAPC was calculated to track statistically significant ($p < 0.05$) changes. The PRSSDI shared the results with the HNASC for discussion and consideration in the review of SAP and MCAHP programs and services.

The MCAH Regional Boards' Health Equity Indicators Questionnaire was developed to assess potential disparities within target populations. It will also allow for the identification of strategies to address them. In addition, the PRSSDI is developing a community questionnaire to be distributed to identify SDoH that contribute to disparities in the MCAH population.

Before developing a workshop to describe what SDoH are, the link between health disparities and poor health outcomes, and ways to promote health equity (HE), and create positive change within PR Title V, the Cultural Anthropologist gave an SDoH presentation to the PRSSDI and MEU team to better understand them. This presentation focused on the Life Course and health equity framework.

The Integrated Index of Maternal and Infant Health Status 2021 (IIMIHS), which includes 14 maternal and infant health indicators by the municipality to assess the health needs of the target population by geographic area, has been completed. The 2021 IISMHS report will be posted on the PRDOH website and made available to MCAH Regional Board members, stakeholders, and the public. A limitation of this report is that neonatal, post neonatal, and perinatal deaths could not be assessed by the municipality because this information is missing from the 2021 death database. Once DRO resolves the current issues with the digital platform, these indicators will be included in the 2021 IIMHS.

Through the translated Title V MCH Block Grant Program State Snapshot Annual Report, we successfully informed stakeholders about the activities to implement the health priorities and the indicators associated with each of these priorities.

Trend analysis of the selected SDoH indicators was shared with the MCHAP Director, Regional Directors, Program Coordinators, MCAH Regional Board members, and other stakeholders. This included the NOMs associated with each NPM, which allowed for continuous monitoring of these indicators and was useful in decision making to promote HE.

Goal 4: Develop systems and enhance data capacity for timely MCAH data collection, analysis, reporting, and visualization to inform rapid state program and policy action related to emergencies and emerging issue/threats.

To keep the PR Maternal Mortality Epidemiological Surveillance System (SiVEMMa) up to date, the MEU evaluator

periodically performs an electronic data linkage to the death, birth, and fetal death files. As mentioned earlier, the PRSSDI receive the Vital Statistics database from the DRO, which is also used for SiVEMMa linkages and analyzes. These linkages were only partially performed with 2021 death data, depending on the information available. Linkages for 2022 could not be performed because the database is not available.

The PRSSDI met with the DRO's Data Quality Team to discuss the importance of the availability of vital statistics for surveillance systems. The PRSSDI also served as a liaison between surveillance system coordinators for case discussions, data discrepancies, or surveillance reports.

The PRPRAMS Surveillance Report is published biennially to share key findings to assess and sustain public health efforts, develop plans and actions, and raise awareness of maternal and child health issues. The PRSSDI, along with the biostatistician from MEU, is actively involved in the analysis, drafting, and review of the surveillance report.

The MCAHP is supporting Emergency Medical Services for Children (EMSC) in its Campaign for a Safe Christmas to prevent unintentional injuries during the holidays, as a collaboration with the University of Medical Science Campus. The epidemiologist at MEU identified the 2020 mortality rates caused by unintentional injuries and the percentage of mortality from each cause. This information was used to design the campaign recommending safe toys and activities. The PRSSDI continues to support the EMSC with statistics and reports on unintentional injuries to positively impact mortality.

Plans for the upcoming year

The PRSSDI will continue each activity under the four goals to further develop, enhance, and expand the PR Title V MCAH data capacity.

In 2024, the MCAH Regional Boards' Health Equity Indicators Questionnaire and the Exploratory Survey are going to be disseminated. The SAP strategies will be further improved by the PDSA approach during the 2024 HNA.

While aiding the CFET in the "FE Sessions" that will be created for employees, the PRSSDI will also create a workshop centered on the Life Course Framework to educate MCAHP staff, partners, and the community.

To offer the most accurate data for Title V measures, communication with the HNAAC members will continue throughout the SAP public input, Regional Board meetings, and data request.

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

The diversity of professional resources available in MEU is one of the MCHAD's key advantages. This array of resources, led by the PRSSDI Coordinator, ensures the achievement of PR Title V objectives and other MCAHD data capacity efforts.

MEU assists in building and expanding the PR Title V data capacity within the 5-year Health Needs Assessment (HNA) and ongoing HNAs, including the selection of the priorities which guide the development of PR's 5-year Title V Action Plan (SAP). MEU also complements the Title V MCH Block Grant program by improving the availability, timeliness, and quality of the MCAH data, tracking NOMs, NPMs, and SPMs, and creating ESMs.

MEU is also responsible for identifying MCA-relevant topics to the SAP to complete a more in depths analysis that would support the programs and services of MCAHD. MEU provided the MCAH Steering Committee with the 2023 HNA findings and public input to review the 2020–25 SAP and the selected indicators. MEU and the Title V Steering Committee discussed the 2023 HNA findings and reviewed the proposed 2020-25 SAP.

To ensure that all aspects of MCAH, including CSHCN, are considered within all processes and analysis, MEU receives the support of the Comprehensive Adolescent Program (CAHP) Director, Pediatric Consultant, OB/Gyn Consultant, TV-HVP Coordinator, TV-HVP Evaluator, Cultural Anthropologist, CSHCN Evaluator, and Mental Health Consultant.

A challenge faced by the PR Title V is reporting, collecting, and monitoring non-FAD statistics of the indicators included in the annual report. PR Title V has been improving the availability, timeliness, and quality of the MCAH data toward multiple mechanisms to report in the Title V MCH Block Grant Application/Annual Report. MEU gathers MCAH data and information from multiple programs within and outside the PRDOH. Strengthening the network of collaborating programs has been an effective method for improving data quality. The agencies that share information or data with Title V to monitor the indicators are listed in the first column of the following table, and databases that are also analyzed to monitor these indicators are included in the second column:

Information used to Monitor Title V Indicators

Agencies	Data bases
Administration of Mental Health and Anti-Addiction Services	Birth Certificate
AAAC	Death Certificate
PR Health Insurance Administration	Fetal Death Certificate
WIC	Public Use Microdata Sample
Center for Assistance to rape Victims	PRPRAMS
Poison Control Center	PRBRFSS
PR Family Department	Census International Database
Catastrophic Remediable Diseases	PRYRBSS
Tabaco and Oral Health Program	MCH-Jurisdictional Survey
Office of Board of Medical Licensure and Discipline	
Office of Regulation and Certification of Health Professionals	
PR Commission for Suicide Prevention	
Health Insurance Commissioner Office	

Three surveys that are part of MCAHD or funded by Title V allow the monitoring of indicators considered under the SAP. Since 2017, PR-PRAMS has been a part of the MCAHD, allowing the comparison of local data with the mainland. The MCH-JS (2019 and 2023) collects data on the physical and mental health of women and children 18 or younger. Additionally, MCHAD continues to collect data on NPMs like preventive medical visits, children's dental health, and some of the linked NOMs through the MCA module in the PR-BRFSS, providing access to updated data to track the progress of these indicators.

The TV-HVP participant records, Youth Health Promoters Pre-Post Profiles, and PR Youth Health Literacy Tool Kit (PR-YHLT) Pre-Post Survey are additional resources used to track and assess the development of ESMs.

HVP patient records include monthly reports and participant program records that are used to monitor HVN's performance and collect data on the population reached each month. These documents collect biopsychosocial information about the participant and her family and are designed to guide the HVP's interventions during the pregnancy and postpartum period.

Sixth graders are recruited for three years through the school-based Youth Health Promoters Project (YHPP) at participating schools. During the first and third years of the project, YHPP participants fill out a 61-item profile that contains fundamental data about the students. The PR-YHLT is made available to students in the second year to educate them about health, particularly the value of seeking yearly checkups. Pre-post tests are also administered during this period, allowing to measure the number of youths with increased perception of how to navigate the healthcare system after receiving.

The PR-BDSPS is an active population-based surveillance system that monitors 53 congenital defects. Seven (7) medical record abstractors (6 graduate nurses and a sonographer) visit birthing hospitals, high-risk clinics, and relevant agencies, to identify cases of congenital defects among different pregnancy outcomes: live births, terminations, spontaneous abortions, and stillbirths. Before a case is included in the system's database, a detailed analysis of the information is made to determine if the inclusion criteria on the National Birth Defects Prevention Network (NBDPN) guidelines are met. Once the case is in the database, the congenital defect is coded using the ICD-10-CM. The BDSPS has access to the VSRO to ascertain and validate data. The medical record abstractors provide support to other CSMND programs too.

The PR-UNHSP receives funds under the CDC agreement "Enhancement of the PR EDHI-IS for Documentation and Use of Follow-up Diagnostic and Early Intervention Services Data" to optimize the information system. Currently, the PR EHDI-IS has the capacity to collect hearing screening results, audiology diagnostic evaluation results, and early intervention data of D/HH infants reported by hospitals, audiology clinics and by the Part C Early Intervention Program. The PR EHDI-IS can provide accurate information at both the individual and population levels. This allows the PR-UNHSP to ensure that D/HH infants and young children receive services, to assess progress, and to answer questions from leadership and other stakeholders.

PRSSDI links data from many sources (birth and death data, Medicaid, and WIC). An evaluation process utilized by MEU ensures the validity and completeness of data links. More indicators (hospitalizations, ER visits, risk factors, among others) will be requested to have more thorough information about the infant.

MEU monitors maternal deaths thru the PR Maternal Mortality Epidemiological Surveillance System (SiVEMMa). Electronic data linkage is periodically performed using the death, birth, and fetal death files. Newspaper articles help to identify additional cases, mainly those related to homicides of pregnant women or sudden deaths for unknown causes. To further enhance SiVEMMa and the Maternal Mortality Review Committee (MMRC), Act 186 of 2016 provides the legal tools for the confidential collection of data needed for a complete review of maternal deaths in PR. The Act also provides for the creation of the MMRC (composition, privacy, legal protection, and responsibilities) to review maternal deaths and make recommendations for preventive actions. All members of the MMRC are officially appointed by the Secretary of the PRDOH. It includes a multidisciplinary panel of experts in the mental, behavioral, medical, and data analysis professions. MCAHD also completed a data sharing agreement with CDC to share the data collected by MMRC for CDC's Maternal Mortality Review Information Application (MMRIA) to improve data quality, identify TA needs, and perform detailed analyses across MMRIA users. An MOU with CDC outlines the terms by which PR will utilize MMRIA to collect and analyze data regarding maternal deaths. In addition, MCAHD applied for a CDC grant (CDC-RFA-DP23-0066) to address health inequities by supporting the capacity to create and put into practice data-informed strategies to prevent pregnancy-related deaths and lessen disparities among disproportionately affected populations.

MEU oversaw the development of a workshop for schools among adolescents in grades 6 through 12 to disseminate "Mi agenda de salud" and raise awareness of the importance of an annual preventative visit in WRA. A 30-minute video focused on women who are over 22 years and work in government offices is being created with the same goal. This video will be one of the Office of Governmental Ethics resources, which mandates that all government employees complete 20 credits of ethical education every two years.

MCAHD also heads the PR Fetal Infant Mortality Review (PRFIMR), complementing local population-based fetal and infant mortality data. The objective of the FIMR is to identify system-related risk factors for fetal and infant mortality and to generate recommendations to address them. The team is currently revising guidelines and tools for gathering data in accordance with the National Center for Fatality Review and Prevention (NCRFP). The PRFIMR will continue to concentrate on deaths occurring in families participating in the HVP, all of whom are considered at high risk for IM.

The PR SET-NET collects information from medical records on lab tests, medical and obstetric history, pregnancy outcomes, childbirth, pediatric clinical information, and support services at determined time points. Data analyses allowed a better understanding of associations between Zika virus infection during pregnancy and adverse pregnancy outcomes, as well as infants long-term outcomes. The PR SET-NET surveillance protocol has three phases: 1- collects information from prenatal care records, up to delivery or until a miscarriage or termination is reported. The MRAs abstract information from prenatal care records, including symptoms, specimen collection, travel history, viral infection-related hospitalizations, past medical history, obstetrical/gestational history, and current pregnancy information which includes medication, prenatal testing, severity of disease for COVID-19 cases, prenatal imaging, and diagnostics; 2- includes crucial clinical information of the birth such as pregnancy outcome, date and type of birth, gestational age, specimens collected at birth from infant and mother, infant weight, length and head circumference, infant physical evaluation, screening and diagnostic testing, birth defect diagnosis and other clinical hospitalization information; 3- phase 3 for the Zika surveillance monitors infants' physical, cognitive, social, and behavioral development up to age 5. This surveillance is centered on the PR-DOH's protocol for the developmental monitoring and coordination of specialized health care services for this cohort of infants. Phase three for the COVID-19 surveillance monitors the infant's physical health evaluation on pediatricians' first visit at 2 and 6 months of age. The COVID-19 surveillance was initiated in July 2021.

The PR SET-NET data management team has access to the PR Vaccination Registry, an electronic system that collects vaccination data of the PR population. The team uses this access to corroborate and collect COVID-19 vaccination status and information on all pregnant women monitored under the COVID-19 surveillance.

To formalize data-sharing collaboration with agencies, MCAHD has several MOU. The PR Primary Health Association supports and endorses the participation of HRSA Qualified Health Centers in the HNA and other research; the Demographic Registry Office ensures continuous access to the vital events data at any time; and the CDC for LOCATe assess the neonatal and maternal levels of care of birthing hospitals. Additionally, an MOU with ASSMCA guarantees data exchange, collaboration, and assistance for individuals identified in each program who require mental health support.

MEU supports MCAHD in disseminating data and information to the public and other venues like AMCHP and City Match. The Integrated Index of Maternal and Infant Health Status (IIMIHS), developed by MEU under the direction of PRSSDI, includes 14 maternal and infant health indicators by the municipality to assess the health needs of the target population by geographic area (attached as part of the Supporting Documents). A dashboard to share Title V, IIMIHS, PRAMS, and SiVEMMa data is also under development by MEU to publish them on the PRDOH website.

MEU used REDCap to implement LOCATe (version 9) in 28 of 30 birthing hospitals. All hospitals were given access to the survey's link, which enabled MCAHD to update information about the neonatal and maternal levels of care at birthing hospitals in PR and track low birth weights in those facilities that met the standards.

Another analysis performed by MEU is the maternal risk-appropriate care and the Perinatal Periods of Risk (PPOR) to identify periods of increased risk of fetal/infant deaths. The PPOR is an excellent tool that supports the PR Title V

5-year HNA and the FIMR.

PR Title V supports public health campaigns aimed at preventing and raising awareness, including the Safe Christmas Campaign, the Adolescent Pregnancy Prevention Month, and the March of Dimes' Month of Prematurity Prevention. For adolescent pregnancy prevention, MEU provides updated statistics to CAHP, shared with the media, stakeholders, groups, and the public. MEU also supports with data the March of Dimes PR Chapter initiatives, and EMSC unintentional injuries Christmas Campaign, among others. MCAHD is also collaborating with EMSC in the classification of Pediatric Emergency Rooms.

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

The PRDOH Office for Public Health Preparedness and Response Coordination (OPHPRC) prepares a comprehensive Public Health Emergency Guide that is updated regularly. The most recent edition, *Guía de Salud Pública para Emergencias y Desastres 2022* is accompanied by the Emergency Operations Plan (EOP), *Plan de Operación de Emergencia 2022-2023*, as well as appendices that cover specific risks and populations (e.g., Mass Care, Mental and Behavioral Health, Storms and Hurricanes, among others). More information on the OPHPRC planning and response activities can be found at www.salud.gov.pr/CMS/245.

MCAHD staff participate in several initiatives of the OPHPRC, including:

- The HVP Coordinator takes part in the PRDOH's Public Health Preparedness Academy, aimed at providing staff with basic information regarding emergency planning and response within the PRDOH structure.
- The HVP Coordinator and Evaluator participated in the Mental and Behavioral Health Committee, which developed guidelines to ensure care of the mental health needs of the population during and after crises. Although the committee is not currently holding meetings, the leader continues to share pertinent information via email.
- The HVP Coordinator participates in the Persons with Access and Functional Needs in Emergencies Committee, which includes consideration of the requirements of pregnant and parenting persons in disaster aftercare.

At the regional level, Title V staff play an active role when emergency plans are activated. The MCAHD regional directors act under the direction of the regional authorities to assign personnel and coordinate services. MCAHD staff at the central and regional level have specific tasks they perform in cases of emergency. Although they are not part of the Incident Management System (IMS) structure, they are called on as needed in emergency situations.

The Home Visiting Nurses (HVN) are deployed to shelters to provide care focusing on the MCH population. HVNs also follow up on their participants (whether they remain in their homes or are in shelters) to identify needs related to the emergency and channel them as needed. An emergency needs assessment form was developed after Hurricane Maria to identify challenges faced by the families and allow the HVNs to develop care coordination plans accordingly and continues to be used when required.

Educational materials regarding disaster preparedness are available through the *Encuentro de mi vida* ("The encounter of my life") website (www.salud.gov.pr/CMS/480) and the PRDOH's website disaster preparedness section. A guide on safe infant feeding in emergencies (*Alimentación segura del infante en casos de crisis y emergencias*) was developed in 2019 by the MCAHD and WIC. Its purpose is to provide disaster response staff the strategies to ensure the health and safety of infants and children during and after a crisis.

The MCAHD regional advisory boards are composed of government agencies and private entities that serve the MCH population. Regular meetings throughout the year allow MCAHD staff to cultivate a close relationship with these agencies. During and after an emergency, this facilitates the coordination of services for the population. Among the most pressing services needed by the population during or after emergency situations are:

- WIC offices, which are an important support system for pregnant and parenting persons.
- Referrals to hospitals, medical and dental offices, and other health providers.
- Offices of local and central government agencies which can provide assistance in housing, utilities, basic services, road clearing and other needs.

The Title V Action Plan includes the development of an Emergency Preparedness and Response Guide that considers the characteristics, needs, and vulnerabilities of the MCH population, including prenatal care, adequate nutrition, prevention of premature birth, safe infant feeding, safe sleep practices, and special considerations

regarding the needs of older children, among others. This guide responds to Priority Need 3: Decrease Infant Mortality of the PR Title V Action Plan.

During 2022-2023 the Title V HVP Coordinator, Evaluator, and Mental Health Consultant have begun developing the first component of the proposed guide. The *Guía de preparación y respuesta en emergencias para la población materno infantil* (“Guide to Emergency Preparedness and Response for the MCH Population”) will be distributed to HVNs and other MCAHD staff to use in their educational interventions with pregnant and parenting persons. It contains recommendations and educational resources, aligned with the aforementioned PRDOH resources, to address the needs of the MCH population in the face of emergencies. The toolkit is composed of the following sections:

1. Introduction: General information on disaster preparedness and response; taking the needs of the MCH population into account in emergencies.
2. Preparations and actions to take before, during and after a disaster strikes: Includes general preparedness recommendations that apply to any type of emergency, staying safe during the event, and dealing with the immediate aftermath. In addition, it offers detailed pointers for reproductive age women, pregnant and postpartum persons, infants, and children.
3. Responding to specific emergencies: Suggestions targeted to the most common types of emergencies that affect PR (i.e., hurricanes and other weather-related events, earthquakes, landslides, heatwaves, house fires) and tailored to each of the population categories mentioned above.
4. Emotional and psychological well-being during and after the disaster: How to help families manage the stress brought on by disasters; recommendations for the HVNs and other staff to maintain their own emotional balance in responding to emergencies.
5. Other information: Duties and actions of MCAHD staff in emergencies; references and resources.

As of this writing, the toolkit is under development. It will be distributed to the regional MCAHD staff in the third quarter of 2023 and will be accompanied by an in-service training session.

Representatives of the CSHCN RPCs are members of the PR-DOH’s Regional Operational Emergency Centers. Each Regional Emergency Operations Plan includes updated information about hospitals and specialized clinical centers for the pediatric population in the region, location of shelters, meeting areas, alternate locations for emergency operations, transportation alternatives, and evacuation routes. This information, together with the CSHCN Program information on locations and contact information, helps to improve protection for the most vulnerable populations. In addition, the CSMN Division has agreements with FEMA and pediatric home care entities to locate and support the TDCY population in case of emergencies. An interactive map with their geographical addresses is updated regularly.

The “Emergency Preparedness Toolkit for Persons with Disabilities and Anybody Else” developed by the Wisconsin Council on Physical Disabilities, and adapted and translated by MAVI, is shared with new families by the TDCY Registry coordinator to ensure they have an individualized emergency plan. Also, workshops on emergency and disaster planning for CSHCN has been provided to the CSHCN Program staff to provide them with tools to help families to prepare for any type of emergency or disaster. Four (4) two-hour workshop called “Developing an Emergency Plan for Families with Technology-dependent Children” was provided to families in a virtual modality during reporting year in partnership with MAVI, impacting 109 families and 19 professionals. These workshops provided information about preparedness before, during, and after an emergency.

The Nutrition Clinic at the Metro PC continues to follow-up families whose children use special formulas due to metabolic disorders, especially during holidays or times of recess such as Christmas, to assure they have the sufficient supplies.

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

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

The Title V program and the Title XIX Medicaid program are under the organizational structure of the Health Department. The health care for the low-income population, Medicaid, and CHIP eligible are channeled through the PRHIA, responsible for contracting private Health Insurance Companies (HICs) to provide the clinical services needed and included in the State Plan submitted to CMS. It includes special coverage for CSHCN and ASD.

Services coordination isn't mandatory by CMS and is not included in the PR State Plan. That limitation has provided a good opportunity for TV MCAHD staff to collaborate with Title XIX Medicaid program, especially with the Medical Assistance Office (MAO) which performs the eligibility evaluation.

The MCAHD CHWs and the HEs are in the community constantly looking for pregnant women to offer them education on health issues that can impact them and one specific task is the referral to the MAO for the evaluation of eligibility to the GHP to those without health insurance coverage and to other services needed as are identified. This contact with the population at the community level allows our personnel to refer for the HVP and to recruit for the Prenatal and Parenting courses, tools that increase the prevention and promotion of health. At the same time, MAO personnel at their local offices refer to MCAHD staff the pregnant women that they certify as eligible for the GHP. This collaboration allows MCAHD a more extensive impact toward improving the overall health of the MCH population.

The HVP provides education and support by nursing personnel, to high-risk pregnant women for complications that complement the clinical services provided by the GHP.

The MCAHD began collecting data for the CDC collaborative project PRAMS on July 2017. This project provides data to respond to emerging issues that arise during the collection cycle, alongside regular data, which help to guide our efforts toward a healthier MCH population. From 2018 until now, PRAMS has implemented 5 supplemental surveys in response to emerging issues, as requested by CDC. The data has been shared with stakeholders to guide their initiatives. A fact sheet on the use of opioids during pregnancy was distributed among the PRAMS Steering Committee and published on the PRDH website. A COVID-19 data brief is underway, as well as the 2019-2020 surveillance report.

The Early Intervention (EI), IDEA Part C program is under the MCAHD which allows direct access for the families referred from the HVP and others in the community. The services provided under EI in the children's natural environment increase those needed by the MCH population and are not covered in the same way as in the GHP or other private health insurance.

There are other federal programs under the MCAHD that support the services provided by Title V. SRAE and PREP focus on the reduction of teen pregnancy and STDs infection and MIECHV expands the services offered by the HVP.

MCAHD personnel is part of the MOD Program Committee, along with the Hospital Association, ACOG/PROGYN, Association of Primary Health Care of PR, Vita Health Care, and UPR University, among other organizations. The Hard Stop Policy, which specifically prohibits or denies payment for elective inductions, is an initiative driven by this committee in order to decrease premature births.

The Pediatric Preventive Health Care Guidelines were developed as a public policy by the MCAHD in collaboration with members of the Academia, AAP, PR Health Insurance Administration, the CSMND, PR Children's Hospital, Society of Pediatric Dentists of PR, Puerto Rican Society of Pediatrics, and other experts in the field. These guidelines, reviewed in 2021, are according to Bright Future Guidelines and are distributed to the health care providers to steer primary health care providers to deliver high-quality preventive health care that has an impact on child health and well-being.

The CSMND has collaborative agreements and partnerships, formal or informal, with key players at the public health care system and services level. Partnerships at this level involve data sharing, technical assistance, policy development, training activities and collaborations development for health-care services, among others. Below is a

list of some, but not all, of the partners.

Federal agencies: CDC, HRSA, CMS, FEMA, WIC, Medicaid, and FQHCs. Jurisdictional agencies: Department of Education, Family Department, Demographic Registry, PR-HIA, ASEM, and the Office of the Ombudsman for People with Disabilities (OPPI, Spanish acronym), among others. Academic: Medical Science Campus of the University of PR, Albizu Campos University. Professional associations: PR-Psychology Association, PR Audiologists Academy, Puerto Rican Pediatric Society, West Region Pediatricians Association, East Region Pediatricians Association. Family associations and organizations: APNI, F2F, PR-PKU Association. Other community organizations: Association of Primary Health Care of PR, Oral health Program, MAVI, PR-Newborn Screening Program, Society of Education and Rehabilitation of PR (SER de PR, Spanish acronym), and the Spina Bifida and Hydrocephaly Association, among others.

Collaborations at the enabling services level are primarily related to the provision of enabling and direct services for CSHCN and their families including referrals to needed services, care coordination, family engagement and support, and eligibility assistance services. Partners at this level include community health care providers, Part C Early Intervention Services, audiology clinics, the Spina Bifida and Hydrocephaly Association, the Down Syndrome Association, SER de PR, Centro Margarita, Centro Espibi among others.

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

Title V and Title XIX Programs, both are part of the organizational structure of the Puerto Rico Department of Health. Medicaid and SCHIP funds are administered by the Puerto Rico Health Insurance Administration (PRHIA), a government organization created by Act #72 of 1993. PRHIA leads the contracting process and monitors compliance of four (4) Managed Care Organizations (MCO) that provide services for the eligible population, including CSHCN.

Although service coordination is not mandatory by CMS and is not included in the Puerto Rico State Plan, the collaboration between Title V and Title XIX is assured by a Memorandum of Understanding (MOU) that encourages continuous communication between the MCAHD team and Medicaid (central and local) offices where the eligibility evaluation takes place. The MOU includes but is not limited to data gathering and sharing by PRHIA, dissemination of educational materials, referrals between programs, outreach activities in common, reimbursement for specialty care and services, evaluation of the system of care, and service gap identification and solution. In terms of data collection and sharing, the PRHIA requires the submission of an annual report on the health status of the covered population to all contracted MCO's. The report includes information on services provided to the Medicaid population, including the provision of preventive services, and care coordination, among other health indicators. Based on the information collected, PRHIA generates a report with specific data on the maternal, child (including CSHCN), and adolescent health status. The report is received at the MCAHD and is used for planning, monitoring, and evaluation purposes. The information and data sharing with Medicaid also includes data regarding different funding sources (State, Medicaid, SCHIP), premium costs per enrollee, eligible population demographics, and availability of providers for each population.

Regarding the CSHCN population, the PRHIA requires contracted health insurance companies under the GHP to have a system that allows health care providers to submit a request for a child to be registered in the GHP special coverages. The special coverages include CSHCN, aplastic anemia, hemophilia, cystic fibrosis, and autism. These cover all or part of the services related to the child's condition either temporarily or up to age 21 years. Families can choose any provider under their Preferred Provider Network without a referral from their PCP. The PRHIA requests that insurances register the participant within a 72 hours' period. Also, the PRHIA allows for refundable services provided at the CSHCN Program to CSHCN covered by GHPs to be billed to the proper insurance. Services provided to CSHCN under private insurance are also billed to the insurance company. Title V covers non-refundable services such as specialized pediatric services of difficult access, care coordination, or CSHCN without insurance coverage. The PRHIA shares data of CSHCN from birth to 21 years of age as requested by the CSMN Division, following the PRHIA data safety standards.

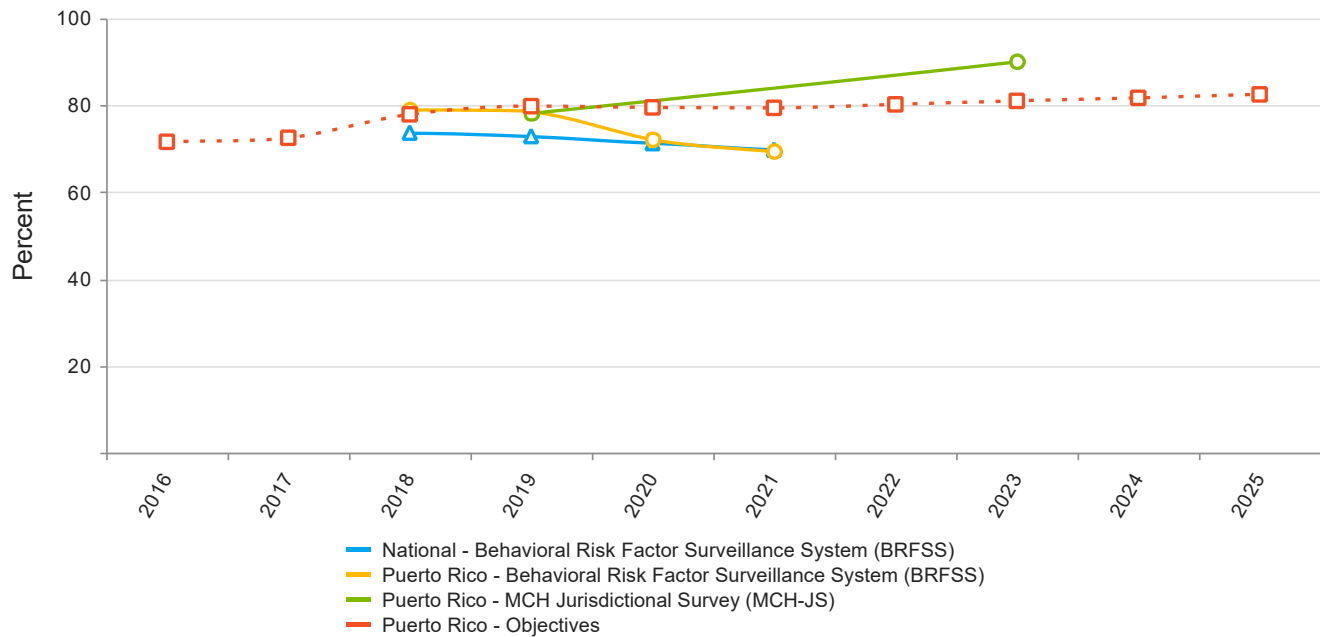
Educational materials availability and distribution is also included in the collaboration agreement between Title V and Title X Programs. The materials and referral information between programs is available for the eligible population through Medicaid and MCAH regional offices. In terms of community outreach and referral system, Medicaid/Title V use a common referral form.

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

Women/Maternal Health

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					
Data Source: Behavioral Risk Factor Surveillance System (BRFSS)					
	2018	2019	2020	2021	2022
Annual Objective			79.4	79.3	80.1
Annual Indicator		78.7	78.5	72.1	69.2
Numerator		481,355	484,022	442,111	421,471
Denominator		612,005	616,350	613,335	609,159
Data Source		BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year		2018	2019	2020	2021

i Previous NPM-1 BRFSS data for survey year 2017 that was pre-populated under the 2018 Annual Report Year is no longer displayed since it is not comparable with 2018 survey data.

Federally Available Data**Data Source: MCH Jurisdictional Survey (MCH-JS)**

	2019	2020	2022
Annual Objective		79.4	80.1
Annual Indicator	77.9	77.9	89.8
Numerator	346,051	346,051	381,975
Denominator	444,413	444,413	425,358
Data Source	MCH-JS	MCH-JS	MCH-JS
Data Source Year	2019	2019	2023

Annual Objectives

	2023	2024	2025
Annual Objective	80.9	81.6	82.4

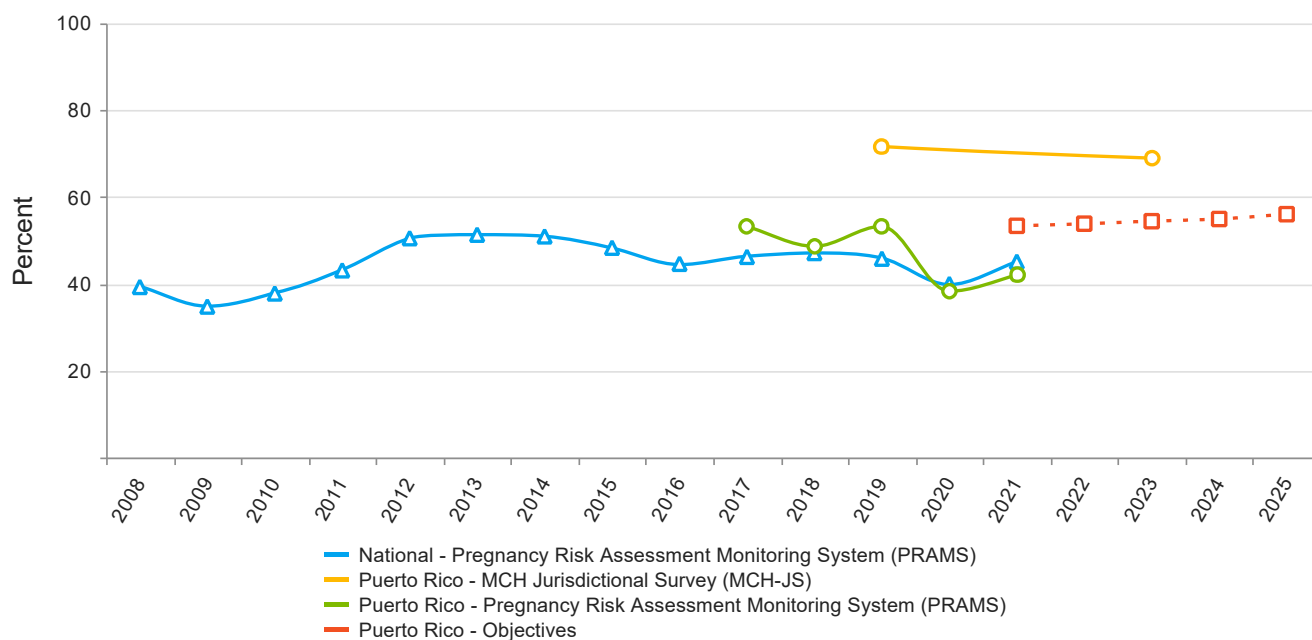
Evidence-Based or –Informed Strategy Measures

ESM 1.1 - Percent of women, ages 18 through 44, with a preventive medical visit in the past year who reported using the “Women of Reproductive Age Preventive Care Pocket Guide” to schedule a preventive medical visit in Puerto Rico by September 2021-2025

Measure Status:			Active	
State Provided Data				
	2019	2020	2021	2022
Annual Objective			0	0
Annual Indicator			0	79.1
Numerator				239
Denominator				302
Data Source			PRBRFSS	HVP participant survey
Data Source Year			2021	2021-2022
Provisional or Final ?			Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	79.9	80.7	81.5

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



Federally Available Data

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

	2019	2020	2021	2022
Annual Objective			53.3	53.8
Annual Indicator	48.7	53.3	38.3	42.0
Numerator	10,196	10,706	7,165	8,001
Denominator	20,921	20,073	18,687	19,039
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2018	2019	2020	2021

Federally Available Data			
Data Source: MCH Jurisdictional Survey (MCH-JS)			
	2019	2020	2022
Annual Objective			53.8
Annual Indicator	71.4	71.4	68.8
Numerator	377,217	377,217	345,074
Denominator	528,457	528,457	501,765
Data Source	MCH-JS	MCH-JS	MCH-JS
Data Source Year	2019	2019	2023

Annual Objectives			
	2023	2024	2025
Annual Objective	54.4	54.9	56.0

Evidence-Based or –Informed Strategy Measures

ESM 13.1.2 - Percent of persons who recognize oral health as part of routine prenatal care after participating in the MCAHP prenatal course by September 2021-2025

Measure Status:		Active
State Provided Data		
	2021	2022
Annual Objective		
Annual Indicator	100	97.5
Numerator	4	39
Denominator	4	40
Data Source	Pre and post Prenatal Course	Pre and post Prenatal Course
Data Source Year	2020-2021	2021-2022
Provisional or Final ?	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	99.0	99.0	99.0

State Action Plan Table

State Action Plan Table (Puerto Rico) - Women/Maternal Health - Entry 1	
Priority Need	
Promote health and wellbeing in women of reproductive age (WRA)	
NPM	
NPM 1 - Percent of women, ages 18 through 44, with a preventive medical visit in the past year	
Objectives	
By 2025, increase to 82% the percentage of women who receive an annual preventive medical visit (Baseline PR-BRFSS 2019: 78.5%).	
Strategies	
Disseminate the Women of Reproductive Age Preventive Care Pocket Guide.	
Establish collaborations with entities that promote and provide mental and preventive health services to the target population.	
Provide continuing education to HVNs to improve their knowledge and skills in identifying, managing, and referring participants who report mental health issues.	
Continue the current Maternal Mortality Review Surveillance System in Puerto Rico.	
Develop and disseminate an Emergency Preparedness and Response guide that considers the needs of WRA, pregnant and parenting women, including violence prevention, prenatal care, adequate nutrition, prevention of premature birth, among others.	
ESMs	Status
ESM 1.1 - Percent of women, ages 18 through 44, with a preventive medical visit in the past year who reported using the "Women of Reproductive Age Preventive Care Pocket Guide" to schedule a preventive medical visit in Puerto Rico by September 2021-2025	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 - Percent of women who drink alcohol in the last 3 months of pregnancy

NOM 11 - Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations

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 (Puerto Rico) - Women/Maternal Health - Entry 2

Priority Need

Improve birth outcomes

NPM

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

Objectives

By 2025, increase to 56% the percentage of pregnant women who had a preventive dental visit (Baseline PR-PRAMS 2019: 53.3%).

Strategies

Strengthen collaborations to develop strategies that promote preventive oral health care visits in pregnant women.

Provide information to the target population on the benefits of preventive oral visits during pregnancy via social media and educational activities in the community.

Promote preventive dental visits among Title V Home Visiting Program pregnant participants.

Continue to provide educational activities regarding prenatal care through workshops (Spanish title: "Curso Prenatal").

Continue outreach and referral of pregnant women to initiate prenatal health care.

Disseminate and promote the Prenatal Health Care Services Guidelines to the target population and health care providers.

Promote healthy lifestyles during pregnancy via social media and educational activities in the community.

ESMs

Status

ESM 13.1.1 - Percent of Title V Home Visiting Program (HVP) pregnant participants who received oral health services post referral in Puerto Rico by September 2021-2025

Inactive

ESM 13.1.2 - Percent of persons who recognize oral health as part of routine prenatal care after participating in the MCAHP prenatal course by September 2021-2025

Active

NOMs

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

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

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

Women/Maternal Health - Annual Report

During the reporting year (2021-2022), the Maternal, Child and Adolescent Health Division (MCAHD) continued its work with Women's Reproductive Health (WRH) and Maternal Health (MH). WRH focuses on health issues during the years between menarche and menopause, including the pre- and interconceptional periods, while MH concentrates on health during pregnancy and immediately after birth. The MCAHD directs its efforts at different levels, including community-wide education and outreach, individual education and support, professional development, and stakeholder/system level interactions.

MCAHD PROGRAMS FOR WR/MH

The MCAHD has traditionally reached the population of women of reproductive age (WRA) and pregnant persons through various strategies. At the individual level, the Home Visiting Program (HVP) focuses on pregnant persons at high risk for adverse birth outcomes. Home Visiting Nurses (HVN) offer education, support, and care coordination to pregnant and parenting persons from pregnancy through two years after the birth of their child. Perinatal Nurses visit birthing hospitals to provide education and referrals to new parents, regardless of risk level. At the community level, Health Educators (HEs) design educational activities and materials on maternal and child health topics and lead public education efforts. Community Health Workers (CHWs), in turn, offer health promotion activities in varied community settings.

As has been discussed in previous reports, the COVID-19 pandemic imposed substantial modifications to the aforementioned intervention strategies, which varied over the years according to the severity of the pandemic. These adaptations allowed the MCAHD to continue to provide support and education to women in the community. At this writing, programs and strategies are functioning as designed, with appropriate cautionary measures in place to protect staff and participants.

The MCAHD regional staff that implemented these activities in 2021-2022 included 79 HVNs offering services in 70 of the 78 municipalities; 7 regional HVP nurse supervisors; 7 Perinatal Nurses who visit birthing hospitals throughout the Island; 6 HEs; and 24 CHWs. At the regional level, they respond to 6 regional MCAHD directors (two regions, Fajardo and Metropolitan, share one director), who report to the MCAHD director.

HOME VISITING PROGRAM

The HVP, which has been in operation since 1992, was originally modeled on the Nurse Family Partnership program and has undergone minor modifications to ensure it continues to be relevant and appropriate. The HVP provides case management and care coordination services, education, and support to women with medical and social risk factors associated with poor pregnancy outcomes. Criteria for admission include pregnancy before age 22 or after 35, certain chronic illnesses, and previous pregnancy loss or death of a child; other conditions can be considered on an individual basis. Participants are admitted during pregnancy and followed until the child is 2 years old.

The central level HVP team is composed of the HVP Coordinator, Evaluator, and the Title V Mental Health Consultant, who report directly to the MCAHD director. The team is charged with designing and monitoring all program activities, revising the protocols and instruments periodically and making any needed modifications, training the HVNs and supervisors to ensure they have the most current information, and offering technical assistance and support to the regional supervisors and directors in the implementation of the HVP. Through program evaluation activities, the performance and accomplishments of the HVNs are assessed. These results are communicated to the MCAHD director and regional directors and supervisors so that appropriate action can be taken to improve the implementation of the HVP model, if needed.

In the three years since the appearance of COVID-19, the HVP has undergone several adaptations, as described in previous annual reports, starting with a modified protocol to move from in-person visits to virtual interventions (via telephone calls and text messaging), gradually returning to the core HVP service model. At this writing, the HVP is operating as designed; however, the telephone intervention protocol continues in place for families that have tested

positive to COVID-19 or who are awaiting test results.

The HVP Coordinator, Evaluator and Mental Health Consultant hold regular monthly meetings with the regional supervisors via Microsoft Teams. They also share information with supervisors and regional directors as needed to ensure the program runs smoothly and uniformly throughout the Island.

The HVP operates throughout the island, including the island municipalities of Vieques and Culebra. It is designed to offer holistic case management, care coordination, support and education services to pregnant and parenting persons, their children up to age 2, and their families.

The HVNs are registered nurses with special training in MCH issues. A variety of validated screening instruments and tools are used to identify participants' strengths and needs. Interventions are based on a biopsychosocial model of care. They educate participants regarding protective behaviors, including appropriate prenatal care, healthy eating, physical activity, breastfeeding, positive parenting, infant and child development, safety, and related topics. Behaviors that can affect mother and baby are also emphasized, including alcohol use, smoking, prescription and over-the-counter medication use, exposure to toxic substances, stress, intrafamily and partner violence, maternal mental health, among others. In addition, social determinants of health, including access to health care, employment, housing, social support systems, and others are identified and addressed as needed.

HVNs refer participants to care providers in the community according to the identified needs and offer follow up to ensure services are received. They also monitor whether pregnant women are receiving adequate prenatal care and that infants and children are receiving care according to EPSDT guidelines.

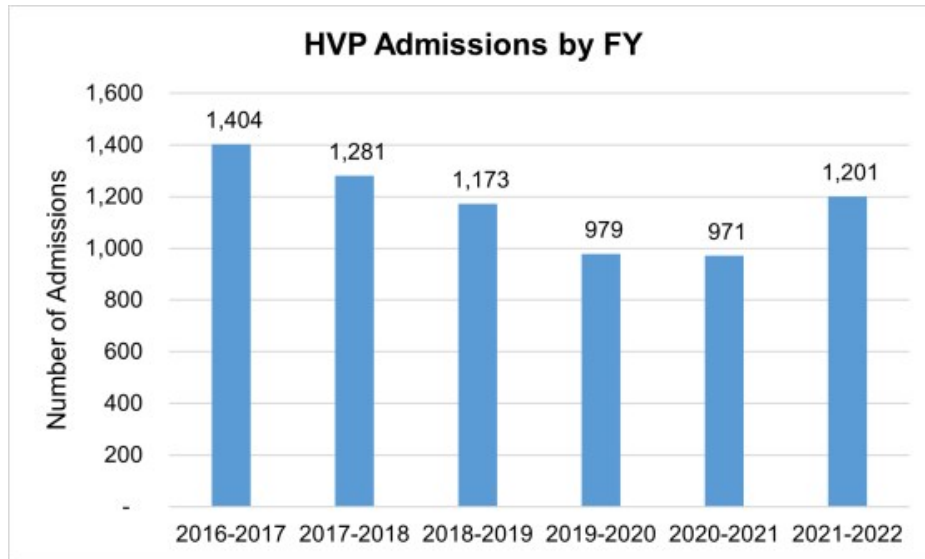
HVP participant information

Puerto Rico has faced a series of dramatic natural and political events in the last 6 years. The MCH population was particularly affected by Hurricanes Irma and María in September 2017 and the earthquake sequence that affected the south and southwest of the Island beginning in December 2019. The COVID-19 pandemic, which started in early 2020 and to this day has not been resolved, further complicated life in Puerto Rico, particularly for the most vulnerable populations. The HVP endeavored to adapt and respond to these very different emergency situations in order to continue offering services as effectively as possible.

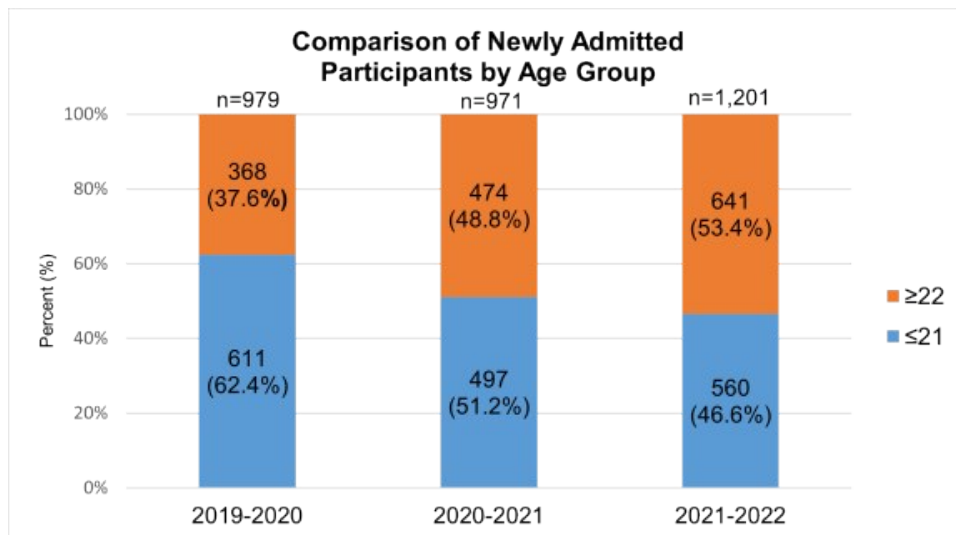
New admissions in the reporting year

In the year before Hurricanes Irma and María (2016-2017) the HVP had 1,404 new admissions. Over the next 4 years, the observed decrease in newly admitted pregnant persons can be attributed to the lasting impact of the hurricanes and subsequent emergent situations. In the months following the hurricanes, a massive disruption in electrical power and water services affected the entire island; for many, the power outage lasted upwards of six months. This affected the availability of medical and government services to varying degrees. While the earthquakes of early 2020 affected mostly the southwest of the Island, they were followed in March of the same year by the COVID-related shutdown, which limited services of the usual sources of referrals to the HVP – mainly WIC, Medicaid and OB/GYN offices. Furthermore, HVNs and CHWs were not able to go out in the community to promote the services or identify candidates for the program.

By 2020-2021 new admissions had dropped to 971, a decrease of 45% from the level before the hurricanes. However, the situation has improved over this past year as services have gradually returned to usual operations. Thanks to the efforts of the HVNs and other regional staff to identify candidates for the program, new admissions numbered 1,201 in 2021-2022, an increase of 19% over the previous year. The following chart shows the variation in the number of admissions over the past 6 years.



Historically, the HVP had a majority of participants aged 21 and under. However, the proportion of younger and older participants has changed over the past three years. In the reporting year, new admissions ages 22 and older represented a slight majority. The following graph portrays the decrease in younger participants over the past three years.

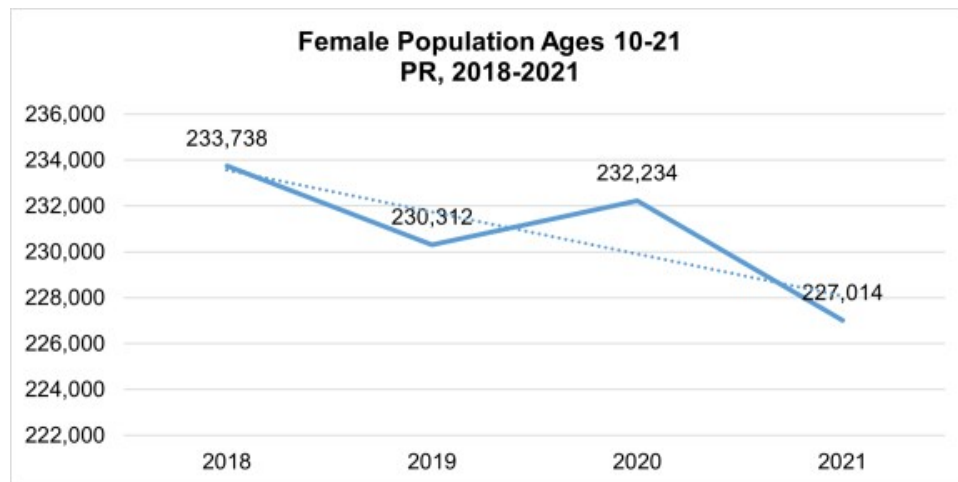


Nearly half of new participants (47.54%) are 22 to 34 years old. Teens ages 19 or younger make up one quarter (25.23%) and 21.4% are older adolescents 20 to 21 years old, as detailed in the following table.

**Age distribution of newly admitted participants
2021-2022**

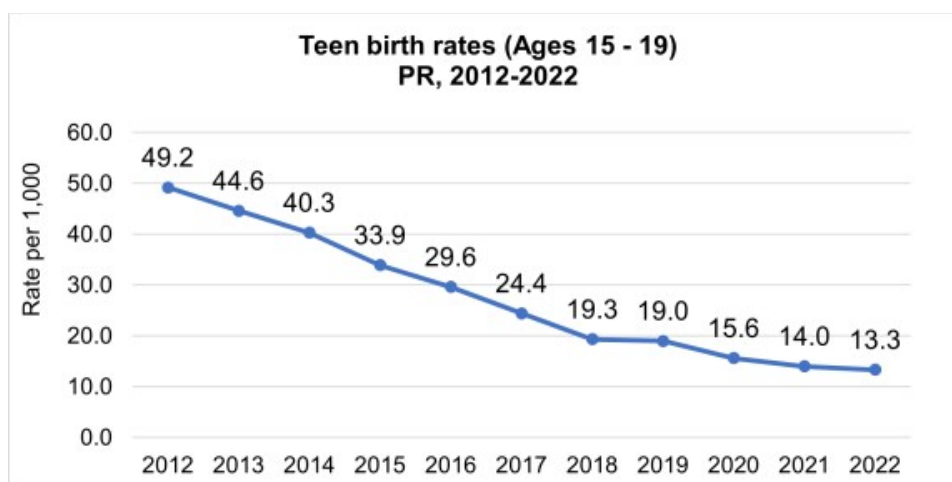
Age	#	%
<15	5	0.42
15 - 17	105	8.74
18 - 19	193	16.07
20 - 21	257	21.40
22 - 34	571	47.54
≥35	70	5.83
Total	1,201	100.00

When looking for possible reasons for the change in the makeup of the new admissions, it is important to consider the population trends in Puerto Rico in recent years. According to the Puerto Rico Statistics Institute^[1], the 2020 Census reflects the accelerated aging of the population of PR. The median age overall increased from 36.9 in 2010 to 45.2 in 2020, while for the female population the median age increased from 38.6 to 46.6 in the same period. At the same time, the US Census Bureau reports that the female population ages 10-21 shows a decreasing trend, as seen in the following chart.



Source: Annual Estimates of the Resident Population by Single Age of Year and Sex for Puerto Rico Commonwealth, PRCS 2018, 2019, 2020, 2021. Source: U.S. Census Bureau, Population Division

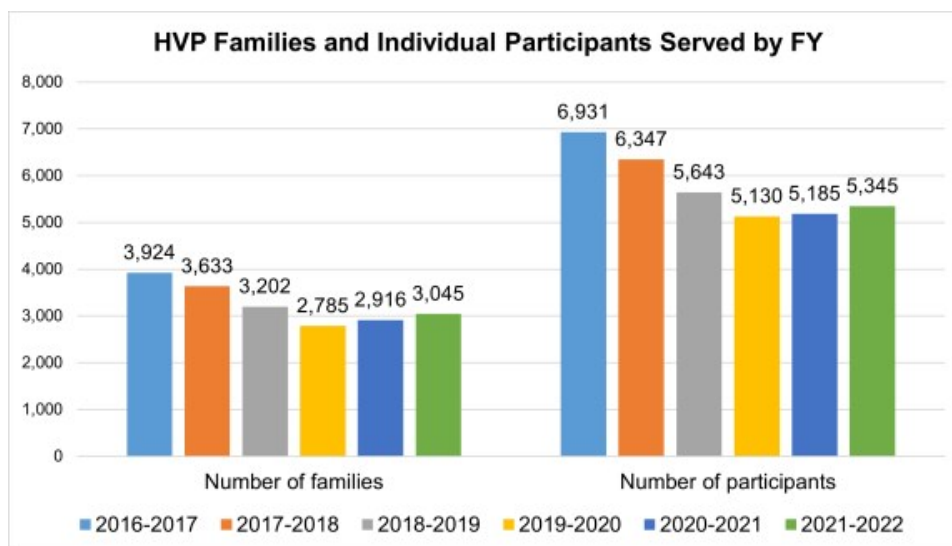
There has been a dramatic decrease in the female teen birth rate over the past 12 years. For the population of adolescent females ages 15 to 19, the rate plummeted from 49.2 per 1,000 females aged 15-19 in 2012 to 13.3/1,000 in 2022, as shown in the next chart.



Source: Vital Statistics, Demographic Registry, PR Department of Health, 2012-2022; Population Estimates, American Community Survey, 2012-2021. US Census. 2022- International Database, US Census

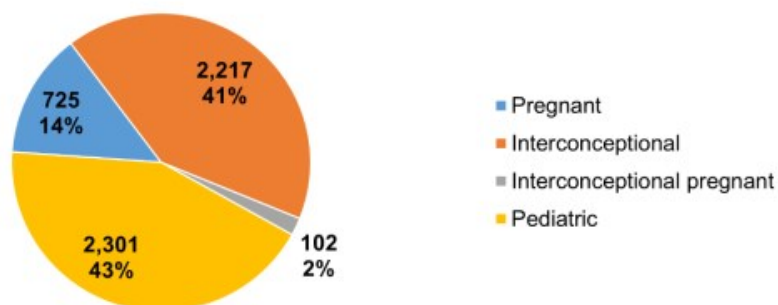
Population served in the reporting year

HVP participants are divided into two broad groups. **Pregnant and parenting participants** are categorized as pregnant, interconceptional, or interconceptional pregnant (those who have a subsequent pregnancy while still in the program). **Pediatric participants** are divided into infants (<12 months), and children (12 to 24 months of age). During 2021-2022, the HVP provided services to **5,345 participants** in **3,045 families**. The next chart shows how, after a downward trend in the years after the hurricanes and during the COVID-19 crisis, the past two years have shown a rebound in the number of participants and of families served.



The next chart shows the distribution of participants by category in 2021-2022. Overall, pregnant and interconceptional participants make up 57% of the total, with infants and children accounting for the remaining 43%.

DISTRIBUTION OF HVP PARTICIPANTS BY CATEGORY
2021-2022



The tables that follow show the distribution of the 5,345 participants by category and age group. The numbers and proportions of pregnant and interconceptional participants are given for ages 21 and under, and 22 and over. They ranged in age from 14 to 45 years old, with a mean of 22.23 years. Pediatric participants are divided into infants under 12 months of age and children 12-24 months of age.

Distribution of HVP Participants by Category and Age Group
2021-2022

Pregnant	#	%
≤21	341	47.0
≥22	384	53.0
Total	725	100

Interconceptional	#	%
≤21	1,208	54.5
≥22	1,009	45.5
Total	2,217	100

Interconceptional Pregnant	#	%
≤21	62	60.8
≥22	40	39.2
Total	102	100

Pediatric	#	%
Infants (<12 months)	1,090	47.4
Children (12-24 months)	1,211	52.6
Total	2,301	100

Among the 1,201 newly admitted participants, 39.3% entered the HVP in the first trimester of pregnancy and 45.7% entered in their second trimester. Nearly nine out of ten (88.0%) had initiated prenatal care in the first trimester of pregnancy. Twenty of the new participants (1.7%) had not initiated prenatal care at the time of admission.

In the reporting year, the proportion of participants who were insured by the Government Health Plan (GHP) decreased when compared with the previous year (84.7% vs 90.0% in 2020-2021). There was a corresponding increase in those with private insurance (14.5% vs 9.8%) and those who pay out of pocket (0.8% vs 0.2%).

Half of HVP participants (53.4%) received prenatal care in an IPA, 41.5% in a private practice and 4.9% elsewhere. Three participants (0.3%) reported they lacked a prenatal care provider.

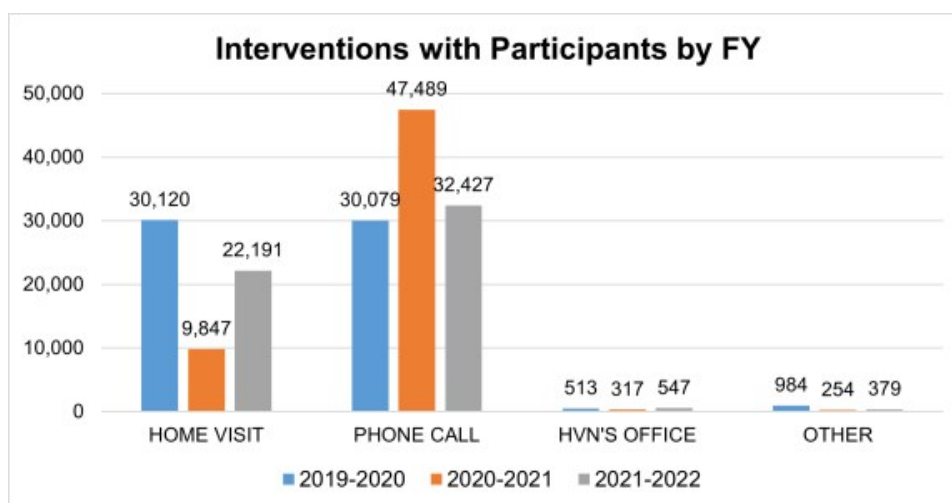
The number of pregnant participants who reported they had a dental care provider increased significantly, from 67.4% in 2020-2021 to 86.9% in the reporting year. This can be attributed to the efforts of the HVNs to coordinate dental health services for the participants. Beginning on admission to the HVP, HVNs offer education on the importance of oral health during pregnancy, given the relationship between oral disease and adverse birth outcomes. In the reporting year, HVNs referred 356 pregnant participants to a dentist; half (52.2%) of these referrals were completed. Possible explanations for this include the reluctance of many dentists to treat pregnant women, fearing possible complications, the scarcity of dentists in some areas, which requires traveling to another town to receive services, and fewer available appointment slots, delaying the provision of care. To address these barriers, the HVNs identify the dentists in the community or nearby towns that accept pregnant patients and help the participants to make the appointments.

Services and interventions with participants in the reporting year

During 2021-2022, 79 HVNs offered services in 70 municipalities. The average caseload was 23 families per nurse, with a range of 5 to 40 families.

When looking at the number of home visits and services rendered to participants and comparing them to previous years, it is important to keep in mind that 2019-2020 had 8 months of services before the COVID-19 lockdowns and restrictions began in March 2020. Home visits resumed in March 2021, although not all families were willing to receive the HVNs in their homes. Nevertheless, the reporting year saw a dramatic increase in home visits, more than double the previous year. The number of telephone interventions remained elevated, in part due to the temporary interruption of home visits in January and May 2022 in response to spikes in the number of COVID-19 cases.

The past three years show marked changes in the proportion of services provided through home visits and telephone interventions. This chart compares the interventions in 2019-2020 (n=61,696), 2020-2021 (n=57,907) and 2021-2022 (n=55,544) according to the type of contact between the HVN and the participant. The "Other" category includes encounters in settings such as a provider's office, government offices (WIC, Medicaid) and other locations.



The following table breaks down the 55,544 interventions according to participant category and type of intervention.

**Type of Intervention by Participant Category
2021-2022**

Category & Age Group	Home	Phone	Office	Other	Total
Pregnant ≤21	2,824	3,959	87	70	6,940
Pregnant ≥22	2,657	4,002	144	80	6,883
Interconceptional ≤21	4,241	6,062	76	74	10,453
Interconceptional ≥22	3,831	6,369	84	70	10,354
Interconceptional pregnant ≤21	156	265	6	4	431
Interconceptional pregnant ≥22	80	135	3	0	218
Infants (<12 m)	5,224	7,630	88	56	12,998
Children (12-24 m)	3,178	4,005	59	25	7,267
Total	22,191	32,427	547	379	55,544

Screening Instruments

HVNs use a series of validated screening instruments to identify factors that can have an unfavorable effect on participants' health and wellbeing. The findings are used as the basis for the intervention plan, including education, support and referrals as required.

Pregnant persons are generally aware that alcohol, tobacco, and other drug (ATOD) use during pregnancy carries a stigma; therefore, accurate information is commonly withheld from health care providers. With this in mind, the HVNs offer education on the effects of ATOD on the fetus to all participants, regardless of their admitted use.

A tobacco use history instrument was administered to 62 pregnant participants who stated in the screening prompt that they had ever smoked a cigarette. Their ages are shown in the following table.

**Participants who Report Ever Having Smoked Cigarettes, by Age
2021-2022**

Age group	#	%
<15 y/o	0	0.0
15 – 17 y/o	3	4.8
18 – 19 y/o	10	16.1
20 – 22 y/o	20	32.3
23 – 29 y/o	19	30.6
30 – 34 y/o	9	14.5
>34 y/o	1	1.6

Participants who report they have smoked at any time are asked a series of follow up questions regarding their current use. Their responses are shown in the next table.

**Responses of Ever-Smokers to the Tobacco Use Instrument
2021-2022**

Item	#	%
Current smoking status	60	100.0
Decreased use of cigarettes during pregnancy	1	1.7
Stopped smoking <u>during</u> pregnancy	28	46.7
Had stopped smoking <u>before</u> pregnancy	31	51.6
How long ago did you quit smoking?	59	100.0
> 4 months	52	88.1
0-3 months	7	11.9
Did you have any difficulty quitting smoking?	59	100.0
No	58	98.3
Yes	1	1.7
What will happen after baby is born?	58	100.0
Will not smoke again	52	89.7
Will smoke again	2	3.4
Unsure	4	6.9
Will you need support to remain a non-smoker after baby is born?	59	100.0
No	56	94.9
Yes	3	5.1

An alcohol and drug use screening instrument based on the 4P+ screening tool^[2] was administered to 813 pregnant participants in the reporting period. This screen is only administered in person, not by phone. Two thirds of respondents (473, 58.8%) reported ever having used alcohol. The following table shows their responses regarding frequency of alcohol and drug use in the month before pregnancy and in the month before the interview (i.e., during pregnancy). Only two respondents (0.4%) reported using any alcohol and none reported using drugs in the previous month.

**Responses of Participants who Were Ever-Drinkers
and Completed the ATOD Screening Instrument
2021-2022**

Item	#	%
Frequency of alcohol use in the month <u>before pregnancy</u>	515	100.0
Every day	0	0.0
3-6 days/week	6	1.2
1-2 days/week	36	7.0
Less than 1 day/week	154	29.9
Never	319	61.9
Frequency of alcohol use in the <u>previous month</u>	507	100.0
Every day	0	0.0
3-6 days/week	0	0.0
1-2 days/week	0	0.0
Less than 1 day/week	2	0.4
Never	505	99.6
Frequency of drug use in the month <u>before pregnancy</u>	807	100.0
Every day	13	1.6
3-6 days/week	4	0.5
1-2 days/week	5	0.6
Less than 1 day/week	5	0.6
Never	780	96.7
Frequency of drug use in the <u>previous month</u>	800	100.0
Every day	0	0.0
3-6 days/week	0	0.0
1-2 days/week	0	0.0
Less than 1 day/week	0	0.0
Never	800	100.0

The HVP protocol calls for all participants to be screened for maternal depression and anxiety using the 10-question Edinburgh Postnatal Depression Scale (EPDS) at least once during pregnancy and twice in the first year postpartum. For participants who obtain >10 points on the scale or a positive answer to Item 10 (suicidal ideation), the HVP protocol requires the HVN to offer education to the participant and a family member or support person (as authorized by the participant) as well as a referral to mental health services. In addition, they receive frequent follow-up by the HVN to ensure completion of the referral and adherence to any treatment that may have been prescribed.

In the reporting year, 1,733 EPDS screens were administered to pregnant and interconceptional participants. The scores were distributed as follows: 1,608 (93%) scored < 10 points; 61 (3%) scored 10-12 points; and 64 (4%) scored >12 points. The responses ranged from 0 to 24 points, with a mean of 3.54 points and a standard deviation of 3.81. No statistically significant differences were found in risk of depression between participants up to age 21 (8.3%) and those 22 and over (7.0%) ($p=.210$).

Of the 125 screens with a score of >10 points, 16% stated they were already receiving mental health services, 51 (59.2%) were issued a referral for services, and 4% were offered a referral but refused it. Twelve (0.7%) screens had a positive response to Item 10 (suicidal ideation), distributed as follows: Yes, quite often-1; Sometimes-2; Hardly ever-9. Of these, 5 (41.7%) received a referral for services; all participants and 4 (33.3%) of their relatives or partners were given support, information, and follow-up.

Participants are screened for intimate partner violence using the Women's Experience with Battering (WEB) scale. The scale consists of 10 questions that inquire about psychological manifestations of violence in the woman's relationship and two questions about physical and sexual violence. It is answered using a 6-point Likert scale, from "Totally disagree" to "Totally agree." The possible scores range from 12 (no experiences with violence) to 72 (extreme experience with violence), with a score of 20 or more points representing a high risk for violence. The WEB instrument is answered by the participant, who then hands it to the HVN to score and interpret.

As with other instruments that screen for sensitive topics, participants may be hesitant to reveal they are living in a violent relationship. Therefore, HVNs offer education and support on this topic to all participants, regardless of the score. For those who score high, the HVNs have several options for intervention, including a brief form that the participant can fill out to ask for further help if the aggressor or other family members are present. HVNs have a complete directory of services for persons who live with violence, ranging from hotlines to shelters and legal assistance if they decide to leave home. The HVN can help the participant develop an escape plan and steer them to organizations that can help her press charges, as needed.

The WEB scale is administered in the second or third trimester of pregnancy and again three months postpartum. A total of 776 screens were administered; 769 (99.1%) scored low (<20 points) and 7 (0.9%) scored high (≥20 points). The scores ranged from 10 to 60, with a median of 10 points. In the reporting period, HVNs referred 10 participants to services. HVNs can refer participants to services even if their total score is low, in response to answers to particular questions or the participant's concerns.

The following table shows the total number of respondents who answered, "Agree a little," "Agree somewhat," or "Agree strongly" to each of the items in the questionnaire.

**Responses of Participants who Agreed "A little", "Somewhat" or
"Strongly" to Each of the Items in the WEB Scale
2021-2022**

Item	#	%
1. My partner makes me feel unsafe even in my own home.	15	1.92
2. I feel ashamed of the things he does to me.	7	0.89
3. I try not to rock the boat because I am afraid of what my partner might do.	3	0.38
4. I feel like I am programmed to react a certain way to my partner.	5	0.64
5. I feel like my partner keeps me prisoner.	3	0.38
6. My partner makes me feel like I have no control over my life, no power, no protection.	2	0.25
7. I hide the truth from others because I am afraid not to.	2	0.25
8. I feel owned and controlled by him.	2	0.25
9. My partner can scare me without laying a hand on me.	2	0.26
10. My partner has a look that goes straight through me and terrifies me.	2	0.26
11. My partner has physically assaulted me	2	0.26
12. My partner has forced me to have sex against my will.	1	0.13

Training for HVP Staff

HVNs are offered in-service training on a regular basis to ensure they have up-to-date information regarding MCH issues and have the tools and skills needed for effective interventions with their participants. Since March 2020, most training sessions have been offered via Zoom or Microsoft Teams. Please see Workforce Development for details of the trainings offered during the reporting year.

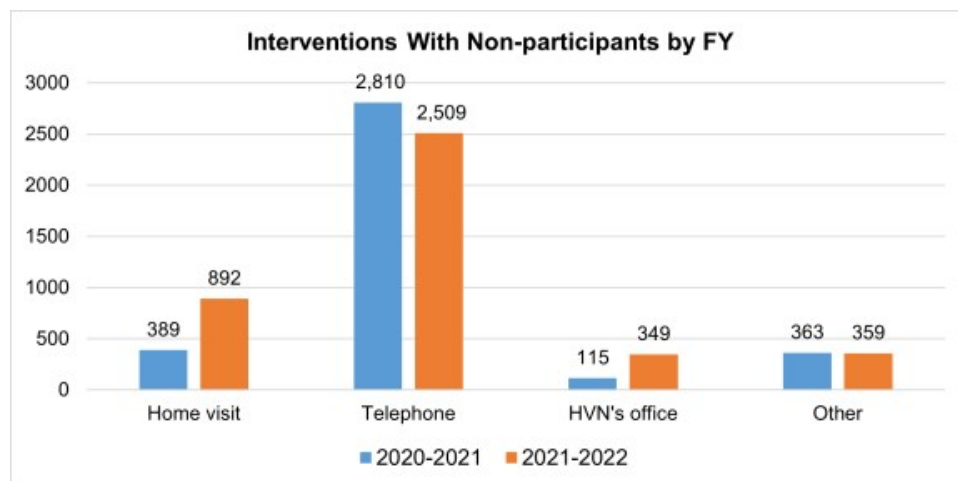
The regional HVP supervisors hold regular meetings with the HVP Coordinator, Evaluator, and the Title V Mental Health Consultant. The focus of these meetings is to present new information that pertains to the program, discuss challenges and successes, weigh options to overcome any challenges, and facilitate uniformity and quality of implementation of the program model at the local level. These meetings also take place via Teams.

MCAHD ACTIVITIES AT THE COMMUNITY LEVEL

HVP Interventions with non-participants

The HVNs offer education, support, and care coordination on a limited basis to pregnant and parenting persons in the community who do not qualify for the HVP or who are not able to engage in a long-term commitment to the program. Partners, relatives, and friends of HVP participants are also offered education to prepare them to support their loved ones. This is a way to increase the scope and reach of the mission of the MCAHD for vulnerable populations. Since the onset of the COVID-19 pandemic, these interventions have been an important source for people who had limited access to their usual providers. The encounters with non-participants can take the form of home visits (which can happen in the non-participant's home or in the home of an HVP participant), telephone calls to provide education or care coordination, and visits to the HVN's office. The "Other" category includes health care services, government offices (such as WIC or Medicaid) and other locations.

The total number of interventions with non-participants increased from 3,677 in 2020-2021 to 4,109 in the reporting year. Similar to the experience with HVP participants, there was a marked uptick in home and office visits, as expected given the flexibilization of COVID precautions, and a slight decrease in the number of telephone calls.



The types of interventions by category and type of intervention are detailed in the following table.

**Interventions with Non-HVP Participants
2021-2022**

Category	Home	Phone	Office	Other	Total	%
Pregnant women	93	1,223	87	45	1,448	35.24
Non-pregnant women	481	768	168	220	1,637	39.84
Infants (<12 m)	49	239	26	3	317	7.71
Children (12-24 m)	51	178	27	9	265	6.45
Men	218	101	41	82	442	10.76
Total	892	2,509	349	359	4,109	100.00

After identifying the specific needs presented by the non-participant, the HVN can offer information and referrals for

services. In the reporting period, 754 referrals were given to non-participants of the HVP to the services detailed below:

**Referrals Made for Non-HVP Participants
2021-2022**

Service or Agency	#
Government health plan	57
Prenatal care	38
Medical care (adults)	28
WIC	91
Department of the Family	7
Housing Department	9
Municipal services	2
Department of Education	1
Mental health services	11
Dental services	33
Breastfeeding support groups	18
Early Intervention Program	19
Preventive Pediatric Care (EPSDT)	16
Home Visiting Program	31
Other	393
Total	754

COMMUNITY HEALTH WORKERS AND HEALTH EDUCATORS

CHWs and HEs direct their educational efforts to group interventions in schools, health service provider sites and communities. HEs also offer training on health topics to various audiences and create educational materials and curricula on diverse MCH topics. The population groups reached by the CHWs and HEs include women of reproductive age, pregnant and parenting persons and their companions, and the general public. As COVID-related restrictions were lifted, they were able to resume offering in-person educational activities.

All educational presentations and materials are revised and updated by the Health Educators as needed in response to changing community needs, emergent conditions, or revised priorities.

**Distribution of Health Educators and Community Health Workers
2021-2022**

Region	HE	CHW
Arecibo	1	3
Bayamón	1	9
Caguas	1	4
Fajardo	1*	2
Mayagüez	1	4
Metropolitan	*	0
Ponce	1	2
Total	6	24

**The Fajardo and Metropolitan regions share one HE*

The main interventions directed to women of reproductive age and maternal health are the Prenatal Course and individual and group orientations on various aspects of women's health, pregnancy, and reproductive health.

Prenatal Course

The in-person Prenatal Course can be offered in four 1-hour sessions or a single 3-hour session, depending on the needs and preferences of the entity coordinating the event. Both versions include information on the following topics: healthy lifestyles, prenatal care, risk behaviors, stages and changes in pregnancy, conditions affecting pregnancy, delivery planning, delivery process, signs and prevention of premature birth, caesarean birth, postpartum care, newborn care, and breastfeeding. The course is kept updated with information regarding current or emerging threats. As part of the course, the participants complete a socio-demographic profile and a pre- and post-test. The following tables show the number of participants in the courses in 2021-2022.

Prenatal Course: 1 Session, In-Person

Offered by	# of Courses	# of Participants*
Health Educators	21	80
Community Health Workers	92	146
Total	113	226

**Participants include pregnant persons and companions (partners or other significant support persons)*

Prenatal Course: 4 Sessions, In-Person

Offered by	# of Courses	# of Participants*	# & % Completing all Sessions
Health Educators	2	5	5 (100%)
Community Health Workers	8	17	12 (71%)
Total	10	22	17 (77.3%)

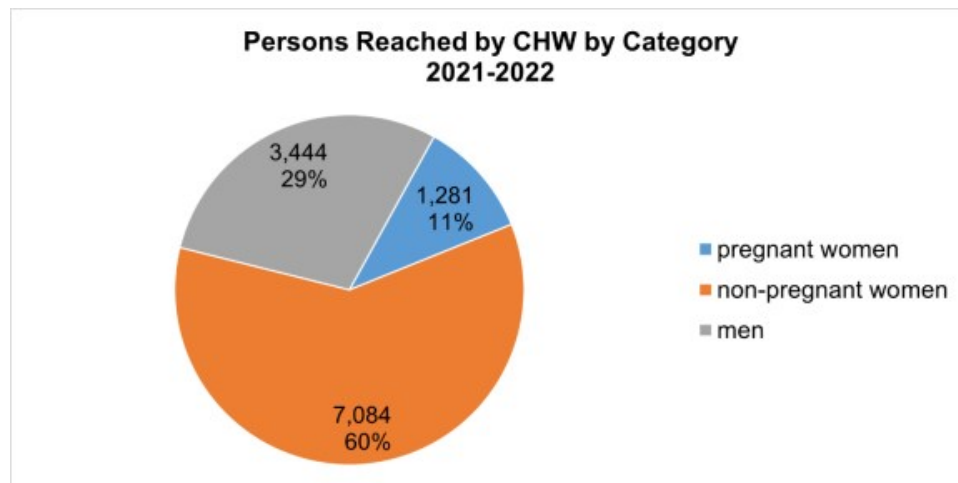
**Participants include pregnant persons and companions (partners or other significant support persons)*

In response to the limitation in group activities due to COVID-19, the health educators created the Virtual Prenatal Course based on the one-session course. The 22-minute video, which includes sign language interpretation, is available on the "Encounter of my life" webpage (salud.pr.gov/encuentro_mi_vida) and presents the information using the same five categories as the educational campaign, namely Prenatal care, Labor and delivery, Postpartum, Infant care and Breastfeeding. After watching the video, visitors can access the educational leaflets included in the campaign for more detailed information. This course was viewed by 619 persons in the reporting period.

Other Health Education Activities

Health education topics related to WRA/MH include women's preventive physical and mental health care; family planning, reproductive decision-making and contraceptive methods; preconceptional health including control of chronic conditions before pregnancy; interpregnancy spacing; use of folic acid and prevention of birth defects; healthy relationships and effective communication; intrafamily and intimate partner violence; physical activity and nutrition for a healthy weight; seasonal or contagious diseases (influenza, dengue, COVID-19 and others); community services related to depression, addiction, violence, childcare, among others.

In the reporting year, the CHWs reached a total of 11,809 persons aged 10 and up through individual orientations, prenatal and parenting courses, and group activities in the community. As shown in the following chart, nearly three quarters of the participants (8,365, 71%) were women.



The 8,365 women were distributed as shown in the following table, according to age group and pregnancy status. Three quarters (77%) were aged 21 and over; 85% were not pregnant at the time of the intervention.

Women Ages ≥10 Reached in Courses, Individual Orientations and Group Activities 2021-2022

Age Group & Status	#	%
≤21, Pregnant	258	3.1
≤21, Non-Pregnant	1,662	19.9
≥22, Pregnant	1,023	12.2
≥22, Non-Pregnant	5,422	64.8
Total	8,365	100

The 2,542 women who received individual orientations had a similar distribution by age, with 82% ages 21 and over. Two thirds (67%) were not pregnant at the time.

**Women Ages ≥10 Receiving Individual Orientations
2021-2022**

Age Group & Status	#	%
≤21, Pregnant	184	7.2
≤21, Non-Pregnant	267	10.5
≥22, Pregnant	667	26.2
≥22, Non-Pregnant	1,424	56.0
Total	2,542	100.0

Group orientations in diverse community settings reached 4,253 women ages 10 and over. Two thirds (67%) were aged 22 and over, and only 7% were pregnant at the time.

**CHW Group Orientations to Women Ages ≥10 by Setting
2021-2022**

Setting	≤21, Pregnant	≤21, Non-Pregnant	≥22, Pregnant	≥22, Non-Pregnant	Total
Schools	4	67	50	206	327
Community	16	1,000	135	1,322	2,473
Health Care	13	287	53	924	1,277
Health Fair	3	30	12	131	176
Total	36	1,384	250	2,583	4,253

The HE offered individual education on MCH topics to 94 women ages 10 and over, detailed by pregnancy status and age group in the next table.

**HE Individual Orientations to Women Ages ≥10
2021-2022**

Age Group & Status	#
≤21, Pregnant	7
≤21, Non-Pregnant	10
≥22, Pregnant	33
≥22, Non-Pregnant	44
Total	94

ORAL HEALTH IN PREGNANT WOMEN

Prenatal preventive oral health is a determinant that may have an impact on the pregnancy outcome. Furthermore, poor maternal oral health is also a risk factor for early childhood caries in their offspring. According to the Puerto

Rico PRAMS 2021 survey, 42.0% of respondents had a dental cleaning done by a dentist or dental hygienist in a preventive oral visit while they were pregnant. This was an increase from 38.3% of respondents in 2020. These findings support the PR MCAHD's activities to promote the oral health preventive visit and access to oral care for pregnant women.

MCAHD staff provide individual and group in-person education on good oral hygiene, regular preventive dental check-ups, dental decay and oral disease to pregnant women, families, children, and adolescents, in an effort to increase awareness of the risks to overall health and wellbeing. The Prenatal Courses provide education and promotion of oral care during pregnancy and encourage a dental visit during pregnancy as part of the prenatal care plan. The HVNs provide education to participants about the importance of dental care and refer them to the dentist as part of their prenatal care.

The "Encounter of my life" educational campaign includes a leaflet on oral health care during pregnancy, which includes warning signs of periodontal disease and recommendations for optimal dental health, including visiting the dentist twice a year, shown below.



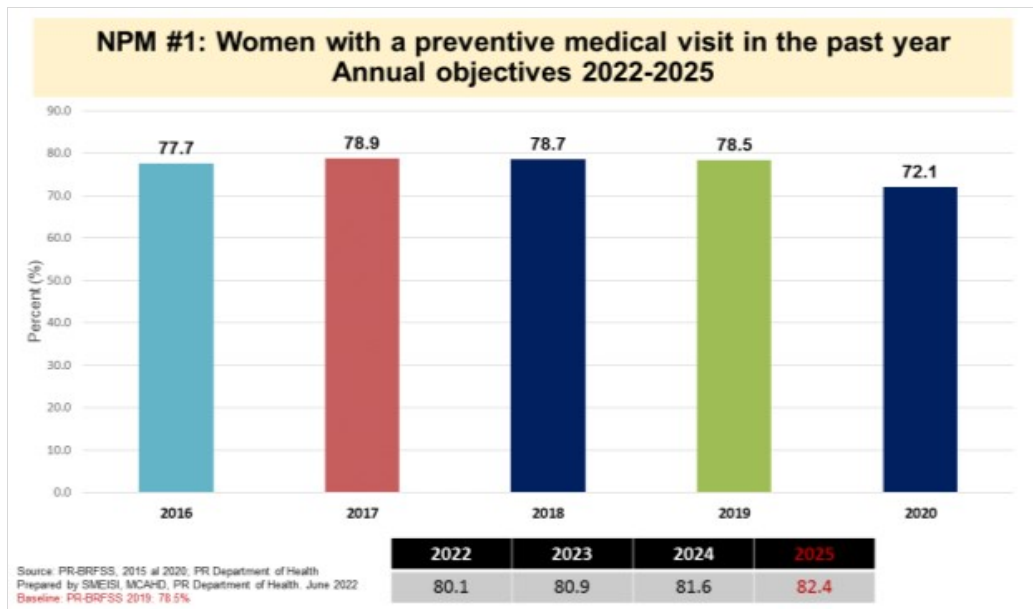
Figure 1 - Oral health in pregnancy leaflet from "Encounter of my life" webpage

PROMOTING PREVENTIVE HEALTH SERVICES AMONG WOMEN

The MCAH Preventive Care Guidelines for women in reproductive age, which were developed beginning in 2016-17, were updated according to the latest developments and recommendations of local and national public agencies and professional organizations, including ACOG. The current update to the Women's Preventive Services Initiative (WPSI) Well-Woman Chart provided valuable guidance for the content and recommendations.

According to 2020 BRFSS data, 72.1% of respondents had a preventive medical visit (NPM #1) in the year before the survey. This represents a decrease compared with the previous 4 years, which had remained fairly constant around 78%. This may be related to the curtailing of services during the pandemic, as has been discussed. A question related to the annual preventive medical visit was recently added to the new HVP data collection forms and included in the first home visit. Preliminary data reveal that during 2019-2020, 57.2% of HVP participants had a

preventive medical visit in the past 12 months, which is considerably lower than the BRFSS results. HVNs educate participants on the importance of this visit and make the necessary referrals in the interconceptional period.



Mi agenda de salud: una guía para mujeres de 10 a 49 años (“My health planner: A guide for women ages 10 to 49”) is a health promotion tool for women ages 10 to 49. Its aim is to encourage an annual preventive health visit with a primary care physician (PCP), explain what can be expected during the visit, and encourage women to talk to their PCPs regarding any concerns. It offers a list of health protective behaviors, explains the importance of vaccinations and the most common procedures and tests by age group. The content of *Mi agenda de salud* is guided by the latest edition of the WPSI, the PR “Preventive Care Guidelines for women of reproductive age,” the PR “Pediatric Preventive Health Care Guidelines” and other professional recommendations. Please refer to the 2020-2021 application for a complete description of the development of this tool.

The guide has been disseminated through diverse channels to ensure it reaches as many WRA as possible, including health insurance companies, health care providers; HVNs, PNs, CHWs and HEs; MCAHD Regional Boards; MCAHD Youth Advisory Committee; and PRAMS survey respondents, among others.

A QR code printed on the guide leads users to the “Mi agenda de salud” webpage (www.salud.pr.gov/agenda_salud), which is shown in the figure below. This page offers supplemental information, references, and a short video that explains the importance of the annual health visit and how to use “Mi agenda de salud” to guide the visits. It also has a link to download and print a copy of “Mi agenda” and an instructional video showing the steps to fold the guide.



Figure 2 - "Mi agenda de salud" webpage

MATERNAL MENTAL HEALTH

The first Perinatal Mental Health Awareness Day was observed in Puerto Rico in May 2022. The Title V Mental Health Consultant was instrumental in writing and presenting the measure, which was passed by both the House and Senate as Act 6 of 2022. Its objective is to educate and increase awareness about the issues surrounding emotional and mental health during pregnancy, delivery, and the postpartum period. It aims to open the way to education and research activities to identify more effective ways to prevent, diagnose and treat these conditions, which have an adverse effect not only on the health of the pregnant and parenting persons, but also on their children.

The Perinatal Mental Health Center (CSMP-PR, Spanish acronym), which was co-founded by the Title V Mental Health Consultant and is affiliated with the Psychiatry Department of the UPR School of Medicine, commemorated the day by holding a conference on May 4, 2022. The first part of the event was a presentation of the CSMP-PR and the work it is doing in this area. The legislator responsible for Act 6 spoke about the process and the importance of paying attention to this issue. Finally, a panel composed of representatives of programs that serve the MCH population discussed the topic "Perinatal mental health: why it matters to pregnant and parenting persons." The HVP Coordinator presented the program's protocols and the experience of the HVNs in this regard.

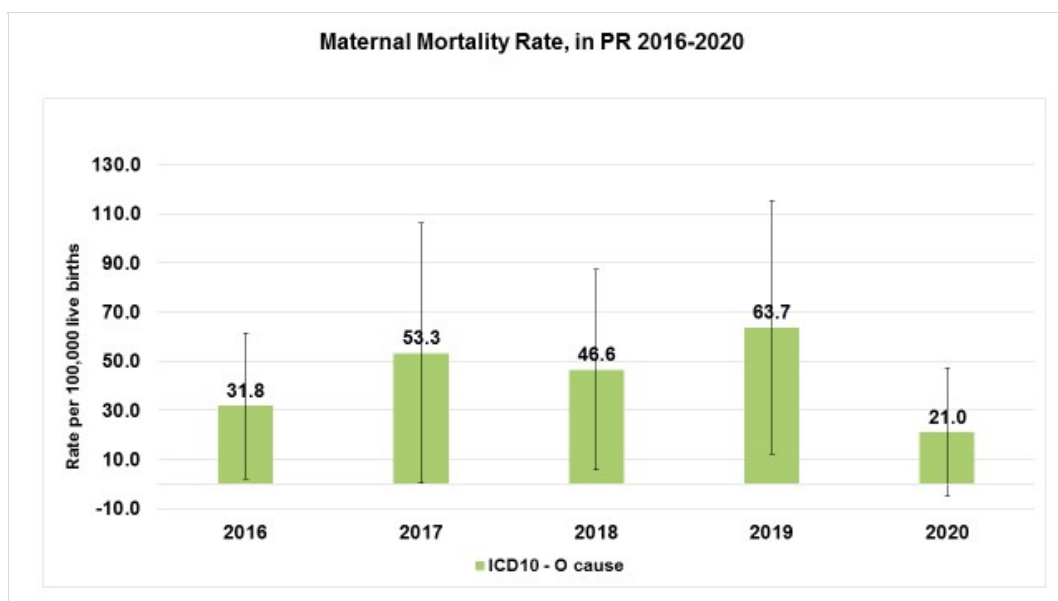


Figure 3 - On the left, the promotional poster of the Perinatal Mental Health Awareness Day conference; top right photo shows the panelists (the HVP Coordinator is second from right); bottom right shows the panelists and two of the organizers.

MATERNAL MORTALITY

Following the MMRIA orientation to members of the Maternal Mortality Review Committee (MMRC) in January 2022, the Secretary of the PRDOH signed the Memorandum of Understanding and Data Sharing Agreement in June 2022. These two agreements set forth the workflow expected from the MMRC. As part of the preparation process, the MMRC and MMRIA representatives participated in a mock case analysis using the MMRIA formats in April 2022.

The TV Evaluator has continued to link and evaluate the Vital Statistics birth and death data to identify maternal deaths. To date, 49 cases dating from 2016 to 2020 have been identified. The initial review of cases identified pregnancy-related hypertension (18%) as one of the leading causes of pregnancy-related death in Puerto Rico. During this time period a maternal death was 20 times more likely to occur to women aged 35 or older as compared with women younger than 20 years old (p value < 0.01).



[1] Instituto de Estadísticas de Puerto Rico. (2023, 25 de mayo). *Acelerado el ritmo del envejecimiento poblacional en Puerto Rico*. <https://estadisticas.pr/en/media/3626>

[2] 4P+©National Training Institute, 1999. Used by permission.

Women/Maternal Health - Application Year

The physical and mental health and well-being of women of reproductive age (WRA), mothers, and birthing persons (MH) is one of the top priorities of the MCAHD. The Title V Home Visiting Program (HVP), Perinatal Nurses, prenatal care campaign and courses, and Community Outreach and Education will continue to address the two main concerns of this domain: promoting health and well-being among WRA and improving birth outcomes.

Maintaining healthy lifestyles lessens the probability of developing conditions that affect women's physical and mental health, complicate pregnancy, and adversely affect birth outcomes. Conversely, the adoption of healthful behaviors starting long before pregnancy increases the likelihood of positive birth outcomes. Physical and mental health factors are intertwined and require equal attention. Social, cultural, and environmental factors that can have a positive or detrimental effect on the woman's physical and mental well-being are taken into consideration when designing and delivering interventions.

HOME VISITING PROGRAM

As discussed in the WRH/MH Annual Report, after the adjustments made necessary by the COVID-19 pandemic response starting in 2020, the Home Visiting Program (HVP) has returned to in-person interventions throughout the island. For the few participants who request no home visits, especially mothers of newborns, the modified protocol designed to guide the interventions via telephone and text messaging can be used. However, participants are encouraged to resume home visits as soon as possible. Home Visiting Nurses (HVN) use the mobile phones with unlimited data plans that were supplied to them in January 2021 to improve communication with their participants.

The HVNs assist participants to navigate the processes needed to access public and private services such as enrolling in WIC or Medicaid, registering newborns in the Demographic Registry, and others. They also refer participants and help them obtain health care services, including well-woman preventive visits, prenatal and postpartum care, and pediatric care.

Maternal health care is one of the main focus areas of the HVP. The HVNs receive periodic in-service training on various aspects of women's physical and mental health, including preconceptional, prenatal and postpartum care, so they can offer updated information to participants. To ensure HVNs' services are provided with sensitivity and respect, they will continue to receive training on diversity, equity, and inclusion. The training sessions enhance the HVNs' knowledge and skills to identify and address any issues identified during their interventions.

The HVP uses validated screening instruments to assess the participants' needs and concerns, including the following:

- Edinburgh Postnatal Depression Scale to screen for perinatal depression
- Cambridge Worry Scale to identify sources of worry or stress related to pregnancy and childbirth
- Adverse Childhood Exposure (ACEs) to enable HVNs to take a trauma-informed approach to their interventions
- Women's Experience with Battering (WEB) scale to identify women facing or at risk for physical or emotional violence

Alcohol, tobacco, and drug use is assessed using a modified 4P+ Scale^[1]. A tobacco use history inventory is administered to participants who state they have ever smoked. Other screening tools may be adopted as the need arises.

The HVNs use the information gleaned from these screening instruments together with the participant's Biopsychosocial Profile (the core participant record) and their observations as the basis to develop the individualized care plan.

The HVN interventions focus on education, support, case management and care coordination by means of referrals

to available services in the community. The HVP protocol specifies the educational and support interventions that are offered to all pregnant and interconceptional participants. As always, the HVNs tailor their actions to the participant's identified strengths and needs, taking into consideration the resources available in the community. Nutrition and physical activity during and after pregnancy, postpartum care, well-woman health care, maternal mental health and well-being are some of the topics that make up the WRA/MH component of the HVP curriculum.

MCAHD staff remains on the alert for emerging health threats or changes to the environment that may require modifications to the programs, protocols, instruments, or educational materials. In addition, the HVP is agile in reacting and responding to any required changes, as demonstrated by the response to the COVID-19 crisis.

PROMOTING ORAL HEALTH IN PREGNANT WOMEN

The COVID-19 pandemic and response affected access to dental services throughout the island. Although the situation has improved greatly, some dental offices are offering limited services, resulting in long waits for appointments. This situation discouraged many people from seeking dental services. Therefore, education emphasizing the importance of oral care remains a priority. The *Encuentro de mi vida* campaign and the Prenatal Course emphasize the importance of preventive dental visits during pregnancy. The HVP provides education and referrals to dental care to all pregnant and interconceptional participants.

MATERNAL MENTAL HEALTH

World Maternal Mental Health Day has been celebrated on the first Wednesday of May each year since 2016. The campaign was started by an international group of perinatal mental health experts to increase recognition of the importance of this issue. In Puerto Rico, the first Perinatal Mental Health Awareness Day was observed in May 2022. Its objective is to educate and raise awareness about issues surrounding emotional and mental health during pregnancy, delivery, and the postpartum period. It aims to open the way to education and research activities to identify more effective ways to prevent, diagnose and treat these conditions, which have an adverse effect not only on the health of the pregnant and parenting persons, but also on their children.

The MCAHD's efforts in this area continued in 2023 with the creation of the **Perinatal Mental Health Task Force (PMHTF)**. The steering committee is composed of the Title V Mental Health Consultant (leader), HVP Coordinator, and HVP Evaluator, with the support of the Title V Director.

The kickoff meeting of the Task Force was held on May 3, 2023, Perinatal Mental Health Awareness Day in PR. The agenda for this meeting was to present a broad picture of the topic, explain the vision, mission, and goals of the Task Force, and to delineate the steps proposed to accomplish them. The meeting included representatives a variety of government and from the Administration for Mental Health and Anti-Addiction Services, Women's Affairs Office, PR Psychology Association, PR Hospital Association, ACOG-PR Chapter, Nursing Association, Social Workers' Association, March of Dimes, and Caderamen (CBO that works with reproductive health issues). Two programs that are affiliated with the School of Medicine of the University of PR also took part: the Perinatal Mental Health Center, which conducts research and raises awareness of perinatal mental health issues, and the Maternal-Infant Studies Center, which provides OB/GYN and psychological services to pregnant and parenting persons living with HIV.



Figure 1 - Attendees of the first meeting of the Perinatal Mental Health Task Force, May 3, 2023. Seated from L to R: HVP Coordinator, Title V Director, Title V Mental Health Consultant and Title V Evaluator

The PMHTF's mission is to identify, evaluate, and take action to improve policies, systems and resources that provide mental health services to the perinatal population and their families. The goals that will drive the work are:

1. Identify barriers and facilitators (at the provider and patient level) for screening and diagnosing PMH disorders.
2. Develop a directory of MH treatment providers and facilities accessible regardless of health insurance coverage.
3. Create a culturally responsive awareness campaign about perinatal mental health.

The next step is to develop the methodology to conduct an environmental scan to identify the barriers and facilitators for screening and diagnosing PMH disorders. Subsequently, two subcommittees will work on the directory and the awareness campaign. The focus, scope, and content of these will be informed by the findings of the scan.

The timeline for accomplishing these goals is outlined in the following figure.

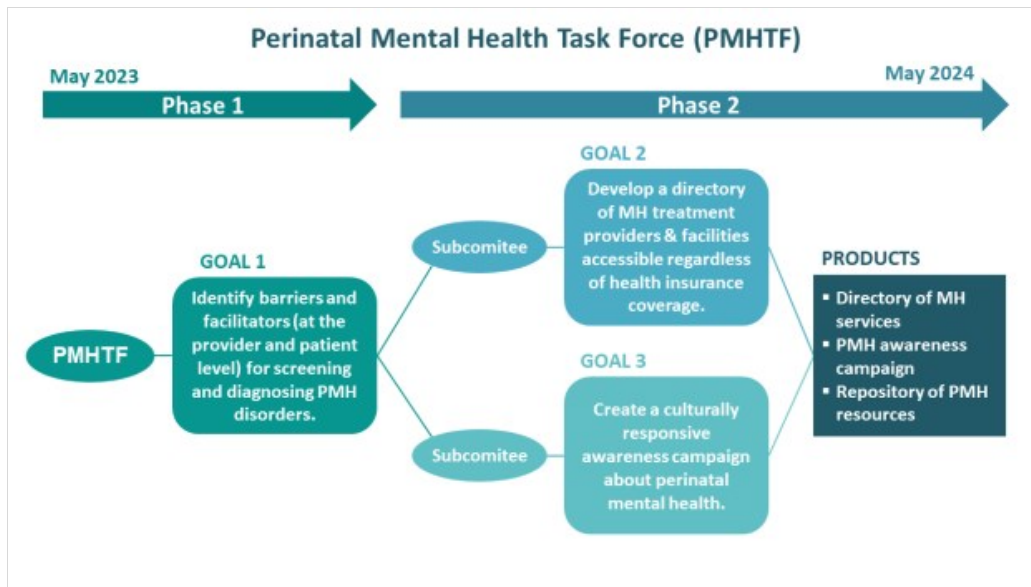


Figure 2 - Perinatal Mental Health Task Force timeline

The PMHTF expects to complete these tasks by May 2024. At that time, the processes of the first year will be evaluated and the activities for the next year will be developed. As shown in the figure above, the products of the first year are:

- A directory of mental health services and providers that addresses the needs of the perinatal population.
- A perinatal mental health awareness campaign to run on social media.
- The creation of an electronic repository of PMH resources for professionals, the perinatal population, and other persons interested in the subject, which will be maintained and updated regularly by the steering committee.

These products will be disseminated through the PRDOH's communication channels and by the members of the PMHTF to ensure the widest reach possible.

MCAHD ACTIVITIES AT THE COMMUNITY LEVEL

Community Health Workers and Health Educators

Educational activities in the community and schools have resumed after the limitations imposed by the COVID-19 response. The Health Education component (HE) provides group orientations in schools and universities, health care provider and other service offices, and other locations where the MCH population can be reached. The HEs and Community Health Workers (CHWs) focus on oral health, nutrition and physical activity, COVID-19 and other transmissible diseases, mosquito-borne diseases, alcohol, tobacco and drug use, family planning, well-woman care, signs and symptoms of premature birth, the Hard Stop policy that discourages elective inductions or cesareans before 39 weeks of pregnancy, and related MCH topics in their work at the community level.

In addition to providing education and orientation on health topics, the CHWs identify pregnant and parenting persons who do not have health insurance coverage and refer them to the Medicaid office for evaluation of eligibility and certification. They also identify pregnant women who are not receiving prenatal care and other persons who are not otherwise connected to the health care system and provide referrals for needed health services.

Educational Campaign

The "Encounter of my life" (*Encuentro de mi vida*) campaign is directed at pregnant and parenting persons, their partners, relatives, and anyone interested in the topic. It emphasizes the importance of completing 40 weeks of pregnancy, attending prenatal care regularly, healthy behaviors, decreasing risks during pregnancy, postpartum care,

breastfeeding, infant care, safe sleep, and other topics pertaining to the physical and mental health and well-being of both mother and baby. These topics are covered through short videos as well as leaflets that can be downloaded or printed freely. The educational materials are reviewed regularly to ensure they present the latest scientific information. The PNs and HVNs direct people to the website for information that complements their interventions.

Figure 3 shows the image of the *Encuentro de mi vida* campaign page, hosted within the PRDOH's website at www.salud.pr.gov/CMS/480.



Figure 3 - *Encuentro de mi vida* website image, which reads “Get ready for the encounter of your life. Here you will find all you need to know to have a healthy pregnancy.”

Promoting Preventive Health Services Among Women

The women's health pocket guide, entitled *Mi agenda de salud: una guía para mujeres de 10 a 49 años* (“My health planner: A guide for women ages 10 to 49”) is a health promotion tool for women ages 10 to 49. Responding to NPM 1: “Percent of women with a past year preventive medical visit,” its aim is to encourage an annual preventive health visit with a primary care physician (PCP), explain what can be expected during the visit, and encourage women to talk to their PCPs regarding any concerns. It offers a list of health protective behaviors, explains the importance of vaccinations and the most common procedures and tests by age group. The guide is disseminated through diverse channels including the HVNs, PNs, CHWs and HEs, MCAHD Regional Boards, MCAHD Youth Advisory Committee, and PRAMS survey respondents, among others.

A survey regarding awareness and use of the guide was conducted in April 2023 among participants of the HVP to provide data for ESM 1.1.2: “Percent of women, ages 18 through 44, with a preventive medical visit in the past year and who reported using *Mi agenda de salud*.” A total of 1,339 HVP participants, ranging in age from 14 to 44, completed a short survey administered by the HVNs.

Two thirds of respondents (827, 62%) knew of the existence of *Mi agenda de salud*. Of these, almost all (773, 93%) stated that they had a copy of the guide; 318 (41.1%) of those who had a copy reported they had used *Mi agenda de salud* in the previous 12 months. The last item asked these participants to select what actions they had taken guided by *Mi agenda de salud* from among the three main purposes of the guide. The following table shows the number of participants who selected each option; they could select more than one.

Actions Taken by HVP Participants Guided by *Mi agenda de salud* 2023

Purpose	#	%
To ask my doctor specific questions about my health	228	71.7
To request a lab or screening test according to my age	221	69.5
To request an appointment for a preventive health visit	255	80.2

As a complement to the guide, two educational activities were designed in 2022-2023 to raise awareness of the benefits of the annual preventive health visit and promote use of the guide. The first is an in-person educational activity for young persons ages 10 to 19 that is offered by the CHWs in middle and high schools and organizations that work with this population. Through a variety of interactive activities, the facilitator leads participants through the guide and emphasizes the importance of protective health behaviors and attending the annual preventive health care visit. Although *Mi agenda de salud* is geared to women, the educational activity is inclusive of all students in the classroom, as all can benefit from the core health message. In 2022-2023, 100 sessions of this activity reaching 2,008 students in grades 6 to 12 have been held.

The second activity is a 30-minute video aimed at adult women (ages 20 to 49) that will be offered through the Government Ethics Office (GEO). All government employees and contractors must complete a set number of hours of continuing education offered through this office, thus ensuring a wide potential audience for the video. The video was designed and produced in-house by the *Mi agenda de salud* team at the MCAHD and focuses on specific recommendations to maintain optimal physical and mental health and well-being, emphasizing the annual preventive health visit. It also explains how to download a printable or digital copy of the guide. At this writing the video is being reviewed by the PRDOH's Communications office, after which final editing will be done. It is expected to be ready for submission to the GEO in the last quarter of 2023.

MATERNAL MORTALITY

As part of its commitment to disseminate information aimed at improving maternal health care and decreasing adverse pregnancy outcomes, the MCAHD designed a one-day continuing medical education symposium titled "Healthy Women & Reproductive Years." PROGyn, a local organization dedicated to education and exchange of knowledge among providers of OB-GYN services, was contracted to coordinate the event.

The aim of the symposium was to discuss modern management of chronic medical conditions leading to optimal obstetrical outcomes among reproductive age women. Didactic sessions followed by panel discussions reviewed clinical issues in hypertension related disorders, diabetes, obesity, thyroid disease, autoimmune disorders, and mental health in women, including postpartum depression. The objectives of this educational event were to:

- Review chronic hypertension impact on pregnancy and pre-eclampsia related disorders.
- Present recent guidelines for diabetes care and gestational diabetes management.
- Discuss nutritional recommendations for reproductive age women and prevention of obesity.
- Describe updated treatment of thyroid diseases and their impact on reproduction.
- Review autoimmune disorders diagnostics and treatment in the OB-GYN practice.
- Discuss identification, management and referral recommendations for female mental health diseases and postpartum depression.

The symposium was held on June 4, 2023, and had an attendance of over 100 participants: 77 physicians, 8 medical students, 23 nurses, and 3 other healthcare professionals.



Figure 4 – Scientific program of the Healthy Women & Reproductive Years symposium



Figure 5 - View of the conference room

The Maternal Mortality Review Surveillance System (MMRSS) works towards the goal of having a better understanding of maternal deaths in Puerto Rico. The MMRSS will implement CDC's Maternal Mortality Review Information Application (MMRIA) data system. In May 2023, a proposal was submitted to CDC requesting funding

that will be used to enhance the system's capacity to make recommendations to address preventable pregnancy-related deaths and increase the availability of data, including communities disproportionately impacted; and to identify, describe and disseminate information on pregnancy-related deaths and opportunities for maternal health promotion and disease prevention. The PR-MMRC is developing a systematic process corresponding to the MMRIA system to increase the timeliness, accuracy, and standardization of information available about pregnancy-related deaths, including disparities and opportunities for prevention. All the tools provided by the CDC for data collection have already adapted and translated into Spanish, including the Informant Interview Guide for MMRCs. A collaboration agreement between the Demographic Registry and the MCHD establishes updated files on births, deaths, and fetal deaths will be submitted monthly to perform an active surveillance system that identifies pregnancy-associated deaths.

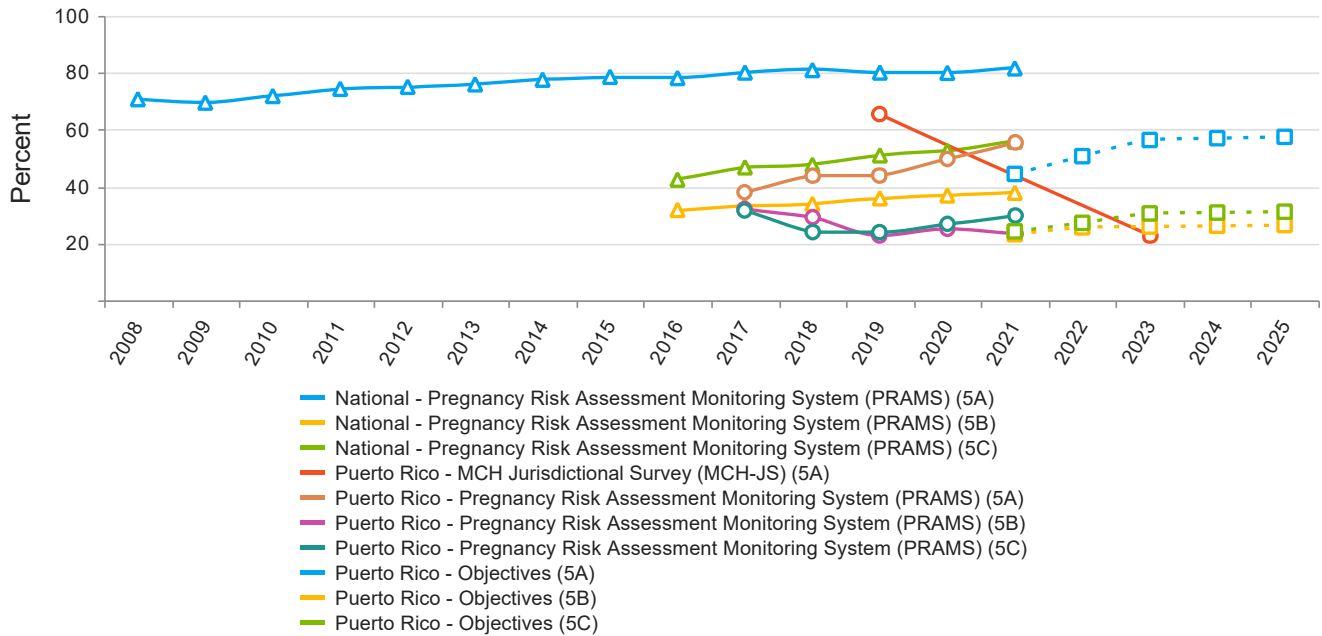
Data analysis of the cases selected for study will be presented in the quarterly MMRC Case Analysis Meetings for review and recommendations. The PR-MMRC will disseminate the information to the Legislature, health insurance companies, hospitals, health professions organizations, universities, and other institutions. Potential strategies will be translated into action and documented, such as training workshops for health care providers, a media campaign to prevent health complications and deaths, educational activities directed to women of reproductive age, and all actions taken by the health care system in the short, medium, and long term to correct identified gaps.

[1] 4P+©National Training Institute, 1999. Used by permission.

Perinatal/Infant Health

National Performance Measures

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



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

Federally Available Data				
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)				
	2019	2020	2021	2022
Annual Objective			44.4	50.6
Annual Indicator	43.6	44.0	49.6	55.2
Numerator	9,056	8,759	9,080	10,395
Denominator	20,766	19,897	18,315	18,842
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2018	2019	2020	2021

Federally Available Data			
Data Source: MCH Jurisdictional Survey (MCH-JS)			
	2019	2020	2022
Annual Objective			50.6
Annual Indicator	65.3	65.3	22.6
Numerator	8,468	8,468	4,209
Denominator	12,960	12,960	18,635
Data Source	MCH-JS	MCH-JS	MCH-JS
Data Source Year	2019	2019	2023

Annual Objectives			
	2023	2024	2025
Annual Objective	56.3	56.9	57.4

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

Federally Available Data				
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)				
	2019	2020	2021	2022
Annual Objective			23.3	25.7
Annual Indicator	29.1	23.1	25.2	23.6
Numerator	6,018	4,562	4,614	4,426
Denominator	20,645	19,765	18,305	18,776
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2018	2019	2020	2021

Annual Objectives			
	2023	2024	2025
Annual Objective	26.0	26.2	26.5

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

Federally Available Data				
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)				
	2019	2020	2021	2022
Annual Objective			24.3	27.3
Annual Indicator	24.3	24.1	26.8	30.0
Numerator	5,062	4,772	4,897	5,652
Denominator	20,809	19,808	18,275	18,837
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2018	2019	2020	2021

Annual Objectives			
	2023	2024	2025
Annual Objective	30.6	30.9	31.2

Evidence-Based or –Informed Strategy Measures

ESM 5.1 - Percent of infants of 4 months of age, in the Title V Home Visiting Program (HVP), placed to sleep in a safe environment after receiving safe sleep counseling in Puerto Rico by September 2021-2025

Measure Status:		Active	
State Provided Data			
	2020	2021	2022
Annual Objective			0
Annual Indicator			28.9
Numerator			43
Denominator			149
Data Source			HVP participant records
Data Source Year			2021-2022
Provisional or Final ?			Final

Annual Objectives			
	2023	2024	2025
Annual Objective	29.2	29.5	29.8

State Action Plan Table

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

Priority Need

Decrease infant mortality

NPM

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

Objectives

By 2025, increase to 7% the percentage of infants up to 6 months of age placed to sleep in a safe environment (Baseline PR-PRAMS 2019: 4.5%)

By 2025, increase to 57% the percentage of infants up to 6 months of age placed to sleep on their backs (Baseline PRAMS 2021: 55.2%)

By 2025, increase to 27% the percentage of infants up to 6 months of age placed to sleep on a separate approved sleep surface (Baseline PRAMS 2019: 23.1%)

By 2025, increase to 31% the percentage of infants up to 6 months of age placed to sleep without soft objects or loose bedding (Baseline PRAMS 2021: 30%)

Strategies

Collaborate with the Puerto Rico Hospitals Association to train hospital staff on infant safe sleep practices and promote successful breastfeeding initiation.

Through the PR Title V Home Visiting Program, Perinatal Nurses, Prenatal and Parenting courses, community outreach educational activities, social media, and other communication outlets, provide information and promote infant safe sleep practices, signs and symptoms of premature birth, unintentional injury prevention, and recommendations proven to help achieve successful breastfeeding initiation and exclusively breastfeeding until six months.

Promote the implementation of Hard Stop Policy in hospitals.

Develop policies and strategies based on results of the CDC state and jurisdictional analysis of LoCATE to increase the percent of very low birth weight and/or premature infants delivered at facilities that provide the specialty level required for the care of high-risk neonates.

Maintain the current Fetal and Infant Mortality Review Advisory Committee in Puerto Rico with the purpose of identifying gaps and improving maternal and infant care.

Develop and disseminate an Emergency Preparedness and Response guide that considers the needs of infants, including safe infant feeding, safe sleep practices, among others.

ESMs	Status
------	--------

ESM 5.1 - Percent of infants of 4 months of age, in the Title V Home Visiting Program (HVP), placed to sleep in a safe environment after receiving safe sleep counseling in Puerto Rico by September 2021-2025

Active

NOMs

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

Perinatal/Infant Health - Annual Report

During 2021-2022 the MCAHD implemented various strategies to promote evidence-based practices that contribute to decrease infant and maternal mortality. These efforts were carried out in collaboration with partners in the community and included the adoption of healthful habits during pregnancy, early and continuous prenatal care, delivery of high-risk infants at facilities that fulfill the requirements for the recommended level of care, breastfeeding until infants reach at least 6 months of age, educating parents on unintentional injury prevention and safe sleep practices, and strengthening parenting skills.

COVID-19

As previously reported, in response to the COVID-19 pandemic the MCAHD modified the implementation of its programs. These adaptations changed over the years according to the evolution of the pandemic to allow the MCAHD to continue to provide support and education to the MCH population. In the reporting year, programs and strategies returned to regular operations, with appropriate cautionary measures in place to protect staff and participants.

Safe Sleep

Promoting safe sleep to decrease infant mortality continues to be a priority in the MCAHD needs assessment for 2021-22. In Puerto Rico, sleep-related Sudden Unexpected Infant Deaths (SUIDs) were the third cause of infant deaths between the ages of 1 to 12 months in 2021 and the first cause in 2017 to 2019. The definition of death due to sleep related SUIDs includes Sudden Infant Death Syndrome (SIDS), unknown cause, and accidental suffocation and strangulation in bed.

**Causes of Death in Infants from 1 to 12 months old
Puerto Rico, 2021***

Causes of Death	%	Rate per 100,00 live births
Conditions originating in the perinatal period	51.0	3.8
Congenital malformations	14.5	1.1
SUIDS**	10.3	0.8
Septicemia	3.4	0.3
Other causes	20.8	1.6

*NVSS 2021, Preliminary Data

**Codes that define SUIDS; ICD-10: R95 (Sudden Infant Death Syndrome), R99 (Other ill-defined and unspecified causes of mortality), W75 (Accidental suffocation and strangulation in bed)

The AAP recommends placing infants to sleep in a safe environment including a back (supine) sleep position, on a separate firm sleep surface (room-sharing with parents until at least 6 months of age without bed sharing), and without soft objects or loose bedding. Other recommendations include breastfeeding and avoiding smoke exposure during pregnancy and after birth as emphasized by the National Institute of Child Health and Development (NICHD) Safe to Sleep Campaign®.

In the PR PRAMS 2021 survey, 55.2% of participants reported placing their babies to sleep on their backs, but only 6.9% complied with all three criteria of a safe environment (on their backs, on a separate approved sleep surface, without soft objects or loose bedding). Although there has been a gradual increase in these numbers, the PR PRAMS results raised concerns regarding the knowledge and practices of safe sleep in PR; therefore, providing education on safe sleep continues to be a priority.

**Infant Sleep Practices
PRAMS 2019-2021**

Infants placed to sleep:	2019 %	2020 %	2021 %
A. On their back (supine)	44.0	49.6	55.2
B. On a separate approved sleep surface	23.1	25.2	23.2
C. Without soft objects or loose bedding	24.1	26.8	30.0
In a safe environment that includes A, B & C	4.5	6.8	6.9

The MCAHD has implemented diverse strategies and collaborations to improve safe sleep practices and decrease infant mortality due to SUIDS, promoting the inclusion of infant safe sleep practices in CME and training hospital staff. Among collaborators in the implementation of these strategies were PROGyn and ACOG, PR Hospital Association, and PRAAP Chapter.

The Home Visiting Nurses (HVNs) offered prenatal and postpartum education regarding safe sleep practices to the 3,045 families that participated in the Home Visiting Program (HVP) in the reporting year. They record the baby's sleeping environment at each visit and provide guidance if the appropriate conditions are not met. According to 2021-2022 HVP discharge data, HVNs identified 149 participants who were placing their infants in an unsafe sleeping environment. As a result of the HVNs' intervention, 43 (28.9%) modified their practices and achieved a safe sleep environment. By 4 months of age, the majority of HVP infants complied with at least one of the safe sleep criteria, and nearly half (45.4%) met all three. These numbers are significantly higher than those reported by PRAMS, possibly as a result of the HVNs' direct education efforts and follow up with their participants.

**Infant Sleep Practices
HVP 2021-2022**

Infants up to 4 months placed to sleep:	%
A. On their back (supine)	73.6
B. On a separate approved sleep surface	84.8
C. Without soft objects or loose bedding	62.8
In a safe environment that includes A, B & C	45.4

In addition to the HVP efforts, regional MCAHD staff offer education on safe sleep practices through outreach efforts in the community. In the reporting year, the Perinatal Nurses (PNs) reached 3,267 pregnant and postpartum women in their visits to birthing hospitals. The regional Health Educators (HE) and Community Health Workers (CHW) also educate participants on safe sleep practices through individual and group orientations, including the Prenatal and Parenting courses. A total of 533 persons participated in these activities, as detailed in the following table.

**Educational activities related to safe sleep practices
offered by HE and CHW
2021-2022**

Type of intervention	HE	CHW	Total
Individual orientation	1	92	93
Group orientation	14	95	109
Prenatal courses	85	158	243
Parenting courses	0	88	88
Total	100	433	533

Safe sleep practices are also promoted through the PRDOH's social media and in the “*Encounter of my life*” educational website (salud.pr.gov/encuentro_mi_vida) to increase the reach of the prevention message. The leaflet illustrating the safe sleep recommendations, which can be downloaded or printed, is available at www.salud.pr.gov/CMS/562.



Figure 1 – Safe sleep leaflet from the “*Encounter of my life*” webpage

The video promoting safe sleep practices that was produced in 2020 is currently under revision to include sign language interpretation, as required by the PRDOH. It will be available on the website once updated. In 2021-2022 the video was viewed 235 times.



Figure 2 – Screenshot of the safe sleep video

Infant Mortality

Vital Statistics (VS) preliminary data for 2021 reported an IM rate of 7.6 per 1,000 live births and the preterm-related

mortality rate was 277.3 per 100,000 live births. Prematurity-associated conditions and low birth weight are among the first five causes of infant mortality on the island.

Respiratory distress syndrome continues to be the main cause of death in early preterm babies. Preterm birth (PTB) in Puerto Rico, although it has decreased since 2015, remains high at 11.8% (VS 2022). Low birth weight (LBW) is related to preterm birth, an increasing health concern and the first cause of death for early preterm babies. According to VS data for 2022, 11.5% of live births had low or very low birth weight for gestational age.

Changes in birth weight, gestational age, and infant mortality are summarized in the following tables.

Percent of Births by Weight and Gestational Age in PR

Birth Weight or Gestational Age	2019 %	2020 %	2021 %	2022 %
Very Low Birth Weight (<1,500 grams)	1.5	1.4	1.5	1.4
Low Birth Weight	8.9	10.2	10.5	10.1
Normal Weight	89.9	89.8	89.5	89.9
< 37 wks. gestational age	11.8	11.5	12.0	11.8
37-38 wks. gestational age	34.3	33.7	34.6	35.0
≥ 39 wks. gestational age	53.9	54.5	53.3	53.2

Infant Mortality, Puerto Rico 2019-2021*

Year	Number of infant deaths	Rate per 1,000 live births	Total births
2019	135	6.6	20,409
2020	134	7.0	19,053
2021*	146	7.6	19,336

NVSS 2019-2021*

*Preliminary Data

MCAHD staff educate, increase awareness, and promote strategies to decrease prevalence of premature birth by various means, including:

1. HVNs evaluate HVP participants to identify the presence of risks related to premature and LBW deliveries, provide education about the signs and symptoms associated with premature labor, as well as information concerning the birthing facility levels of care and perinatal services near to their residence.
2. Perinatal Nurses offer education to pregnant women on signs and symptoms of premature labor.
3. The Prenatal Courses (in-person and virtual) provide information on the warning signs and symptoms of preterm labor and the steps women should take if they suspect they are experiencing it.
4. The “*Encounter of my life*” webpage includes information regarding the signs and symptoms associated with premature labor.
5. The MCAHD promotes the use of the prenatal card by pregnant women in obstetric offices to record pertinent obstetric history and information, and the benefit of always carrying it in case of any complication requiring urgent care.

The MCAHD provides support to PR PRAMS in sharing results with stakeholders. It encourages collaboration to propose and implement strategies to improve pregnancy outcomes and decrease IM by addressing identified needs.

The MCAHD promotes preconceptional and interconceptional health, prevention of preterm and early term births,

and perinatal regionalization in an effort to decrease infant mortality. To this end, the MCAHD joined the CDC LOCATe initiative, which seeks to evaluate the levels of hospital specialty service for maternal-infant care. In August 2021 MCAHD contacted CDC to begin the process of re-implementing LOCATe in its current 9.2 version. An MOU was signed between the PRDOH and CDC to formalize the data sharing process and develop the required programming in the REDCap electronic platform (now used to complete the survey). This process was completed in April 2022.

CDC shared with MCAHD the new version of the questionnaire so it could be translated to Spanish. MCAHD staff held a virtual meeting with the Perinatal Care Advisory Committee in December 2021 to discuss the survey questions and ensure the wording would be understood by the hospital staff that will answer the questionnaire. A second virtual meeting was held in January 2022 with additional members in the committee with expertise in maternal care to conclude the discussion of questions related to this topic. The draft questionnaire was sent to CDC for review since the Spanish version must present the same content as the English version. In April 2022 MCAHD received CDC approval and programmed the translated questionnaire in the REDCap platform.

The selected sample included 33 hospitals that were eligible to participate (100 or more births during 2021). At the close of the reporting year, arrangements to send a formal invitation letter from the Secretary of Health to the hospitals were under way.

The MCAHD collaborates with the PR Hospital Association to promote compliance with Administrative Order 366 of 2017. This order requires hospitals to adopt the Hard Stop Policy as a condition to renew their operational license from the Health Department. This administrative order was integrated as part of the Hospital Regulations Policy #9184 (June 2020).

The MCAHD director and the maternal infant epidemiologist are members of the March of Dimes (MOD) Prematurity Prevention Committee, which also includes a representative of the Hospital Association, maternal fetal specialists, and other stakeholders. The committee focuses on proposing and implementing strategies to promote prevention of preterm births. Two priorities have been added: the group prenatal care initiative and the use of low dose aspirin among high-risk pregnancies.

Promoting healthier behavior and prenatal care through an educational campaign

During 2021-2022 the educational campaign *“Encounter of my life”* (“El encuentro de mi vida”) continued to spread the message that pregnancy lasts 40 weeks, encouraging adequate prenatal care and the avoidance of risk behaviors that can affect the fetus as a strategy to decrease infant prematurity, morbidity, and mortality. The campaign features linguistically and culturally appropriate messages aimed at pregnant persons, their partners and support persons, and the general public.

The *“Encounter of my life”* is housed within the PRDOH website at salud.pr.gov/encuentro_mi_vida. The information is organized in five sections: Prenatal care, Labor and delivery, Postpartum, Breastfeeding, and Infant care, as shown in the figure below. Each section features several fact sheets that can be viewed online, downloaded, or printed. They were developed by MCAHD staff in accordance with ACOG and AAP recommendations and are regularly reviewed for timeliness and accuracy. The Virtual Prenatal Course can also be accessed through this webpage.



Figure 3 - “Encounter of my life” main page showing links to each of the five sections.

In the reporting year, the “Encounter of my life” page had 41,564 unique visitors, a tenfold increase over the previous year. This increase in traffic was due to a strong marketing campaign that accounted for 33,748 visitors between April 16 and May 12, 2022. The number of page views and sessions had a corresponding increase, as shown in the table.

Visits to “Encounter of my life” Web Page

Time period	Page views (# of times a site page is visited or refreshed)	Site sessions (all actions performed by a visitor)	Unique visitors (# of different people who visited the site)
2020-2021	8,935	4,372	4,110
2021-2022	59,431	44,398	41,564

Title V Home Visiting Program

The Title V Home Visiting Program (HVP) provides case management and care coordination services, education, and support to women with medical and social risk factors associated with poor pregnancy outcomes. Criteria for admission include pregnancy before age 22 or after 35, certain chronic illnesses, and previous pregnancy loss or death of a child. Participants are admitted during pregnancy and followed until the child is 2 years old. Referrals come from outreach activities conducted by the HEs, CHWs and Perinatal Nurses, as well as from WIC, Medicaid, OB/GYNs and other collaborators in the community. The 79 HVNs active during 2021-2022 visited families in 70 of the 78 municipalities in PR; another 5 municipalities are covered by the MIECHV program, *Familias Saludables Puerto Rico*.

In the three years since the appearance of COVID-19, the HVP underwent several adaptations, as described in previous annual reports, starting with a modified protocol to move from in-person visits to virtual interventions (via telephone calls and text messaging). At this writing, the HVP is again offering in-person services as designed, with

the option to provide virtual interventions if needed. For a complete discussion of the HVP, please refer to the Women-Maternal Health narrative.

The HVP participants are categorized as pregnant, interconceptional, interconceptional pregnant (those who have a subsequent pregnancy while still in the program), infants (<12 months), and children (12 to 24 months of age). During 2021-2022, the HVP provided services to 5,345 participants in 3,045 families (an increase from 5,181 participants in 2,916 families in 2020-2021). The following table breaks down the distribution of participants by category.

Distribution of HVP participants by category

2021-2022

Category	#	%
Pregnant	725	13.5
Interconceptional	2,217	41.5
Interconceptional pregnant	102	2.0
Infants (<12 months)	1,090	20.4
Children (12-24 months)	1,211	22.6
Total	5,345	100.0

The HVP has historically had a larger proportion of adolescent participants, considered at higher risk for complications and poor outcomes than the general population of birthing mothers in Puerto Rico. Despite the HVP serving a high-risk population, similar birth outcomes are observed when compared to the whole island, as shown in the following tables. This suggests its positive impact on birth outcomes. Further evaluations are being carried out to measure the impact of the HVP.

Comparison of births among HVP participants vs. all PR births

2021-2022

Maternal age range	% in age range - HVP	% in age range - PR
<20 years	38.2	6.4
20 to 25 years	42.0	36.3
26 to 35 years	15.8	47.3
>35 years	4.0	9.9

Source: HVP data and Vital Statistics FY 2021-2022, Demographic Registry, PR Department of Health.

Comparison of gestational age at birth of HPV participants vs. PR total births

2020-2021

Gestational age at birth	% of all births in HVP	% of all births in PR
Early preterm <34 weeks	4.4	3.2
Late preterm 34 to 36 weeks	9.2	8.7
Early term 37 to 38 weeks	31.2	34.7
Late term 39 weeks or more	55.2	53.5

**Comparison of birth weight of HPV participants vs. PR total births
2020-2021**

Birth weight	% of all births in HVP	% of all births in PR
Very Low Birth Weight (<1,500 grams)	1.4	1.4
Low Birth Weight (1,500 to 2,499 grams)	14.2	8.8
Normal weight (≥2,500 grams)	84.4	89.8

The HVNs also offer limited services to non-participants of the HVP. These can be pregnant and parenting persons who do not qualify for admission to the program, as well as other persons in the community. In 2021-2022 they offered services to 4,109 persons, distributed as shown in the following table.

**HVN interventions with non-participants
2021-2022**

Category	Total
Pregnant	1,448
Non-pregnant	1,637
Infants (<12 m)	317
Children (12-24 m)	265
Men	442
Total	4,109

In addition to education and orientation, the HVNs identified needs and referred non-participants to services they required, as reported in the following table.

**HVN referrals to non-participants
2021-2022**

Service or agency	Number of referrals
Government health plan	57
Prenatal care	38
Medical care (adults)	28
WIC	91
Department of the Family	7
Housing Department	9
Municipal services	2
Department of Education	1
Mental health services	11
Dental services	33
Breastfeeding support groups	18
Early Intervention Program	19
Pediatrician	16
Home Visiting Program	31
Other	393
Total	754

Perinatal Nurses

During 2021-2022 the 6 regional perinatal nurses (PNs) visited 31 birthing hospitals throughout the island where they provided information to pregnant and postpartum women and their partners, relatives, or other companions. Although the focus is on the pregnant or birthing person, including the support persons in the intervention has an impact on the health and wellbeing of the family. The PNs reached a total of 4,329 persons, distributed as shown in the following table.

**Persons reached by Perinatal Nurses, by category
2021-2022**

Category	#	%
Pregnant	305	7.0
Postpartum	2,962	68.4
Companions (male)	624	14.4
Companions (female)	438	10.2
Total	4,329	100.0

The PNs carried out a total of 19,011 educational interventions on topics relevant to the health and wellbeing of pregnant and parenting persons, infants, and children, as described in the following table (each person can receive multiple interventions).

**Educational interventions delivered by Perinatal Nurses
2021-2022**

Topic	Pregnant women	Postpartum women	Companions (Male)	Companions (Female)	Total
Women's health care	11	180	51	302	544
Prenatal care	197	23	13	3	236
Risk behaviors in pregnancy	188	25	2	3	218
Labor and delivery	218	11	5	4	238
Post-partum care	50	1,748	512	141	2,451
Breastfeeding	123	2,765	424	164	3,476
Newborn screening	8	1,144	342	133	1,627
Care of premature baby	5	38	1	1	45
Newborn care	82	2,456	466	154	3,158
Pediatric preventive health care (EPSDT)	60	1,610	484	170	2,324
Correct car seat placement and use	43	2,076	451	192	2,762
Violence and unintentional injury prevention	4	149	51	59	263

In addition to the educational interventions, the PNs identify specific needs of the pregnant and postpartum women and their companions and refer them to the needed services. This table offers details on the 557 referrals made by PNs by type of service and population group.

**Referrals by Perinatal Nurses
2021-2022**

Topic	Pregnant women	Postpartum women	Companions (Male)	Companions (Female)	Total
Government health plan	2	17	1	0	20
Prenatal course	6	2	0	0	8
Parenting course	2	273	0	1	276
Home Visiting Program	47	78	96	0	221
CSHCN Program	1	10	6	0	17
WIC	2	0	0	0	2
Dentist	0	0	5	0	5
Early Intervention Program	0	1	2	0	3
Demographic Registry	0	4	0	0	4
Other	0	1	0	0	1

Prenatal course, in-person and virtual

The Prenatal Course includes information and educational activities on the following topics: healthy lifestyles, prenatal care, risk behaviors, stages and changes in pregnancy, conditions affecting pregnancy, delivery planning, delivery process, signs and prevention of premature birth, caesarean birth, postpartum care, baby care, breastfeeding, birth spacing and family planning. The course is kept updated with information regarding current or emerging threats, including COVID-19. As part of the course, the participants complete a socio-demographic profile and a pre- and post-test. It can be offered in four 1-hour sessions or a single 3-hour session, depending on the needs and preferences of the entity coordinating the event. During 2021-2022, both in-person courses were offered to 243 participants (see details in the following tables).

Prenatal course: 1 session, in-person

Offered by	# of courses	# of participants*
Health Educators	21	80
Community Health Workers	92	146
Total	113	226

**Participants include pregnant persons and companions (partners or other significant support persons)*

Prenatal course: 4 sessions, in-person

Offered by	# of courses	# of participants*	Participants* completing all sessions
Health Educators	2	5	5
Community Health Workers	8	17	12
Total	10	22	17

**Participants include pregnant persons and companions (partners or other significant support persons)*

In response to the limitation in group activities due to COVID-19, the health educators created the Virtual Prenatal Course based on the one-session course. The 22-minute video, which includes sign language interpretation, is available on the “*Encounter of my life*” webpage (salud.pr.gov/encuentro_mi_vida) and presents the information using the same five categories as the educational campaign, namely Prenatal care, Labor and delivery, Postpartum, Infant care and Breastfeeding. After watching the video, visitors can access the educational leaflets included in the campaign for more detailed information.

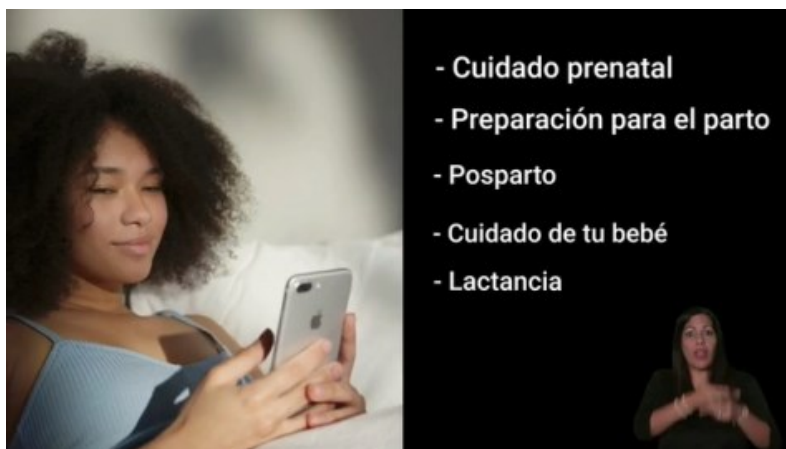


Figure 4 – Screen capture of the Virtual Prenatal Course showing the topics included in the video. The sign language interpreter can be seen in the lower right corner.

During 2021-2022, 619 persons completed the Virtual Prenatal Course. Almost all (595, 96.1%) were women; of these, 510 (85.7%) were pregnant.

As presented in the table below, pre- and post-test results reveal a statistically significant increase in participants' knowledge after completing the courses, regardless of the method.

**Pre- and post-test scoring in prenatal course participants
2021-2022**

Method	Pre-test %	Post-test %	Significance
Virtual course	86	94	<0.00001
In-person course (1 session)	81	97	<0.00001

Community Education Interventions

The educational efforts of CHWs and HEs are again offered as designed as COVID-19 restrictions were relaxed. The MCAHD Health Educators (HEs) and Community Health Workers (CHWs) provide education to pregnant women on the signs and symptoms of preterm delivery, the importance of early prenatal care, healthy eating habits and adequate weight gain during pregnancy, physical activity, preconception health, oral health, health complications that may arise, labor and delivery processes, breastfeeding, newborn care, family planning and related subjects. During the activities, staff encourage women to abstain from risk behaviors such as smoking during pregnancy and offer recommendations to reduce this behavior as well as other factors that contribute to poor outcomes. A total of 1,392 pregnant women received educational interventions from HEs and CHWs during fiscal year 2021-2022.

The CHWs and HEs also offer community outreach educational interventions on newborn and infant care and other topics relating to prenatal and post-partum care that impact birth outcomes. These orientations can be offered to individuals or groups. During 2021-2022, HEs and CHWs offered 1,639 individual interventions on the topics shown in this table.

**Individual orientations on selected topics related to perinatal-infant health
2021-2022**

Topic	HE	CHW	Total
BF/benefits	0	398	398
BF/laws that protect and support	15	117	132
BF/correct latching	0	213	213
Premature birth	0	215	215
Family planning	2	74	76
Support and protective laws for women in labor	3	90	93
Labor plan	2	38	40
Postpartum care	0	204	204
Emotional wellbeing	0	30	30
Safe sleep	1	92	93
Shaken baby syndrome prevention	0	69	69
Crying baby, strategies to cope	0	32	32
Safe toys	0	44	44
Total	23	1,616	1,639

The outreach activities are held in diverse settings in the community. In the reporting year, HEs and CHWs reached 12,320 persons in the locations listed below.

**Population reached in group activities by outreach staff, by location
2021-2022**

Location	HE	CHW	Total
Schools	1,234	466	1,700
Communities	1,870	4,859	6,729
Health Care Facilities	265	3,086	3,351
Community Health Activities/Information Tables	247	293	540
Total	3,616	8,704	12,320

**Group activities on selected topics related to perinatal-infant health
2021-2022**

Topic	HE	CHW	Total
Breastfeeding	96	98	194
Newborn care	14	95	109
Psychological changes and health conditions during pregnancy	0	77	77
Preparing for birth	0	55	55
Postpartum care/Family planning	0	172	172
Bonding and care of infant 0 to 1 y/o	0	378	378
Shaken baby syndrome prevention	150	0	150
Unintentional injury prevention	231	1,753	1,984
Total	491	2,628	3,119

The CHWs refer participants to services available in the community according to the needs and interests of the individual. In 2021-2022 they issued a total of 2,778 referrals, as detailed in the following table.

**Referrals made by CHWs
2021-2022**

Service or agency	Referrals
Medicaid / Government health plan	144
Prenatal care	126
Medical care (adults)	34
WIC	114
Department of the Family	2
Housing Department	4
Municipal services	28
Department of Education	29
Mental health services	15
Oral health services	48
Breastfeeding support group	81
Early Intervention Program	94
Preventive Pediatric Care (EPSDT)	144
Home Visiting Program	376
Other	1,539
Total	2,778

In addition to offering referrals, CHWs and HEs coordinate with local agencies and service programs (via telephone calls or in person) regarding services needed by people in the community they reach in their interventions. In the reporting period a total of 2,295 contacts were made, as detailed in the next table.

**Agencies contacted by CHWs and HEs
to coordinate services or activities
2021-2022**

Agency or service	CHW	HE
Medicaid / Government health plan	311	1
Prenatal care	97	13
Medical care (adults)	112	13
WIC	322	2
Department of the Family	54	53
Housing Department	40	63
Municipal services	70	8
Department of Education	258	0
Mental health services	9	177
Oral health services	99	20
Breastfeeding support group	13	5
Early Intervention Program	5	26
Preventive Pediatric Care (EPSDT)	134	2
Home Visiting Program	111	0
Other	272	5
Total	1,907	388

Fetal Infant Mortality Review (FIMR)

MCAHD staff has headed the Puerto Rico Fetal Infant Mortality Review (PR-FIMR) since 2006, contributing additional information to local population-based fetal and infant mortality data. The objective of the FIMR is to identify systems-related risk factors for fetal and infant deaths and to generate recommendations to address them. To this end, the Review Team examines de-identified comprehensive information regarding infant and fetal deaths. In recent years, the PR-FIMR focused on deaths occurring among HVP participants.

During the reporting year the PR-FIMR was on hiatus. Please see the Perinatal-Infant Plan for the Application Year narrative for details on the reactivation of the PR-FIMR during 2022-2023. When a fetal or infant death occurs in the HVP, priority is given to providing the mother bereavement support. A Fetal Death Report or Infant Death Report containing general information on the mother, gestational age or age of the infant, and cause of death is filled out by the HVN and submitted with the monthly reports.

The following table details pregnancy outcomes (deaths or losses) of the HVP for 2020-2021 and compares the results to the general PR population. Final mortality data for 2022 were not available at the time of this report. The Demographic Registry Office (DRO) has been transitioning to a digital platform for death registrations since 2021. This change resulted in many data quality setbacks, which had a negative impact on the availability of death data. Therefore, data for 2021 are preliminary until the issue is totally resolved.

**Comparison of pregnancy outcomes (deaths and losses)
between HVP and general PR population
2020-2021**

Death or loss due to:	HVP*	PR*
Abortion (<20 weeks gestational age)	Percent: 3.0% Numerator: 19 Denominator: 633 (604 infants born alive + 19 abortions + 10 fetal deaths)	Percent: 18.2% Numerator: 4,225** Denominator: 23,206 (18,749 infants born alive + 4,225 abortions** + 232 fetal deaths)
Fetal death (≥ 20 weeks of gestational age)	Percent: 1.6% Numerator: 10 Denominator: 633 (604 infants born alive + 19 abortions + 10 fetal deaths)	Percent: 1.0% Numerator: 232 Denominator: 23,206 (18,749 infants born alive + 4,225 abortions** + 232 fetal deaths)
Fetal death (≥ 20 weeks of gestational age)	Rate: 16.3 per 1,000 births and fetal deaths Numerator: 10 Denominator: 633 (604 infants born alive + 10 fetal deaths)	Rate: 12.2 per 1,000 live births and fetal deaths Numerator: 232 Denominator: 23,206 (18,749 infants born alive + 232 fetal deaths)
Maternal death	Rate: 165.6 per 100,000 live births Numerator: 1 Denominator: 604 infants born alive	Rate: 26.7 per 100,000 live births Numerator: 5 Denominator: 18,749 infants born alive
Infant death (less than 1 y/o)	Rate: 6.6 per 1,000 live births Numerator: 4 Denominator: 604 infants born alive	Rate: 10.3 per 1,000 live births Numerator: 193 Denominator: 18,749 infants born alive
Pediatric death (1 to 2 y/o)	Rate: 0 pediatric deaths Numerator: 0 Denominator: 1,535 children	Rate: 28.9 per 100,000 children Numerator: 12 Denominator: 41,476 children

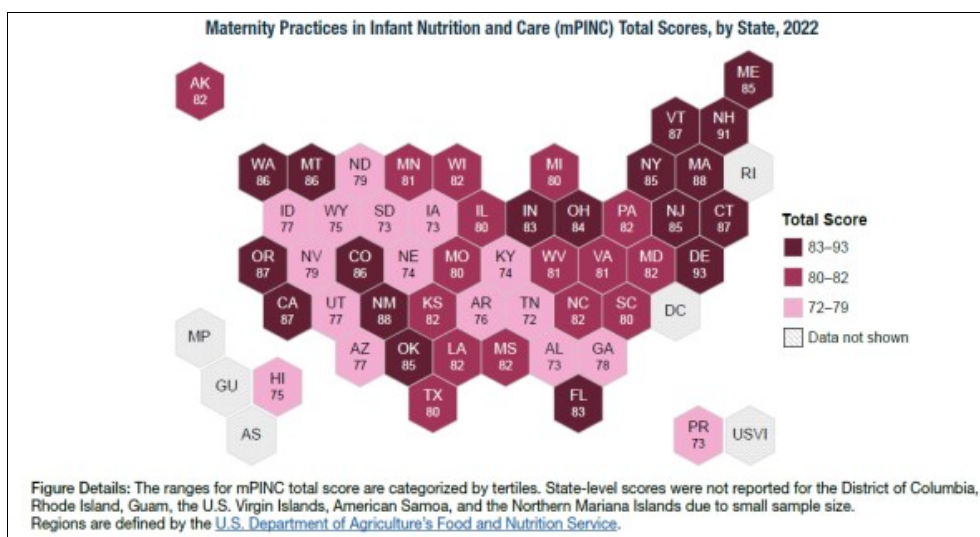
*HVP and PR Vital Statistics from July 2020 to June 2021.

**Statistical information of Women's Abortion Clinics (4 of 5 clinics), Assistant Secretariat for Planning and Development, PR Department of Health Fiscal Year 2020-2021. Data available for abortions in PR General Population.

Breastfeeding Promotion

Breastfeeding (BF) has proven to have a positive impact on decreasing IM. Evidence supports BF's beneficial effect in decreasing the prevalence of childhood obesity and in the prevention of Sudden Unexpected Infant Death. Thus, the PRDOH prioritizes the promotion of BF practices.

The Maternity Practices in Infant Nutrition and Care (mPINC) is an instrument for maternity institutions to self-evaluate their progress in improving maternal care practices that support and promote breastfeeding. There has been a gradual increase in the number of PR birthing hospitals that participate in the survey, and an improvement in scores reflecting positive changes in maternal infant practices. The mPINC score in 2013 was 61, in 2015 it was 69, and in 2020 PR achieved the score of 73. In the 2022 mPINC survey, PR achieved the same total score as reported in 2020.



The MCAHD staff also continued to encourage hospitals to comply with implementing a policy to establish a breastfeeding support program and rooming-in as required in the Hospital Regulations Policy for licensing and operation #9184 (June 2020). The regulations emphasize compliance with Act 156 as amended in 2016 (assuring women may have a companion through labor and the postpartum period, rooming-in option, and BF rights, among others), and Act 79 of 2004 (forbidding hospital staff from giving breast milk substitutes to newborns without a doctor's order and the mother's informed consent).

The revised 2030 Healthy People objectives include two related to breastfeeding: increase the proportion of infants who are breastfed exclusively through age 6 months and increase the proportion of infants who are breastfed at 1 year.

HP 2030 Breastfeeding Objectives

Objectives	US baseline 2015* %	PR baseline 2015* %	HP 2030 target %
Increase the proportion of infants who are breastfed exclusively through age 6 months	24.9	26.5	42.4
Increase the proportion of infants who are breastfed at 1 year	35.9	29.8	54.1

*Data Source: NIS, 2015

Puerto Rico Vital Statistics (VS) data obtained from the birth certificate revealed that 96.7% of mothers ever breastfed prior to registering their babies in 2022, a slight decrease compared to 2021 (97.2%). Of the women who reported ever breastfeeding, in 2022 47% reported exclusive BF prior to registration. In the first hour post-partum, 70% of mothers who delivered vaginally and 36% of mothers who delivered by cesarean section were able to breastfeed. Exclusive BF rates upon discharge from hospitals reflect the success of implementing BF support strategies. The following table reports BF prevalence in Puerto Rico for 2019-2022 using VS data.

Percent of mothers reporting breastfeeding 2019-2022

Year	2019 %	2020 %	2021 %	2022 %
Ever BF*	96.5	96.5	97.2	96.7
Ever BF exclusively*	47.5	48.9	45.6	46.9
BF at discharge**	91.7	91.5	92.9	92.9
Exclusively BF at discharge**	34.0	35.0	31.7	32.7
BF 1 st hour after birth (C/S) §	33.5	35.0	35.4	36.3
BF 1 st hour after birth (vaginal) §	66.4	68.7	69.3	70.4
BF 1 st hour after birth (all deliveries) §	56.4	52.5	52.4	53.2

*Data is obtained by the combination of breastfeeding the 1st hour after birth, at the time of discharge and at the baby registration in the demographic registry office

**Data reported by hospital

§Data reported by mother/father at baby registration

Most recent data from PRAMS 2021 showed that 25.4% of mothers breastfed exclusively at 3 months. This was an increase of 28% when compared to 2019 (19.8%). The percentage of mothers that were still breastfeeding at the time the survey was answered remained above 50% during the last 3 years of data. Other data pertaining to BF, obtained from the 2019-2021 PR PRAMS, are reported in the following tables.

Exclusive breastfeeding at 3 months of age PR PRAMS 2019-2021

Year	% exclusively BF at 3 months of age
2019	19.8
2020	22.6
2021	25.4

Infants who were breastfed at the time the survey was answered, by age
PR PRAMS 2019-2021

Year	Never breastfed %	2 months %	3 months %	4 months %	5 months %	6 months %
2019	5.6	64.5	59.8	50.9	47.0	47.9
2020	5.6	65.1	67.5	52.2	49.4	38.2
2021	6.5	47.1	67.4	61.4	45.9	47.1

Breastfeeding status at the time the survey was answered
PR PRAMS 2019-2021

Year	% still breastfeeding	% discontinued breastfeeding
2019	54.6	45.4
2020	53.2	46.8
2021	54.2	45.8

Breastfeeding promotion and support in the hospital postpartum
PR PRAMS 2019-2021

PRAMS statement	2019 %	2020 %	2021 %
Received information on BF from hospital staff	85	82	80
Had rooming-in	79	72	73
Breastfed in the first hour postpartum	55	53	55
Received support on how to BF	73	71	69
Was taught to BF whenever the infant demanded	76	74	71
Received a telephone contact number for BF support	50	46	40
Received free formula upon discharge	47	52	52
Had skin to skin contact in the first hour postpartum	76	67	65
Sedation of mother as a reason for not being able to BF in the first hour	25	26	28
Breastfed in the hospital	90	87	86

Breastfeeding support after baby's birth
PR PRAMS 2019-2021

Response from mothers who ever breastfed	2019 %	2020 %	2021 %
Had someone to answer questions	80.0	71	70.5
Help to place the baby in proper latching position	77.6	71	71.3
Help to evaluate if baby was feeding enough breastmilk	74.6	66	65.6
Help to treat bleeding or painful nipples	55.1	45.2	42.1
Information on where to obtain a breast pump	62.9	53.2	50.9
Help in using a breast pump	50.6	38.3	40.7
Information about support groups	73.8	59.3	46.9

Breastfeeding is actively promoted through various strategies directed at MCAHD participants and the general public. The Prenatal Course, both in-person and virtual, includes information on the benefits of BF, preparation in the

prenatal period, initiation in the hospital, resources available in the community for postpartum support, and laws and regulations that support BF in Puerto Rico are among the topics included in the course. As reported above, 248 persons participated in the in-person courses and 619 in the virtual course, for a total of 867 persons.

A total of 1,090 infants (birth to 12 months of age) participated in the HVP during 2021-2022. HVNs provide breastfeeding education and support to the participants. The HVP protocol calls for weekly visits in the first 4 weeks postpartum where, among other topics, they evaluate latching and breastfeeding positioning, and refer mothers for professional help and support in the community when problems requiring further intervention are identified. The HVP nurses encourage exclusive breastfeeding during at least the baby's first 6 months of life. In the HVP, 88% of participants reported ever breastfeeding, an increase from the 83% who did in 2020-2021. Likewise, 38% continued to BF until 6 months, which is an increase from 37% in 2020-2021.

The Perinatal Nurses reached out to 2,962 new mothers in 31 birthing hospitals to promote breastfeeding and offer orientation on resources that provide breastfeeding support in their community.

The WIC program uses an evidence-based BF peer counselor support program which connects experienced BF WIC participants and new mothers. According to the information provided by WIC, the BF rate for their participants was 59.9% for 2021-2022. The data for the peer counselor program reports the number of contacts between the counselor and the participants; it does not reflect the actual number of persons served. The contacts include individual in-person orientation, telephone consultations, home visits and group orientations. In the reporting year WIC reports 62,895 contacts with pregnant and parenting persons. Of these contacts, 1,142 persons received support while still in the hospital after the birth of their infant.

WIC BF Peer Counselor Interventions by Participant Category
2021-2022

Participant category	Number of contacts	%
Pregnant	24,040	38.2
Breastfeeding	17,118	27.2
Partial breastfeeding	16,501	26.2
Postpartum (non-breastfeeding)	5,236	8.3
Total	62,895	100

The recommendations for feeding infants and children from 0 to 24 months of age were approved and adopted as public policy by the Secretary of Health in 2018. They promote exclusive breastfeeding and the delay in the introduction of solids until 6 months of age. These recommendations continue to be shared with pediatricians and nutritionists in multiple forums.

The PR PRAMS survey queried mothers regarding the introduction of solid foods in their babies' diets. Data for 2021 showed that there was an increase in the percent of infants who had not received solids foods at 5 months, from 63.1% in 2020 to 66.3% in 2021. The following table shows the percentage of infants who had not started eating solids at 2, 3, 4 and 5 months of age during 2019-2021.

Infants who had not received solid foods at the time of the survey, by age
PR PRAMS 2019-2021

Year	2 months %	3 months %	4 months %	5 months %
2019	95.9	91.1	80.6	63.2
2020	93.4	93.0	82.4	63.1
2021	100.0	96.7	81.5	66.3

Other Strategies Implemented by the MCAHD to Decrease IM

Prevention of unintentional injury

The MCAH Program staff offers educational activities to participants, providers, and the general population to increase awareness of preventable causes of infant mortality and prevention of unintentional injury. The HVNs provided orientation and distributed educational materials directed at reducing unintentional injuries at home to the participants of the HVP and to the community. The PNs also include orientations on safe sleep and prevention of unintentional injury in their orientation on newborn care to postpartum families.

The Prenatal and Parenting courses include content on injury prevention, safety strategies, preventing shaken baby syndrome, safe sleep, safe toy selection, the Poison Control phone number and support they provide, and the proper use of car seats, among others. CHWs and HEs also offer individual and group orientations to promote the prevention of unintentional injury. During 2021-2022, MCHAD staff offered 382 individual orientations and reached 1,984 persons through group activities on this topic.

Prevention of Shaken Baby Syndrome

The HEs and MCAHD staff created a culturally appropriate interactive intervention on the management of crying babies, *¿Por qué lloran los bebés?* ("Why do babies cry?"). It teaches parents and caregivers strategies to manage crying and irritable babies to prevent Shaken Baby Syndrome (SBS). They incorporated the use of the SBS simulation doll to demonstrate the damaging effects of shaking a baby and to deliver the prevention message more effectively. Updated safe sleep recommendations were included in this intervention, which was offered by HEs to 150 persons during 2021-2022.

Prevention of Forgotten Baby Syndrome

Forgotten Baby Syndrome may happen to any family. A child left in a parked vehicle can die of heat stroke (extreme heat) in a very short time. Due to the tropical temperatures in Puerto Rico, a baby forgotten in a car faces rapid dehydration and death. Therefore, education and strategies to prevent forgotten baby syndrome are also included in the HVP and the Prenatal and Parenting courses, including a brochure developed for families. Act 173 of 2016 requires day care centers to call parents if a child is absent without previous notification to the center.

An informational poster was designed by the interdisciplinary team of consultants of MCAHD to spread the message of how parents need to develop a strategy to protect their infants. MCAHD staff continues to share the poster with other agencies and organizations.



Infant CPR Anytime

Infant CPR Anytime is a strategy proven to save lives that is included in the HVP education protocol. HVNs use an infant mannequin to teach Infant CPR skills to the participating families, evaluating their performance by using observation guides and providing feedback to ensure competency. Infant CPR Anytime teaches parents and caregivers how to react and rescue an infant in case of choking or cardiorespiratory arrest. Hands-on training on Infant CPR Anytime is temporarily discontinued due to the precautions related to infection control and prevention. However, the HVNs use the Baby Anne® infant CPR trainer to demonstrate and explain basic techniques as well as choking prevention and management. The Infant CPR Anytime training is combined with the delivery of safe sleep recommendations, complementing strategies aimed at decreasing infant mortality.

Opioids

The MCAHD has remained vigilant to the prevalence of withdrawal syndrome in newborns, which requires hospitals to report cases to the PR Department of the Family. During 2022 neonatal abstinence was reported in 0.5/1000 live births among mothers with medical insurance in PR. Although this is in the lower range when compared to the prevalence in the USA (1.8 to 40.8/1000 live births in the USA in 2021), the MCAHD promotes healthy lifestyles and habits including avoidance of drugs, tobacco, and alcohol during pregnancy. The holistic management of infants with withdrawal syndrome and their families is shared between the primary physicians and PR Department of the Family.

Perinatal/Infant Health - Application Year

The MCAHD will continue to address the population's emerging needs and focus its efforts on improving birth outcomes. Strategies will focus on promoting behaviors that can lead to a healthy pregnancy and decrease preterm births, disseminate information to the MCH population regarding the levels of care of hospitals to increase the percent of very low birth weight infants delivered at facilities with the specialty level required for the care of high-risk neonates, promoting the adoption of safe sleep practices and breastfeeding, especially exclusive breastfeeding until infants reach 6 months of age, and evaluating fetal and infant deaths in the FIMR to identify strategies to decrease infant mortality.

Pregnant and parenting persons, infants, and children are at increased risk during and after disasters. The MCAHD is developing an Emergency Preparedness and Response Guide that takes into account the characteristics, needs, and vulnerabilities of the MCH population. Topics covered include prenatal care, adequate nutrition, prevention of premature birth, safe infant feeding, safe sleep practices, and special considerations regarding toddlers and older children, among others. This guide responds to Priority Need 3: Decrease Infant Mortality of the PR Title V Action Plan. Please see Section III.E.2.b.iv. MCH Emergency Planning and Preparedness, for a complete discussion of this activity.

COVID-19

After the period of adjustments required by the COVID-19 pandemic, all MCAHD activities have resumed regular operations. The MCAHD remains alert to updated recommendations and guidance provided by the PRDOH and the CDC regarding emerging public health threats, and will continue to take recommended precautions as necessary.

Safe Sleep

Sleep-related Sudden Unexpected Infant Deaths (SUIDs) continue to be among the leading causes of infant deaths between 1 to 12 months of age in Puerto Rico. The MCAHD will continue its efforts to increase knowledge and awareness of safe sleep practices through its programs and educational interventions, including:

- Promoting infant safe sleep practices among Home Visiting Program (HVP) participants beginning in the second trimester of pregnancy and evaluating safe sleep practices once baby is born.
- Educating participants of the Prenatal and Parenting courses on infant safe sleep practices.
- Promoting infant safe sleep practices via social media, the "*Encounter of my life*" webpage, and the virtual prenatal course. The safe sleep educational video is temporarily off line, pending sign language interpretation required by the PRDOH, and will again be made available through these channels after editing.
- Emphasize safe sleep practices among displaced families affected by disasters.

In 2023-2024, the MCAHD will develop a collaborative effort with birthing hospitals to distribute a short educational video on safe sleep practices to be displayed in hospital information monitors, ensuring the family has watched the video before discharge from the hospital. It will also collaborate with the Puerto Rico Hospital Association to offer continuing education on infant safe sleep practices to hospital staff.

The Title V Epidemiologists, Biostatistician, and the PR PRAMS coordinator are producing a report to be submitted for publication in the MMWR in the coming months. It features the findings of safe sleep practices in PR using the PRAMS database for the years 2017 to 2019.

Prevention of Premature Births

The implementation of the Hard Stop Policy in all birthing hospitals in order to decrease elective labor induction prior to 39 weeks of gestation in non-medically indicated cases continues to be an area of interest for the MCAHD. Efforts focus on promoting strategies recommended by ACOG for the implementation of the Hard Stop Policy and compliance with the PR Hospital Regulations Policy #9184 (July 2020), in collaboration with the PR Hospital

Association (PRHA) and the March of Dimes.

One of the activities planned on this topic is a one-day conference titled *Mobilizing Action for Maternal Infant Health*, to be held in September 2023. It responds to the *White House Blueprint for Addressing the Maternal Health Crisis*, which lists among its priorities the need for a strong, well trained perinatal workforce. This conference will provide current information on perinatal health, prematurity, health equity, quality of healthcare and social determinants of health. In addition, it will be an opportunity to recognize the hospitals that have achieved compliance with the Hard Stop Policy from May 2022 to May 2023. The conference is being planned in conjunction with the PRHA and the March of Dimes. The target audience includes the perinatal staff from the 30 birthing hospitals in PR, including hospital administrators, OB/GYNs, nurses, health educators and social workers, for a total of 200 participants. The speakers are leading experts in their fields.

The preliminary agenda follows.

- State of Premature Birth Rates in PR
- Non-elective Cesarean Sections: Current Statistics and Prevention Strategies
- Health Equity
- Implicit Biases
- Preconceptional Health
- Social Determinants of Health Affecting the Pregnant Population
- Perinatal Mental Health

The MCAHD will continue to increase awareness regarding premature birth using various education and promotion strategies that explain the warning signs and symptoms of preterm labor and the actions to take if preterm labor is suspected. This topic is covered in the prenatal courses offered by the HEs and CHWs at the community level, and in the virtual prenatal course and educational materials available from the “*Encounter of my life*” website (see next section).



In the HVP, the Home Visiting Nurses (HVN) evaluate participants to identify the presence of risks related to

premature and LBW deliveries and offer education about the signs and symptoms of premature labor. They provide information on the nearest birthing facility with appropriate perinatal services. The Perinatal Nurses offer education to pregnant persons on signs and symptoms of premature labor. The MCAHD promotes the use of a prenatal card that records pertinent obstetric history and information and the value of always having it at hand.

Promotion of healthy lifestyles during pregnancy

The “*Encounter of my life*” (*Encuentro de mi vida*) educational campaign delivers the message that pregnancy should last 40 weeks, adequate prenatal care improves outcomes, breastfeeding begins in the hospital, and other topics related to pregnancy, postpartum and infant care organized in five sections: Prenatal care, Labor and delivery, Postpartum, Breastfeeding, and Infant care. A newly designed webpage was created within the Department of Health’s website (salud.pr.gov/encuentro_mi_vida) to house the campaign’s educational materials as well as the virtual prenatal care course. The Prenatal Care section includes leaflets that promote healthy lifestyles, including the benefits of early and continuous prenatal care, physical activity, diet and nutrition, oral health care, emotional wellbeing, abstaining from alcohol, tobacco and drug use during pregnancy, and related topics.

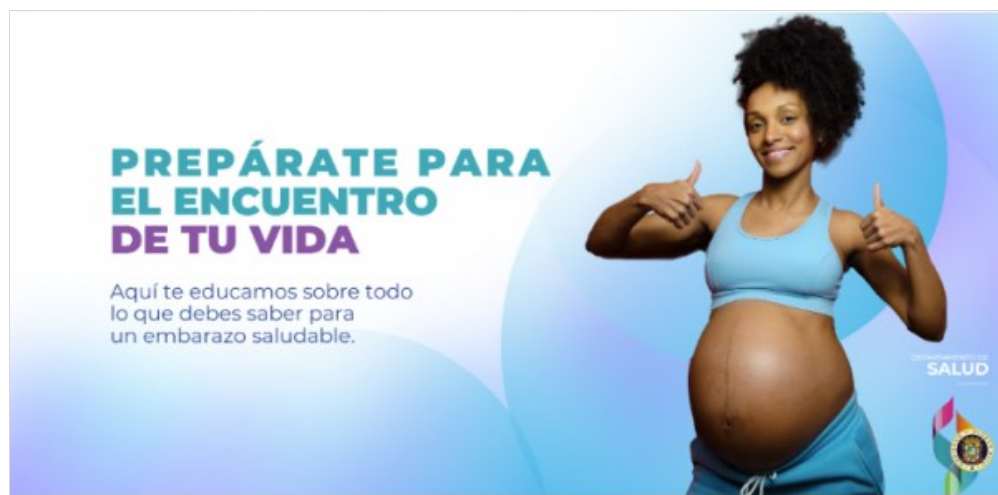


Figure 2 – “Encuentro de mi vida” website image, which reads “Get ready for the encounter of your life. Here you will find all you need to know to have a healthy pregnancy.”

The Home Visiting Program promotes physical and mental well-being of infants, children, and pregnant and parenting participants. The HVNs provide one-on-one education and support to encourage healthy eating habits, physical activity, vaccination and preventive health visits, oral health care of both mother and baby, developmental stimulation, breastfeeding, safe sleep, prevention of unintentional injury, among many other topics. These interventions begin in the prenatal period and extend until the baby reaches their second birthday. The service will continue to be delivered to high risk and vulnerable families, connecting them with the resources in their community.

Births at facilities with the specialty level required for the care of high-risk neonates

As part of the MCAHD efforts of re-implementing the CDC’s Levels of Care Assessment Tool (LOCATe) initiative in order to evaluate the levels of hospital specialty service for maternal-infant care, 33 birthing hospitals that had 100 or more births in 2021 were determined to be eligible to participate in the survey. In September 2022, an invitation letter that explained the purpose of the survey was sent to these hospitals along with a consent form. Three of the invited hospitals reported they did not have an operating delivery room or nursery, due to lack of professionals. Of the 30 birthing hospitals that comprised the final sample, three did not agree to participate in the study; the remaining 27 hospitals completed the survey, for a response rate of 90% (27/30).

The MCAHD is currently in the process of sharing the LOCATe database with CDC to complete the analysis of the evaluation of neonatal and maternal levels of care. The findings and recommendations will be discussed with key staff from the participating hospitals during individual meetings as part of their evaluations. Following that, the

MCAHD outreach component and the HVP will collaborate in the dissemination of these findings at the community level. The results will also be used to propose policies and strategies to promote an increase in the percent of very low birth weight and/or premature infants delivered at facilities that provide the specialty level required for the care of high-risk neonates.

Fetal Infant Mortality Review (FIMR)

Over the last decade, Puerto Rico's infant mortality rates have improved but continue to be above the average national numbers. Between 2018 and 2020, the annual infant death rates in Puerto Rico were between 6.7 to 7.0 deaths per 1,000 live births, higher than those reported during the same period in the United States (5.7 to 5.4).

The Puerto Rico FIMR program (PR-FIMR) was reactivated in the second semester of 2022. The core team is composed of the MCAHD Director, the Pediatric Consultant, the HVP Coordinator, HVP Evaluator, the Reproductive and Pediatric Epidemiologists, and the Title V Mental Health Consultant. The process began with an extensive evaluation and revision of the literature and documentation available on the website of the National Center for Fatality Review and Prevention (NCFRP) and the American Academy of Pediatrics (AAP).

The core team focused on updating the PR-FIMR's Implementation Manual and data collection instruments (parental interview and clinical data collection forms). The Pediatric Consultant and the HVP Coordinator met with the FIMR Director for the NCFRP to discuss the reactivation of the program, clear up some questions on the processes for data abstraction and the parental interview, as well as to discuss PR's participation in the National Fatality Review Case Reporting System. Initially, the PR-FIMR will evaluate cases of fetal loss and infant death of participants of the HVP.

In the coming months the PR-FIMR team will undertake the following steps in the process to begin once again reviewing fetal and infant deaths occurring in the HVP.

- Distribute a letter from the Secretary of Health to inform hospitals about the PR-FIMR, its purpose and importance. It will also request the assistance of hospital administrators to facilitate access to hospital records for data abstraction by the Perinatal Nurses.
- Train the MCAHD staff who will participate in the program. The HVNs will conduct parental interviews, since they are familiar with the characteristics of the HVP population and have experience and training in interactions with families. The Perinatal Nurses, given their clinical knowledge and background, will carry out the data abstraction with collaboration of the Regional Directors as needed.
- Identify and invite potential members of the case review team (CRT) and the community action team (CAT). The CRT will discuss the deidentified cases and generate a list of recommendations. The CAT will be involved in the implementation of the recommendations received from the CRT. Both teams should include representatives of different fields who can bring diversity, influence, lived experiences and commitment to racial, social and health equity in the FIMR process.

Breastfeeding

The PR MCAH staff supports the initiation of breastfeeding (BF) and continuation of exclusive BF until at least 6 months of age using diverse strategies. The MCAHD will continue to promote BF as a lifesaving measure in a disaster and to disseminate the Safe Infant Feeding Guidelines developed and adopted by the Secretary of Health in 2019 as a public policy.

Data on prevalence and trends of BF in PR reported by WIC, the Demographic Registry, PR PRAMS, Immunization Survey and the Maternity Practices in Infant Nutrition and Care (mPINC) survey inform MCAHD's strategies to increase initiation and continuation of BF. The MCAHD shares this data with stakeholders to raise awareness among BF advocates, BF support groups and birthing hospitals of gaps in services and support for BF mothers.

The MCAHD provides training to HVNs, HEs, CHWs, and Perinatal Nurses to ensure they have up-to-date information that is geared to the populations they reach and the interventions they carry out. CHWs and HEs offer educational activities in the community; Perinatal Nurses reach pregnant and postpartum persons in hospitals and give one-on-one education; HVNs raise awareness of the benefits of breastfeeding among their participants beginning in pregnancy and support their efforts throughout the postpartum period.

The MCAHD disseminates information of laws that protect the rights of BF mothers in public and in the workplace at the community level through the prenatal courses, the “*Encounter of my life*” website and other educational activities.

The MCAHD will also continue to promote hospital compliance with PR Hospital Regulations Policy #9184 (July 2020), which includes requirements for hospitals to establish BF support policies. The 2022 mPINC report reflects the positive impact of the strategies implemented by the MCAHD in fostering changes in hospitals to support breastfeeding. The results will guide the proposal and implementation of further strategies.

The MCAHD staff will collaborate with the Puerto Rico Hospital Association to train hospital staff in the promotion of successful breastfeeding initiation and to share information of breastfeeding support groups in community.

To commemorate Breastfeeding Month, in August 2022 a series of five social media posts were published in the PRDOH’s accounts. The messages, shown below, were developed by MCAHD staff and the artwork was designed by the PRDOH’s Communications Office. Left to right, top row: Text post with core message and link for more information; Recommendations for successful breastfeeding; Benefits of BF for baby. Left to right, bottom row: Preparing for BF from pregnancy; BF when mom has COVID-19; BF resources and support groups.



Figure 3 - Breastfeeding Month social media posts

The prenatal courses, both in-person and virtual, promote BF by including information relevant to pregnant and parenting persons on the benefits of BF, strategies for successful initiation, the hospitals’ obligation to provide support for BF mothers, and topics relevant to optimum prenatal care and preparation for delivery. The in-person courses are offered by the regional MCAHD Health Educators and Community Health Workers, and the virtual course is found in the “*Encounter of my life*” webpage on the PRDOH website. The courses are advertised in the PRDOH social media pages using quotes from previous participants that tell of the benefits of participating in the course. The text post that accompanies each photo explains the contents of the courses and how to participate.



Figure 4 - Social media posts advertising the prenatal courses

The “Encounter of my life” section on breastfeeding, shown below, has printable leaflets covering four topics: Benefits of BF, Preparation for BF, BF positions, and Laws that protect BF.



Figure 5 - Breastfeeding section of "Encounter of my life" webpage

Forgotten Baby Syndrome

Forgotten Baby Syndrome continues to be a threat that may occur to any family. A child left in a parked vehicle can die of heatstroke (extreme heat) in a very short time. Due to the tropical temperatures in Puerto Rico, a baby forgotten in a car faces rapid dehydration and death. Therefore, education and strategies to prevent forgotten baby syndrome are also included in the HVP and the Prenatal and Parenting courses. An educational brochure and poster were developed by the interdisciplinary team of consultants of MCAHD giving parents tips on how to develop a strategy to protect their infants.

Mi bebé... mi tesoro ¿llegó seguro?

Olvidar o dejar un niño(a) en un carro puede causarle la muerte.
Te puede pasar a ti, **ten precaución.**

Sigue estos consejos para evitar olvidar al menor en el carro:

1



Siempre deja la cartera, el celular, la computadora, la mochila, la lonchera o uno de tus zapatos a los pies del asiento protector donde se encuentra tu bebé.

3

Coloca el bulto de tu bebé en el asiento delantero del carro en un sitio visible.



2

Coloca un peluche a tu lado cada vez que viajes con tu bebé y ajusta el espejo retrovisor de manera que tengas visibilidad al menor.



4

Pídele a tu pareja, al abuelo/a u otro familiar que te llame a la hora que siempre dejas al bebé en el cuidado para asegurarte de que tu niño/a está seguro/a.



¡No te olvides!

Antes de bajarte del carro mira el asiento protector de tu bebé.

División Madres, Niños y Adolescentes | Departamento de Salud | 787-765-2929 Ext. 4550



GOBIERNO DE PUERTO RICO
Departamento de Salud



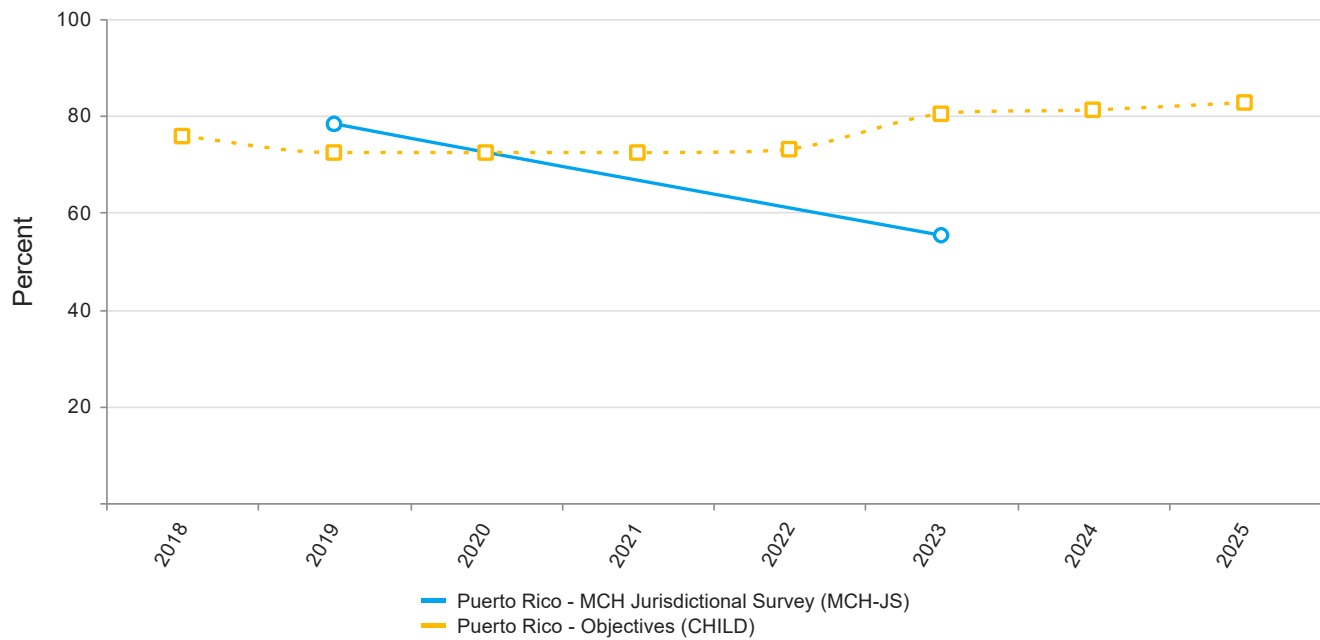
DEPARTAMENTO DE
SALUD
GOBIERNO DE PUERTO RICO
DIVISIÓN MADRES,
NIÑOS y ADOLESCENTES

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Child Health

National Performance Measures

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			
Data Source: MCH Jurisdictional Survey (MCH-JS)			
	2019	2020	2022
Annual Objective	72.3	72.3	73
Annual Indicator	78.1	78.1	55.2
Numerator	453,736	453,736	291,078
Denominator	581,051	581,051	527,155
Data Source	MCH-JS	MCH-JS	MCH-JS
Data Source Year	2019	2019	2023

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	75.7	72.3	72.3	72.3	73
Annual Indicator	72.3	72.3	72.3	72.3	78.7
Numerator	433,883	433,883	433,883	433,883	322,711
Denominator	600,429	600,429	600,429	600,429	409,873
Data Source	BRFSS	BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year	2017	2017	2017	2017	2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	80.3	81.1	82.6

Evidence-Based or –Informed Strategy Measures

ESM 13.2.1 - Percent of infants of 6 months or more in the Title V Home Visiting Program at high risk for caries who received early oral preventive services in Puerto Rico by September 2021-2025

Measure Status:				Active	
State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective			39.3	34.1	34.2
Annual Indicator		39.3	34	26.3	47.7
Numerator		210	127	142	148
Denominator		534	373	539	310
Data Source		HVP Participants Records	HVP Participants Records	HVP Participants Records	HVP Participants Records
Data Source Year		2018-2019	2019-2020	2020-2021	2021-2022
Provisional or Final ?		Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	48.5	49.3	50.1

State Action Plan Table

State Action Plan Table (Puerto Rico) - Child Health - Entry 1	
Priority Need	
Improve preventive health in children	
NPM	
NPM 13.2 - Percent of children, ages 1 through 17, who had a preventive dental visit in the past year	
Objectives	
By 2025, increase to 83% the percentage of children with a preventive dental visit in the past year, participants of the Government Health Insurance Plan. (PR-BRFSS 2021: 78.7%)	
Strategies	
Promote the use of the infant at high risk for caries screening tool among primary care providers, particularly FQHC, for an early referral to establish a dental home.	
Promote the preventive dental visits among Parenting Course participants.	
Promote healthy lifestyles to families through the PR Title V Home Visiting Program, Perinatal Nurses, Prenatal and Parenting courses, community outreach educational activities, social media and other communication outlets, as appropriate.	
Develop and disseminate an Emergency Preparedness and Response guide that considers the needs of children.	
ESMs	Status
ESM 13.2.1 - Percent of infants of 6 months or more in the Title V Home Visiting Program at high risk for caries who received early oral preventive services in Puerto Rico by September 2021-2025	Active
NOMs	
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	

Child Health - Annual Report

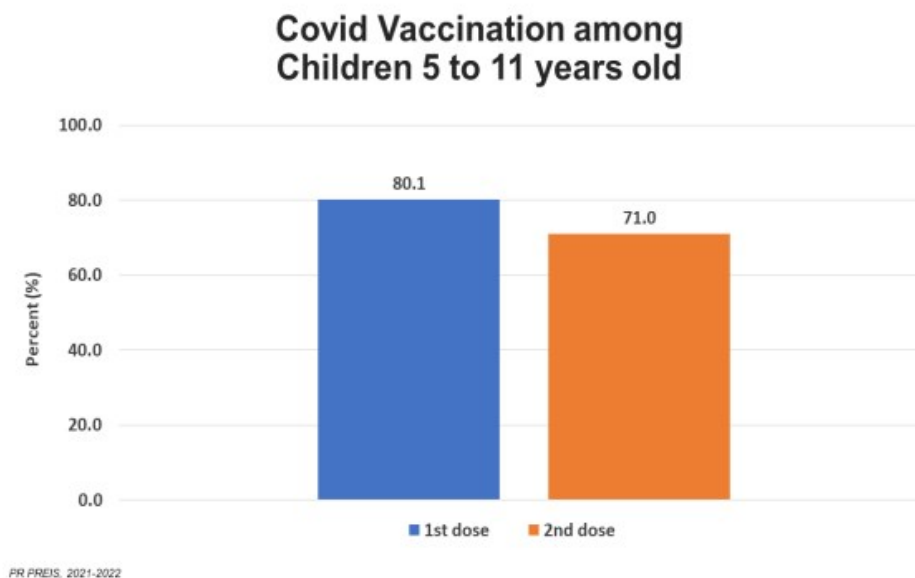
The MCAHD advocates for high quality health care access and the establishment of pediatric best practices in the delivery of health care services. These efforts aim to share the vision for leveraging resources, integrate and improve systems of care, promote quality health services, and develop supportive policies. MCAHD staff works in collaboration with diverse partners, including families, community-based organizations, private sector, and other government agencies.

During 2021-2022 the MCAHD continued to develop and implement varied strategies to achieve the national and state performance goals relevant to the Child Domain. Details on specific health education and promotion activities are reported in the Community Outreach Section of this narrative.

COVID-19

Over the past three years, the MCAHD made adaptations to its programs and strategies in response to the COVID-19 pandemic and the restrictions imposed by the federal and local government. As the restrictions were relaxed, programs gradually returned to their regular operations. In 2021-2022 the MCAHD carried on its efforts to provide support and education to contribute to the health and wellbeing of the MCH population, taking appropriate measures to protect staff and participants according to prevailing official recommendations. Some of the modifications developed during the COVID-19 crisis have been adopted permanently to increase the program's reach and to expedite processes.

In October 2021, the US FDA authorized the emergency use of the COVID-19 vaccine to include children 5 through 11 years of age. MCHAD staff continues to participate in educational efforts to promote vaccination of children in the community, including the COVID-19 vaccine. The following graph shows the percent of COVID vaccination among children in those ages, during 2021-2022.

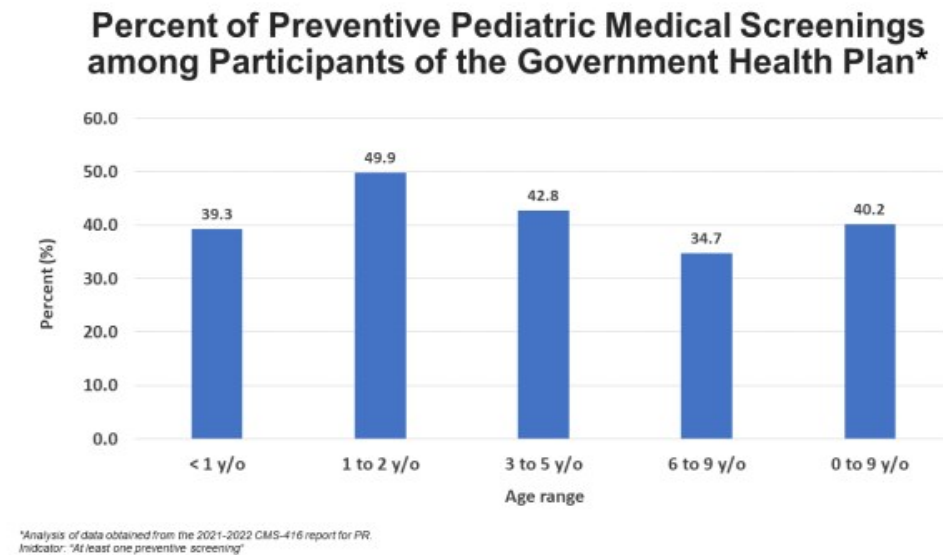


Promoting preventive health visits

Since 2015 many pediatricians have closed their offices in response to the economic difficulties created by the migration of the population (young families with children) to the mainland and difficulties in the reimbursement from health insurance companies. Many have moved away from the Island or have joined an emergency room or intensive care unit as employees to ensure a sustained income. The financial burden associated with providing services during the pandemic led many pediatricians to retire, further limiting the availability of pediatricians on the Island.

During the COVID-19 crisis, in-person preventive services were limited. However, in the reporting year, pediatric care practices gradually reopened. MCAHD staff focused efforts on educating families on the importance of maintaining the recommended preventive visit and immunization schedule.

In 2022, 40.0% of children between the ages of 0 to 9 years old with the Government Health Plan (GHP) were reported having at least one preventive screening in the data provided in the CMS-416 report, as shown in the following chart. Although this is an improvement over the 2021 figure of 38.5%, the level of compliance achieved before the pandemic (58% in 2019) has not been achieved. This continues to reflect the impact of the COVID-19 on outpatient clinical services.



The next two tables detail billing data for preventive visits by new and established patients for the reporting year.

**New Patient Preventive Visits by Age Range
Based on Billing Data Classified by ICD-10 Code and Insurance Type
2021-2022**

CPT Code	ICD-10 CM Code	% PHI*	% GHP**	% all Insured***
99381 <1 year	Z00.110 Health supervision for newborn under 8 days old	0.4	0.6	0.5
99381 <1 year	Z00.111 Health supervision for newborn 8 to 28 days old	0.5	1.2	1.0
99381 <1 year	Z00.121 Routine child health exam with abnormal finding	1.4	3.0	2.5
99381 <1 year	Z00.129 Routine child health exam without abnormal findings	2.7	5.8	4.9
99382 1-4 years	Z00.121 Routine child health exam with abnormal findings	0.6	1.7	1.3
99382 1-4 years	Z00.129 Routine child health exam without abnormal findings	0.9	2.1	1.7
99383 5-11 years	Z00.121 Routine child health exam with abnormal findings	0.4	1.2	0.9
99383 5-11 years	Z00.129 Routine child health exam without abnormal findings	0.5	1.4	1.1

* Percent of visits calculated using the number of billing services divided by the number of insured participants eligible for services with private health insurance

** Percent of visits calculated using the number of billing services divided by the number of insured participants eligible for services with the government health plan

***Average percent of visits using the number of billing services divided by the number of insured participants eligible for services with a private health insurance and government health insurance.

**Established Patient Preventive Visits by Age Range
Based on Billing Data Classified by ICD-10 Code and Insurance Type
2021-2022**

CPT Code	ICD-10 CM Code	% PHI*	% GHP**	% all Insured***
99391 <1 year	Z00.110 Health supervision for newborn under 8 days old	0.1	0.1	0.1
99391 <1 year	Z00.111 Health supervision for newborn 8 to 28 days old	0.5	0.3	0.4
99391 <1 year	Z00.121 Routine child health exam with abnormal finding	6.2	9.7	8.7
99391 <1 year	Z00.129 Routine child health exam without abnormal findings	15.7	19.4	18.3
99392 1-4 years	Z00.121 Routine child health exam with abnormal findings	3.4	9.4	7.5
99392 1-4 years	Z00.129 Routine child health exam without abnormal findings	5.9	13.1	10.9
99393 5-11 years	Z00.121 Routine child health exam with abnormal findings	1.9	6.4	4.9
9392 1-4 years	Z00.129 Routine child health exam without abnormal findings	2.1	7.5	5.6

* Percent of visits calculated using the number of billing services divided by the number of insured participants eligible for services with private health insurance

** Percent of visits calculated using the number of billing services divided by the number of insured participants eligible for services with the government health plan

***Average percent of visits using the number of billing services divided by the number of insured participants eligible for services with a private health insurance and government health insurance.

The PR Health Insurance Administration (PRHIA) underwent an administrative change expanding participants' choice of primary care physicians and hospitals, which was previously constrained to specific regions. The PRHIA reported that for 2021-2022 there were 713 pediatricians (including subspecialists), 385 family physicians, and 2,499 general physicians contracted and available to provide services to the pediatric population from 0 to 21 y/o insured with the GHP (see table below). The total pediatric population between the ages of 1 to 9 years old enrolled in GHP and eligible for Early and Periodic Screening, Diagnostic and Treatment (EPSDT) as of June 2022 was 153,790.

**Licensed Physicians registered in the PR Medical
Licensing and Disciplinary Board from July 2021 to June 2022**

Category	Total number of providers registered	Reported active in practice in PR	Reported out of PR
Family Physician	591	467	82
General Physician	4,791	2,922	631
Child Psychiatrist	125	105	12
Adult Psychiatrist	416	325	64
General Pediatrician	1,181	962	86
Pediatric Neurologist	7	4	1
Pediatric Endocrinologist	0	0	0
Pediatric Pneumologist	0	0	0
Pediatric Rheumatologist	0	0	0
Pediatric Gastroenterologist	0	0	0
Pediatric Nephrologist	1	0	0
Pediatric Cardiologist	3	1	1
Pediatric Surgeon	12	10	0
Pediatric Hemato-oncologist	2	0	0
Pediatric Intensive Care Specialist	0	0	0
Pediatric Dentist	96	87	5
General Practice Dentist	850	740	74
Dentist no specialty	301	176	15
Psychologist/Clinical	3,707/880	2,093/803	88/76

The Puerto Rico Preventive Pediatric Health Care Service Guidelines (PR PPHCSG) steer primary health care providers to deliver high-quality preventive health care that has an impact on child health and well-being. The PR PPHCSG improve the provision of primary health care services of infants, children, and adolescents by promoting the use of universal and selective screenings by age, complete history-taking and physical exam, and the delivery of anticipatory guidance. The guidelines recommend the evaluation of nutritional habits, physical activity, BMI, oral health, development status, signs of depression and risky behavior, and the use of specific validated screening instruments to help in an early identification and timely intervention. They emphasize the role of anticipatory guidance for effective prevention by providing the opportunity to share strategies to improve healthy lifestyles and to educate parents on changes and needs of children in each stage.

The guidelines encourage providers to identify risk factors as early as possible for prompt evaluation and intervention that will allow children to achieve their full potential. Common conditions which may be identified by following a scheduled itinerary for preventive care services include obesity and children at risk for obesity, developmental delays, and risk for dental caries. Provider compliance with the PR PPHCSG fulfills the EPSDT requirements for the Medicaid-served population, established as a public policy by the PRDOH. EPSDT also serves as a guideline for preventive medical services for the rest of the pediatric population who receive medical services covered by other private insurance companies.

In 2021, the AAP updated the Bright Futures guidelines with the recommendations of the US Preventive Task Force. To update the PR PPHCSG, the former Pediatric Consultant reviewed the new recommendations and pertinent scientific literature. In July 2021, a virtual meeting was held with a group of pediatric health care professionals and experts to determine which recommendations would be adopted. Using the findings of this meeting, the PR PPHCSG were updated and shared in August 2021 with pediatricians, GHP providers, academia, PRAAP Chapter,

Pediatric Dentist Society of Puerto Rico, among others. During 2021-2022, the health insurance companies contracted for the GHP continued to reinforce the use of PR PPHCSG as EPSDT guidelines in pediatric preventive health care services provided to the GHP population by including this topic in their providers' CME activities.

According to the 2019 Jurisdictional Survey (MCH-JS), 72.8% of parents with children between the ages of 1 to 11 stated that their child was in excellent or good health. Data for the PR Behavioral Risk Factor Surveillance System (BRFSS) for 2021 showed that 89.1% of parents reported their children aged 1 to 11 years had a preventive service visit in the last year. Similarly, among the children who were discharged from the HVP during FY 2021-2022, 85% had had at least one preventive medical visit by age 1 and 86% by age 2.

MCAHD staff strives to increase the preventive visits through the dissemination of the PR PPHCSG, individual and group orientations. The “*Encounter of my Life*” webpage (salud.pr.gov/encuentro_mi_vida) also includes a printable leaflet (Fig. 1) that explains the benefits of the preventive visit and has the schedule of visits until age 1. For details on the educational activities promoting the recommended Preventive Pediatric Visit schedules by age offered by CHWs and HEs, see the Community Outreach Section of this narrative.



Figure 1 - Educational leaflet on preventive pediatric visits from the "Encounter of my life" webpage

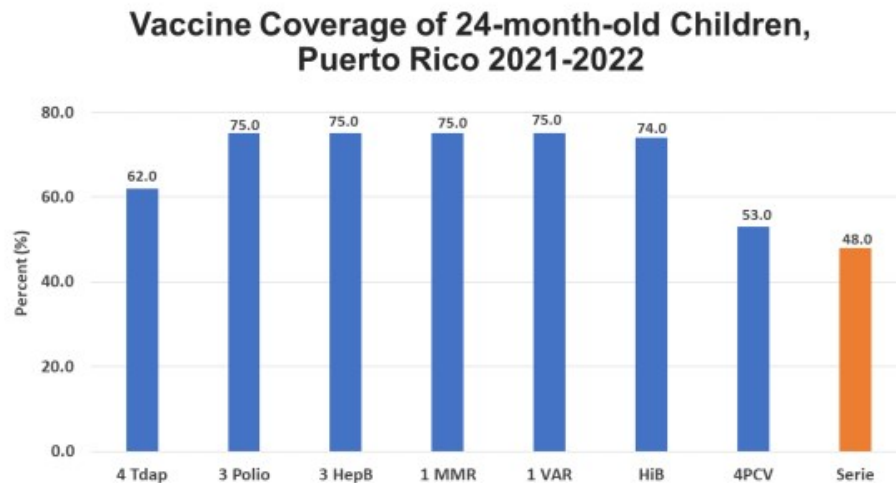
Promoting On-schedule Immunizations

Puerto Rico vaccination laws establish the required immunizations by age. The vaccination schedules are dictated by the DOH and are updated every year based on recommendations of the CDC and the Advisory Committee on Immunization Practices (ACIP.) An administrative order signed in 2021 requires parents to present evidence of vaccination to enroll in private and public schools up to the university level. However, state law also grants immunization exemptions to children with a justified medical condition or due to religious reasons.

PR Act 169 of 2019 makes it mandatory for all immunizations administered to be reported to the government by providers and insurance companies. The Puerto Rico Immunization Registry (PRIR) ceased functions in early 2020

due to technical problems that led to the loss of valuable data from previous years. The system was replaced by the PR Electronic Immunization System (PREIS).

The following graph shows the vaccine coverage for children 0 to 24 months of age for FY 2021-2022. Although the prevalence of immunization for some individual vaccines reaches 75%, only 48% of children had the complete vaccination series. In contrast, upon discharge from the HVP 86.6% of children had up-to-date immunization coverage (data for 2021-2022). This validates the effectiveness of the HVNs' education and care coordination efforts with participant families.



PR PREIS, 2021-2022.
Annual Estimates of the Resident Population by Single Year of Age and Sex for Puerto Rico Commonwealth, April 1, 2020 to July 1, 2021. US Census Bureau

Influenza vaccination is not mandatory for schools or day care centers in PR. The prevalence of influenza immunization for children ages 6 months to 17 years old was 8% in 2021-2022 (estimated data recovered from the PRIR). MCAHD promotes the annual flu vaccine and collaborates with the PR Immunization program in the influenza campaigns with other collaborators such as PR AAP Chapter.

The spread of misinformation and myths through social media regarding vaccine safety increased during the pandemic. These messages influenced many parents not to vaccinate their children. The MCAHD staff worked to demystify and offer correct information regarding the importance of vaccinating children to provide protection against preventable infectious conditions. This topic was discussed in the Prenatal and Parenting courses and in the HVN's interventions. For details on these educational activities, see the Community Outreach Section of this narrative.

Promoting oral health

Poor oral health can have adverse effects on physical and mental health, school performance, and overall quality of life. Optimal oral health enables children to speak, eat, and socialize without experiencing pain, discomfort, or embarrassment, improving their learning and school attendance. Educating families and children from an early age helps them to gain knowledge about oral health, develop positive attitudes toward oral hygiene, healthy eating habits, and attend regular dental care.

To this end, the MCAHD provides individual and group orientations at the community level, educates HVP participants, and collaborates with entities such as Head Start/Early Head Start (HS/EHS) to disseminate the following messages: good oral hygiene beginning in infancy, nutritional habits and behaviors that decrease the risks for dental caries, and the importance of visiting the dentist from an early age. Efforts are also focused on identifying children at higher risk for early childhood caries for referral to the dentist. HS/EHS and the HVP have adopted the Early Childhood Caries (ECC) risk screening developed in 2017 by the former Title V Pediatric Consultant.

Multiple strategies have contributed to the improvement in oral health in the pediatric population in the last 20 years: the implementation of the PR Government Health Plan with dental care coverage, an increase in the use of sealants, and the requirement established by Act 63 of 2017 that mandates children have an oral evaluation and periodic dental cleanings along with a compulsory Oral Health Certificate (OHC) upon school enrollment, for students entering grades Kindergarten, 2nd, 4th, 6th, 8th, and 10th. This ensures the student had a dentist evaluation in the 6 months prior to enrollment. Schools are required to complete an annual report for the Health Promotion Division of the DOH. Reports are analyzed and results are evaluated by the Oral Health Coalition for evaluation and proposal of strategies to continue to promote oral health. The MCAHD is part of the Oral Health Coalition.

Despite these improvements, dental decay continues to be highly prevalent in the PR pediatric population. According to the CMS 416 GHP report, 17.1% of children between 1 and 17 y/o had dental caries. The 2021 PR BRFSS reveals that 78.7% of children in the same age group had a preventive dental visit. The following table shows data relevant to oral health care in the pediatric population.

**Data Relevant to Oral Health Care in the Pediatric Population
2021-2022**

Age Range	Dental Visit Description	PR EPDST (CMS 416)
1-17	Dental Decay	17.1%
1-9	Eligible Receiving Preventive Dental Services	45.6%
1-9	Eligible Receiving Any Preventive Dental or Oral Health Services	46.0%
6-14	Eligible Receiving a Sealant on a Permanent Molar	7.2%
1-18	Eligible Receiving Any Preventive Dental or Oral Health Services	47.8%
1-18	Eligible Receiving Preventive Dental Services	48.2%

The PR PPHCSG includes recommendations for preventive dental visits twice a year from infancy and early childhood. They also emphasize the need for caries risk assessment in early infancy, with first teething, for an effective preventive intervention and referral to a dental home. Billing data provided by PRHIA shows that during 2021-2022 less than 1% of patients between the ages 0 and 5 y/o had fluoride varnish preventive treatment performed by a pediatric dentist. In Puerto Rico, the use of fluoride varnish by primary care practitioners is currently not practiced. Most pediatric dentists do not apply it because not all insurance companies reimburse it, and it is an off-label use without Federal Drug Administration (FDA) approval. Some do apply it and do not bill the insurance company. Similarly, the use of dental sealants to prevent caries is not widespread in PR. The CMS 416 GHP report stated 7.2% (6 to 14 y/o age range) and the PR HICO reported 7.1% of billing for sealants (5 to 14 y/o range) during 2021-2022. Therefore, it is important to encourage its use, particularly among the groups less likely to have a dental sealant application and who are at a higher risk for dental decay.

The MCAHD advocates for the inclusion of oral health care in early childhood and pregnancy in professional training and continuing education activities. General dentists are reluctant to provide services to children under age 8, due to their limited experience treating this population, and a lack of equipment to monitor sedated children when required.

Regarding availability of dental services, according to the Puerto Rico Office for the Regulation and Certification of Health Professionals / Medical Licensing and Discipline Board, the number of certified active pediatric dentists is 87. This represents a ratio of approximately 2,520 children 0 to 8 yrs. per dentist.

To widen the reach of the MCAHD's education and promotion efforts and strengthen collaboration with other agencies that also serve the MCH population, two of the seven Title V Regional Boards (RB) elected to develop

activities that address the children's oral health strategies of the State Action Plan during 2021-2022.

The Bayamón RB established a plan that consisted of two phases: (1) Coordinating an Oral Health Summit, and (2) Developing educational activities on the topic "Oral Health by Development Stages".

The Oral Health Summit was held on October 1, 2021, and included the following presentations: Oral Health 101, Services provided in the Oral Health Program, and Oral Health Services included in the GHP. Among the 200 participants were nurses of the Department of Education and HS/EHS, and representatives of WIC, Immunization, Oral Health, CSHCN, and MCAH Programs of the Bayamón Region.

Activities for the second phase were offered by the Dental Assistant of the Oral Health Program of PRDOH in December 2021 and January 2022, reaching a total of 53 persons. Attendees included MCAHD staff (HEs, CWHs and HVNs) and members of the Bayamón RB, including representatives of HS/EHS, WIC, and schools.

The Caguas RB developed educational activities in coordination with the HE for parents and children of a local HS/EHS. During 2021-2022, 433 children and 459 parents participated in these educational activities. The RB also coordinated a workshop for HS/EHS personnel on the importance of good oral health in children, reaching 92 persons.

Collaboration has continued with the director of the Oral Health Promotion Program to identify strategies to increase and promote referrals for dental home from the first tooth (6 to 12 months of age) and the early identification of infants at high risk of dental caries for referral to a dentist.

HEs and CHWs offer oral health education and promotion of preventive measures through the Prenatal and Parenting courses and individual and group activities in the community. They also distribute educational materials concerning the importance of protective sealants to reinforce their orientations. For details on the population reached through individual and group orientations, see the Community Outreach Section of this narrative.



Figure 2 - Health promotion fair in collaboration with ASSMCA held at the Children's Park, Bayamón, May 2022. CHWs wear costumes representing a tube of toothpaste, a toothbrush, and a molar to attract children's attention.



Figure 3 - Educational activity on oral hygiene offered in a rural elementary school in Orocovis by the Bayamón HE.

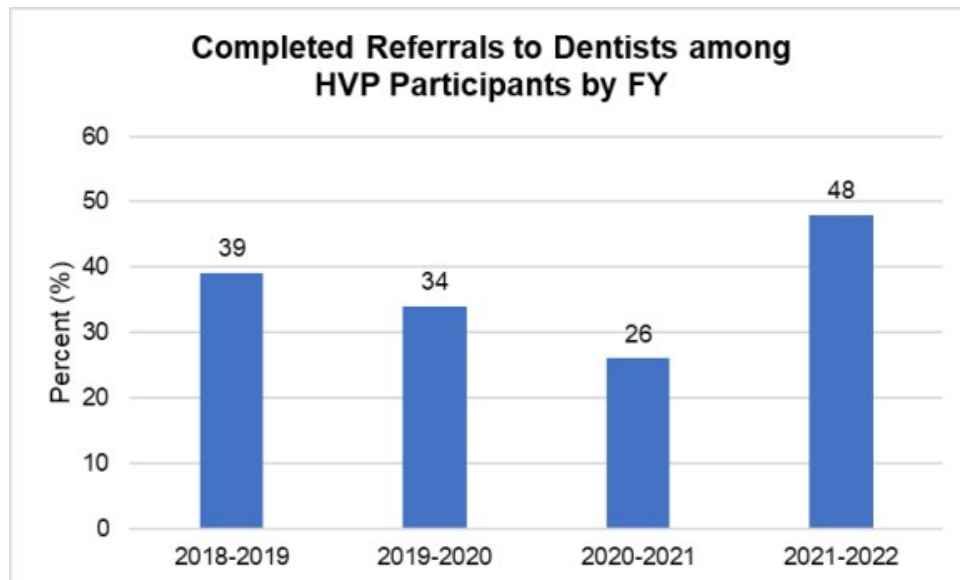
HVNs educate HVP participants on how to decrease the risk of dental decay in their infants, the transmission of *Streptococcus mutans* and its relation to an increased risk of developing dental caries in infants, as well as the role of appropriate health habits in decreasing the transmission.

The HVP administers the ECC risk screening to infants at 6 and 12 months. Infants under 12 months who are identified at high risk but do not have teeth yet are not referred to the dentist until reaching 12 months. The results of the 877 screens administered in the reporting year are shown in the following table.

HVP Infant Caries Risk Screening Results and Outcomes (# and %)
2020-2021

Age ECC Screening administered	6 months	7 to 11 months	12 months	Total
Number of screens administered	496	46	335	877
High-risk screens	376 (75.8%)	34 (73.9%)	266 (79.4%)	676 (77.1)
Delayed referral (infant without teeth)	315 (83.8%)	17 (50.0%)	22 (8.3%)	354 (52.4)
Already had a dentist	2 (0.5%)	1 (2.9%)	9 (3.4%)	12 (1.8)
Referred to a dentist	59 (15.7%)	16 (47.1%)	235 (88.3%)	310 (45.9)
Completed referral	15 (25.4%)	1 (6.3%)	132 (56.2%)	148 (47.7)
Referral not completed	44 (74.6%)	15 (93.7%)	103 (43.8%)	162 (52.3)

All infants are referred to the dentist when they are 12 months old. Those who are identified at high risk at an earlier age are referred immediately. Of the 877 screenings for high early childhood caries risk administered in 2021-2022 to participants of the HVP between the ages of 6 to 12 months old, 77% had a high-risk result. Half (48%) of the referrals for a dental appointment were completed. This compares favorably to the completion rate for previous years. As seen in the chart below, during FYs 2019-2020 and 2020-2021, COVID-19 restrictions affected access to oral health services. Notably, the completion rate for the reporting year is higher than before the pandemic, reflecting the effectiveness of the HVNs' in identifying resources and services in their communities, as well as the success of their educational interventions with their families and ability to communicate the importance of early oral health care.



Source: HVP monthly reports 2018-2022

Promoting Physical Activity and Reducing the Risk for Childhood Obesity

Obesity is a risk factor for many of the common chronic diseases related to mortality and morbidity. The high prevalence of children with overweight or at risk of overweight makes this an area of particular interest for the MCAHD.

According to the 2021 YRBSS, 18.7% of youths 10 to 17 years old in PR were overweight or obese. PR WIC data for 2021-2022 shows that, out of 53,809 participating children ages 2 to 5, 2,025 (4%) had a BMI at or above the 85th percentile. During the pandemic and until 2026, the US Congress granted WIC a waiver to deliver their services remotely. Since the participant's evaluation is conducted over the phone, the WIC program's methodology for calculating BMI and identifying overweight or obese children relied on phone interviews with parents who provided estimates of their children's weight and height. As a result, these numbers may not reflect a correct estimate.

During 2021-2022, the MCAH staff continued initiatives to encourage increased physical activity and healthier nutritional choices to decrease the risk of obesity. Participants of the Parenting courses continued receiving updated information and recommendations by the AAP encouraging daily physical activity, outdoor play, and limiting exposure to television or other passive digital media for infants, toddlers, and children. To model and promote this active lifestyle, short and simple physical activity breaks (*Pausas Activas*) are offered in all courses.

Parents also received orientation on the obesity risk for their children when they consume high-calorie snacks with low nutritional value. The AAP's recommendation to limit juice intake to less than 4 ounces a day in toddlers, 6 to 8 ounces a day in children, and no juice before 1 year old was reinforced. The Parenting course, directed at parents of children from birth to 5 years, includes messages encouraging physical activity and making healthier nutritional choices for their families.

The MCAH staff continued to promote healthy nutritional habits and compliance with the culturally and linguistically adapted My Plate recommendations during home visits and in community-based activities. The staff also encouraged the exchange of water instead of high-calorie sweetened beverages in purchased meals as provided by Act 256 of 2015, requiring food outlets to offer consumers the option to exchange soda for bottled or filtered water in combo meals at no extra charge.



Figure 4 - School-based activities on nutrition and physical activity offered by a CHW in the Bayamón region.

Brochures with culturally appropriate simple language reinforce the messages delivered during orientations to families in the community, in the Parenting courses, the Prenatal courses in the HVP and the “*Encounter of my Life*” webpage (salud.pr.gov/encuentro_mi_vida). For details on the educational activities promoting these topics, see the Community Outreach Section of this narrative.

Preventing Unintentional Injuries

The MCAHD has continued collaborating with the PR AAP Chapter, Emergency Medical Services for Children

Program (EMSC) and United Way of PR in promoting the prevention of unintentional injury, emphasizing areas of major concern: use of adequate protective equipment for bicycles, skateboards and skates, precautions when using electric power generators during hurricane season, precautions to avoid burns when using gas burners to cook and candles, and safe toy selection.

The Prenatal and Parenting courses include recommendations on safety strategies to address the main causes of unintentional injuries. Besides the parenting courses, the CHWs and HEs deliver orientations on parenting skills and injury prevention geared to different age ranges. The HVNs also deliver age-specific orientation on unintentional injury prevention in their home visits.

In the reporting year, the Puerto Rico Poison Control Center reported they received 1,152 calls regarding children ages of 0 to 9 y/o and 101 regarding infants under 1 y/o. In addition to the data shown in the table below, 93 calls related to medication dosing errors in children 0 to 9 y/o were received. These numbers support the need to continue to educate parents and caretakers in safeguarding medications and poisonous substances at home.

Puerto Rico Poison Control Call Center Report 2021-2022
Distribution of Substance Exposure by Age Group

Substance/Medication	< 1 y/o	1-9 y/o
Essential Oils / Eucalyptus	1	12
Alcohol (<i>alcoholic drinks</i>)	1	1
Analgesics (<i>Acetaminophen / Ibuprofen / others</i>)	6	48
Hormones (<i>levothyroxine / others</i>)	2	52
Anticonvulsant (<i>Levetiracetam / Oxcarbazepine</i>)	1	13
Antidepressant (<i>Fluoxetine / Paroxetine</i>)	1	1
Antihistamine (<i>Cimetidine / Cetirizine / Diphenhydramine</i>)	2	3
Antimicrobials	12	6
Diuretics	3	79
Street Drugs (<i>Marijuana Edible / Dried / Amphetamine</i>)	0	16
Foreign Body (<i>Desiccant silica gel / feces / urine</i>)	0	2
Hydrocarbon substances	8	18
Gastric prep solutions (<i>Ex-lax / Omeprazole / Prevacid</i>)	0	48
Cardiovascular medication (<i>Beta Blocker / Clonidine / others</i>)	3	12
Asthma medication (<i>Albuterol</i>)	0	32
Pesticides (<i>Anticoagulant / Pyrethroid / Boric Acid</i>)	1	52
Topical products (<i>Diaper Care / Rash product, Camphor cream</i>)	4	19
Cold medications (<i>Broncroton / Dimetapp / Giltuss</i>)	6	0
Household cleaning products (<i>Hypochlorite / Laundry detergent</i>)	5	59
Muscle relaxant medications (<i>Baclofen / Cyclobenzaprine / others</i>)	11	33
Sedatives / Hypnotics / Antipsychotics (<i>Benzodiazepine / others</i>)	0	41
Chemical substances (<i>Boric acid</i>)	0	96
Rubbing Alcohol	0	7

The MCAHD staff continued sharing the latest NHSTA and AAP car seat guidelines and recommendations for adequate protective car seat selection and use according to the age and weight of the child. MCAHD staff also promoted compliance with local laws that require children be restrained while riding in a car, and the correct use of approved safety helmets when riding a bicycle, motorcycle, or other open motorized vehicles. In 2021-2022, one fatality and 721 non-fatal injuries related to incorrect use of car seats or seat belts were reported in children under 10 years of age, as shown in this table.

Non-fatal injuries to passengers in motor vehicle crashes, 2021-2022

Passenger Age	#
<1 year	37
1 to 9 years	684
Total	721

Data from the Administration for Automobile Accidents Compensation (AAAC 2021-22)

The MCAHD staff collaborates with the EMSC Advisory Council's efforts towards improving the emergency response infrastructure in Puerto Rico and establishing a well-coordinated, well equipped, and up to date Emergency Response System that complies with the National Pediatric Readiness Project (NPRP).

The PR pediatric mortality rate for 2021 was 14.6 per 100,000 children ages 1 to 11 and 12.6 for ages 1 to 14, higher in comparison with 2020 (10.6 and 11.9 respectively). However, it was lower than the US pediatric mortality rate of 17 per 100,00 children ages 1 to 14 in 2021 (VS).

Mortality Rate in Children by Age Group, Puerto Rico, 2020- 2021*

Age Group	2020	2021*
1 to 4 years	21.2	25.3
1 to 11 years	10.6	14.6
1 to 14 years	11.9	12.6

VS Data 2020 and 2021*

*Preliminary Data

The unintentional injury death rate was 3.6 per 100,000 (1-14 y/o) in 2021, and it continues to be the first cause of death in this population, as shown in the following tables.

Unintentional Injury Death Rates, 2020 and 2021*

Age Group	2020	2021*
1 to 4 years	4.2	9.3
1 to 11 years	2.2	4.3
1 to 14 years	2.3	3.6

VS Data 2020 and 2021*

*Preliminary Data

Causes of Death in Children 1 to 14 y/o, 2020 and 2021*

Cause of Death	2020	2021*
Unintentional injuries	9	15
<i>Motor vehicles crashes</i>	4	5
<i>Asphyxiation</i>	1	1
<i>Fall from a height</i>	1	1
<i>Trauma to body</i>	1	2
<i>Drowning and submersion</i>	1	4
<i>Struck by falling object</i>	1	1
Neoplasms	5	5
Congenital malformations	4	9
Homicide	5	4
Coronavirus	0	4
Benign Neoplasms	0	1
Cardiovascular diseases	2	1
Peptic Ulcer	0	1
Heart Disease	2	0
Influenza and Pneumonia	2	0
Certain conditions originating during the perinatal period	2	0
Other causes	12	12
Total deaths	43	52

VS Data 2020 and 2021*

*Preliminary Data

Promoting developmental screening and early developmental stimulation

The early identification of developmental delay provides the opportunity for a timely diagnosis and early intervention. Most cases of developmental delay are not identified until the children start school, due to a lack of appropriate developmental screening. The use of developmental screening tools by primary care physicians may increase early detection of atypical patterns of development. MCAHD staff advocate for the use of developmental screening tools by primary care physicians as recommended in the PR PPHCSG and the inclusion of this topic in their continued medical education activities.

Analysis of 2021-2022 billing data by the Health Insurance Commissioner Office (HICO) revealed that <5% of the insured population between the ages of 0 to 48 months were billed with CPT code 096110 in 2021-2022, indicated for billing autism screening with MCHAT or developmental screening using ASQ. These numbers may not represent the actual number of screenings, because developmental screening CPT codes may not have been included in the billing statements due to multiple reasons.

The Physician Regulatory and Licensing Board has sustained the requirement of at least 6 CME hours in the topic of autism spectrum disorder for pediatricians, prompting multiple educational sessions on this topic. This has provided additional opportunities to promote awareness of the Early Intervention Program and the use of autism and developmental screening instruments as recommended in the PR PPHCSG.

The MCAHD staff addresses this area of need by various strategies. At the community level, participants in the Parenting courses receive information on the expected developmental milestones of children and availability of screening tests to evaluate development. The course also promotes the use of nurturing and positive parenting skills to stimulate optimum child development. Parents and caregivers benefit from education on the typical and atypical

patterns of development to help them identify children at risk and share knowledge of resources in the community to evaluate and refer as needed.

The HVP contributes to early identification of developmental delays and referral for further evaluation and early intervention, if required, by periodically screening all infants and pediatric participants using the Ages and Stages Questionnaire (ASQ-3) and the Ages and Stages Social Emotional Questionnaire (ASQ:SE-2) in the home setting. In the reporting year, a total of 1,090 infants (<12 months old) and 1,211 toddlers (12 to 24 months old) participated in the HVP, each completing the ASQ-3 and ASQ:SE-2 screenings as indicated in the HVP screening schedule. The tests administered to these children are not billed and do not appear in the GHP data.

Due to changes in the HVP's reporting system, beginning this year the data reported in the following section refers to the children who were discharged in FY 2021-2022 upon completing the program. It does not reflect currently active participants. Among 298 children discharged during 2021-22, 46 (15.4%) had positive screening results or were identified with some concern requiring a referral. The following tables offer details on the screening results and referrals for these children.

**HVP Participants Screening Results of ASQ-3 and ASQ:SE-2
2021-2022 Discharge Data**

HVP Participants	n	%
Low-risk screening	252	84.6
High-risk screening	46	15.4

The HVNs have a directory of services available in the community and make referrals according to the needs identified in the participant. The 46 children with positive screening results were referred to the providers specified in this table.

**Sources of Referrals for Participants with a Positive Screen
2021-2022 Discharge Data**

Referred to:	n	%
Early Intervention	19	41.3
Pediatrician	12	26.1
Regional Pediatric Centers	9	19.6
Therapeutic services	5	10.9
Orthopedic services	1	2.1
Total	46	100.0

After extending the referral, the HVNs follow up with the participants to ensure they receive the services required. At the time of discharge from the program, most of the referrals had been completed, as shown in this table.

**Status of Referrals for Participants with a Positive Screen
2021-2022 Discharge Data**

Status	n	%
Completed	37	80.4
Not completed	8	17.4
Refused referral	1	2.2
Total	46	100.0

Early identification is key to enable children to receive a full evaluation and services as soon as possible. Screening

of HVP participants begins at 8 weeks of age and is scheduled regularly from then until discharge. One-third of the children were identified in their first year of life, allowing them to benefit from a very early referral.

**Referral age for HVP participants with a High Result on ASQ:3
and ASQ-SE2 Screening, 2021-2022 Discharge Data**

Age	n	%
0-9 months old	9	19.6
10-12 months old	6	13.0
13-15 months old	13	28.3
16-24 months old	18	39.1
Total	46	100.0

Of 46 screenings with a high-risk result, 84.8% were in the social emotional screening test, not commonly used in primary pediatric medical care. This highlights the importance of the screening done in the HVP, which can identify children whose social and emotional development requires further assessment and specialized intervention to ensure they reach their full potential.

**Distribution of ASQ and ASQ-SE with a high-risk result in
HVP Participants Screening, 2021-2022 Discharge Data**

Screening Instrument	Screens with high-risk results
ASQ-3	7
ASQ:SE-2	39

In addition to screening for developmental delays, HVNs teach parenting skills in their interventions, including strategies to stimulate development. Evidence supports the importance of brain stimulation in early childhood to attain optimum brain development, which can lead to a better quality of life. The HVNs teach parents how to use the CDC Learn the Signs, Act Early so they can track and celebrate their children's milestones. The HVP has developed a protocol (*Guía de temas educativos e intervenciones postparto*) that specifies educational topics and screenings that the HVN must administer during each home visit, according to the child's age and needs. The interventions are complemented by culturally appropriate educational materials and items to stimulate developmental tasks.

For details on the population reached through individual and group orientations, see the Community Outreach Section of this narrative.

Promoting social and emotional wellbeing

Exposure to stressors and adverse conditions impact the wellbeing of children. During 2021-2022, HICO reported 15,094 (5.2%) children between the ages of 1 to 9 y/o received treatment due to mental and behavioral disorders, with diagnoses that included major depressive disorder, recurrent post-traumatic syndrome, anxiety disorders, attention deficit, among others.

The MCAHD works with families to identify sources of stress and develop adequate responses that can lead to a positive outcome. Participants of the Parenting courses receive information on effective parenting skills, managing children's behavior, and coping with stressful situations, as well as on resources or services in the community where they can receive assistance.

The HVP follows families from pregnancy until the child is two years old. In that time, the HVN establishes a close relationship with the family, which allows for the identification of strengths and areas of need using standardized screening instruments, such as the Adverse Childhood Experiences (ACE), Edinburgh Postnatal Depression Scale

(EPDS), and the Women's Experience with Battering (WEB) scales. Using the information gleaned from the instruments and the interactions with the family, the HVN develops an action plan with the participant to address identified areas of need, and offers orientation, support, and referrals. The objective of this interaction is to improve the situation and minimize or prevent the negative impact on the child's development.

Day care centers are an important resource for families with young children. Quality childcare offers enrichment opportunities that foster social and emotional growth and development, thus improving their general wellbeing. MCAHD staff collaborate with Head Start and Early Head Start (HS/EHS) programs, which provides the opportunity to share resources, such as the Parenting and Prenatal courses. Regional Directors and HEs participate in HS/EHS Health Services Advisory Committees and Policy Councils and offer training to staff.

Community Outreach

The regional MCAHD staff charged with offering educational and promotional activities at the community level consists of the HE and CHWs. In addition, the HVNs provide one-on-one education to the HVP participants. They focus on diverse MCH topics, including prenatal, infant, child and adolescent health. Focus areas related to the Child Domain include:

- Preventive health visits
- Physical activity and preventing risk for obesity
- Immunizations
- Unintentional injuries
- Developmental screening and early developmental stimulation
- Social and emotional wellbeing
- Oral care

The HVNs provided education and referrals regarding these topics to 3,045 families reached during 2021-2022. The following tables summarize population reached in individual and group educational interventions by HEs and CHWs in the reporting year.

**Individual orientations on selected topics related to child health
2021-2022**

Topic	HE	CHW	Total
Development 1 to 5 y/o	16	1,240	1,256
Toilet training	0	32	32
Introduction of solid foods	1	564	565
Nutrition and physical activity	3	54	57
Safe toys	0	355	355
Picking day care centers	0	255	255
Total	20	2,500	2,520

**Group activities on selected topics related to child health
2021-2022**

Topic	HE	CHW	Total
Care of young child 1 to 5 y/o	244	1,008	1,252
Injury prevention, self-esteem, and discipline with love 1 to 5 y/o	237	4,536	4,773
EPSDT	124	692	816
Oral health	0	623	623
Nutrition and physical activity	96	0	96
Total	701	6,859	7,560

The CHWs and HEs also offer two in-person Responsible Parenting courses, one for ages 0-5 and the second for ages 6-11. Both focus on the physical, mental, and emotional health and wellbeing of infants and children according to their age and developmental stage and include the MCH topics mentioned above. The target population for these courses are parents, grandparents, other relatives, and caretakers.

The Responsible Parenting 0-5 course consists of 4 sessions. In the reporting year, MCAHD staff the course was held 50 times; 96 persons completed all 4 sessions. As presented in the table below, pre- and post-test results demonstrate a statistically significant increase in participants' knowledge after completing the courses.

**Average Pre and Post-Test Scoring in Sessions of the
Responsible Parenting Course 0 to 5 y/o, 2021-2022**

Session	Pre-test (%)	Post-test (%)	Significance
1	82	93	<0.0001
2	79	94	<0.0001
3	81	90	<0.005
4	71	90	<0.0001

The Responsible Parenting 6-11 course consists of one session. It was offered 79 times for a total of 340 persons.

**Average Pre and Post-Test Scoring in Sessions of the
Responsible Parenting Course 6 to 11 y/o, 2021-2022**

Session	Pre-test (%)	Post-test (%)	Significance
1	82	94	<0.005

Pre- and post-test results for this course also reveal a statistically significant increase in participants' knowledge after completing the course. These results demonstrate the effectiveness of these courses and the potential benefit for the health and wellbeing of the child population in PR.

Child Health - Application Year

The promotion of healthy lifestyles to improve the physical and mental health and wellbeing of children is a priority of the MCAHD. It focuses its efforts on increasing preventive dental and pediatric visits and immunization compliance, early childhood developmental screening and early developmental stimulation, and promoting adequate nutrition and physical activity to reduce the risk for childhood obesity. Other areas of interest include education on responsible parenting to prevent unintentional injury and child abuse and neglect. MCAHD staff uses diverse educational and outreach interventions to reach a wide audience through individual and group activities. This includes the Home Visiting Program (HVP), Prenatal and Parenting courses, educational activities in schools and community settings, and dissemination of educational materials through the “Encounter of my life” webpage (salud.pr.gov/encuentro_mi_vida) and publications in the PRDOH social media accounts.

Children are particularly vulnerable during and after disasters. The MCAHD is developing an Emergency Preparedness and Response Guide that considers the characteristics and needs of the MCH population. Special considerations regarding toddlers and older children include assuring physical safety, establishing a routine that includes regular feeding, recreational activities with their families and caregivers, proper hygiene, and providing a space for them to process their emotions, among others. Please see *Section III.E.2.b.iv. MCH Emergency Planning and Preparedness*, for a complete discussion of this activity.

MCAHD activities resumed regular operations as the COVID-19 restrictions were lifted. Staff monitors recommendations and guidance provided by the PRDOH and the CDC regarding emerging public health threats and will continue to take recommended precautions as necessary.

Promoting Preventive Health Visits

The promotion of the PR Pediatric Preventive Health Care Services Guidelines (PR PPHCSG) will continue to be advocated by the MCAHD at all levels: providers, providers’ training programs, providers’ associations, community, families, and parents. Disseminating the recommendations included in the PR PPHCSG to the public lets parents know what to expect in preventive visits.

In their interventions, the Home Visiting Nurses (HVN), Perinatal Nurses (PNs), Community Health Workers (CHWs) and Health Educators (HEs) will continue to educate parents and promote scheduled preventive visits and screenings as recommended in the guidelines. The importance of preventive health care services for the wellbeing of children is also emphasized in the Parenting Courses.

The MCAH Program evaluates the use of clinical preventive services by the population to identify gaps and develop strategies to overcome them in collaboration with stakeholders.

Promoting On-Schedule Immunization

MCAHD staff provide accurate and reliable information to families regarding contagious diseases and the benefits of vaccinating children and adults according to the most current CDC and PRDOH recommendations. During 2022-2023 HVNs, HEs, PNs and CHWs will promote immunization in their interventions in the community, including the Prenatal and Parenting courses.

Two short videos on the benefits of vaccination produced by the MCAHD staff are available at encuentrodemivida.salud.gov.pr and promoted by MCAHD staff in the community.



Figure 1 – Screen grab of the "Early Childhood Vaccinations" video

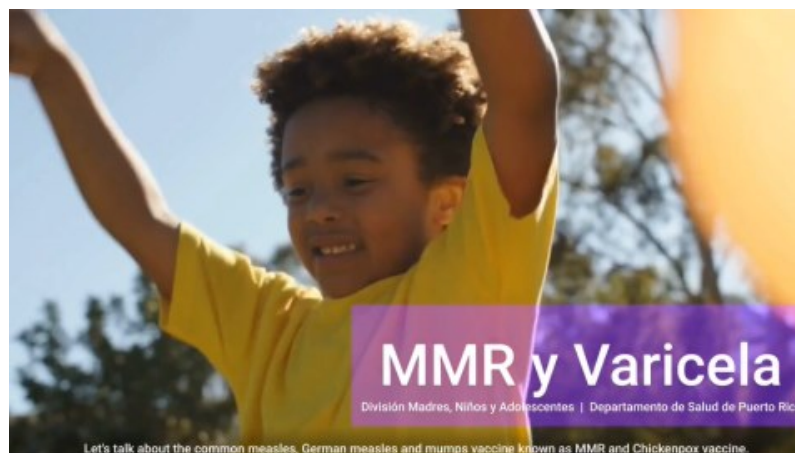


Figure 2 - Screen grab of the "MMR & Chickenpox" video

Promoting Oral Health

Oral health contributes to overall health and wellbeing, yet caries remains the most prevalent chronic disease of childhood, with an impact on oral health throughout life. Therefore, promoting oral health from infancy contributes to the individual's well-being and development in subsequent years and life stages (school years, adolescence, and adulthood). The MCAHD promotes the provision of dental services from a very early age and continued dental coverage in the PR GHP.

At the Central Level, MCAHD staff collaborates with the PR Territorial Dental Officer from the Health Promotion Division and other oral care stakeholders in a group working on improving oral health outcomes. Act 63 of 2017 requires an oral exam certificate for children in kindergarten, 2nd, 4th, 6th, 8th, and 10th grade in private and public schools. The group will continue to promote its implementation.

MCAHD regional staff uses multiple strategies, such as individual and group orientations and the Prenatal and Parenting Courses, to educate on oral health, promote good oral hygiene and regular preventive dental check-ups to families, children, adolescents, pregnant persons, and the general public. MCAHD Health Educators (HE) offer educational activities on the importance of early oral health care and referral for services to Head Start/Early Head Start (HS/EHS) staff and families. Educational materials are also included in the "Encounter of my life" webpage, such as the leaflet seen in this image, which can be downloaded or printed on demand.



Figure 3 - Oral health in childhood leaflet from the "Encounter of my life" webpage

The HVP educates participants on the importance of early and regular oral health care for pregnant persons and children. The Home Visiting Nurses (HVN) administer the Early Childhood Caries (ECC) risk assessment to infants at 6 and 12 months of age, refer participants to dental care services and monitor the completion of the referral.

The Program will continue advocating for the adoption of fluoride varnish as a preventive strategy for infants and young children at high risk for caries. This is a cost-effective strategy recommended by the AAP Bright Futures, reaffirmed in 2017.

The Bayamón Regional Board (RB) continues to implement the children's oral health strategy of the Title V State Action Plan begun in 2020-2021. Their next intervention is an educational and interactive event for parents that will include a presentation by oral health professionals, exhibits by various health programs, and clinical services. It will be held in November 2023 in the municipality of Cataño.

The Parenting Courses (for parents of children 0 to 5 years old and 6 to 11 years old) include education on the risk for dental caries. Participating parents receive strong advice to instill healthy oral habits in their children from early childhood, as well as information regarding GHP coverage for dental visits for their children. More importantly, it encourages the involvement of families in promoting healthy oral habits, establishing a dental home, and oral health literacy in communities.

Promoting Physical Activity and Reducing the Risk for Childhood Obesity

MCAHD staff encourages the inclusion of strategies that help improve nutritional habits and increase the time dedicated to age-appropriate physical activity among children to reduce the risk of obesity. The MCAHD staff educates participants regarding physical activity, breastfeeding, healthy eating, and compliance with the recommendations of My Plate (culturally and linguistically adapted) during their home visits and in community based educational activities.

The Parenting Courses features information on healthy nutritional choices and daily physical activity for children and their families. It includes the AAP's recommendations on limiting time spent on entertainment media, including TV, computers, phones, and other electronic devices according to the child's age. Parents receive orientation on the obesogenic effect of consuming high calorie snacks with low nutritional value and the AAP's recommendation to limit juice intake. The MCAHD staff will also continue to promote choosing water instead of high-calorie sweetened beverages in purchased meals, as contemplated by Act 256 of 2015. Printed and digital educational materials available in the "Encounter of my life" webpage reinforce the messages delivered during orientations to families in the community, in the Prenatal and Parenting courses, and in the HVP.



Figure 4 - Healthy eating and physical activity leaflet

To address the state of childhood obesity on the Island, the MCAHD has contracted United Way Puerto Rico to implement the *Programa BienEstar*® in 75 day care centers in the northern region of PR. This program was developed by United Way in 2014 to promote healthy lifestyles beginning in early childhood so that this and future generations can be healthier and more productive, and to provide information, strategies, and resources on healthy lifestyles to the adults responsible for children's upbringing. *BienEstar* is unique because it was produced in PR and addresses local cultural systems, dietary practices, physical activities, and games that consider the climate and environment. It trains day care center teachers to present the topics of interest using creative and fun activities to engage families and stimulate the children's physical, cognitive, and social development. Cornell University is currently conducting an evaluation of the program to document its impact.

Preventing Unintentional Injuries

HVNs provide their participants with education and materials on preventing unintentional injuries. HEs and CHWs offer individual and group educational activities on prevention of in-home injuries, firearm safety, car seat placement and use, safe sleep, use protective play gear, safe toys, prevention of forgotten baby syndrome, and drowning prevention, among others. The Prenatal and Parenting Courses and the "Encounter of my life" webpage also cover these topics; the toy safety leaflet is shown here.



Figure 5 - Safe toys leaflet

The MCAHD personnel educate parents and caregivers on the National Highway Traffic Safety Administration (NHTSA) and AAP car seat guidelines and recommendations according to the child's age. In addition, staff promote compliance with local laws that require children to be restrained while riding in a car and the use of approved helmets when riding a bicycle, motorcycle, or any other open motorized vehicle. The "Encounter of my life" educational material shown here is available from the webpage for downloading or printing. In addition to information about choosing and installing the car seat, it has a section on how to avoid forgetting the child in a vehicle.



Figure 6 - Car seat leaflet

MCAHD staff collaborates with the Emergency Medical Services for Children (EMSC) Project in advocating for an improved emergency response infrastructure and a well-coordinated, well equipped, and up-to date Emergency Response System in Puerto Rico that complies with the latest recommendations of the National Pediatric Readiness Project (NPRP). The PRDOH Hospital Operating Regulations Policy #9184 incorporates the AAP guidelines for hospitals that provide pediatric emergency care (July 2020). MCAHD Central Level staff, in collaboration with the Hospital Association and the EMSC Project, will continue to promote appropriate pre-hospital management of pediatric emergencies; management of mass casualties; the use of the Broselow System to deliver pediatric care in emergencies; availability of proper pediatric equipment for rescue and emergency interventions; adequate patient transfer for critical care; and hospital readiness to manage pediatric cases after a disaster or major emergency.

MCAHD staff collaborates with the Emergency Medical Services for Children (EMSC) Program in advocating for an improved emergency response infrastructure and a well-coordinated, well equipped, and up-to-date Emergency Response System in Puerto Rico that complies with the latest recommendations of the National Pediatric Readiness Project (NPRP). The PRDOH Hospital Operating Regulations Policy #9184 and requirements has incorporated the AAP guidelines for hospitals that provide pediatric emergency care (July 2020).

This collaboration also includes a study to identify facilities that have pediatric emergency departments, and to classify these emergency departments according to the adequacy of their resources (medications, equipment, policies, and education) and staff to provide effective emergency care for children. In 2022 MCAHD Pediatric Epidemiologist met several times with the EMSC Program to discuss the methodology of the study and the evaluation instrument. Two meetings were held with the Sub-Secretary of Health and staff of the Auxiliary Secretariat for Accreditation and Regulation of Health Facilities to discuss this initiative and to obtain the approval of the Secretary of Health.

The Director of the EMSC Program is leading the efforts to develop an Advisory Committee that includes

representatives from the AAP PR Chapter, Emergency Medical Services, PR Pediatrics Society, Pediatricians' Association, Western and Eastern Region, PR Hospital Association, MCAHD, and pediatricians from the University of Puerto Rico, School of Medicine. This committee will collaborate in the development of the data collection instrument and provide input on the study methodology. The questionnaire will use information based on the NPRP, an initiative that empowers emergency departments to improve their capacity to provide high quality care for children, and the guidelines established in the PRDOH Hospital Operating Regulations Policy #9184.

Next steps include creating the Advisory Committee, developing the instrument for data collection in a printed and digital format, and inviting hospitals to participate in the study.

Promoting Developmental Screening and Early Developmental Stimulation

MCAHD HEs and CHWs offer educational activities and distribute educational materials on the expected developmental milestones of children and availability of screening tests to evaluate development, as well as positive parenting skills to stimulate optimum child development. These topics are covered in individual and group orientations and in the Parenting courses. Parents and caregivers benefit from education on the typical and atypical patterns of development to help them identify children at risk and receive information of resources in the community if further evaluation is required.

In addition to educating parents on developmental milestones and strategies for early stimulation, HVNs administer the Ages and Stages Questionnaires (ASQ-3) and ASQ: Social Emotional (ASQ:SE-2). They refer children for further evaluation and early intervention, if needed. HVNs encourage parents to use the CDC's Learn the signs, Act Early educational materials to track and celebrate children's developmental milestones. Educational materials produced by the MCAHD can be downloaded or printed from the "*Encounter of my Life*" webpage (salud.pr.gov/encuentro_mi_vida).



Figure 7 – Three leaflets that explain the characteristics and developmental milestones of children ages 1-2, 2-3 and 3-5 years old, and how to encourage optimal development according to age.

A local PTI, Support for Parents of Children with Disabilities (APNI, Spanish acronym) sponsors the "*Reconoce las señales*" ("Recognize the signs") learning community, which promotes the early identification of and intervention with children who exhibit developmental delays. The HVP Coordinator participates in the monthly meetings. The goals of the group include:

- Strengthening early childhood systems and programs to address concerns related to development and health.
- Promoting surveillance systems, screening, and early access to services for children with developmental delays or disabilities.
- Encouraging parent involvement.

- Promoting the identification of barriers and opportunities.
- Promoting resiliency in families.

MCAHD staff endorse the use of screening tests by primary care physicians as recommended in the PR PPHCSG guidelines. The Survey of Wellbeing in Young Children is an alternative test for screening different aspects of child development and wellbeing that has been adopted by many states. It is among the tests recommended by the AAP that does not require a license for use, is available in Spanish, and has been added as alternative screening test in the PR PPHCSG update.

Promoting social and emotional wellbeing

Children's early socioemotional development is directly affected by their mothers' mental and emotional health. HVNs use standardized screening instruments, such as the Adverse Childhood Experiences (ACE), Edinburgh Postnatal Depression Scale (EPDS), and the Women's Experience with Battering (WEB) scale to assess maternal mental health. When they identify an area of need, they offer orientation, support, and referrals to services as needed by the mother and her family. The objective is to improve the situation and minimize or prevent the negative impact on the child's development.

The Title V Mental Health Consultant offers regular training to HVNs and Supervisors on mental health, emotional wellbeing, administering and interpreting the screening instruments, supporting families after traumatic events, and strategies to promote resilience among participants and their families, among other topics.

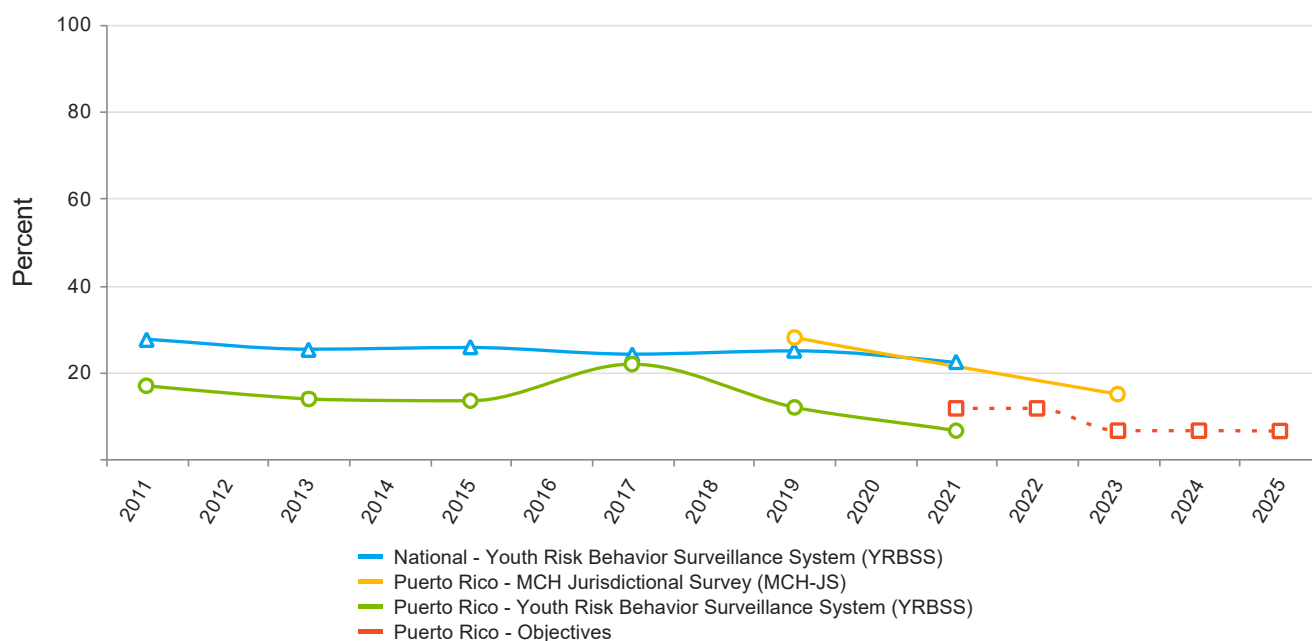
At the community level, the HEs and CHWs interventions and the Parenting courses include information on effective parenting skills, managing children's behavior, and coping with stressful situations, as well as on resources or services in the community where they can receive assistance. These activities are also offered to HS/EHS program participants, increasing the reach of Title V efforts. MCHAD Regional Directors and HEs will continue to participate in HS/EHS Health Services Advisory Committees and Policy Councils and to offer training to staff.

The HVP, the Parenting courses, and the Why babies cry and SBS demonstration using the simulation doll aim to teach parents and caretakers positive responses they can use when faced with children's challenging behaviors.

Adolescent Health

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)

	2019	2020	2021	2022
Annual Objective			11.7	11.7
Annual Indicator	21.8	12.0	12.0	6.7
Numerator	22,875	10,721	10,721	5,841
Denominator	104,752	89,358	89,358	86,865
Data Source	YRBSS	YRBSS	YRBSS	YRBSS
Data Source Year	2017	2019	2019	2021

Federally Available Data			
Data Source: MCH Jurisdictional Survey (MCH-JS)			
	2019	2020	2022
Annual Objective			11.7
Annual Indicator	27.9	27.9	14.9
Numerator	58,635	58,635	32,825
Denominator	209,819	209,819	219,847
Data Source	MCH-JS	MCH-JS	MCH-JS
Data Source Year	2019	2019	2023

State Provided Data				
	2019	2020	2021	2022
Annual Objective			11.7	11.7
Annual Indicator				6.7
Numerator				5,793
Denominator				86,814
Data Source				YRBSS
Data Source Year				2021
Provisional or Final ?				Final

Annual Objectives			
	2023	2024	2025
Annual Objective	6.6	6.6	6.5

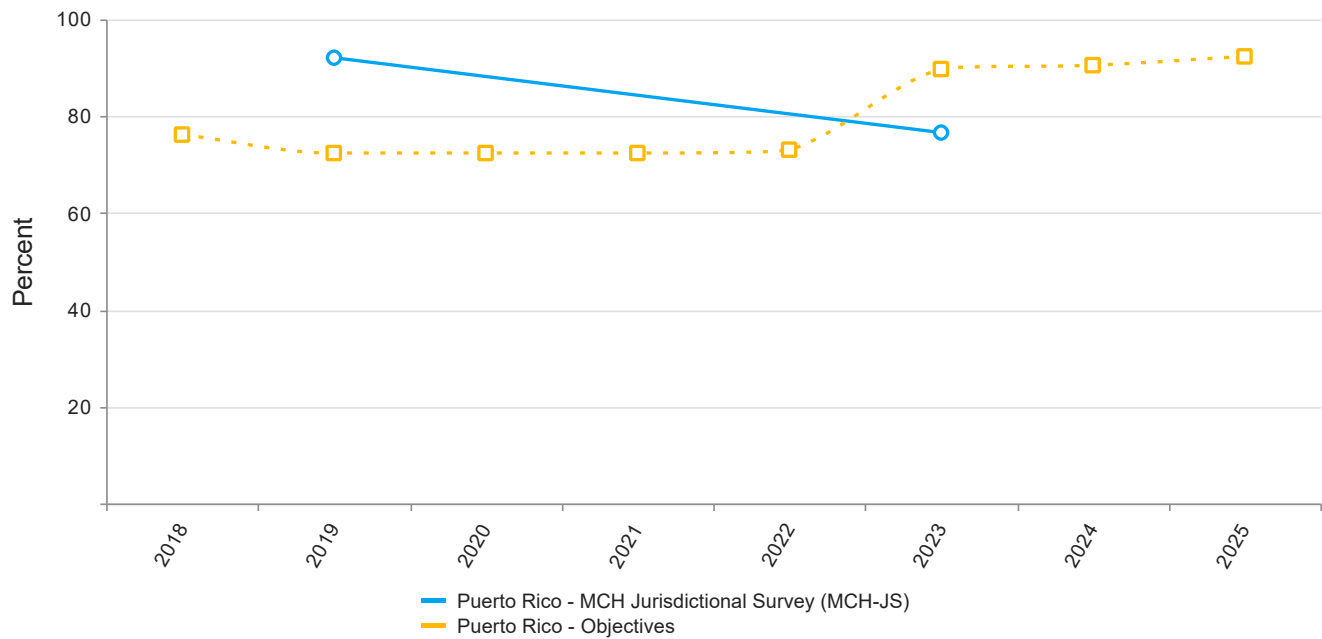
Evidence-Based or –Informed Strategy Measures

ESM 9.1 - Percent of Youth Health Promoters (YHP) that completed the first year who report not being bullied in Puerto Rico by September 2021-2025

Measure Status:			Active	
State Provided Data				
	2019	2020	2021	2022
Annual Objective			0	0
Annual Indicator			0	88.5
Numerator				193
Denominator				218
Data Source			YHP Profile	YHPP First-Year Profile Survey
Data Source Year			NA	2021-2022
Provisional or Final ?			Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	88.0	88.0	88.0

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



Federally Available Data

Data Source: MCH Jurisdictional Survey (MCH-JS)

	2019	2020	2022
Annual Objective	72.3	72.3	73
Annual Indicator	92.0	92.0	76.5
Numerator	192,972	192,972	168,105
Denominator	209,819	209,819	219,847
Data Source	MCH-JS	MCH-JS	MCH-JS
Data Source Year	2019	2019	2023

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	76.1	72.3	72.3	72.3	73
Annual Indicator	72.3	72.3	72.3	72.3	87.8
Numerator	174,840	174,840	174,840	174,840	126,750
Denominator	241,976	241,976	241,976	241,976	144,428
Data Source	BRFSS	BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year	2017	2017	2017	2017	2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	89.6	90.4	92.2

Evidence-Based or –Informed Strategy Measures

ESM 10.1 - Percent of Youth Health Promoters (YHP) reached with the PR Youth Health Literacy Toolkit (PR-YHLT) that increase their awareness regarding how to use the health care system (pre-post survey) in Puerto Rico by September 2021-2025

Measure Status:				Active	
State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	60	84.8	84.9	85	85.1
Annual Indicator	59.3	84.7	68.3	68.3	55.1
Numerator	64	72	28	28	43
Denominator	108	85	41	41	78
Data Source	PR Youth Health Literacy Pre-Post Survey	PR Youth Health Literacy Pre-Post Survey	PR Youth Health Literacy Pre-Post Survey	PR Youth Health Literacy Pre-Post Survey	PR Youth Health Literacy Pre-Post Survey
Data Source Year	2017-18	2018-19	2019-2020	2019-2020	2020-2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	85.2	85.3	85.4

State Action Plan Table

State Action Plan Table (Puerto Rico) - Adolescent Health - Entry 1	
Priority Need	
Improve health and wellbeing of adolescents	
NPM	
NPM 9 - Percent of adolescents, ages 12 through 17, who are bullied or who bully others	
Objectives	
By 2025, reduce to 6.5% the percentage of adolescents who report being bullied in school (Baseline PR-YRBSS 2021: 6.7%).	
Strategies	
Review the Youth Health Promoters Project (YHPP) curriculum to incorporate additional strategies/activities related to bullying prevention and mental health/wellbeing.	
Increase awareness about mental health/wellbeing and bullying prevention in youth and adults, including parents/caregivers and health care providers.	
Develop a comprehensive project that incorporate youth, parents, and school communities that promote school connectedness, respect, healthy relationships and equity to eradicate bullying to be implemented in a youth health promoters YHPP in collaboration with Department of Education.	
Develop Youth Intervention Guides to promote resilience and reduce youth trauma after stressful events.	
Develop and disseminate an Emergency Preparedness and Response guide that considers the needs of adolescents and young adults.	
ESMs	Status
ESM 9.1 - Percent of Youth Health Promoters (YHP) that completed the first year who report not being bullied in Puerto Rico by September 2021-2025	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 (Puerto Rico) - Adolescent Health - Entry 2

Priority Need

Improve health and wellbeing of adolescents

NPM

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

Objectives

By 2025, increase to 92% the percentage of adolescents with a preventive medical visit in the past year (Baseline PR-BRFSS 2021: 87.8%)

Strategies

Empower youth to adopt healthy behaviors through positive youth development initiatives.

Establish collaboration with MCAH stakeholders to implement PR Youth Health Literacy Toolkit (YHLT) to provide knowledge about how to use the health care system.

Increase awareness of youth health and wellbeing issues including the annual healthcare visit through educational activities and multi media campaigns.

Implement the Puerto Rico Youth Friendly Healthcare Services Guidelines in a pilot project in FHQC.

Identify a Got Transition Guide to assist youth to transition from pediatric to adult healthcare services.

ESMs

Status

ESM 10.1 - Percent of Youth Health Promoters (YHP) reached with the PR Youth Health Literacy Toolkit (PR-YHLT) that increase their awareness regarding how to use the health care system (pre-post survey) in Puerto Rico by September 2021-2025

Active

NOMs

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

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

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

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

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

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

NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)

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

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

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

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

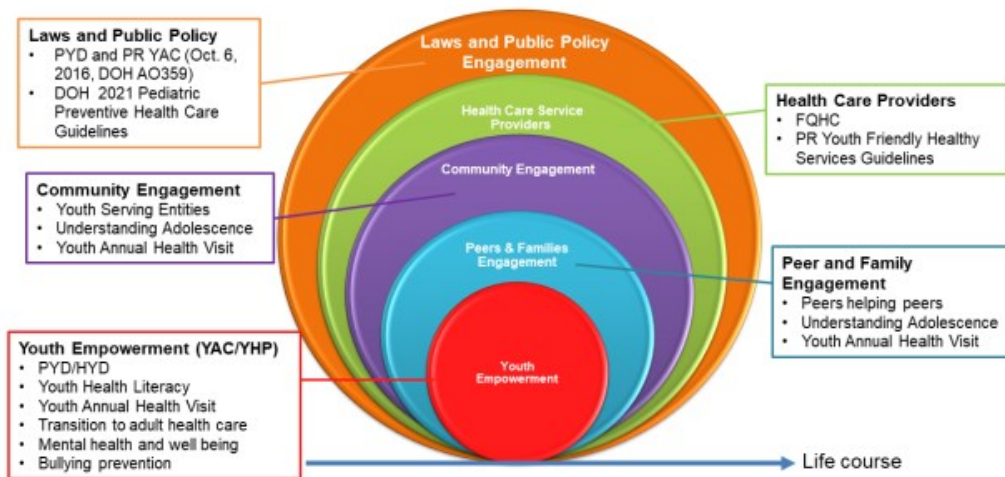
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females

Adolescent Health - Annual Report

MCAHD view adolescents through a positive youth development (PYD) perspective within the life course and adolescent health outcomes as grounded in broad social, economic, and environmental factors underlying their health opportunities and inequities.

The **priority to improve adolescent health and wellbeing** is approached through a combination of strategies of the Socio Ecological Model (SEM). It provides the framework for understanding the multiple levels of the social system and the interactions between adolescents and environment in program planning, partnerships, and capacity strengthening. It also helps to understand influences on behavior, target activities or interventions, define outcomes and understand the level of impact of an intervention. The following image summarizes SEM adolescent health domain approaches from individual youth empowerment, interpersonal peer/family's engagement, community engagement, health care services providers to law & public policy.

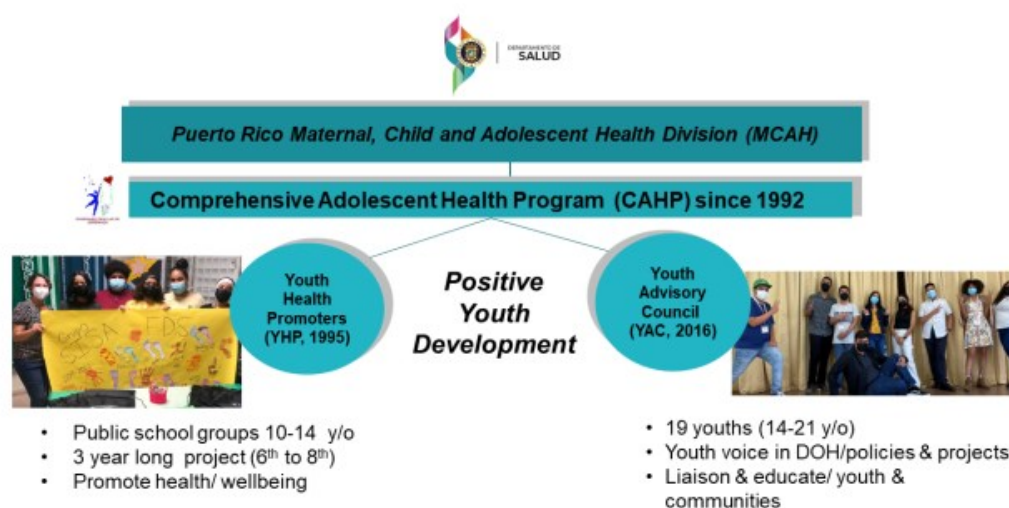
PRMCAH: Adolescent Domain



MCAHD continued to strive towards the priority to improve adolescent health and wellbeing during 2021-22 even though COVID-19's new variant pandemic waves kept PR schools and workplaces changing from in-person to virtual mode with each surge. Many schools had interlocking schedules (short term class periods for half day) due to short columns reinforcement after the earthquakes and students were returning in phases after virtual learning due to COVID-19 preventive measures. Also, a total PR electric energy failure happened in May 2022. Planned activities were adapted to overcome all these challenges to continue projects and services. MCAHD continued to be vigilant to unexpected events such as the Orthopox/monkeypox outbreak that by April' 2023 PRDOH Report had 211 confirmed cases (5 were 10-19 y/o) and 6,111 administered vaccines since the 1st PR case was confirmed on June 29, 2022.

MCAHD **Comprehensive Adolescent Health Program, or Servicios Integrales de Salud al Adolescente (SISA, Spanish acronym)** addresses adolescent health & wellbeing since 1992 and adopted PYD in 2000. SISA's mission is to optimize the development of the physical, mental, social, and spiritual potential of all PR adolescents, facilitating them to assume responsibility to acquire healthy lifestyles and reach a better quality of life. SISA is composed of one Regional Coordinator (SISA RCs) in each DOH's seven (7) regions that are licensed social workers with ample experience working with adolescents, and central level staff with PYD Coordinator/YAC Facilitator, YHPP Coordinator (YHPP CL) and Associate Director. The personnel meet monthly to share experiences and knowledge to improve work with youth, report regional and central level work, review YHPPs curriculum, discuss youth surveys and studies, design workshops and increase workforce capacity through continued education (CE).

Positive Youth Development (PYD) is an intentional process of providing all youths with the support, relationships, experiences, resources, and opportunities to become successful and competent adults. It guides the organization of services, opportunities, and supports so that young people are engaged with caring adults in a process that acknowledges and encourages the development of youth assets and skills as they reach their full potential. SISA's PYD initiatives are **1. Youth Health Promoters Project (YHPP)** since 1995, is implemented by SISA RCs twice a month for 3 consecutive years (6th to 8th grade) with 10-14 y/o youths in public schools and use SISA developed PYD curriculum *Healthy Youth in Action* ("Jóvenes Saludables en Acción", in Spanish); and **2. Youth Advisory Council (YAC)**, is a two-year term advisory entity created to provide youth voice and participation in DOH's development and implementation of policies and projects to promote health and wellbeing of PR youth. It is ascribed to MCAHD through DOH's Administrative Order #359 signed on October 6, 2016.



The MCAHD **priority to promote adolescent health and wellbeing** includes **NPM #9 Percent of adolescents, ages 12 through 17, who are bullied, or bully others** to decrease its prevalence and increase youth mental health/wellbeing, and **NPM 10: Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year** to increase teen healthcare annual visit.

NPM #9 Percent of adolescents, ages 12 through 17, who are bullied, or bully others. The range of emotional and psychological effects of bullying, which affect those who are bullied, who bully others or witness bullying (bystanders), extend beyond the physical, and the recognition of them has elevated bullying into a public health issue. It can result in physical injury, social and emotional distress, self-harm and even death. It also alters the stress response system in the brains of those involved. These changes can impair cognitive functions and the person's ability to self-regulate their emotions. Bullying is preventable, but the factors that may increase or decrease the risk for perpetrating or experiencing bullying need to be understood and addressed.

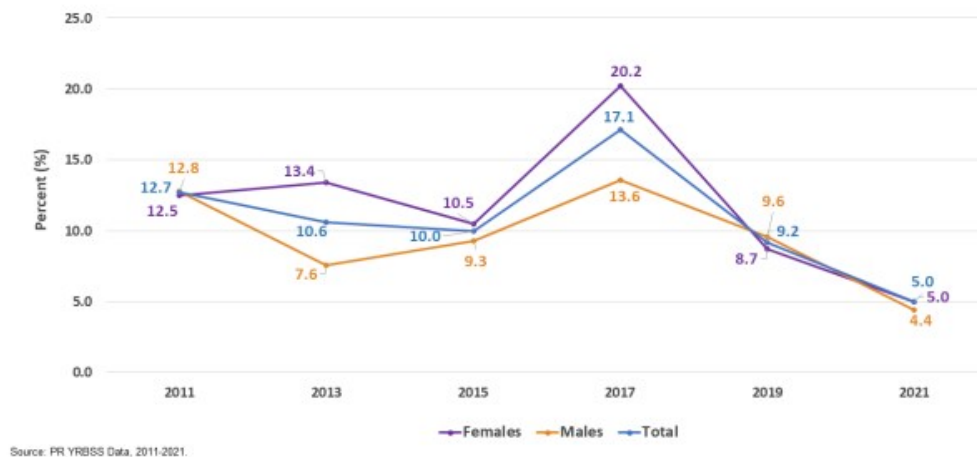
MCH Jurisdictional survey (JS) was created in 2018 to provide data because the National Survey of Children's Health is not done in USA territories. In relation with bullying, PR 2019 MCH-JS reported 27.9% bullying in the past year.

Youth Risk Behavioral Survey (YRBS) has been used every other year in PR since 1995 to track behaviors that can lead to poor health in students grades 9 through 12. The results help monitor adolescent health behavior

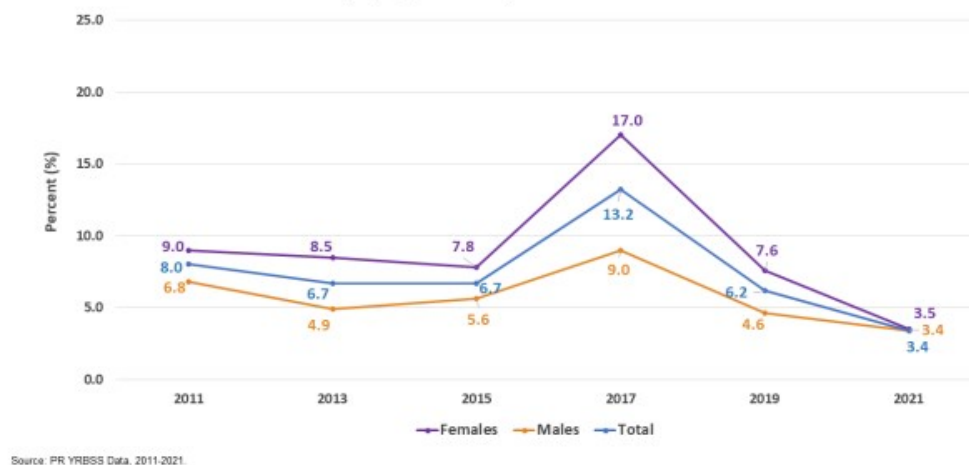
changes over time, identify emerging issues, and plan and evaluate programs to support the health of youth.

The following graphs from PR YRBS data illustrate a decrease in bullying at school from 12.7% in 2011 to 5% in 2021. Similarly, being electronically bullied had a decrease from 8% in 2011 to 3.4% in 2021. The results for all questions in PR 2017 YRBSS were higher than any other year, but CDC nor DOE had provided an explanation. Although females have had a decrease in both types of bullying, a higher percent reported being bullied than males.

Adolescents bullied at school by gender, 2013-2021

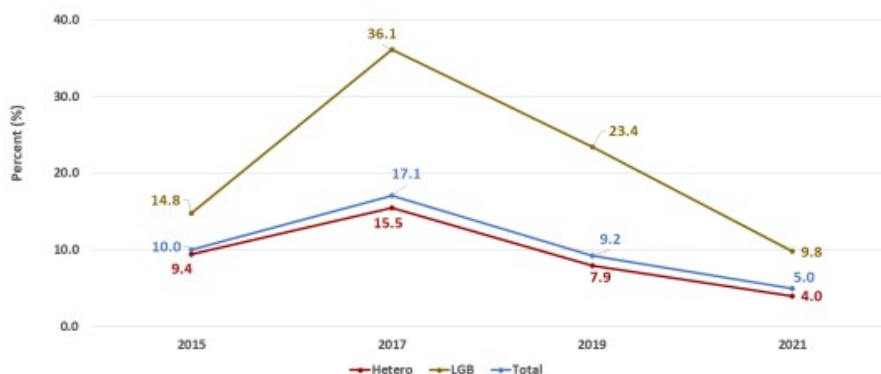


Adolescents electronically bullied by gender, 2013-2021



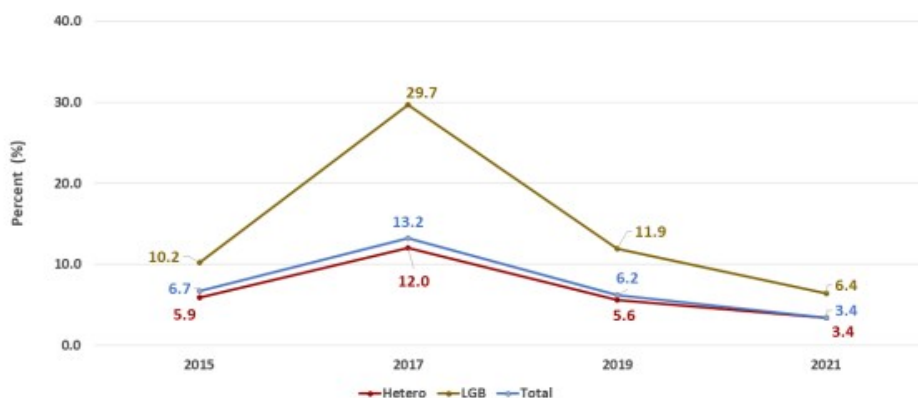
In 2015, PR YRBSS included a question that allowed youth to identify their sexual orientation as heterosexual, lesbian, gay, or bisexual (LGB). SISA and MEU analyzed 2015, 2017, 2019 and 2021 data which revealed youth that identified themselves as LGB had a higher percent of bullying, mental distress, and other issues than their heterosexual peers for example in 2021 YRBSS: 1. Bullied on school property (9.8% LGB vs 4.0% hetero), 2. Electronically bullied (6.4% LGB vs 3.4% hetero), 3. Felt sad or hopeless (67.1% LGB vs 31.2% hetero), 4. Seriously considered suicide (25.3% LGB vs 6.8% hetero), 5. Planned suicide (19.3% LGB vs 4.6% hetero), and 6. Attempted suicide (18.2% LGB vs 8.6% hetero).

Adolescents **bullied at school** by sexual orientation, 2015-2021



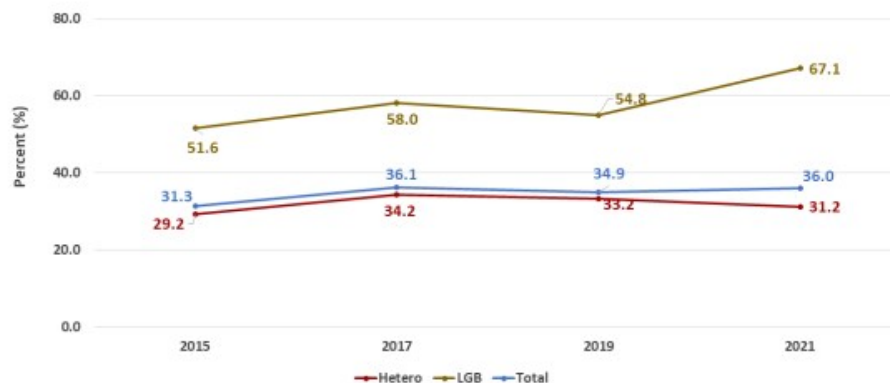
Source: PR YRBSS Data, 2015-2021.

Adolescents **electronically bullied**, by sexual orientation, 2015-2021



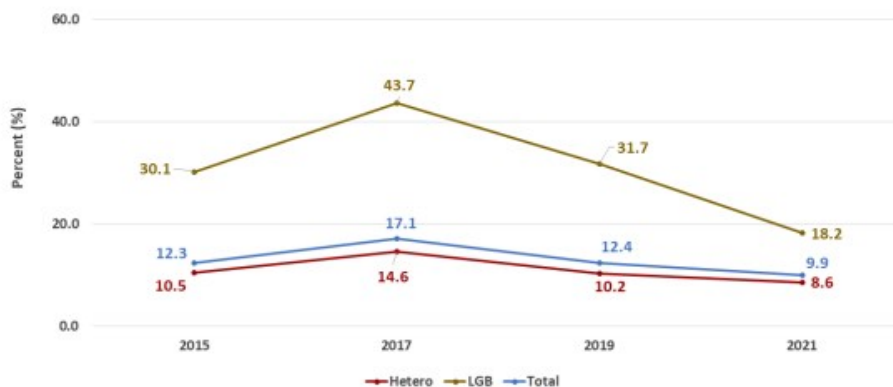
Source: PR YRBSS Data, 2015-2021.

Adolescents **felt sad or hopeless** by sexual orientation, 2015-2021



Source: PR YRBSS Data, 2015-2021.

Adolescents **attempted suicide** by sexual orientation, 2015-2021

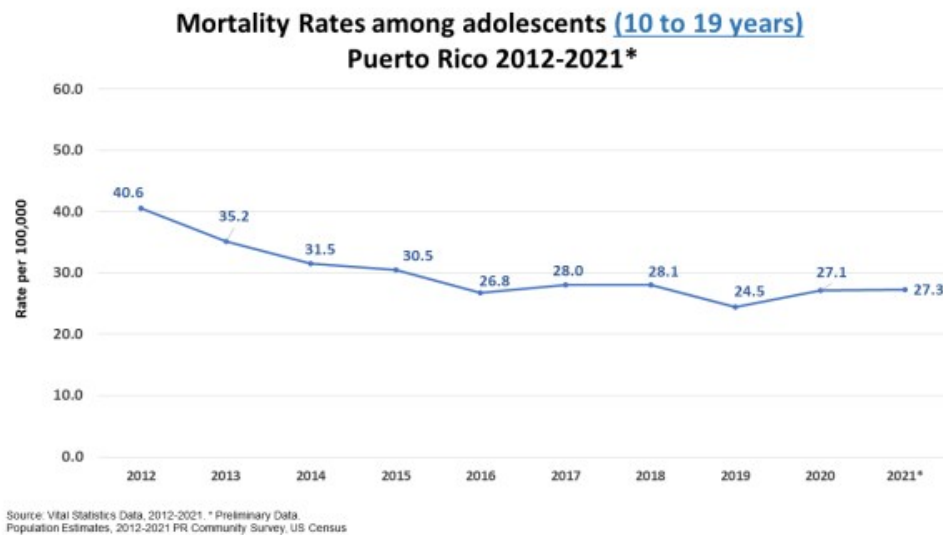


Source: PR YRBSS Data, 2015-2021.

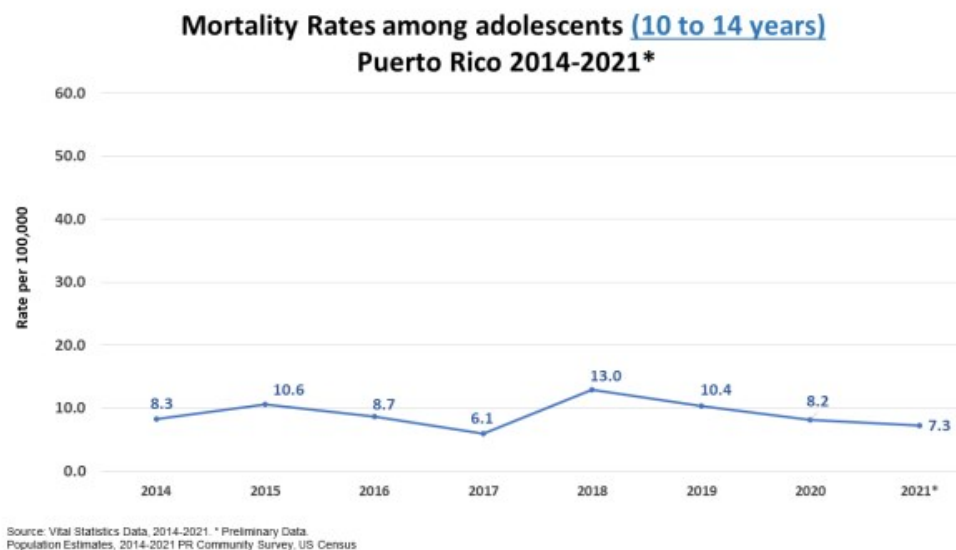
Youth Mortality Rates

The 2021 mortality rates in the following graphs are preliminary. In 2021, the PR Demographic Registry's Office changed to a digital platform and currently they are fixing technical challenges to retrieve death certificates data.

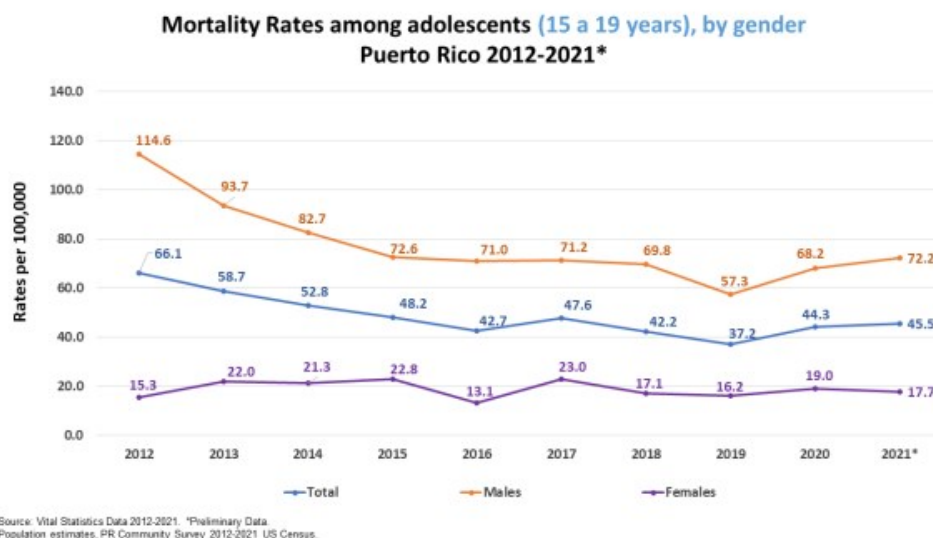
The following graphs use PR VS Data. Although PR's 10-19 y/o mortality rate decreased from 40.4/100,000 in 2012 to 24.5/100,000 in 2019, there was an increase to 27.1/100,000 in 2020 and an additional increase to 27.3/100,000 in 2021, as depicted in the 10-19 y/o graph.



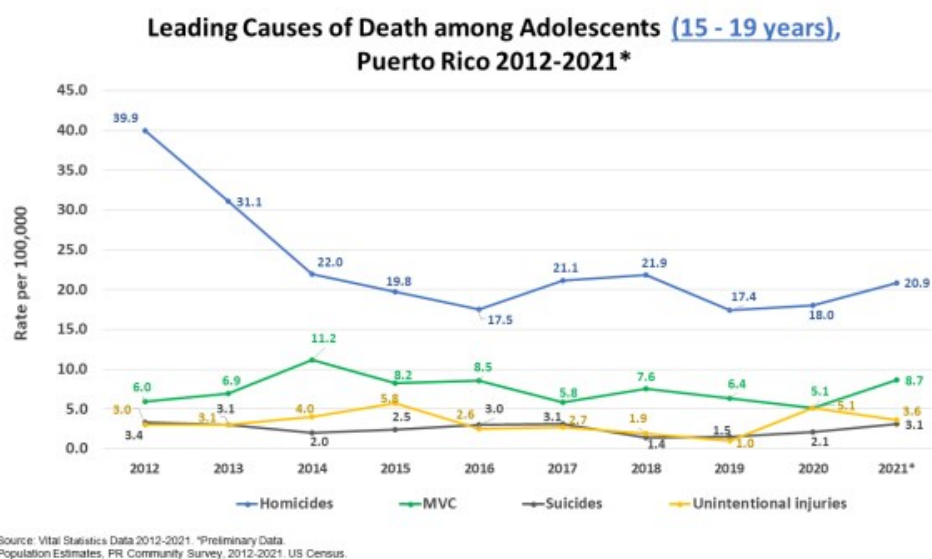
This increase was not in the 10-14 y/o mortality rate because it has had a continuous decrease from 13.0/100,000 in 2018 to 7.3 in 2021.



The following graph illustrates the increase was in the 15-19 y/o rates. In 2021 the mean mortality rate was 45.5/100,000, an increase from 44.3/100,000 in 2020, specially in males that increased from 68.2/100,000 in 2020 to 72.2/100,000 in 2021. The 2021 male's rate was 4 times higher than the 17.7/100,000 female's rate which decreased from 19/100,000 in 2020.



The next graph provides a better understanding of PR's 15-19 y/o leading causes of death's tendencies in the past ten years. Four of the main causes of death are violence related; the highest rate is for homicides, followed by motor vehicle crashes, unintentional injuries, and suicides. From 2020 to 2021 three rates increased, homicides 16%, MVC 71%, and suicides 48%. Unintentional injuries decreased 29%.



Mortality rates have different causes associated with each adolescent and young adult age groups. MEU compiled mortality rates by common causes of death within the following age groups: 10-14, 15-17, 18-19 and 20-24. This data is important to identify causes by age group and develop strategies to decrease the risks identified.

The following table shows the pattern of 2021 top leading causes of death in 10 to 24 y/o by age groups through color-coded boxes. The 10-14 y/o first two were internal or non-violent causes (neoplasms and congenital malformations). The top 15-24 y/o causes were external, or violence related: Homicides was the 1st cause of death for 15 to 24 y/o, Motor Vehicle-Crashes was 2nd for 15 to 24 y/o, Unintentional injuries ranked 3rd in 18-24 y/o, and Suicide was the 3rd in 15-17, 4th in 20-24 and 5th in 18-19 y/o.

<i>Top 5 leading causes of death among adolescents and young adults by age group</i>				
<i>Rates by 100,000, Puerto Rico 2021*</i>				
Rank	10-14 years	15-17 years	18-19 years	20-24 years
1	Neoplasms 1.7	Homicides 12.1	Homicides 33.9	Homicides 53.7
2	Congenital Malformations 1.7	Motor Vehicle-Crashes 6.0	Motor Vehicle-Crashes 12.6	Motor Vehicle-Crashes 24.6
3	Motor Vehicle-Crashes 0.6	Suicides 2.6	Unintentional injuries 6.3	Unintentional injuries 18.7
4	Unintentional injuries 0.6	Diseases of Heart 1.7	Neoplasms 3.8	Suicides 5.9
5	Homicides 0.6	Unintentional injuries 1.7	Suicides 3.8	Neoplasms 2.7

Source: Vital Statistics Data 2021, *Preliminary Data
Population Estimates, American Community Survey 2021, US Census.

Youth suicide mortality rates

The 2022 PR Suicide Prevention Commission Report (SPCR) show that the suicide deaths have decreased in the past 10 years but continue to be more prevalent in males than females. In 2021 suicide deaths, 89.1% were males, 10.9% were females, and 89.9% occurred between 35 to 74 y/o.

Regarding death by suicide in PR's 15-19 y/o, the FAD reported a rate of 2.1/100,000 in 2019-21. Due to the relatively small number of deaths, three-year data estimates are provided to improve precision and reportability. But if VS data is used, there has been an increase since 2019 1.5/100,000 to 3.1/100,000 in 2021. The SPCR 2021-22 indicated 4 deaths by suicide in 10-19 y/o, 2 males 15-17 y/o, 2 males 18-19 y/o and 11 deaths occurred in 20-24 y/o. As with adults, youth suicide is more prevalent in males.

One effort led by SAMHSA's equivalent, the PR Mental Health and Substance Prevention Administration (Administración de Servicios de Salud Mental y Contra la Adicción or ASSMCA, Spanish acronym), is the Psychological Help Line (Línea Primera Ayuda Social, PAS) with toll free numbers 1-800-981-0023, 1-888-672-7622 TDD and the new "988", three-digit nationwide phone number since 2021 to call or text, that provides emergency mental health support and guidance 24 hours, 7 days a week. A team of health care professionals offer crisis management, emotional support, preliminary psychosocial screening, evaluation coordination and referrals for mental health issues including suicide behaviors, depression, domestic violence and anxiety among other.

In 2021-22, Linea PAS reported a total amount of 211,323 calls, an amount lower than 2020-21's 649,595 calls during COVID-19 pandemic. From a total amount of 20,382 calls for suicide behavior, 3,200 (15.7%) were from 10-19 y/o. From these calls, 2,578 were for **suicide ideation and threat**: 71 from 10-14 y/o, 2,161 from 15-17 y/o, and 346 from 18-19 y/o. Female were 70.8% of all 10-19 y/o suicide ideation and threat calls. **Suicide attempts** calls were **622**: 20 from 10-14 y/o, 522 from 15-17 y/o, and 80 were 18-19 y/o. Females were 63.9% of all 10-19 suicide attempts calls.

PR Poison Control Center (PCC) provides free, confidential, and expert medical advice through Hotline 1-800-222-1222. 24 hours a day every day of the year. In 2021-22, 372 calls were received related to 10 to 19 y/o. From those, 184 (49.5%) were for suicide attempts: 57 were 10-14 y/o, 96 were 15-17 y/o, and 31 were 18-19. From all 10-19 suicide attempts calls, 77.1% were related to females. The drugs most used were analgesics, antihistamines, antidepressants, and hypnotics.

All these external or violent related mortality causes can be prevented and need to be addressed throughout a comprehensive, collective, and interdisciplinary health system approach that include youth, families, community, entities, and government to develop culturally effective initiatives with a social determinant approach to decrease

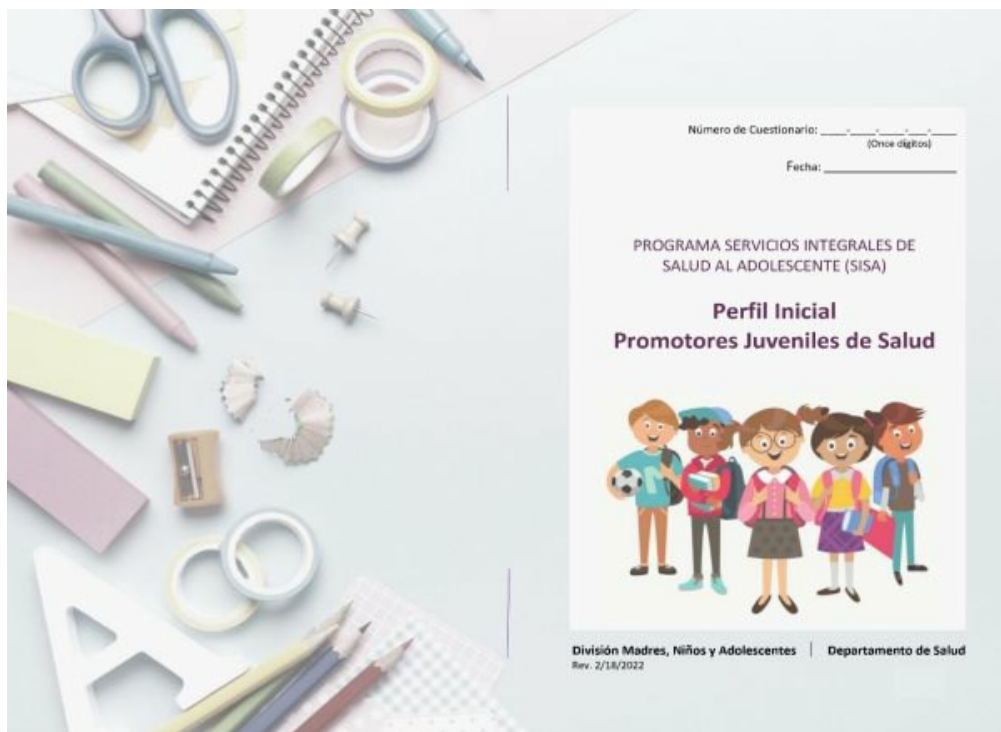
youth deaths and promote health and wellness in all youth.

Strategies to address NPM #9 Percent of adolescents, ages 12 through 17, who are bullied, or bully others in 2021-2022 included:

1. Review Youth Health Promoters Project (YHPP) curriculum to incorporate additional strategies/activities related to bullying prevention and mental health/wellbeing.

To adequately review YHPP and incorporate additional activities, SISA staff received virtual and face to face workshops about youth mental health by the MCAHD Mental Health Consultant and by PR Rutgers University Region 2 Mental Health Technology Transfer Center (MHTTC) trainer through a collaboration established in November 2021. The themes included were: loss, anxiety, the importance of emotions to prevent self-caused lesions (cutting), how to recognize trauma in youth and self-care. The in-person training was preferred as it provided a better option to exchange ideas, experiences, and practice exercises. Both trainers had the expertise and skills to provide high quality knowledge and useful tools to use with youth, coworkers, and themselves.

The YHPP curriculum is implemented with groups of 15-25 students 10-14 y/o during three years from 6th to 8th grade. YHPs complete a sociodemographic Profile, focused on their attitudes and behaviors before and after completing the project. To design, validate and incorporate bullying and cyberbullying questions during 2021-22, 800 YHP Profiles from 2016 to 2019 results were analyzed, questionnaires from other projects were studied and a group of MCAH experts (evaluators, data entry, consultants, and curriculum specialist) held 14 meetings to update it. Questions were clustered by theme and project's objectives; wording was checked to be simple and adequate for age (10-14 y/o) and its design was changed to a booklet with colorful images to be more attractive to youth.



Front page of the YHPP profile

Las próximas preguntas tienen que ver con la violencia en tu escuela:

54. Durante el último mes, ¿cuántos días faltaste a la escuela porque te sentiste inseguro/a?
_____ días

55. Durante el último mes, ¿cuántas veces alguien te amenazó o hirió con un objeto, un arma, un cuchillo u otra cosa en la escuela?
_____ veces


56. Durante el último mes, ¿cuántas veces viste a personas gritándose, peleándose o provocando caídas a otros en la escuela?
_____ veces

Las próximas preguntas son acerca del acoso (bullying). El acoso es cuando un estudiante o más se burlan, amenazan, rumoran, golpean, empujan o hieren a otro estudiante una y otra vez.








57. Durante el último año, ¿has sido acosado en la escuela?
a. ___ No
b. ___ Sí
c. ___ Prefiero no contestar


58. Durante el último año, ¿has sido acosado por mensajes de texto, WhatsApp, Instagram, Facebook, Email u otros medios cibernéticos?
a. ___ No
b. ___ Sí
c. ___ Prefiero no contestar

59. Durante el último año, ¿sabes de compañeros/as que han sido acosados/as en la escuela o por medios cibernéticos?
a. ___ No
b. ___ Sí
c. ___ No sé
d. ___ Prefiero no contestar



Las próximas preguntas tienen que ver con tu futuro (marca con una X):

60. ¿Cuán importante es para ti...?	Importante	No importante
 ...graduarte de escuela superior (4to año)		
 ...ir a la universidad o estudiar una carrera corta		
 ...tener un trabajo		
 ...mantener una buena salud		
 ...hacer trabajo en la comunidad o trabajo voluntario		
 ...tener buenos amigos/as con los que puedas contar		
 ...tener familia que te apoye		



Example of two YHPP profile pages with questions

Bullying and cyberbullying questions were incorporated in the Profile to be used in the modified ESM 9.1 *Percent of Youth Health Promoters (YHP) that completed the first year who report not being bullied in Puerto Rico by September 2021-2025*. The questions are: 1. Have you been bullied on school property in the past year? 2. Have you been cyberbullied in the past year? and, 3. Do you know if a student had underwent bullying or cyberbullying in the past year? Suggestions from DOH legal advisors and experts from collaborative entities were included. A Profile Administration Guide was developed which included implementation details and the referral process to DOE staff if answers to specific “red flag” questions were identified. The Profile was offered as a pilot to two YHP groups. Youth accepted the new format and expressed it was easier and friendlier to complete.

The 218 YHPs that started 1st year in 2021-2022 completed the Profile in September & October 2022. From this amount, 88.5% (193) reported not being bullied in the past year. This result was included as baseline in this annual report.

Mental health/wellbeing themes and activities are included throughout YHPP’s three-year curriculum. In 2021-22 YHP’s Year 2 meetings were expanded to include identification and management of emotions, updated sexuality, gender expression, and nondiscrimination. Accurate information about bullying/cyberbullying was gathered for the development of specific new activities in 2023.

2. Increase awareness about mental health/wellbeing and bullying/cyberbullying prevention in youth and adults, including parents and caregivers and healthcare providers.

The AAP Bright Futures Guidelines recommends a strength–based approach to screening and counseling around behaviors that can lead to mortality and morbidity during youth health care visits. PR’s 2021 updated Pediatric Preventive Healthcare Services Guidelines included new validated screening tools for early identification, evaluation, and intervention of depression PHQ9 and risky behaviors CRAAFT (2.1+N) to assess youth mental health and provide counseling in the annual healthcare visit. It was shared for its use with MCAHD stakeholders and through DOH webpage to reach healthcare providers and the public.

To provide accurate information about mental health/wellbeing and bullying prevention, SISA and MEU continued collecting and analyzing data from PRYRBSS and ASSMCA's "Consulta Juvenil" (PR youth survey similar to Monitoring the Future) related to bullying, cyberbullying, safety in schools, feeling lonely, suicide ideation and, sexual behaviors among other indicators. An interactive power point presentation of 2015 to 2019 YRBSS data by MEU pediatric epidemiologist was offered to SISA staff in March 2022 and to YAC in June 2022. All data was stratified by age, sexual orientation, school grade and sex. Advisors identified females and LGB youth had higher percentages of bullying, sadness, and suicide behaviors. This activity increased YAC knowledge and interest to promote bullying prevention and increase awareness of youth mental health needs.

YAC provided feedback to a DOH Suicide Prevention Commission (SPC) youth suicide prevention video about the importance to ask youth about depression and suicidal ideas. Advisors provided ideas to update it with additional stories they can relate to. SPC acknowledged the importance of their suggestions and invited them to participate in other suicide prevention initiatives.

YAC collaborated in the development of a Youth Wellbeing Congress of Sexual Risk Avoidance (SRAE) Grant. It was going to be the 1st youth gathering activity after pandemic and YAC suggested to include the following mental health topics: working with the emotions, ways to identify and manage bullying situations, and financial literacy as part of the agenda. Advisors also participated as staff ushers and moderators of the Congress that was held in August 2022.

The MCAHD adolescent health campaign included bullying prevention and mental health promotion in 2021-22. Short length videos (30 secs) and posters were designed, produced, and 4 of 9 themes were mental wellness messages: 1. We are unique, do not discriminate, 2. Express your emotions and communicate, 3. Access professional help if you feel lonely or distressed, and 4. Respect for health relationships. The campaign ran in DOH webpage & its social media and on digital platforms from February to June 2022.



A Directory of laws, studies and entities related to youth mental health (bullying included) was created in 2020 to be used as data base for this strategy. During 2021-22 the following entities were added: 1. Law #21 on May 24, 2022, established the third Friday of April as the official day against bullying with the theme: "United against bullying" to perform activities to increase awareness and prevent bullying in DOE, 2. The 2018 doctoral study "An Analysis of Public Policies and Practices of Education Leaders to Prevent Bullying in PR" by a DOH health educator, and 3. A new service entity, "PR Optimum Adolescent Health (PROSA, in Spanish) that began working with youth in 2020. A collaborative workgroup was formed during the process of identifying Spanish language curriculums to prevent bullying in PR. SAMHSA (Reg 2), Rutgers University MHTTC (Reg 2), NYC Comunilife, Inc., and PRSPC join efforts with SISA to increase PR youth mental awareness and eradicate bullying. This group of committed persons realized

there was a need to include a larger number of entities to have a dialogue about youth mental health needs in PR and how to work together to address them. The 1st meeting of this bigger group was held in November 2022.

3. Develop a comprehensive project that incorporate youth, parents and school communities that promote school connectedness, respect, healthy relationships and equity to eradicate bullying, to be implemented in a YHPP school in collaboration with DO

“Bullying behavior is a major public health problem that demands the concerted and coordinated time and attention of parents, educators and school administrators, health care providers, policy makers, families and others concerned with the care of children and youth.” concluded a recent report of the National Academies of Science, Engineering, and Medicine.

An extensive review was done for initiatives with a comprehensive approach to prevent bullying/cyberbullying at schools and communities. Sources of Strength, Brain Wise, Green Dot, Welcoming Schools, and the National Council for Mental Wellbeing’s teen Mental Health First Aid (tMHFA) were identified but none was available in Spanish or had been used in PR. Communication with SAMHSA Region 2 was established to help SISA identify Spanish language projects or a means to translate and culturally adapt those identified. SAMHSA arranged a meeting with NYC Comunilife CEO, SISA and several DOH mental health experts to get acquainted with the development of “Life is Precious” a promising community developed project for suicide prevention in NYC for the past 13 years. The communication evolved to become an alliance workgroup to increase awareness of youth mental health/wellbeing and bullying prevention.

A meeting with the DOE school health education administrator was held to share ideas and begin a collaboration to develop and pilot a comprehensive bullying/cyberbullying prevention initiative in a YHPP/DOE school.

4. Develop Youth Intervention Guides to promote resilience and reduce youth trauma after stressful events

YHPP Intervention “Guide after a Hurricane” and “Guide after an Earthquake” developed by SISA in collaboration with MCAH MH Counselor were used to develop “Vamos a conectarnos” (“Let’s Connect”) meeting that was offered to a total amount of 460 YHPs in 92% of YHP schools as their first YHP welcoming activity in August 2021. It was designed to be implemented virtually or face to face and its purpose was to address COVID-19 pandemic effects on youth to reduce trauma and promote resilience after such an unprecedented event. It included: 1. Greetings to YHPP, 2. Soft abdominal breathing exercise to calm down and connect, 3. Coexistence agreements for respect and confidentiality, 4. Youth introductions “My name is and (what) makes me happy”, 5. “Roller coaster” activity to identify and express significant 2020-21 personal events, and the emotions felt and challenges during pandemic, 6. Gratitude exercise to acknowledge people and positive side of the events, and 8. Identify support resources and next steps.

5. Develop and disseminate an Emergency Preparedness and Response Guide that takes into account the needs of adolescents and young adults

The Emergency Preparedness Guidelines developed by government agencies and NGOs entities continued to be updated. Communication will be established to include essential YAC’s voice and participation in the development of an Emergency Preparedness and Response Guide directed to youth by DOH.

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

During adolescence the annual healthcare visit provides an optimum scenario for youths to understand and assume individual responsibility for their health and receive necessary guidance towards healthy lifestyles while building a strong connection with her/his healthcare provider.

MCAHD used PR Behavioral Risk Factor Survey (PR BRFSS) to collect data from parents about their youth annual health visit and their offspring's health because PR is not included in the National Survey of Children's Health (NSCH). The 2019 PR MCH-JS reported 91.97% of 12-17 y/o have had a preventive medical visit in the past year and MCAHD concluded that this data didn't reflect the reality of PR adolescents visit. This indicator was included again in 2021 BRFSS and NPM 10 Annual Objectives were estimated using the 2017 BRFSS 72.3% as baseline. PR 2021 BRFSS reported 87.8% had the preventive visit, a 21.4% increase from 2017 baseline.

Another indicator the MCH-JS collects is the percent of children with mental/behavioral health condition who receive treatment or counseling (NOM 18). PR 2017 BRFSS parents reported 81.1% of their 15-17 y/o received treatment or counseling and the 2019 JS reported 46.6%.

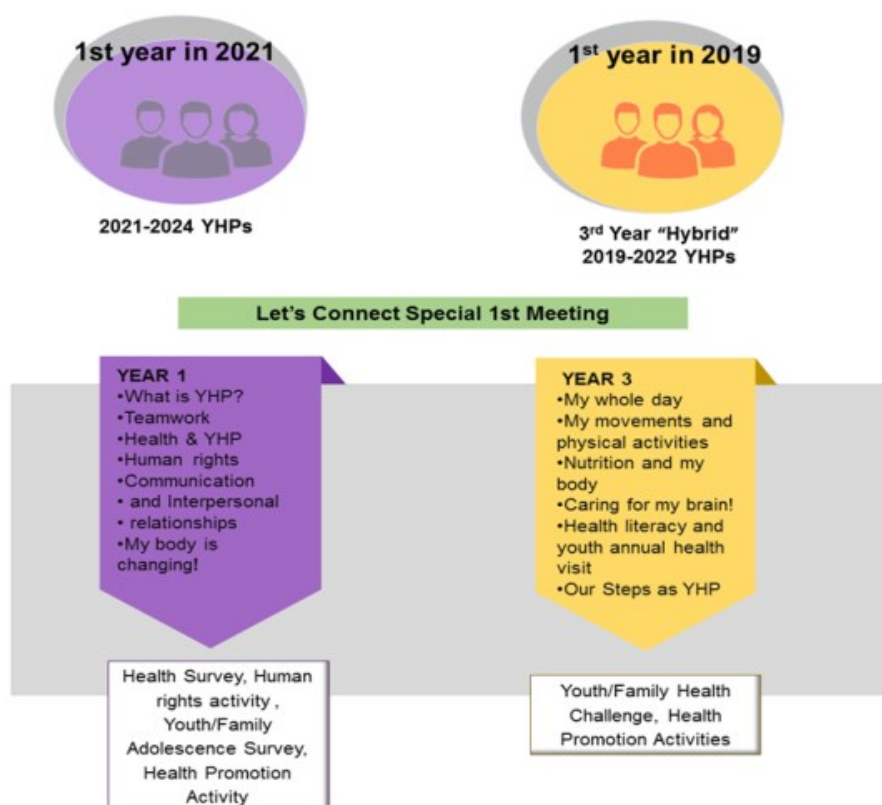
The following strategies were held in 2021-22 to address NPM #10 Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year:

1. Empower youth to adopt healthy behaviors through Positive Youth Development (PYD) initiatives

Youth Health Promoters Project (YHPP) continued to empower youths and their peers to adopt healthy behaviors and increase awareness of youth annual healthcare visit. The YHPP's PYD initiative is implemented in collaboration with PR DOE with groups of early adolescents (10-14 y/o) from 6th to 8th grade in public schools. Each YHPP group has 15 to 25 voluntary students that meet with SISA RC and school liaison at least 15 meetings per each academic year. *Healthy Youth in Action* ("Jóvenes Saludables en Acción", in Spanish) is the SISA developed PYD curriculum used to guide youth to learn about health, human rights, healthy relationships, adolescent changes, sexual health, brain development, among others. YHPs create health promotion activities and use peer helping peer strategies to share them with youth and adults at school, family, and community. Youth from diverse backgrounds and capabilities are encouraged to participate, including YSHCN.

In 2020-21 schools closed and students changed to virtual learning due to COVID-19 pandemic measures. Meanwhile, SISA staff set out to adapt YHPP in-person curriculum's 15 sessions per year (45 total) into virtual ones. During this process it was realized that YHPs which started in August 2019 and were returning after pandemic in 2021-22 were not going to receive HYP 2nd year so a "hybrid" one-year continuation curriculum was developed with essential themes from 2nd and 3rd years. The "hybrid" included: healthy nutrition, physical activity, sleep, health literacy, annual health visit, importance of the brain and its development during adolescence and their journey through YHPP. The following diagram portrays themes and activities of the groups that started YHPP 1st year in August 2021 and the YHPs that started in 2019 and completed with the "hybrid" special curriculum during 2021-22.

YOUTH HEALTH PROMOTERS PROJECT (YHP) 2021-2022



“Vamos a Conectarnos” SISA’s main concern with youth after pandemic was the effects due to decrease of social interactions, burden of virtual learning, isolation at home, increase of parental pressures and disruption of family important dates due to illness or death, among others. To address those effects and provide a space to ventilate their emotions, “Vamos a conectarnos” (“Let’s Connect”) special meeting was developed. Previously developed after the hurricanes & earthquakes interventions were used as its framework. It was designed to be the 1st meeting for all YHP groups upon their return in 2021. Its purpose was to provide the opportunity to reconnect with each other while identifying and ventilating their emotions post pandemic, acquire tools to manage stress and anxiety and get acquainted with resources to turn to, if needed. A total amount of 461 YHPs from 44 schools in 42 municipalities received it.

In August 2021, SISARCs were available to implement YHPP in three modalities, virtual, face to face or combined. A total amount of 649 students started in 45 public schools, 35 in 1st Year (6th grade) and 10 with the “hybrid” (Years 2 & 3 combined) to finish the project. A total amount of 156 8th graders they had started in 2019 graduated from YHPP’s in June 2022.



Although schools started face to face, they adopted DOH/DOE COVID-19 prevention protocols. Most schools had short term periods and groups were subdivided to receive classes on alternate days. Other schools had 6th graders in one classroom with one teacher for all subjects. Due to these measures YHPs were not able to offer youth health promotion activities to peers but practiced them within their own class. Schools affected by the earthquakes had building repairs and students were transferred to nearby schools with “interlocking” class schedules. All these changes affected schools’ schedules and classes, but SISA RCs kept adapting accordingly, by changing to virtual mode or selecting new meeting dates to reach all the YHPs.



The themes offered in 1st Year include what is a YHP, teamwork, health promotion, human rights, communication, interpersonal relationships, and the changes during adolescence. Some 1st year groups were not able to complete their 15 meetings as scheduled. Those meetings were rescheduled with school liaison to receive them in 2022-2023 before beginning the YHP 2nd year sessions.

The updated YHPP Initial Profile was offered to two pilot groups in May and received positive youth comments. Due to schools changes it was scheduled to be offered to YHPs that began 1st Year in 2021-22 in the beginning of 2022.

Three SISA RCs positions became vacant by December 2021 due to retirement, health problems, and new professional opportunity but by June 2022 MCAHD had recruited three new RCs. They received a comprehensive training that included the position responsibilities, studying the DOE health education standards, workshops about positive youth development, YRBSS data, adolescent birth rates in PR & each municipality as well as the theoretical information and practical tools to select the 5 schools to implement YHP’s 1st year meetings in August 2022.

Youth Advisory Council (PRYAC) continued to provide MCAH and DOH input about youth health/wellbeing policies and initiatives including youth annual healthcare visit. The selection of DOH's 3rd YAC was postponed until 2021 because during COVID-19 pandemic the in-person group interviews ("Youth Encounters") were not possible. YAC 2018-20 advisors decided to stay until the selection of new members.

The selection process of new advisors was done from January to July 2021. YAC 2021-2023 was composed of 22 new and three YAC 2018-2020 advisors within the age range. On August 13, 2021, the transition meeting was held face to face and in virtual mode to celebrate YAC journey since 2016 and welcome new advisors and their parents. Advisors from 2016 and 2018 YACs participated in the activities which included a mindfulness exercise, YAC 2016 to 2021 dynamic timeline activity, parent to parent & youth to youth dialogues, YAC 2018-21 Certificates and the official welcoming ceremony by previous YAC advisors. The following image include advisors in-person and virtually at the transition meeting.



YAC 2021-23 first meeting was held on September 11, 2021, and MCAHD mental health Consultant offered a workshop about emotional wellbeing, tools to manage stress and emotions, and highlighted the value of establishing healthy connections. Most 2021-2022 meetings were virtual and those done face to face, also provided the virtual option for those unable to be in person. They continued working with three committees: 1. Social Media to create publications, 2. Adolescent Health Campaign to ensure youth voice was integrated in the design of the new campaign with the Advertising Agency (AA) and MCAH staff, and 3. Friendly Youth Health Visit to continue previous work. During this meeting a transitory committee was created to update YAC Bylaws and each committee scheduled virtual meetings to review their objectives, design 2021-22 action plan and continue working. Virtual meetings are held only for 3 hours to avoid stress and burnout; therefore, two meetings were scheduled in October to accomplish the tasks.

The first October virtual meeting had the visit of AMCHP Adolescent Health/Youth Engagement Director which provided her experience of knowing 1st YAC and their legacy inspiring AMCHP's to create "Youth Voice Amplified", their 1st youth advisory group. YAC created a new "Logistics Committee" to work in alliance with YAC Facilitators to assess the meetings and develop the agenda and activities of the next ones, among other tasks. The four final YAC 2021-23 committees are depicted in the following image.



To increase YAC knowledge of PR MCAHD projects and initiatives an interactive virtual activity was used to review goals and objectives of each Title V domains initiatives, strategies, and activities. Three advisors participated as observers in PR Title V Grant Review virtual meeting in October and had the opportunity to apply the information learned.

YAC received an MCAHD workshop in December 2021 directed to promote the use of “Mi agenda de Salud” planner among 10-19 y/o and their input was used to modify it. The planner was designed to encourage women 10 to 49 y/o to attend their annual healthcare visit and MCAHD decided to promote it through a video. One 16 y/o YAC advisor participated in it and brought a 10 y/o friend that was also included. The adjunct photo was taken during the video filming and is part of the planner’s promotion in DOH webpage and social media.



During February to June 2022 YAC efforts were directed to increase youth voice in other Title V domains, DOH programs and youth serving entities: 1. DOH Tobacco Free Coalition Action Plan update committee, 2. DOH HIV Community Mobilization Committee efforts to increase HIV testing among young people, 3. Association of Parents of Children with Special Health Care Needs (APNI in Spanish) committee to create a Youth Leadership group, 4. Input to the DOH Folic Acid Awareness Education social media publications and activities, 5. Input about how to

address parents to increase youth vaccination, 6. Ideas to include information about breastfeeding promotion, 7. Provide recommendations to a teen suicide prevention video the Suicide Prevention Commission, 8. Providing ideas and collaboration in the development of a Youth Summit by Sexual Risk Avoidance (SRAE) Project, 9. Provide input to MCHAD strategies and activities included in the PR TV State Action Plan and 10. Two advisors participated in the AMCHP 2022 Virtual Conference “Reflecting on Our Past, Shaping Our Future”.

Workshops were provided to increase YAC knowledge about COVID -19 vaccines by AAP pediatrician, YRBSS data by MCAHD pediatric epidemiologist, stress, mental health, and tools to organize time and tasks by MCAHD MH Counselor, health literacy & MCAHD programs by YAC facilitator, among others.

YAC was granted a space inside the DOH webpage which received a renovation in September 2021 and Consejo Asesor Juvenil (CAJ) (salud.gov.pr) was created. Created publications that were posted in YAC social media were about multiple sclerosis, types of cancer, health visit promotion during the International Adolescent Health Week (IAHW) and a special series to introduce themselves and their role as YAC advisors.

In June 2022, the DOH Communications office offered 5 in-person and 2 virtual advisors a tour of DOH's main offices which included a meeting with the DOH Secretary. They brought him their concerns about youth health insurance coverage, the UPR School of Medicine accreditation, DOE health classes at schools and how he planned to maintain healthcare workforce in PR.



2. Establish collaborations with MCAHD stakeholders to implement PR Youth Health Literacy Toolkit (YHLT) to provide knowledge about how to use the health care system

Health literacy is acquired in a lifelong learning process. It includes the ability to obtain, understand and use healthcare information and services to make appropriate health decisions. Addressing youth with health literacy interventions can help them develop healthy habits and behaviors from adolescence through the lifespan.

To develop a culturally appropriate intervention, New Mexico's YHLT was adapted and is implemented in YHPP 2nd year (7th grade) meetings #8 to 12 since 2017. The meetings include 1. The seven areas of health, 2. Wheel of Health interaction of all health areas, 3. HEADDS physician care model, 4. Why do youth go or not go to annual visit, 5. What to do before, during and after the visit, 6 Youth Preventive Guidelines and the insurance plan and 7. Design a youth friendly healthcare clinic. Its pre and pre-post tests are used to assess ESM 10.1 *The percent of Youth Health Promoters (YHP) reached with the PR Youth Health Literacy Toolkit (PR-YHLT) that increase their awareness regarding how to use the health care system (pre-post survey) in Puerto Rico by September 2021-2025.*

The meetings were integrated in a one-day workshop that was piloted in youth summer camps in 2019. During COVID-19 pandemic in 2020-2021, YHPP 8 to 12 meetings were adapted to virtual mode. YAC received this virtual version in April 2022 monthly meeting and their input was collected to include in the process to update the YHLT

before offering to non YHPs in youth serving stakeholder entities.

During 2021-2022 the YHPs that began in 2019 had the opportunity to continue meeting with SISA RCs in August 2021 with the YHPP “Hybrid” special curriculum. It included Year 2 meetings 8 to 12 about youth health literacy, annual healthcare visit and the pre/post questions to assess ESM 10.1. A total amount of 72 pre & post results from YHPs and 6 from YAC’s virtual intervention analysis revealed 55.1% increase in post survey awareness regarding how to use the healthcare system. This result shows a decrease from 84.7% in 2019-2020 and 63.8% in 2020-21. Further evaluation with next year data in a period of time without the impact created by the COVID-19 pandemic is needed.

3. Increase awareness of youth health and wellbeing issues including the annual healthcare visit through educational activities and multimedia campaign

The teen annual healthcare visit gives the healthcare provider the opportunity to keep track of changes of a youth’s physical, mental, and social development. The provider can then help teens understand the changes happening in this stage of life and the importance of choosing a healthy lifestyle. The more teens understand about their growth and development, the more they will recognize the importance of active involvement in their own health care while building a strong connection with their provider.

PR Pediatric Preventive Healthcare Services Guidelines (PR PPHCSG) are established by PR DOH to promote best practices in pediatric healthcare. The adolescent section last update in August 2021 included new validated screening tools and emphasize a complete history taking and physical exam while offering anticipatory guidance for healthy youth lifestyles. It can be downloaded by the public in the DOH webpage salud.pr.gov.

Nivel Máximo Multimedia Mass Media Campaign:

The www.minivelmaximo.com webpage was completed to promote teen annual health care visit and provide accurate information about growth, development, and health issues during adolescence.

In September 2021, DOH contracted an Advertisement Agency (AA) to work with the adolescent health campaign. The campaign included a series of short videos similar to “Tik-Tok” with real youth images (not cartoons) and short, direct messages to portray the themes. Videos were filmed in December 2021 and three advisors participated.

On February 15, 2022, the new “**Vive al Máximo [saludable]**” social media campaign was launched which included 8 from the 9 original short videos (30 secs.) with accompanying messages and, two longer videos (45 secs) each one with a QRCode link to minivelmaximo.salud.gov.pr DOH webpage. The themes and messages were conceptualized and addressed to three different audiences, early adolescents, adolescents/youth adults and caregivers: 10-14 y/o included 1. Vaping prevention and peer pressure, 2. Do physical activities and limit video games, and 3. We are all unique, do not discriminate, don’t be a bully, respect the diversity; 15-21 y/o comprise 4. Do not text while driving, and buckle up, 5. Respect for a healthy partner relationship, 6. Express yourself, seek help for mental health; and for caregivers added 7. Youth annual health visit importance, 8. Listen to your teen, validate their feelings, and 9. Connect.

Vaping had been included in the campaign directed to 10-14 y/o because PR youth surveys (YRBSS and Consulta Juvenil) shared by the PR Tobacco Free Coalition had revealed an increase in vaping beginning in early adolescence, and YAC had emphasized the importance to prevent it. But the short video directed to vaping prevention was not included because the DOH Communications staff had concerns about the age of youth portrayed in it and its message. A questionnaire to collect YHPs (10-14 y/o) understanding and opinions after viewing the video, poster, and message was developed by MCAH evaluator and offered in 2022. Dialogues with 3 groups of 10-14 y/o YHPs were held and confirmed that after seeing the video they understood the message to resist peer

pressure and not to vape. The results were shared with DOH Communications Office and the vaping prevention video and posters were published, in August/September 2022.



Next is an image of three spots from the campaign's short video about physical activity.



The following are images from the campaign posters. From left to right: 1. “Healthy Relationships: Respect is the key when you share with your friends or partner”, 2. “Connect: Give your children trust, respect, communication, and the attention they need” and, 3. “We are Unique: The key is to accept and respect each other”.



The minivelmaximo.salud.gov.pr DOH webpage received 155 site sessions (a visit to the site), 130 unique visitors (the number of people that visited the website) and 622 page views (the number of times a page is viewed) from July to December 2021. After the campaign was launched there was an increase to 10,658 site sessions, 10,079 unique visitors and 12,121 page views from February to May 2022. The complete videos and posters of the campaign can be seen at DOH webpage.

Education activities directed to youth and adults about adolescent health and wellbeing.

During 2021-2022 SISA RCs offered educational activities to other youth non YHPs. A total amount of educational activities reached 200 youths and 82 adults in 5 schools with the following themes: “I care about mi body”, “Stress management”, “I am special and different”, “Responsible sexuality” and “YHP Project and SISA Program” orientations. Also Understanding Adolescence workshop was offered to 25 adults in 2 youth serving organizations. MCAHD CHW, and HE continued to offer educational activities in available schools.

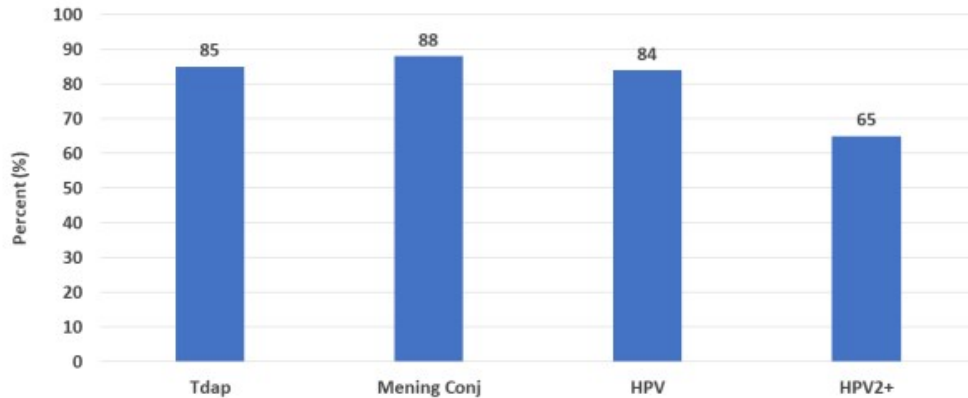
YAC Social Media Committee created publications and messages about 1. Breast Cancer awareness, Oct 2021 2. International Human Rights Day, Dec 2021 3. Get to know YAC and its 2021-23 members, Jan 2022 4. Annual health visit importance during International Adolescent Health Week (IAHW), Mar 2022 5. No more tobacco Day, May 2022, and 6. HIV Testing Day June 2022.

Immunizations and adolescent health and wellbeing: In March 2022, DOH Secretary signed an updated PR Immunization Schedule which included new Dengue vaccine (DEN4CYD) for 9 to 16 y/o with a confirmed previous positive dengue laboratory test and live in an endemic dengue zone. The adolescent’s immunization schedule is included in the PR Pediatric Preventive Healthcare Guidelines directed to healthcare professionals and the public.

PR Act # 25 of September 25, 1983, made mandatory the immunization of students in public and private schools and PR Act # 69 of December 2019 a requisite to report all administered immunizations to PR Immunization Registry (PRIR) by providers and insurance companies. PRIR ceased its function in early 2020 due to technical problems which required the system to be replaced. The collected immunization data was recovered, and a new system, Puerto Rico Electronic Immunization System (PREIS) was developed to include COVID vaccination in December 2020.

The next graph shows the first PREIS available data (2021-22) of 13 to 17 y/o vaccine coverage with at least one dose received: 1. HPV: 84%, 2. Tdap: 85% and, 3. MCV (meningococcal conjugate): 88%.

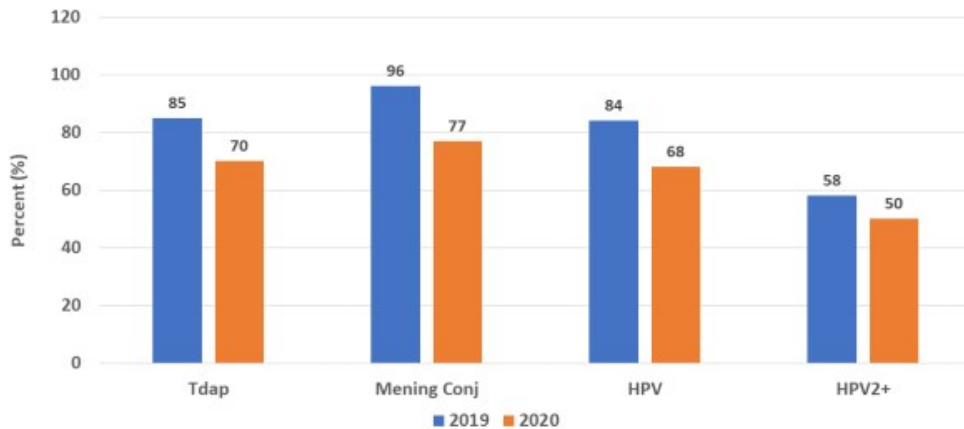
Adolescent Vaccine Coverage 13 to 17 years: Tdap, MCV, HPV Puerto Rico 2021-2022



PR, PREIS 2021-2022

Although they are two different systems, the PREIS data shows an **increase** in all 13 to 17 y/o vaccination coverage compared to 2020 National Immunization Survey (NIS) data: 1. HPV from 68% to 84% 2. Tdap from 70% to 85%, 3. MCV from 77% to 88%, and 2nd dose HPV+2 from 50% to 65%. Next graph shows PR, NIS 2019 and 2020 vaccine data.

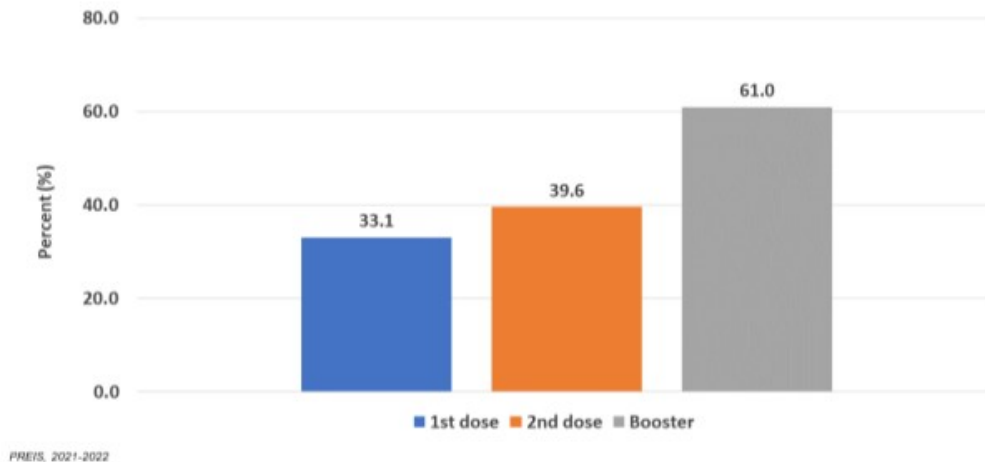
Adolescent Vaccine Coverage 13 to 17 years: Tdap, MCV, HPV Puerto Rico 2019-2020



PR, NIS 2019-2020

COVID-19 vaccines' importance was included in 2021-22 DOH social media health promotion with CDC recommended youth age groups schedules: 16 and older in December 2020, 12 -15 y/o in May 2021 and 5-11 y/o in October 2021. The following graph represents the percent of COVID-19 vaccination among adolescents 12-17 y/o during 2021-2022: 1st dose was 33.1% (74,701), 2nd dose 39.6% (89,376), and the booster 61% (137,725).

Covid Vaccination among Adolescents 12 to 17 years



A collaboration between MCAHD and DOH Immunization Program was established to develop accurate health promotion messages about vaccination in pregnant persons, children, and adolescents. The purpose is to emphasize the importance of immunizations, educate about CDC recommended immunization schedules by age, and dispel myths commonly shared through social media.

Sexual and reproductive health/wellbeing education

Childbearing during adolescence is a challenging event and the youth annual health visit provides an adequate space to provide teens accurate information and counseling about sexual and reproductive health to avoid unintentional pregnancies and STIs as they journey to adulthood.

Teen Birth Rates (TBR) MEU updates female teen birth rates (FTBR) annually for 15-19 y/o and for each youth group (10-14, 15-17 and 18-19) in PR and its municipalities. The PR's 15-19 y/o FTBR decreased from 14/1,000 in 2021 to 13.3 in 2022. The following graph illustrates the continuous decrease in PR's 15-19 y/o FTBR from 49.2/1,000 in 2012 to 13.3 in 2022.

Female Teen Birth Rates among adolescents 15 to 19 years, Puerto Rico, 2012-2022

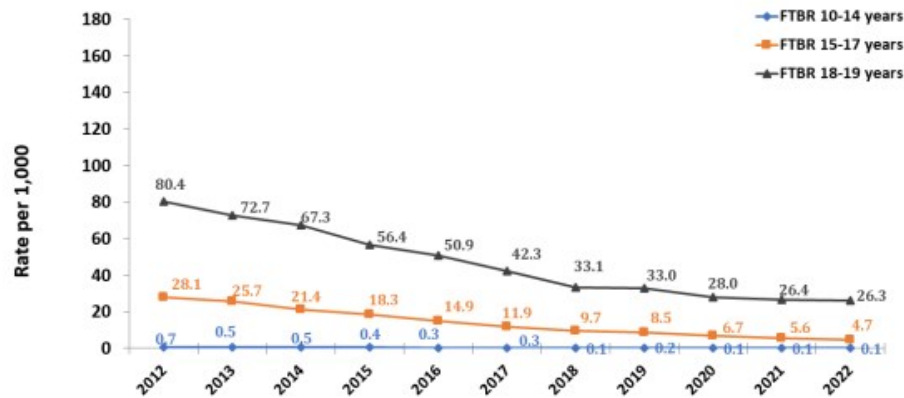


Source: Vital Statistics, Demographic Registry, P.R. Department of Health, 2012-2022
Population Estimates, American Community Survey, 2012-2021, US Census, 2022- International Database, US Census,

The next graph depicts the consistent TBR decrease from 2012 to 2022 in all adolescent female groups. The 10-14 y/o group decreased from 0.7/1,000 to 0.1, 15-17 y/o from 28.1 to 4.7, and 18-19 y/o from 80.4 to 26.3. The data for

each age group provides useful insight to address sexual and reproductive health at schools and other scenarios according to their age, growth, and development. MEU produces similar graphs for each PR municipality and SISA RCs share this data with Regional MCAHD Staff to better understand youth participants and address them accordingly. It is also useful to parents, school personnel and other caring adults.

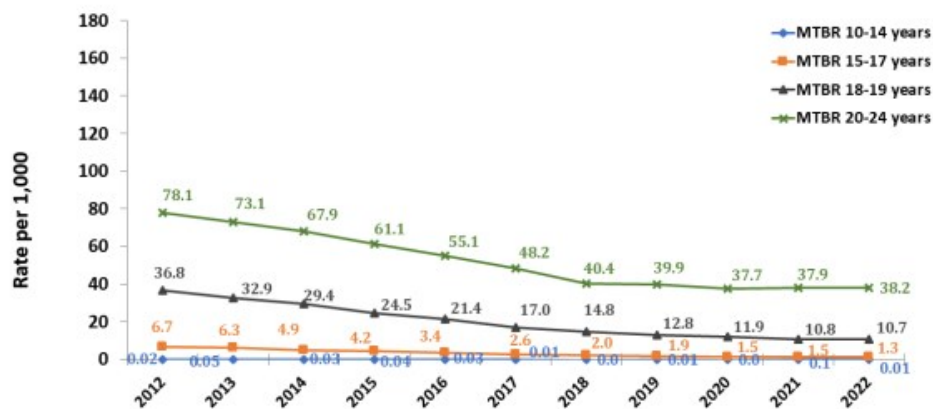
Female Teen Birth Rates by age groups Puerto Rico, 2012-2022



Source: Vital Statistics, Demographic Registry, P.R. Department of Health, 2012-2022.
Population Estimates, American Community Survey, 2012-2021. US Census. 2022- International Database, US Census.

Male TBRs differ from female' of the same age groups. Usually, males become fathers at a latter age, from 20 to 24 years upwards. There has also been a consistent decrease from 2012 to 2022 in all male groups as depicted in the following graph. The 10-14 y/o from 0.02/1,000 to 0.01, 15-17 y/o from 6.7 to 1.3, 18-19 y/o from 36.8 to 10.7 and 20-24 from 78.1 to 38.2.

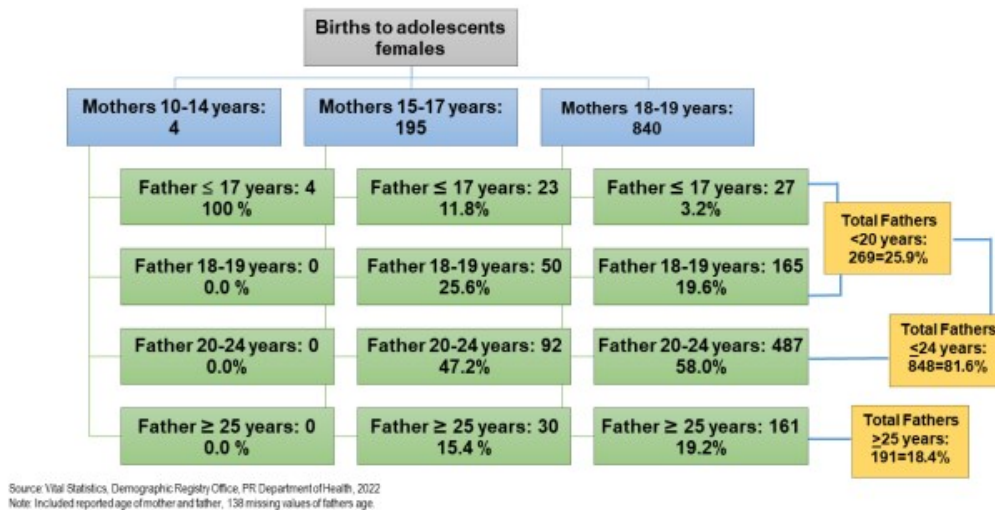
Male Teen Birth Rates by age groups Puerto Rico, 2012-2022



Source: Vital Statistics, Demographic Registry, P.R. Department of Health, 2012-2022.
Population Estimates, American Community Survey, 2012-2021. US Census. 2022- International Database, US Census.

Information from Birth Certificates (BC) reveal that a higher percent of births to adolescent females had an adolescent, or 20-24 y/o father compared to older than 24 y/o fathers. In 2022, 1,177 births were registered to <20 y/o females. Although father's age was missing in 138 BCs, from the 1,039 registered, 25.9% were <20 y/o, 55.7% had 20-24 y/o, and 18.4% >24 y/o fathers. This data confirms the importance of including males and females less than 24 y/o in sexual and reproductive health knowledge to make healthy decisions. YHPP provides 10-14 y/o males and females educational activities to encourage healthy sexual and reproductive decisions in its 3 years curriculum.

Births by mother and father age, Puerto Rico, 2022



MCAHD Primary TPP efforts include all youth (females, males and LGBTTTQ+). YHPP curriculum emphasizes human rights, sexual and reproductive health, annual healthcare visit, and related themes that YHPs use to develop peer health promotion activities. “Mi Nivel Maximo” web page include youth healthy sexuality, among its themes. SISA-RCs and MCAH regional CHWs also reach other students and parents to increase their awareness about childbearing at an early age.

During 2021- 2022 two ACYF programs continued in MCAHD: Sexual Risk Avoidance Education (PR-SRAE), and Personal Responsibility Education Program (PR-PREP).

PR-SRAE implements Relationship Smarts Plus 4.0 (RSP), an EBP for 11 to 15 years old. It includes developing skills and knowledge necessary to end an unhealthy relationship, remain sexually abstinent, and discuss relationship and sexual topics with parents or trusted adults. The goal is to decrease TB and STI rates including HIV, increase healthy relationships, decrease intimate partner violence, and increase school completion and employment.

In 2021-22 a total of 2,052 youth out of 2,095 graduated from RSP with a 98% retention rate. An increase from entry survey was noticed at exit survey with 66.6% indicating they would not have sex in the next 3 months, 72.1% would use protection if having sex, 57.6% more likely to resist to peer pressure, 56.7% would manage their emotions in healthy ways and 56.8% would think about consequences before deciding.

PR-PREP implements two (2) EBPs: 1. ¡Cuídate! with youths 15-17 y/o and 2. ¡Cuídalos! parents' intervention. Their aim is to decrease TBs and teen STIs rates. During 2021-22 implemented its 9th year of ¡Cuídate! EBP with youth from high need geographic areas through in-person, virtual and hybrid modalities. Implementation sites included public schools (middle and high schools), foster care homes, juvenile institutions and CBOs that provide alternative education. A total of 456 youth (12–16) in six (6) PREP municipalities completed with a retention rate of 76.5%. Mean age was 14 years old, and 51.3% were males.

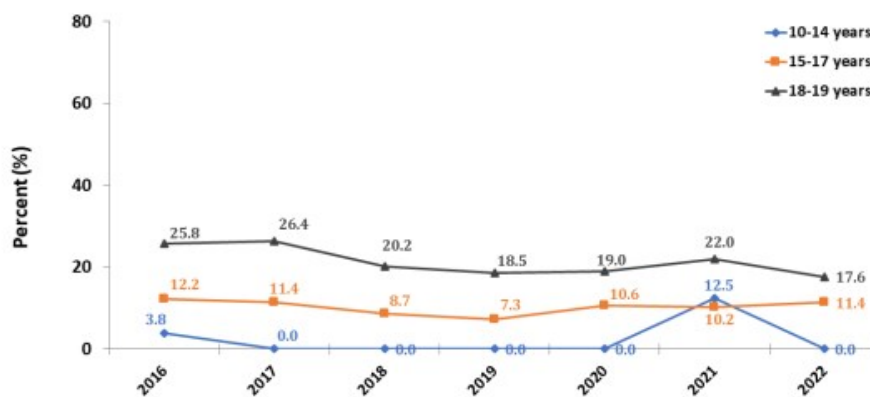
As a result of ¡Cuídate! participants were more likely to: 1. Care about doing well in school (98.0%); 2. Think about the consequences before deciding (83.8%); 3. Manage their emotions in healthy ways (78.3%); 4. Decide not to use drugs (82.4%); 5. Get more education after high school (84.2%); 6. Get a steady job after finishing school (90.5%); 7. Save money (91.2%); 8. Resist or say no to pressure regarding sexual acts (81.1%); 9. Talk to a caregiver about things going on in their lives (74.8%).

The ¡Cúdalos! parents' intervention had 20 parents/caregivers with a 90.0% retention rate in one temporary expansion municipality. Mean age was 40 years old and 85.0% were females. As a result, adults were more likely to:

1. Support their child to achieve their goals (100%),
2. Approach their child to speak about important topics (93.8%),
3. Support your child in the healthy decision-making process (100%)
4. Interest to know their child friends (93.8%),
5. Manage conflicts with their child (93.8%),
6. Know how to manage themselves in case you speak about sexual topics with their child (93.8%), and
7. Keep a healthy communication with their child (100%).

MCAH Secondary TPP efforts include **Maternal, Infant and Early Childhood Home Visiting (MIECHV)** and **MCAH Home Visiting Program (HVP)** to address high-risk pregnant population including teens and young adults with the purpose to have healthy birth outcomes, decrease infant and maternal mortality and morbidity and avoid unintended repeated pregnancies, among other. If having a baby during adolescence is a challenge, having two or more conveys additional stress to mother, babies' and family's health and wellbeing. Efforts to address unintentional repeated births in teens need to continue. The following graph of repeat teen births shows although there has been a decrease in 10-14 and in 18-19 y/o, the 15-17 y/o RTB increased from 10.2% in 2021 to 11.4% in 2022. The peak in 2021's 10-14 y/o corresponds to one repeat birth to a 14-year-old from a total amount of 8 births to 10-14 y/o in 2021.

**Repeat Births among teens by age group,
Puerto Rico, 2016-2022**



Source: Vital Statistics, Demographic Registry, P.R. Department of Health, 2016-2022

Maternal, Infant and Early Childhood Home Visiting (MIECHV) offered virtual and face-to-face visits in 2021-2022, depending on current COVID-19 pandemic measures, to high-risk pregnant women including adolescents and their child until he/she is 36 months old. It is a strength-based, family centered partnership and relationship-based interactions program that uses the evidence-based program Healthy Families America and Growing Great Kids curriculum. Participants receive prenatal and post-partum care orientations, breastfeeding, and immunization support as well as baby's development and milestones, brain development and activities according to baby's age, family planning, how to set goals, and be more autonomous among others. Participants receive referrals based on their needs. During 2021-2022, a total amount of 93 families received a total amount of 1,617 home visits in six municipalities. Of those 93 families, 14 were <20 y/o and 40 were 20-24 y/o, receiving 195 and 682 home visits, respectively.

MCAH Home Visiting Program (HVP) During 2021-2022, the HPV intervention strategies were modified to offer screening, education, and support to the participants via cellphone calls and text messages or face to face, in accordance with DOH prevention protocols, as discussed in the Women/Maternal Health domain. Each HVN had an MCAHD cell phone to contact families and participate in virtual workshops regarding MCH issues and skills needed

for effective interventions with their participants. HVP continued to use the biopsychosocial model of care to serve pregnant women with complex medical and social risk factors associated with poor pregnancy outcomes including pregnancy before age 22 or after 35, certain chronic illnesses, and previous pregnancy loss or death of a child. HVP continued face to face or virtual visits with each participant following the specific schedule until the baby was born and to offer inter-conceptional visits until the baby is 24 months of age to space future births.

HVP visits provide support and empowerment to pregnant and parenting teens and young adults. During 2021-22, 79 HVNs offered services in 70 PR municipalities to a total of 3,044 women of which 901 (29.6%) were 19 years or less, and 1,611 (52.9%) were less than 22 y/o. HVP registered a total of 13,769 visits to pregnant and post-partum, HVN carried out 7,221 interventions at home to teens and young adults less than 22 y/o women, 8,481 interventions via telephone, 169 at MCAH office and 148 at other places. HVP answered 1,805 calls from < 22 y/o participants.

HVP data from discharged participants revealed 93% of adolescents <20 y/o had GIP, 59% had late term births (>38 weeks), and 83% had babies that weighted 2,500g or more at birth. In 2021-22 16% of all HV fathers were <20 years.

MCAHD perinatal nurses (PNN) visit hospitals to reach pregnant and post-partum women and their families. They offer information and support for post-partum care, breastfeeding, childcare, illnesses, losses and other. Their work is especially important to support teens and young adults during pregnancy and postpartum care. They also make referrals to services and programs as deemed necessary. During 2021-22, a total of 7 PNN, one in each DOH seven (7) regions provided educational services to 219 women and males 10-19 y/o: 22 pregnant, 175 post-partum, 6 non pregnant companions and 16 accompanying males in 31 birthing hospitals. They offered individual orientations with information about women's health, prenatal care, risks during pregnancy, labor, postpartum care, breastfeeding, neonatal screening, care of neonate and preterm baby, EPSDT, baby car seat, violence prevention and family planning.

Child-rearing in adolescents and young adults:

Breastfeeding (BF) is a big challenge for adolescents and young adult as many attends school, college, or work after giving birth requiring additional support especially beyond the first month. HVNs provide BF support by scheduling a visit in the first week post-partum and subsequent visits in which they evaluate latching, BF positioning and refer mothers for professional help and community group support, if needed. During 2021-22, 88% of <20 years old ever breastfed and 33% were breastfeeding at 6 months.

MCAH Prenatal Curriculum for non-HVP participants is an important tool specially to empower pregnant teens, their partners, and families. It was originally designed to be offered to small groups by CHW and HE in four sessions. In 2020-21 a **virtual prenatal course** was developed to provide it besides the limitations imposed due to COVID-19's spread control. It consists of a 30-minute video with sign language. Participants receive a certificate after completing a pre & posttest. During 2021-22, 659 participants completed it and 31 were adolescents <20 y/o (22 were pregnant, 8 non pregnant and 1 male). In the evaluation of April to June 2022 course 49% participants registered an increase in posttest. One of the comments compiled was "I am 18 y/o and never had classes about this new phase in my life. It is the best way to teach and should be available at schools to reach pregnant teens." (M, 2022). In 2021 the in-person course was condensed from four to one session and offered to 255 participants of which 31 were <20 y/o (29 pregnant, 1 non pregnant and 1 male)

Responsible Parenting Curriculum (RPC) promotes parental bonding and healthy baby/childcare from 0 to 5 years of age and 6 to 11. It includes growth and development characteristics for children's stages, how to provide early stimulation, importance of child health and dental care visits, nutrition, activity, security, loving experience. It is

offered to parents and caregivers of children less than 11 y/o in small groups by CHWs. RPC was affected due to COVID-19 measures in 2020-21 because it was not available to be offered virtually. During 2021-22 the 0-5 years RPC was completed by 52 adolescents <20 y/o (13 teen moms, 21 nonparent females and 18 males). No adolescents took the 6-11.

4. Implement PR Youth Friendly Healthcare Services Guidelines (YFHSG) in a pilot project in a FQHC.

Youth-friendly health care services are those that attract young people, respond to their needs, and retain them for continuing care, including the annual health care visit. Youth-friendly services are based on a comprehensive understanding of what young people want and need rather than being based only on what providers believe youth need. A Guideline help healthcare providers to assess and modify their clinics or private practices.

YAC 2021-23 continued the Youth Friendly Health Services Committee work reviewing all previous documents. The Committee defined what they understood by youth friendly health services and the elements needed. The Curriculum Consultant reviewed the objectives, the checklist of a YFHS directed to the healthcare provider, and further details of the Guideline. The ideas were integrated in the Guide by the Committee.

5. Collaborate with CYSHCN Transition to Adult Healthcare Services Committee to assist all youth as they transition from pediatrics to adult centered care services in PR

Unfortunately, many young people stop receiving routine healthcare after leaving pediatric care because they do not have the support they need to transition to adult healthcare. SISA staff and YAC participated with YSHCN s Health Care Transition (HCT) Committee in the development of the “Guide to Educational Topics for Youth with Special Healthcare Needs: A Manual for Providers at the Regional Pediatrics Centers”. During 2021-2022 the HCT Committee meetings were internal due to COVID-19 pandemic and SISA & YAC were not notified. In the meantime, a new Got Transition (GT)Toolkit for all youth was identified and communication with GT was established to meet virtually, analyze its feasibility in PR and pilot if deemed appropriate.

Adolescent Health - Application Year

MCAHD will continue to strive towards improving adolescent health and wellbeing during 2023-24. Adolescent domain's action plan strategies and activities outcomes were analyzed by youth, stakeholders and MCAHD staff which provided their input to improve continuation of services for the benefit of youth health and wellbeing.

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

The efforts to understand and address the factors that affects youth mental health and wellbeing will continue including bullying and cyberbullying prevention.

1. Review Youth Health Promoters Project (YHPP) curriculum to incorporate additional strategies/ activities related to bullying prevention and mental health/wellbeing

During 2022-23 SISA staff, received CE workshops with accurate information about bullying/cyberbullying and youth mental health with MCAHD mental health consultant, and Rutgers University MHTTC trainer. A special workshop about two postgraduate studies "Bullying consequences in PR youth from Consulta Juvenil Youth Data Survey" and "DOE Antibullying Policies" by DOH health promotion personnel offered important information and resources. MCAHD "Respond the calling to protect children, youth and their family's mental health" training of 7.5 hrs. was attended by all SISA staff and the 3 newly hired Coordinators received "Youth First Aid Mental Health" virtual training.

Mental health/wellbeing themes are included throughout YHPP's three-year curriculum. SISA staff and MCAHD Curriculum specialist reviewed and completed the update of the first two years of YHPP Manual Guide "Youth Health in Action" ("Jóvenes Saludables en Acción", in Spanish). It consists of a "script-like" format to guide the SISARC to implement each meeting using PYD and peer helping peer strategies, a list of all required materials and procedures before, during and after each meeting in collaboration with DOE liaison to effectively engage and involve youth. During 2023-24 specific themes directed to bullying and cyberbullying effects in mental wellbeing, way to prevent it and how to handle day to day situations related to bullying will be included in 3rd year's update to be completed.

During 2022-23 the ESM 9.1 was modified to **Percent of Youth Health Promoters (YHP) that completed the first year who report not being bullied by September 2021-2025** and the YHPs Profile data was used to assess it. The MCAHD Profile working group of experts met to identify eight (8) questions whose answers may identify youth mental health and security hazards ("red flags") and to refer as needed. The Guide for Profile Administration was completed and used in registered schools. Meetings with DOE Central Level managers were held to clarify schools' doubts about the referral process. During 2023-24 the YHP 3rd year Exit Profile draft will be developed and pilot.

2. Increase awareness about mental health/wellbeing and bullying/cyberbullying prevention in youth and adults, including parents and caregivers and healthcare providers

SISA and MCAHD MEU will continue collecting and analyzing PRYRBSS and ASSMCA's "Consulta Juvenil" (similar survey to Monitoring the Future) data, related to bullying/cyberbullying, safety in schools, suicide ideation and other mental wellness indicators to analyze and share with YAC, SISA and interested entities. The list of government agencies, health professionals' organizations, NGOs that work with youth and youth groups (including LGBTTT+) will continue to be updated.

The communication that SISA established with SAMHSA Region 2 to help in the identification of bullying prevention Spanish language projects evolved to a steering committee to convene youth, families, and adults to work collaboratively to address youth mental health and wellbeing. The first collaborative meeting was held in November 2022 and four YAC representatives were moderators of the activity. They also presented YAC mission and their interest in working towards youth mental health and wellbeing. Three additional meetings were convened until June 2023, and youth continued to participate and moderate each one. Over 20 youth serving entities have participated in the meetings identifying youth and their family's mental health needs, services available and how to address the gaps identified in a collaborative way. One of the 1st results of these meetings is the development of a virtual Directory or mapping of all youth mental health initiatives for the 1st time in PR. A Collective Impact approach was

selected as the way to continue working as a group and next meeting will be held on August 7, 2023. Photos depict the 1st collaborative meeting's youth participation and attendees.



3. Develop a comprehensive project that incorporate youth, parents and school communities that promote school connectedness, respect, healthy relationships and equity to eradicate bullying, to be implemented in a YHPP school in collaboration with DOE

On October 11, 2022, SAMHSA Region II Regional Administrator and Assistant met in person with MCAH personnel to discuss their interest in collaborating to create a comprehensive project or intervention based in PR youth mental health & wellness needs. This collaboration will continue to identify culturally and language appropriate initiatives and their participation in the collaborative meetings for youth mental health.

The DOE is participating in the collaborative meetings to youth mental health /wellbeing and will continue meeting with SISA staff to develop the comprehensive project using the initiatives identified and the information provided by new stakeholders.

4. Develop Youth Intervention Guides to promote resilience and reduce youth trauma after stressful events

During 2022-23 SISA used “YHPP Intervention Guide after a Hurricane” after Hurricane Fiona and the floods that followed in September 2022. It included elements to reduce trauma and promote resilience.

A Basic Intervention Outline Guide will be developed, with the collaboration of MCAHD Mental health Counselor and MHTTC trainer to be used after other unexpected events.

5. Develop and disseminate an Emergency Preparedness and Response Guide that takes into account the needs of adolescents and young adults

The list of Emergency Preparedness Guidelines developed by government and NGOs will continue to be updated and evaluated by SISA for youth inclusion. The communication with DOH Emergency Preparedness Division will be established to include essential YAC's voice and participation in the development of an Emergency Preparedness and Response Guide directed to youth in DOH.

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

1. Empower youth to adopt healthy behaviors through Positive Youth Development (PYD) initiatives

Youth Health Promoters Project (YHPP):

During July – August 2022, the 3 newly hired SISA Reg Coordinators received capacity building about SISA Program history and fundamentals (socioecological model, PYD, peer helping peers) for adequate YHP

implementation at schools, YHPP 1st year theoretical and practice of meetings, including Profile Administration Guide. Monthly meetings and CE will continue to increase workforce capacity, YHP implementation and update knowledge about youth health/wellbeing of all youth including LGBT+ & YSHCN.

Academic year 2022-23 began face to face implementation of YHPP in 51 schools in 44 municipalities island wide and a total of 732 enrolled YHPs, 380 in 1st year (6th grade) and 278 its 2nd year (7th grade). Even though unexpected natural events and structural school buildings reconstruction to become seismic resistant challenged YHPP implementation, SISA RCs managed to overcome them. The YHP Profile was administered to enrolled participants and data collected will be analyzed.

Meetings with newly appointed DOE Central Level officials were held to continue and improve YHPP implementation. Options discussed included the development of 5 year DOH & DOE MOU instead of the DOE endorsement letter, create workshop to DOE liaisons about the Project, and Profile referral process. An MOU draft was sent to DOE in January 2023 to be assessed for approval.

The YHPP's Coordinators' Manual is under evaluation for update, looking forward to be assessed as a promising initiative. 1st and 2nd Year YHPP curriculum were completed. Third year will be completed with the inclusion of new mental wellness and bullying prevention activities in 2023-24.

MCAHD will continue to collaborate with DOE to implement YHPP and look forward to reestablishing YHPs activities with their peer after pandemic.

Youth Advisory Council (PRYAC):

YAC will continue to provide MCAH and DOH input about youth health/wellbeing policies and initiatives including youth annual healthcare visit. During 2022-23 advisors continued to meet in youth-adult alliance face to face and virtually. Committees continued to meet virtually in accordance with their developed Plan.

In August 2022, a special “ropes like” day activity was held with the PR Boys Scout Reserve at Guajataka summer camp facility to promote teamwork, develop trust, and strengthen partnership to continue YAC's work.



Advisors were moderators and active participants in all youth mental health collaborative meetings held in 2022-23 and will continue to provide their input and work together with other youth, families, and adults to improve youth mental health in PR.

During 2022-23 YAC 1. Participated as ushers and moderators in SRAE Youth Summit held in August 2022 in a southern municipality. 2. In alliance with PR Suicide Commission provided information to passerby's in an educational booth during Suicide Prevention Week in a well-known SJ Shopping Mall, 3. One advisor participated in PR Title V BG Review meeting.

Advisors were invited to provide their voice and participate in the following meetings: 1. HIV Prevention Division meetings to update its Action Plan, 2. Juvenile Justice Prevention Group to integrate youth voices in the development of an initiative to decrease youth delinquency, 3. PT Tobacco Free Coalition to present its Action Plan for 2023-25 and, 5 HIV Community Mobilization Committee to provide their ideas about their initiatives. Advisors received workshops about YRBSS data, youth suicide prevention, public speaking among others.

One advisor was sponsored by AMCHP to represent PRYAC in Minnesota NNSAHC Gathering in November 2022. She was the only youth and participated in a panel about youth advisory councils and through her example, emphasized the importance of having their voice and engagement in all initiatives directed to youth. She received a special recognition by NNSACH board for being an inspiration and motivation for the creation of youth councils by AHCs in their jurisdictions.

Two advisors represented YAC in 2023 NNSAHC Meeting and AMCHP 2023 in person annual conference "Cultivating Diverse Leaders in Maternal and Child Health" from May 5 -9, 2023 in New Orleans, Louisiana. They were part of the panel "Supersizing the impact of your adolescent health workforce" in which they expressed their experiences working alongside adults in MCAHD and their contributions to Title V needs assessments, public input and collaborations to the different domain's activities and initiatives.

YAC 2021-2023 two-year term finished and during 2023 the recruitment and selection of new members to complete YAC 2023-25 was activated. The transition meeting will be held on August 12, 2023.

2. Establish collaborations with MCAHD stakeholders to implement PR Youth Health Literacy Toolkit (YHLT) to provide knowledge about how to use the health care system

Pre and posttests of YHPP's Year 2 meetings #8 to #12 about youth health literacy, annual healthcare visit will be used to continue the assessment of ESM 10.1 *Percent of Youth Health Promoters (YHP) reached with the PR Youth Health Literacy Toolkit (PR-YHLT) that increase their awareness regarding how to use the healthcare system (pre & post survey) in Puerto Rico by September 2021-2025.*

3. Increase awareness of youth health and wellbeing issues including the annual healthcare visit through educational activities and multimedia campaign

Nivel Máximo Multimedia Adolescent Mass Media Campaign: During July to September 2022, Nivel Máximo website campaign continued to be posted in social media. To increase its visibility, posters of each theme were printed to distribute them in YHPPs schools during 2022-24. As stickers is a way youth like to express themselves, each topic was created in stickers and shared with SISA RCs to distribute them to YHPs.

The YAC Adolescent Campaign committee will continue meeting to update and adapt the webpage context to be more youth friendly.

Education activities directed to youth and adults about adolescent health and wellbeing by SISARCs, CHW, and HE will continue during 2023-24

Immunizations and adolescent health and wellbeing: The collaboration between MCAHD and DOH Immunization Program will continue to maximize the education and promotion messages to dispel myths about youth vaccination and promote their immunization schedule.

Sexual and reproductive health/wellbeing education efforts directed to youth and their parents will continue through YHPP's health promotion education activities, YAC committees, Nivel Maximo's webpage, and MCAHD regional personnel. PR-Personal Responsibility Education Program (PREP) and Sexual Risk Avoidance Education

(SRAE) ACYF grants.

MCAHD secondary TPP efforts will continue with HV and MIECHV as well as the prenatal and parenting courses directed to 1-5y/o and 6-11 y/o.

4. Implement PR Youth Friendly Healthcare Services Guidelines in a pilot project in a FQHC.

YAC Youth Friendly Healthcare Services Committee continued meeting and included MCAHD Curriculum Consultant to review the Guide previously developed by YAC. The Guide is needed to design and establish the plan to pilot a friendly healthcare services clinic model in a FQHC.

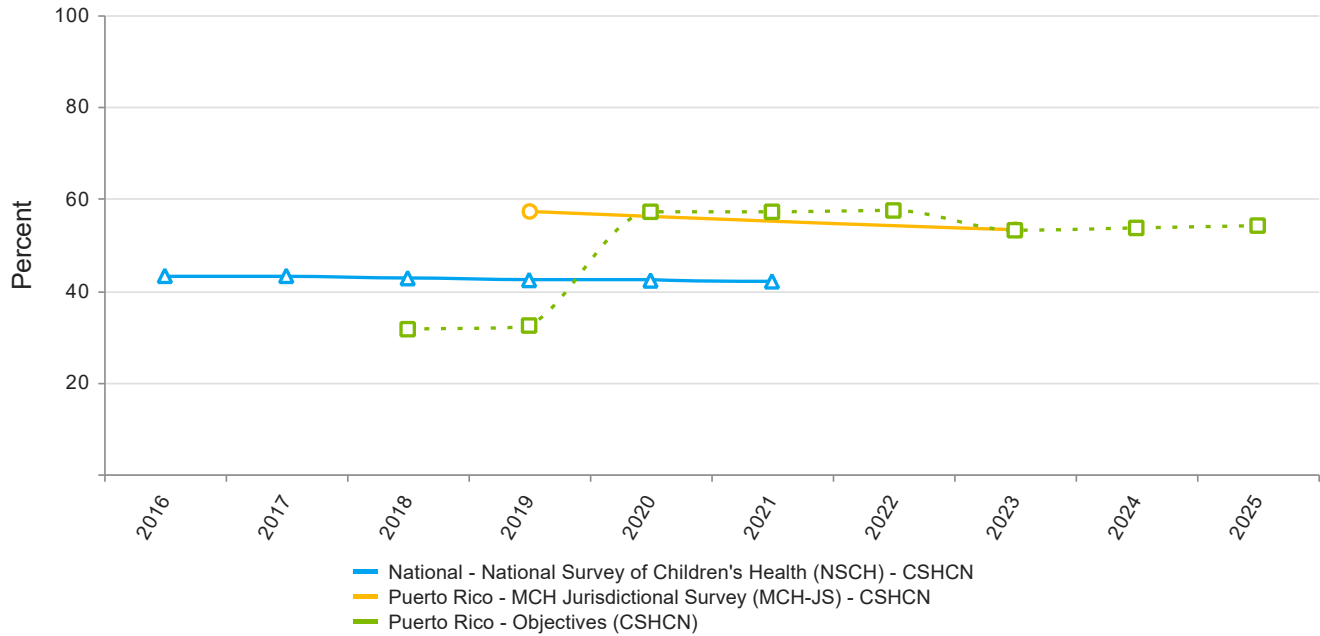
5. Identify a Guideline directed to all youth about Transition to Adult Healthcare Services

The previous strategy Collaborate with CYSHCN Transition to Adult Healthcare Services Committee to assist all youth as they transition from pediatrics to adult centered care services in PR was modified to identify a toolkit to promote a healthy transition of all youth. A meeting with Got Transition directors was held in February 2023 to identify the toolkit for all youth they had recently released in Spanish. A follow up meeting to design next steps to pilot it in PR will be held in 2023-24.

Children with Special Health Care Needs

National Performance Measures

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



NPM 11 - Children with Special Health Care Needs

Federally Available Data			
Data Source: MCH Jurisdictional Survey (MCH-JS) - CSHCN			
	2019	2020	2022
Annual Objective	32.4	57.1	57.4
Annual Indicator	57.1	57.1	53.1
Numerator	107,696	107,696	62,404
Denominator	188,735	188,735	117,607
Data Source	MCH-JS-CSHCN	MCH-JS-CSHCN	MCH-JS-CSHCN
Data Source Year	2019	2019	2023

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	31.6	32.4	57.1	57.1	57.4
Annual Indicator	30.8	57.1	57.1	57.1	
Numerator	46,505	107,696	107,696	107,696	
Denominator	150,935	188,735	188,735	188,735	
Data Source	PR-CSHCN Survey	MCH-JS-CSHCN	MCH-JS-CSHCN	MCH-JS-CSHCN	
Data Source Year	2015	2019	2019	2019	
Provisional or Final ?	Final	Final	Final	Final	

Annual Objectives			
	2023	2024	2025
Annual Objective	53.1	53.6	54.1

Evidence-Based or –Informed Strategy Measures

ESM 11.1 - Percent of families at the CSHCN Program who report that they “always” have a care coordinator or another professional available to help them find the services they need.

Measure Status:			Active
State Provided Data			
	2020	2021	2022
Annual Objective			75.2
Annual Indicator	74.6	75.2	80
Numerator	223	85	192
Denominator	299	113	240
Data Source	Medical Home Family Index Survey	PR-CSHCN Program Care Coordination Survey	PR-CSHCN Program Care Coordination Survey
Data Source Year	2021	2022	2023
Provisional or Final ?	Final	Final	Final

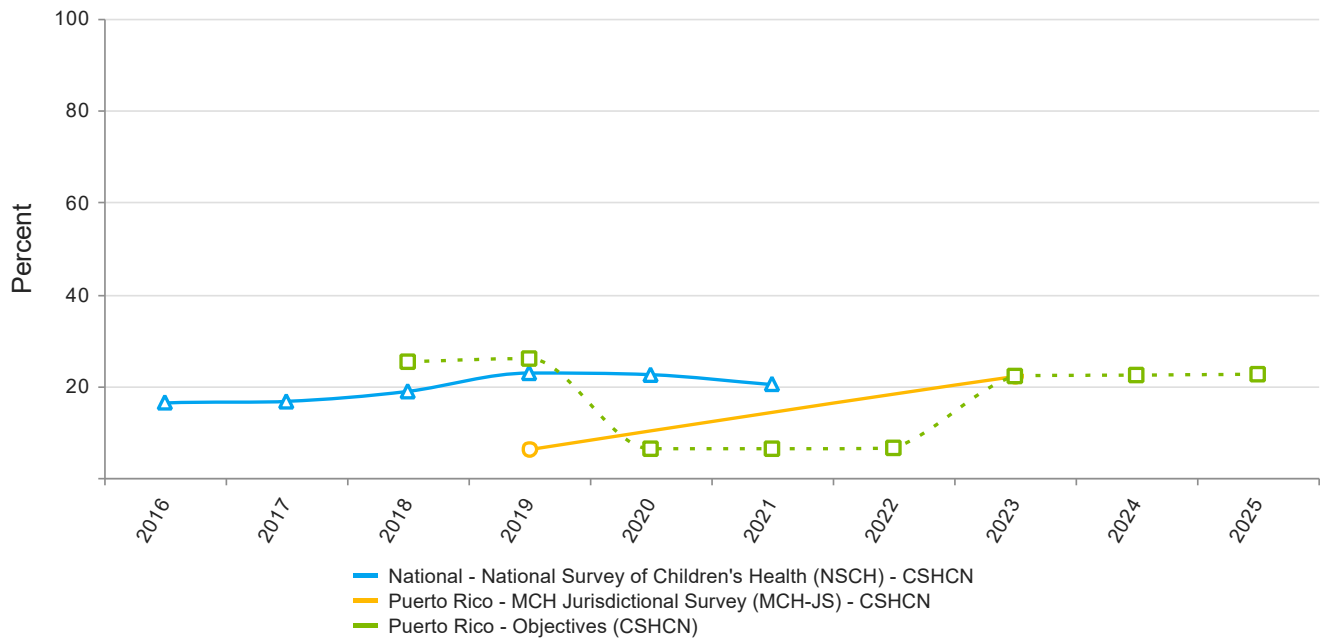
Annual Objectives			
	2023	2024	2025
Annual Objective	76.6	77.3	78.0

ESM 11.2 - Percent of families at the CSHCN Program who "totally agree" that their child has a better health status thanks to the efforts of the care coordinator to help them access the needed services.

Measure Status:		Active	
State Provided Data			
	2020	2021	2022
Annual Objective			74.1
Annual Indicator		57.8	57.4
Numerator		63	132
Denominator		109	230
Data Source		PR-CSHCN Program Care Coordination Survey	PR-CSHCN Program Care Coordination Survey
Data Source Year		2022	2023
Provisional or Final ?		Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	57.4	58.0	58.6

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



NPM 12 - Children with Special Health Care Needs

Federally Available Data			
Data Source: MCH Jurisdictional Survey (MCH-JS) - CSHCN			
	2019	2020	2022
Annual Objective	26	6.4	6.6
Annual Indicator	6.4	6.4	22.2
Numerator	5,714	5,714	10,852
Denominator	89,053	89,053	48,853
Data Source	MCH-JS-CSHCN	MCH-JS-CSHCN	MCH-JS-CSHCN
Data Source Year	2019	2019	2023

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	25.3	26	6.4	6.4	6.6
Annual Indicator	24.7	6.4	6.4	6.4	
Numerator	16,226	5,714	5,714	5,714	
Denominator	65,560	89,053	89,053	89,053	
Data Source	PR-CSHCN Survey	MCH-JS-CSHCN	MCH-JS-CSHCN	MCH-JS-CSHCN	
Data Source Year	2015	2019	2019	2019	
Provisional or Final ?	Final	Final	Final	Final	

Annual Objectives			
	2023	2024	2025
Annual Objective	22.2	22.4	22.6

Evidence-Based or –Informed Strategy Measures

ESM 12.1 - Percent of YSHCN who receive care at the RPCs and has completed a transition readiness assessment in Puerto Rico by September 2021-2025

Measure Status:			Active	
State Provided Data				
	2019	2020	2021	2022
Annual Objective			71.8	71.8
Annual Indicator	48.5	71.8	71	70.4
Numerator	128	173	98	100
Denominator	264	241	138	142
Data Source	Regional Pediatric Centers	CSHCN Program database	PR-CSHCN Program REDCap Census	PR-CSHCN Program REDCap Census
Data Source Year	2018-19	2019-20	2020-21	2021-22
Provisional or Final ?	Provisional	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	71.0	71.7	72.4

ESM 12.2 - Percent of YSHCN at the CSHCN Program who has a transition action plan in place after completing a transition readiness assessment (4th core element of Got Transition).

Measure Status:			Active
State Provided Data			
	2020	2021	2022
Annual Objective			57.1
Annual Indicator		57.1	60.4
Numerator		56	58
Denominator		98	96
Data Source		PR-CSHCN Program REDCap Census	PR-CSHCN Program REDCap Census
Data Source Year		2020-21	2021-22
Provisional or Final ?		Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	58.8	59.4	60.0

State Performance Measures

SPM 1 - Percentage of children with ASD that are diagnosed at 36 month of age or earlier.

Measure Status:				Active	
State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	15.3	16	11.2	11.2	11.3
Annual Indicator	15.3	11.2	11.2	11.2	11.2
Numerator	3,610	1,840	1,840	1,840	1,840
Denominator	23,581	16,413	16,413	16,413	16,413
Data Source	PRHIA	MCH-JS	MCH-JS	MCH-JS	MCH-JS
Data Source Year	2017	2019	2019	2019	2019
Provisional or Final ?	Provisional	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	11.4	11.5	11.6

SPM 2 - Prevalence at birth of neural tube defects.

Measure Status:					Active
State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	8.4	6.4	6.5	9.2	6.4
Annual Indicator	5.3	5.6	9.3	6.2	9.9
Numerator	13	12	19	12	19
Denominator	24,310	21,492	20,431	19,201	19,133
Data Source	PR- Birth Defects Surveillance System	PR- Birth Defects Surveillance System	PR-Birth Defects Surveillance System	PR-Birth Defects Surveillance System	PR-Birth Defects Surveillance System
Data Source Year	2017	2018	2019	2021	2022
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional	Provisional

Annual Objectives			
	2023	2024	2025
Annual Objective	8.6	8.4	8.2

State Action Plan Table

State Action Plan Table (Puerto Rico) - Children with Special Health Care Needs - Entry 1

Priority Need

Increase the number of CSHCN who receive regular ongoing comprehensive health care within a medical home

NPM

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

Objectives

By 2025 increase to 54.1% the percent of CSHCN that have a medical home. (Baseline: MCH-JS 2023: 53.1%)

Strategies

CSHCN Program's staff capacity development in family engagement and health equity.

FESAs capacity development in family-professional partnerships, shared plan of care, and registration of families impacted by their educational activities and interventions.

Explore the possibility of collaboration with entities that offer mental health care services.

Continue with care coordination quality improvement strategies at the PR-CSHCN Program.

Continue with activities to enhance the communication between community PCPs, especially pediatricians, and the PR-CSHCN Program's health care providers

Enhance the care coordination system within RPCs and Autism centers to guarantee that children receive the services they need.

ESMs

Status

ESM 11.1 - Percent of families at the CSHCN Program who report that they "always" have a care coordinator or another professional available to help them find the services they need.

Active

ESM 11.2 - Percent of families at the CSHCN Program who "totally agree" that their child has a better health status thanks to the efforts of the care coordinator to help them access the needed services.

Active

NOMs

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

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

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

NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year

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

Priority Need

Increase the number of YSHCN who receive appropriate supports and services for their transition to adult health care.

NPM

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

Objectives

By 2025, increase to 22.6% the percent of YSHCN who receive the necessary services to transition to adult health care.
(Baseline: MCH-JS 2023: 22.2%)

Strategies

Increase awareness in physicians about HCT and HCT processes.

Promote HCT among YSHCN and their families.

Share transition survey findings with CSHCN Program pediatricians and collect their inputs.

Evaluate HCT at the PR-CSHCNP and identify/implement quality improvement strategies.

Continue identifying and registering physicians who serve the adult population and are willing to treat YSHCN.

Promote PACMA among the PR-CSHCN staff so that they share it with their families with YSHCN.

ESMs

Status

ESM 12.1 - Percent of YSHCN who receive care at the RPCs and has completed a transition readiness assessment in Puerto Rico by September 2021-2025

Active

ESM 12.2 - Percent of YSHCN at the CSHCN Program who has a transition action plan in place after completing a transition readiness assessment (4th core element of Got Transition).

Active

NOMs

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

State Action Plan Table (Puerto Rico) - Children with Special Health Care Needs - Entry 3

Priority Need

Decrease the age when children with Autism Spectrum Disorders (ASD) receive their first diagnostic evaluation.

SPM

SPM 1 - Percentage of children with ASD that are diagnosed at 36 month of age or earlier.

Objectives

By 2025 increase by 5% the proportion of children with ASD diagnosed at age 3 or earlier (Baseline: MCH-JS: 11.2%).

Strategies

Create an ASD inter-agency committee to address the increase of ASD prevalence in PR.

Identify strategies to reduce the waiting lists for ASD evaluation at the CSHCN autism centers.

Continue the distribution of the Passport to Health (Pasaporte a la Salud) at the Office of Vital Statistics (Demographic Registry) to parents of newborns.

Promote among parents the monitoring of their children's developmental milestones, and that they recognized the early signs of ASD, through the distribution of CDC educational materials to centers and providers that serve families with infants and toddlers.

Promote ASD screening at 18 and 24 months of age among health care providers, as mandated in the PR-EDSPT.

Continue encouraging the use of the Autism Registry among health care professionals.

Provide information about the early signs of ASD to pediatricians, PCPs, childcare centers, Early Head Start, Federally Qualified Health Centers, WIC clinics, APNI's web page and the early intervention program.

Identify funds to increase the contracting of professionals at the autism and regional pediatric centers that can carry out diagnostic evaluations to children under 36 months of age.

State Action Plan Table (Puerto Rico) - Children with Special Health Care Needs - Entry 4

Priority Need

Decrease the prevalence of neural tube defects at birth.

SPM

SPM 2 - Prevalence at birth of neural tube defects.

Objectives

By 2025 decrease by at least 1% the prevalence of NTD births.

Strategies

Provide orientation to families affected by NTDs about prevention of NTD recurrence and link them with the services they need.

Update and publish the BDSPS Period 2016-2020 report in the PR-DOH webpage.

Update educational material on folic acid intake, birth defects prevention and NTDs.

Update the educational campaign of folic acid intake using the PR Department of Health webpage. Other social media may be used such as: Instagram, Facebook, and Twitter.

NPM 11: Increase the number of CSHCN who receive regular ongoing comprehensive health care within a medical home.

The medical home model has become the gold standard for how pediatric primary care should be organized and delivered throughout the healthcare system. Receiving care in a medical home is recommended for all children because it ensures the optimal outcomes, especially for CYSHCN. This model includes the active collaboration between families, primary care providers, clinical specialists, behavioral health providers, hospitals, community programs, and any other element of the health care system that intervenes with the child and family. At the PR-CSHCN Program we are focusing our efforts on two key medical home elements: care coordination and family engagement/participation.

Care coordination addresses the connection between medical, social, developmental, behavioral, and other needs of the child and family. Quality care coordination support family and delivery of health-related services across systems, increasing the access to services needed by the child and family, and impacting the overall health outcomes of the child. Quality care coordination may help decrease the fragmentation of the system of care and support integrated services for children.

Family engagement, especially during the earliest years of a child's life, is one of the most powerful predictors of a child's development. Families are children's first caregivers and teachers, and it is the quality of parent-child relationships and interactions that create the foundational skills that children need to be successful. Also, family engagement efforts are being designed along with families to promote equity and parent leadership, which is in line with some of the goals we aim to reach in the long term.

We have recognized the National Committee of Quality Assurance (NCQA) Patient-Centered Connected Care (PCCC) model as one that fits our infrastructure at the regional level, while helping us impact the medical home community. The NCQA developed this model to support sites that provide other types of health care services that are not primary, which is the case of our seven RPCs and two Autism Centers. This model is grounded on five standards of care: 1) connecting and sharing information with PCPs; 2) identifying patients' needs and directing them to the appropriate providers as necessary; 3) using evidence-based decisions to support patients to make care decisions 4) using electronic systems to collect data and accomplish specific tasks; and 5) performance monitoring and evaluation for continuous quality improvement. During the reporting year, the CSHCN Program's QIC leadership adapted the PCCC model to the PR-CSHCNP and named it the Family Centered Connected Care Model (FCCC). During the year, efforts were focused on care coordination quality improvement, enhancement of communication between the program's providers and community pediatricians and PCPs, and the identification/support of CSHCN Program families' needs. Strategies used were the development of flowcharts for care coordination and communication with pediatricians/PCPs, workforce capacity development, and the use of the Family Needs Survey. These strategies are described below.

- *Flowcharts and protocols*

The medical home sub-committee, a sub-committee pertaining to the QIC and comprised of 3 CSHCNP social workers, 3 PCs' administrators and one medical director/pediatrician, developed protocols and flowcharts for the program's care coordination, and for the communication between program's providers and PCP's. Flowcharts are not meant to be a restraint or limitation; however, they may make it easier for users to view a logic continuum within a complex system, act as a guide, and help keep an organized agenda. Flowcharts and protocols developed were then revised by other QIC members. An Encryption Guide was also created to ensure the protection of privileged health information (PHI). These documents were shared with the full QIC and included in the program's Procedure Manuals.

- *Workforce capacity development*

To increase the capacity of care coordination, eight (8) new care coordinators were hired for the CSHCN Program in January 2022, most of which previously worked for the CMS Zika Health Care Services Program. Also, of the thirteen (13) FESAs who were initially recruited in 2016-2017 for the HRSA Zika Maternal and Child Health Service Program, seven (7) were transferred to the CSHCN Program in January 2022 at the end of the Zika's project period. FESAs have demonstrated to be a key asset both for CSHCN Program families and for staff.

During reporting year, a series of educative activities and meetings were coordinated for the new staff, and workshops were provided to all the 14 regional care coordinators (old and new) on March 3, 2022 with the following topics: the adapted PCCC model, the importance and impact of care coordination, protocols and flowchart, the use of the "Family Needs Survey" tool to help families identify their priority needs and where to find support, and information/education to provide to families on key topics such as "Learn the Signs, Act Early" and the importance of folic acid consumption. On March 25, 2022, the workshop was also provided to the seven FESAs, including their role as family engagement and support staff for CSHCN families. A brief about Kristin L. Carman's continuum of patient/family engagement model was also provided.

Workshops were also provided to CSHCN Program health professional staff and other staff, with topics about the FCCC model, contacting and communicating with community pediatricians and PCPs who refer CSHCN, and encryption procedures and guidelines to protect PHI. The workshops were provided as follow:

Pediatric Center(s)	Date	Number of participants
Arecibo PC	4/4/2022	19
Caguas PC	4/12/2022	21
Ponce PC and CEPA	4/19/2022	34
Fajardo PC	4/22/2022	9
Metro PC and Autism Center	4/26/2022	47
Bayamon PC	4/28/2022	22
Mayaguez PC	5/13/2022	16
Total		168

A total of 168 (92%) out of 182 staff members participated in the workshop. These activities were evaluated by 76% of participants. Evaluation results were as follows: 78% reported the educational tools provided are very appropriate, 81% reported that there is relevance of the topics for their job, 81% reported they are willing to apply what they had learned, and 82% evaluated the activity as excellent.

Participants recommended additional workshops on other topics such as transferring therapeutic services from the CSHCN Program to the community, ASD protocols, better understanding of FESAs' roles, collaborative strategies of work teams, communication skills between care coordinators, providers, and families, among others. Some of the participants asked for more frequent meetings, educational activities, and follow-up in relation to the topics that were provided. Educative activities will continue during the application year.

- *Family Needs Identification and Support*

Identifying CSHCN families' needs and directing them to the appropriate providers/resources may impact positively the wellbeing of the family, and in consequence the wellbeing of the CSHCN. Child development occurs physically, emotionally, and socially in the context of the family. A positive family environment supports mental and emotional health, which in turn could lead to better physical health and general wellness. When a child has good health and wellness, they are likely to have better outcomes in school and beyond. However, evidence shows that families with CSHCN may experience needs that can impact the quality of life at home such as increased stress, difficulty to find appropriate and affordable childcare, decisions about work, relying on public support among others. Focus groups with families for the 2020 HNA confirmed some of those needs such as information/orientation needs,

emotional/support needs, psychological/social needs. As a response, an initiative was developed to identify families served by the program who need substantial support; especially families who have recently received the news of a chronic condition for their child. The tool chosen for this initiative was the Family Needs Survey (FNS).

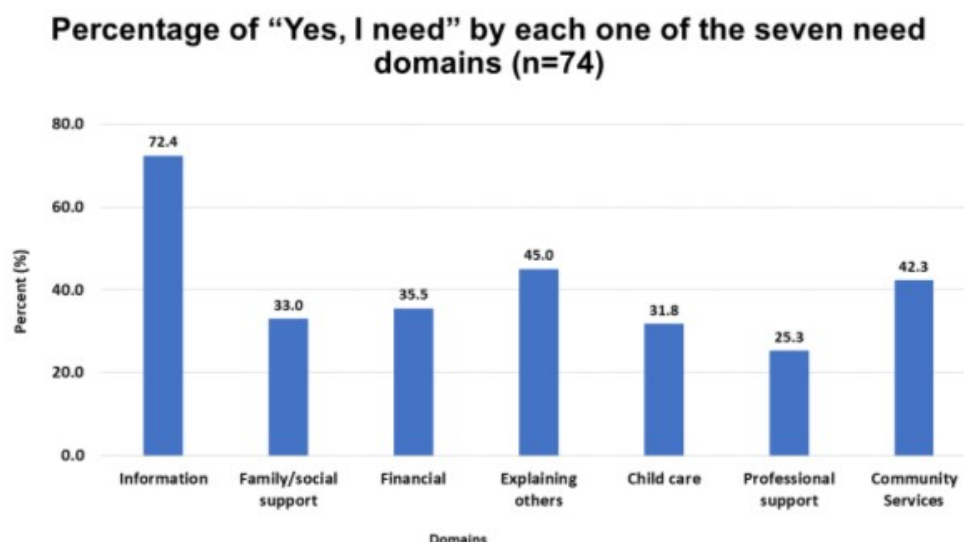
The FNS was developed by Donald B. Bailey and Rune J. Simeonsson, Child Development Institute at the University of North Carolina at Chapel Hill (1988). The survey was carefully developed to identify needs of families with CSHCN in the following topics: Information, Family & Social Support, Financial, Explaining to Others, Child Care, Professional Support, and Community Services. The tool was reviewed and approved by the CSHCN Program's QIC to be piloted at one of the RPCs. Two open ended questions are included at the end of the survey to identify which three needs are the priorities for the family, and if there is a need not contemplated in the survey.

The pilot project was carried out at the Bayamon RPC for three months (June, July, and August 2021). Seventy-four (74) new families participated and were followed-up by the program's social worker and care coordinator. These two professionals developed a framework for the follow-up of families identified as needing support. After examining families' responses and identifying families to be followed-up, the care coordinator would contact family and coordinate an appointment with the social worker, mostly virtual, to assess the family on the specific need. With the families' consent, orientation and support was provided, including linking families with the appropriate services.

After the completion of the pilot project, the Bayamon RPC social worker and care coordinator informed the QIC about their experiences with the initiative. They expressed this initiative added workload to their already busy days. However, they also reported satisfaction as they could perceive that many of the families were grateful to receive the support they needed. Based on the information received, the QIC decided to implement the initiative at the rest of the RPCs. This initiative addresses mostly the families that visit the program for the first time but may include other families. The initiative is being monitored during the present year. The evaluation specialist has met with some of the professionals to hear their voices and collect their inputs. This activity will continue during the application year.

- *Family Needs Survey*

Data collected through the FNS during the pilot project at the Bayamon RPC was also statistically analyzed to better understand our families' needs. The need for information was consistently the need most reported by CSHCN families, both within the survey's quantitative data and in the open-ended questions' qualitative information. The graph below shows the percentage distribution of affirmative answers by each one of the seven need domains (N=74).



Information about the child's condition and about services for the child were the information needs most reported by families, but for all information items more than half of the families reported the need. The table below shows the percentage of families reporting the need per information item.

Information Needs Items	#	%
How children grow and develop	37	50.7
How to play and talk with my child	40	54.0
How to teach my child	48	65.8
How to handle my child's behavior	54	73.0
Information about any condition or disability my child might have	64	85.3
Services that are presently available for my child	66	89.2
Services my child might receive in the future	64	88.9

These results confirm the importance of providing information to families, especially families with children recently diagnosed. Results has been shared with most of the care coordinators during the present year. As a response, care coordinators have shared between them the informational strategies they use at each one of their RPCs and Autism Centers. Each center has its own strategy. For example, the Metro RPC has an alphabetic organizer with all kinds of information such as conditions, services, child management, and other topics. At the Autism Center at San Juan, they prepare beautiful bags with diverse and valuable information that can be of help to families with children with ASD. Fajardo RPC does the same with folders. As a result, coordinators are exchanging their strategies and informational material between them. We expect to identify more informational strategies during the application year. Below is a photo of the bags with information to families in the Autism Center at the Metro area.



The CSHCN Program Committee continues to follow-up all medical home activities. The committee meets every 3 to 4 months to discuss strategies and activities carried out as well as future activities.

Care coordination at the central (state) level

At the CSHCN Program central level, care coordination is carried out for the following populations: children born with birth defects, infants/children with deafness or hard of hearing, infants with evidence of inborn error of metabolism, and children/youth dependent on technology. Below is a summary of care coordination during the reporting year.

The PR BDSPS carries out three essential public health services: assess and monitor the occurrence of birth defects in PR, inform communities on prevention strategies, and follow-up families to guide and link them to professional resources and services available in the community for early intervention. It currently monitors 53 congenital defects. Last year congenital cataract was added to the list, condition previously surveilled by the zika

programs under the CSMND. One of the main goals of the PR-BDSPS is to contact at least 80% of the families identified with an NTD birth, to provide guidance and recurrence prevention counseling; provide educational material and link the child to the needed services. Most of the referrals go to Part C Early Intervention, and to the RPCs. The social worker also refers the child to other community programs if needed, such as My Down Syndrome Friends (MASD by its Spanish acronym), Down Syndrome Puerto Rico Association, Spina Bifida Association, Association of Parents of Children with Disabilities (APNI by its Spanish acronym), Jarcho-Levin and Trisomy 18 family support community and parent support groups. During reporting year 317 families identified by the PR-BDSPS were contacted. A total of 109 referrals to Pediatric Centers, 68 to Early Intervention, and 37 to community programs were performed.

The PR-HDDDT Program coordinator collaborates with the PR-Neonatal Screening Program (PR-NSP) of the Medical Science Campus (MSC), University of PR, in the care coordination and follow-up of infants who test positive in the hereditary screenings. Because of the lack of geneticists, a great pediatrician who works for the CSHCN Program, Dr. Nannette Gonzalez, provides support with the initial evaluation of infants with probable or confirmed inborn errors of metabolism and refers to the geneticist as needed. This strategy aims to speed up access to geneticists for those infants who need it the most. Newborns with a positive screen for Severe Combined Immunodeficiency Syndrome (SCID) are referred to the PR-Medical Science Campus Immunological Clinic. The PR-HDDDT Program coordinator also collaborates with the PR-BDSPS on the care coordination of children with Hermansky-Pudlak Syndrome. During reporting year, the PR-HDDDT Program coordinator coordinated services and/or provided support to 140 (54%) of families with infants with positive screenings.

The PR-UNHSP care coordinators and family representative provided care coordination for 561 families during the reporting year. Care coordination included appointments for hearing screenings, for hearing evaluations, and for evaluations for other health conditions. The program also carried out webinars to families about topics such as special education services for deaf children, deaf population culture, communication with children with hearing differences, reading, and writing methods for children with hearing loss, among other topics. The number of families reached was 103. Two hundred eighteen (218) health professionals were impacted through sign courses, webinars, and a symposium. Sign language interpreter services were also coordinated for parents with deafness or hearing loss, no matter if their child is hard of hearing or not. A total of 41 sign language interpreter services were provided.

The Technology Dependent Children and Youth (TDCY) Registry is a database continuously updated so that families can be reached before and after an emergency or a disaster. The registry was created as a response to hurricanes Irma and Maria in 2017, when numerous families with TDCY were affected by the lack of power and the lack of communication media. Families' physical addresses are kept updated in an interactive google map to facilitate coordination with local and municipal agencies in case of an emergency or disaster. In addition, the registry's coordinator provides orientation and support to families, helps them develop individual emergency plans, and coordinates services and equipment that they may need. During the reporting year, the coordinator linked families and facilitated for them the access to approximately 108 equipment, mainly electric generators, and inverter batteries. He also did care coordination for nine (9) families and carried out four (4) virtual workshops on how to develop an emergency plan. One hundred nine (109) families and 17 health care professionals participated of these four workshops.

Family engagement

"Family engagement refers to the systematic inclusion of families in activities and programs that promote children's development, learning, and wellness, including in planning, development, and evaluation" (Children's Bureau, Administration for Children and Families, HRSA). Family engagement is about building genuine relationships with families, creating partnerships with them for a common goal for the child's health and wellbeing, and sharing the responsibility of working together. Family engagement is an essential part of the medical home model and may also help reduce health inequities in the long term.

A family engagement initiative has been started with the collaboration of both divisions (CSMND and MCHD) and with the TA of the MCH-Workforce Development Center (WDC). A core family engagement work team was created during the reporting year, composed of two co-leaders and six public health professionals, including a family representative. The team has been working based on the understanding that families need a Title V system that systematically includes them in the process of decision-making, and that understands and responds to their needs. The aim is to partner with families to identify and implement strategies to increase families' participation and engagement at all levels (direct service, organizational design/governance, policy making) that will result in programs that are more effective, efficient, and responsive to their needs.

With the MCH-WDC's support, the work-team developed a Family Engagement Work Plan for four years. The plan consists of four phases, being the first phase an assessment of the PR Title V staff on their perceptions of what family engagement is, and their readiness to identify and implement family engagement strategies. For that matter, a questionnaire was developed based on the following two questionnaires: 1- *Family Engagement Guide: The Role of Family Health Partners in Quality Improvement Within a Pediatric Medical Home* (National Institute for Children's Health (NICH)), and 2- the *Family Engagement in Systems Assessment Tool* (FESAT), by Family Voices. The first questionnaire assesses staff readiness assessment, and the second scores the organization on family engagement. These questionnaires were adapted and validated, and then were distributed through Microsoft Forms to all Title V program's staff during October to December 2022 with a participation of 310 staff members. For information about the survey's results, please refer to the 2023 Updated HNA. For more information about this initiative, please go to the Family Partnership Section. The implementation of this plan will continue during the application year.

Family leadership

Family leadership, on the other hand, occurs when parents and family members have the knowledge, skills, and opportunities to represent a parent voice, and to help shape their communities, programs, and policies at the local or state level. Because family leaders speak from their own perspective and lived experiences, they can help health care providers and other types of providers and entities to become more responsive to and supportive of children and families. In PR we had our first attempt to have a family partner as part of our staff in 2008. Coral Jimenez is still working with us and has turned into a great family leader, influencing decision making at all levels. Since 2016, FESAs has been part of our staff as mothers with lived experiences. During these years they have undergone a process of learning, and some of them have become great leaders, have been included as key members of the RPC health care teams, and are becoming experts supporting families to be empowered and engaged. Each FESA has collected success stories about families. They have expressed their amazement and satisfaction as they understand how their lived experience positively impacts the families they serve. During the present year we have provided support from the central level to FESAs, opening spaces to hear their voices and concerns, and will continue as such during application year. The Mayaguez RPC lost its FESA during the present year and now we are looking to recruit a new FESA for that region.

Partnerships with the PR-DOH Oral Health Program

Children with Special Health Care Needs (CSHCN) have higher rates of oral diseases and tooth decay compared with the general population. The PR MCH-JS (2019) showed that 17% of families with CSHCN reported fair or poor teeth health in their child vs 8.2% of families with typical children ($p \leq .000$). Access to oral care for CSHCN may also be more difficult in comparison to typical children. Of the CSHCN's families who participated of the Adapted Medical Home Family Index in 2021, 21% reported that access to a dentist is "very difficult" or "difficult". Some reasons reported, besides the pandemic, were: "dentist do not accept the GIP", "too far from home", "appointments are too far away", "dentist do not serve CSHCN", "dental office does not answer the phones".

The CSHCN Program contacted the Oral Health Program at the PR-DOH for a second year to coordinate preventive oral clinics at the RPCs. The Oral Health Program's main purpose is to conduct oral health assessments to children

at their school. Three licensed dentists and dental assistants visit schools throughout the Island, each in one of three regions: eastern, metro/north, and western. This includes schools in the mountains, whose children may have more challenges to visit a dentist. With the consent of parents and/or guardians, they perform oral assessments to the children, apply fluoride varnish, refer to a community dentist as necessary, and offer individualized orientation about oral health to the family. Toothbrushes, toothpaste, and educational material are also provided to the child and family. It is made clear to families that this activity is not a substitute for a visit to the dentist.

The CSHCN Program coordination with the Oral Health Program consisted of performing oral assessments and prevention visits at some of the PCs during the summer of 2022. This is an ideal period for the dentists to visit the RPCs because most schools are closed during summer vacation, and they can coordinate and spend more time at the RPCs with the children and their families. One hundred and fifty-one (151) children and their families were served:

Pediatric Center(s)	Date (2022)	Number
Arecibo PC	Sept 7 and 8	23
Bayamon PC	July 21	14
Caguas PC	June 11	11
Fajardo PC	July 11,13 and 20	19
Mayaguez PC	June - August	40
Ponce PC	August 1, 3, 8 and 10	44
Total		151

Participant children ranged from ages 1 to 13. They received an oral assessment and fluoridation, as well as referrals to visit a dentist at the community. Children were provided with toothbrushes and toothpaste. Parents and guardians were oriented and counselled on oral health, and provided the following written material (in Spanish):

- Your Child's Bright Smile
- The Oral Health of Children with Special Health Needs
- Colgate, Dr. Muelitas

Last year, a total of 137 children/youth received preventive oral health services from August 9 to August 25, 2021.

To know about the experience of the dentists and dental assistants at the RPCs, a virtual meeting was coordinated with them on November 17, 2022. Two of the dentists and the three dental assistants participated and reported valuable information about their experiences RPCs as described below:

1. They reported that many CSHCN's parents and caregivers at the RPCs have little or no knowledge at all about how to take care of CSHCN's teeth.
2. They expressed their satisfaction to have the opportunity to educate and guide CSHCN's parents, grandparents, and care givers about dental care, which they usually cannot do in schools because parents/caregivers are not present.
3. They reported about the satisfaction they felt when experiencing caregivers' gratitude for their services and education.
4. They expressed the challenge they experienced on assessing children with a diversity of conditions, which conveys different kinds of needs and approaches depending on the condition. Some examples given were cleft palate, mouth frenulum, breastfeeding and bottle in older children, autism, and cerebral palsy among others.
5. One of the dentists reported she feels that pediatricians in general do not understand the importance of oral health, something that causes her frustration.
6. They also complained about the last-minute cancellations of some of the families at the RPCs.

We expect to continue the collaboration between the Oral Health Program and the RPCs during application year.

Other collaborations

The New York-Mid-Atlantic Regional Genetics Network (NYMAC) is one of seven regional networks across the country funded by the MCH-Genetic Services Branch, HRSA. NYMAC is a network of family groups, health care providers, public health groups, and other partners who work together to facilitate access to genetic services and information for families with children with hereditary disorders. In Puerto Rico, NYMAC's project has the purpose of understanding the needs of genetic services in the island, designing a curriculum for families and professionals, and helping families to access genetic services.

The CSMND family representative, Coral Jimenez, was chosen as one of the PR-NYMAC leaders together with Dr. Norma Arciniegas who is a pediatrician. The HDDDTP coordinator is also part of this collaborative effort. They have worked jointly on activities carried out during the reporting year such as participating on meetings, providing inputs, revising documents, and supporting the NYMAC team to coordinate activities for families and/or professionals. During May 2022 NYMAC coordinated three in person workshops. The CSMND family representative helped coordinate the activities and participated as a presenter together with Family Voices and PR Family to Family Center. Two of the workshops were carried out at the Medical Science Campus of the University of PR; one was provided to physicians and medical students, and the other was addressed to families. A third workshop was carried out at the Ponce School of Medicine, of the Ponce Health Science University, and addressed physicians and medical students too. Three geneticists in PR have also joined this effort: Dr. Simon Carlo, Dr. Frances Velez, and Dr. Santiago Cournier.

Collaboration with NYMAC has continued during present year.

Tele-health

Tele-health services at the RPCs and Autism centers have continued during the reporting year. However, as the Covid-19 pandemic descends, face to face services have been increasing. Based on the program's census, a total of 10,744 tele-health interventions were reported by the RPCs providers during reporting year, of which 1,457 (13.6%) were by video conference. This number is an approximate. This compares to approximately 26,946 telehealth services reported last year (2020-2021). Modalities include telephone and emails.

The centers have been equipped with the proper technology so that health care providers can evaluate behaviors and clinical aspects thanks to technological tools, and record evaluations with the required families' authorization and confidentiality measures. In addition to pediatricians, the following health disciplines continued to offer virtual services to eligible families in some of the RPCs: physical and occupational therapy, speech and language pathology and therapy, psychology, and nutrition. Social work and care coordination also offer distance support to families who need it.

Telehealth has demonstrated to be a great tool to reach out to families with accessibility difficulties such as transportation issues, or that suffer other situations that hinder them to get physically to the program. Tele health also has increased the capacity for ASD evaluations at the autism centers, helping to address the ASD evaluation waiting lists. Although CMS has encouraged states to continue to cover Medicaid and CHIP services when they are delivered via telehealth, we still do not know how the waivers and flexibility will be impacted in PR. In the meantime, the coordinator for the telehealth program together with the auxiliary director are visiting the centers and evaluating the programmatic aspects of telehealth at the CSHCN Program.

This modality of service will continue during the application year.

Enabling and direct services at the regional level

The CSHCN Program continues to offer direct and enabling services through the Regional Pediatric Centers (RPC) at the seven health regions of the island, and two Autism Centers. The program's direct contact with CSHCN and families fills a gap in the PR health care system, increasing the access to care for many CSHCN, and strengthening

the medical home community through the program's care coordination. In addition to care coordinators, care coordination is provided by other program's health care providers who are available at the moment of the need, especially social workers and nurses. Also, family to family support is provided by six (6) FESAs. FESAs are, or were, mothers of at least one CSHCN, and have the lived experience that empowers them to provide the support that many CSHCN families need.

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care.

HCT Physicians Survey

Health care transition (HCT) for YSHCN aims to maximize lifelong functioning. Physicians' knowledge about transition processes may increase the possibility of successful implementation of transition strategies and improve transition processes. For that matter, the QIC leadership planned on creating a survey to collect information from physicians about their knowledge and insights on HCT. This effort's first step was to review literature on an attempt to identify previous HCT surveys addressed to providers that could be replicated. At that moment, only one survey of this kind was found: the "Attitudes to Transition and Transfer Instrument to be Used in Adolescent Care" (ATTITUDES) (Sparud-Lundin, Berghammer, Brat & Moons, 2017). The survey's tool is based on the "Questionnaire about Attitudes of Rheumatology Practitioners Toward Transfer and Transition" (QUARTT) by Hilderson, Wouters & Moons (2011). The questionnaire was translated to Spanish, and posteriorly was given to three program's physicians for its revision. Their recommendations, including shortening the tool to reduce the risk of physicians not completing it, were integrated in the tool.

An online version was created in Microsoft Forms and pre-tested. The PR College of Physicians and Surgeons collaborated with the online distribution of the survey during December 2021 and January 2022. The survey was distributed to approximately 1,000 emails using the College's list. A total of 152 physicians participated of the survey. The PR College of Physicians and Surgeons has not updated the information on their emails' list, so the response rate couldn't be calculated.

Of the 152 physicians who participated, 51.3% reported they serve the pediatric population, 27.3% reported they serve both pediatric and adult populations, and 21.3% reported they serve only adult population. For statistical purposes, the sample was categorized in these three groups to understand differences and similarities between groups. There were statistically significant differences in some of the variables that are briefly described in the table below:

	Pediatric physicians %	Adult Physicians %	Pediatric and adult physicians %
Knows or has heard about health care transition processes.	63.3	34.3	51.2
Has never participated in transition processes	41.6	71.9	58.5
Thinks it is completely necessary to share the medical record with the youth recipient physician.	84.4	100.0	78.0
Thinks that transition processes should start at 18 years of age.	58.4	59.4	43.9
Thinks that transition processes should start at 12 years of age.	5.2	0.0	17.0
Has a transition policy or guide at their clinic or workplace.	41.6	3.1	22.0

Physicians who reported they serve both adult and pediatric populations had the highest percent, although still low, in expressing they believe transition processes should start at 12 (17%). This percent was 5.2% for pediatric physicians, and 0% for adult physicians.

Physicians also expressed their opinions and concerns through various open-ended questions. Some physicians expressed that the final transfer to the adult physician should be at 18 years of age while others opine 21 years of age is better (in PR adulthood is considered at 21). Below some of the written expressions about this topic:

"A person who feels as an adult is forced to be in the doctor's office with other children. They already feel big after they are 16... and many doctors who work with children are not comfortable with the older of 18. It doesn't make sense... there are more general practitioners and physicians for adults than pediatricians." (Pediatric physician)

"There are many pediatricians who already at 18 begin to tell the patient that they should seek an adult primary care physician, but many subspecialists do not see patients under the age of 21, and this is a problem. The full transition should be done at 21 so that the patient is not uncovered and there are no gray areas." (Adult physician)

"This is individual (case by case). Some patients are ready at 18 and others are not ready at 21." (Adult physician)

Physicians also expressed that transition processes should start before the final health care transfer, but their commentaries reflected lack of knowledge about the AAP's recommendations of starting transition at 12.

"Pediatrics is up to 20 years. So, the process should start as soon as he/she turns 20. We have 11 months to work on the transition." (Pediatric physician)

"I usually ask my patients to request their appointment (with the adult physician) on their penultimate visit with me, around 6 months before they turn 21." (Pediatric physician)

"I would start talking about the matter between the ages of 17-18, with emphasis between the ages of 20-21, since at 21 they already will go to adult clinics." (Pediatric physician)

"I think that at 16 is a good time to start conversations with the patient, family and providers involved in the case, ... to see if the process can be completed when they reach 18 years of age, if able." (Adult physician)

Many physicians expressed concerns about the difficulty to find physicians and specialists for adults. This was the most frequent concern expressed.

"It is very difficult to find providers for them because the pediatric ones do not see them because they are adults, and the internists do not receive them because they are pediatric." (Pediatric physician)

"I serve all ages, but the problem I have is when I refer to a subspecialist or specialist, that between 18 and 21 years of age the pediatric specialist no longer wants to see them, and the adult specialist does not receive them because they are not adults." (Adult and pediatric physician).

"Most pediatricians in PR see patients until they are 21. Usually, the problem is getting the appointment with the adult specialist." (Pediatric physician)

"I think that many times health insurances do not cover adult physicians' visits until the patient turns 21." (Pediatric physician)

"Many adult providers don't want to see 18's because malpractice insurance won't cover." (Pediatric physician)

Physicians believe that the adult age should be clearly established by authorities, although in PR the official established adult age is 21. However, 18 is considered adulthood for some things.

"They must medically decide if the person is legally an adult at 18 or at 21." (Adult and pediatric physician)

"A public policy should be created to exactly establish the age of adulthood." (Adult and pediatric physician)

"I need to know until what age does the patient belongs to pediatric care. Thank you" (Adult physician)

Physicians also gave recommendations:

“A uniform format should be developed to share the information that the selected adult physician will need to follow-up the YSHN.” (Pediatric physician)

“It is urgent, vital and necessary to develop mandatory seminars on this topic for all physicians, but especially for subspecialists who are the ones who will manage the young adults who will transition into their care.” (Pediatric physician)

“They should pay the time spent by the physician carrying out the transition.” (Pediatric and adult physician)

In summary, findings of this survey indicate that physicians have honest concerns about the HCT of their patients, but they lack tools, support, and evidence-based practices' knowledge on successful transitions. Survey findings suggest that pediatric physicians tend to be more aware of HCT processes compared to adult physicians. However, adult physicians do recognize the importance about addressing HCT. There are differences of opinions among physicians about the age to start the transition process. It seems that there is agreement among physicians that there is a gap of services between the ages of 18 and 21. Sixty four percent (64%) (97) of surveyed physicians showed interest in receiving information about the transition and provided their emails for that matter.

This survey has been shared with PR-F2F and with CEDD during reporting year, and various strategic possibilities has been discussed to reach out and provide tools to physicians. There are still other key stakeholders to meet during the year, share survey's findings, and hear/collect their inputs, including the CSHCN program physicians, Pediatric Hospital Foundation, and community physicians that we know are acquainted with HCT. Informational written material for physicians is being discussed with the PR-F2F. These strategies will continue for the application year.

Meetings with health insurances about HCT

The CSMND family representative identified the need for the program's care coordinators to better understand the GIP health insurance transition processes for YSHCN so that they could better inform families and youth. For that matter she had conversations with the PR-HIA clinical affairs specialist, resulting in the coordination of four (4) virtual meetings with the Case Management Offices of the four PR-HIA contracted health insurances (MCOs). The CSHCN Program seized this time to educate case managers about MCH Title V history, vision/mission, and values; the Title XIX and Title V Interagency agreement; the MCH essential public health and pyramid model; and the importance of integrating HCT processes at all health care levels, included MCOs. The processes and importance of a successful HCT were provided together with a description of the Got Transition model of practice with focus on health insurance transition. Also, a description of the CSHCN Program was provided. Our family representative shared her story about her YSHCN, her challenges, the importance of family-centered care and to provide information to families in all areas regarding HCT. Each case management office shared with us the formats they use for families to fill out their request to transfer the youth to an adult insurance plan. All meetings were interactive, and a Care Coordination Directory of the RPCs was provided to each health insurance case management representative. The table below shows the dates and number of participants in each meeting.

Health Insurance	Date	# GIP case managers	# CSHCN Program staff	# PRHIA staff
First Medical	12/02/2021	5	5	4
MMM	12/07/2021	5	9	9
Triple S	12/09/2021	12	7	5
Menonita	12/14/2021	5	4	5

The total of case managers who participated of the four meetings was 27. PR-HIA participants were the same persons in each meeting, and they participated as listeners. Many of the CSHCN Program participants repeated

meetings and participated actively. Case managers reported the activity increased their knowledge about the topic and 70% reported the information was useful. One of the case managers' supervisors expressed interest in implementing an adapted Got Transition protocol at their case management office. This was a first attempt to promote awareness of HCT among health insurances. The impact of this activity is unknown, but we expect to continue conversations with the PR-HIA and identify other strategies to continue our efforts towards strengthening system's HCT processes.

Other community efforts for HCT for YSHCN

The CSMND received an invitation from the Pediatric Hospital Foundation (PHF) for an activity carried out on June 9, 2022, to present a research summary on HCT by Dr. Dahima Cintrón-Lopez. Dr. Cintrón is a board-certified internist physician in PR, and a resident physician in the combined Internal Medicine- Pediatrics (Medpeds) Residency Program at the University of Puerto Rico- School of Medicine, Medical Sciences Campus. Also, information was provided about a webpage created in a collaboration between the PHF and the Medpeds Residency. The web page is called PACMA, acronym for "*Puente al Cuidado Médico Adulto*", or "*Bridge to Adult Health Care*" in English.

(<https://www.pacmapr.org/?fbclid=IwAR3LEMXLUBSG42L1DAv3PcJWuQXGXgKKns6gdQdXY5ouUYXelRKjUu-2jFA>)

The page displays key transition information for families and health care professionals, as well as lived experience stories. It includes four (4) short videos addressed to families titled:

1. Learn about the story of our patient Janlean
2. Until when should I take my child to the pediatrician?
3. What initiatives can I take to help my son or daughter transition to adult health care?
4. How can I prepare my child to transfer from being a pediatric patient to an adult patient?

Below the invitation for the activity.

TRANSITION TO ADULT CARE
Research Summary & Recommendations
Directed by Dahima Cintrón, MD
Med-Peds PGY-4

Join us to learn an effective way to transition pediatric patients with chronic conditions to the adult specialist. **Join the movement!**

Day: June 9th, 2022
Time: 1:00pm
Place: 545-A, Guillermo Armona Irizarry
RCM School of Medicine

Brought you by
the combined Internal Medicine-Pediatrics Residency from Puerto Rico
& Fundación Hospital Pediátrico
Please RSVP at: info@fundacionhospitalpediatrico.org
(939)450-7898

PACMA
Puente al Cuidado Médico Adulto
Fundación Hospital Pediátrico

The CSHCN Program transition committee will be working during application year to promote the use of the PACMA web page by program's providers as an additional resource to inform families on the matter.

As a result of this activity, a meeting with the PHF's Executive Director, Rebecca Quiñones, was carried out on August 17, 2022, to identify areas of collaboration. For the moment we are sharing information on community adult health care resources to enhance the possibilities of finding an adult health care provider who receives the young

adult, but still are planning additional meetings during present and application year.

Quality Improvement Health Care Transition at the RPCs

The CSHCN Program HCT Committee continued meeting during reporting year. This committee was created under the QIC and is composed of 11 professionals, mostly social workers and care coordinators who support HCT processes at the RPCs. Dr. Nannette Gonzalez and Dr. Alicia Maldonado, two of our pediatricians, are also members of the committee and give their inputs from the physician's perspective. They meet every 3 to 4 months to follow-up transition quality improvement activities, and to identify community events and collaborations to disseminate to their colleagues and families. Examples of these were the virtual workshop "Educate and empower yourself about independent living and transition to adult life services" carried out by the PR-State Rehabilitation Council; and "Youth Transition to Adult Life" carried out by APNI.

The committee revised the Transition Readiness Assessment Tool that is used at the RPCs as recommended by the Evaluation Specialist. They collected inputs from the FESAs and other staff, and during current year are updating the tool for better clarity and reliability. Also, the HCT Committee coordinator is collaborating with APNI as a presenter on some of their workshops such as a virtual meeting with APNI young leaders' group on December 17, 2021, and a description of transition services at the CSHCN Program on March 29, 2022.

SPM 1: Decrease the age when children at risk for autism spectrum disorders receive their first diagnostic evaluation

The CSMN Division staff continued implementing the strategies presented in the SAP for reporting year 2021-2022: 1) education to health care professionals and child caregivers about the early signs of ASDs; 2) distribution of educational materials regarding early identification of ASD in centers that provide services to families with infants and toddlers; 3) distribution of the "Passport to Health" ("Pasaporte a la Salud" in Spanish), to parents of newborns at the Vital Statistics Office; 4) delivery of information on ASD in the parent information centers' webpages; 5) ASD training to professionals; 6) promotion of the use of the ASD Registry among health care providers; 7) update of the ASD registry database.

Increasing awareness on early ASD identification and diagnosis

During reporting year, early ASD identification and diagnosis continued to be promoted by reaching out to agencies and programs that provide services to children. Workshops and CDC materials from the Learn the Signs. Act Early campaign were provided to key entities, as shown in table below. The use of the "ASD Early Identification Guide: Surveillance, Screening and Diagnosis" was encouraged among health care providers and other providers who serve children and adolescents. This guide was developed by specialized CSMN Division staff and includes the protocols for ASD early identification and diagnosis. Workshops and educational activities about the early signs of autism carried out during reporting year included the PR-DOH Protocols for Surveillance, Screening and Diagnosis of ASD; the Uniform Protocols for the Early Identification and Diagnosis of ASD; Early signs of ASD and referral processes for the CSHCN Program among other ASD topics. The table below shows the educational activities, audience, dates, and number of participants:

Activity-topic	Audience	Date	Number of participants
Workshops:			
1. Evidence-based interventions for infants/toddlers with ASD in their natural environments	PR-Part C Early Intervention	4/2022	70 providers
2. PR-DOH Protocols for Surveillance, Screening and Diagnosis of ASD	PR-Part C Early Intervention	4/2022	35 care coordinators

1. Uniform Protocols for the Early Identification and Diagnosis of ASD 2. Processes of referrals to the CSHCN Program	Special Education Service Centers: 1. Caguas 2. Humacao 3. Bayamón/Arecibo 4. San Juan 5. Mayaguez 6. Ponce 7. Fajardo/San Germán	5/31/2022 6/1/2022 6/2/2022 6/3/2022 6/9/2022 6/1/2022 6/14/2022	120
Talks about: • CSHCN Program services • Learn the Signs. Act Early • Distribution of early identification materials	ACUDEN Regulatory Policy Council and Interagency Committee	8/2022	25
Learn the signs. Act Early Guides for: 1. Early Identification of ASD: Surveillance, Screening and Diagnosis 2. Assessment Intervention Planning for Children and Adolescents with ASD 3. Guide to Evidence-Based Interventions for ASD	ACUDEN: teachers, assistants, and caregivers	4/23/2022	500 approx.
Workshop: Early Signs of ASD	Head/Early Head Start: Special needs care coordinators	2/25/2022	24
Workshop: Early Signs of ASD	Head/Early Head Start: education coordinators	4/8/2022	48
Conference: <i>"Early Identification of Autism: CDC's Revised Developmental Milestone Checklists"</i> Dr. Miguel Valencia-Prado	AMPRO: 18 th Annual Convention	11/13/2022	150
ASD Informational table distribution	AMPRO: 18 th Annual Convention	Nov 11-13, 2023	300 approx.

Also, 15,000 copies of the revised version of the Passport to Health (*Pasaporte a la Salud*) were provided to the PR-Demographic Registry Office to be delivered to families when registering their newborn. The Passport to Health is a booklet that informs families about the growing skills they should expect in their children during the first five (5) years, and the warning signs. It also provides contact information for families that may have concerns regarding developmental delay or risk for ASD.

The article "*Early Identification: Developmental Surveillance and Screening*" continues published at the APNI web page since 2020. During 2022 was downloaded by 446 persons. This article has the purpose of informing families

about accessing tools that show them the developmental milestones they should expect during the first five (5) years, and the signs that may indicate the child is not developing accordingly.

Identificación temprana: vigilancia y cernimiento del desarrollo CONOZCAN LOS SIGNOS

Cada bebé es único en su manera de ser. Un infante puede ser tranquilo, otro puede ser más activo. Cada uno crecerá y aprenderá a su ritmo y siguiendo su propio estilo. Sin embargo, todos los bebés tienen las mismas necesidades de: alimentación, atención, estímulos, seguridad, disciplina, comprensión, aceptación, paciencia y oportunidades para aprender.

Todos sabemos que los bebés aprenden desde que nacen. Sin embargo, investigaciones recientes han demostrado que el aprendizaje comienza desde antes de nacer. Desde el nacimiento, la mayoría de los bebés ven, siguen con la vista, oyen y no solamente discriminan entre sonidos, sino que reconocen la voz de su madre. Las habilidades y el desarrollo sensorial y cognitivo de los recién nacidos es mucho más complejo de lo que muchas personas piensan. Los bebés nacen listos para continuar aprendiendo.

Por esta razón es importante identificar tempranamente a los niños con retrasos en el desarrollo o con Trastornos del Espectro del Autismo (TEA) para comenzar intervenciones basadas en evidencia lo antes posible. La intervención temprana mejora el desarrollo general del niño, reduce conductas inapropiadas, ayuda a la familia y a su vez conduce a mejores resultados funcionales a largo plazo.

Por lo general, en el proceso de vigilancia del desarrollo, es posible reconocer retrasos en el desarrollo y el autismo durante los primeros tres años de vida. Este proceso se debe realizar con todos los niños pequeños para identificar aquellos en riesgo de cualquier retraso o condición que afecte su desarrollo. Es importante que los profesionales, incluyendo los proveedores de cuidado y las familias, conozcan que hay varias maneras de identificar niños a riesgo de presentar retrasos en el desarrollo o el TEA. Los Guías de Servicios Pediátricos Preventivos del Departamento de Salud establecen que se debe llevar a cabo un cernimiento del desarrollo en las visitas de cuidados pediátricos a los 9, 18, 24 y 36 meses de edad y un cernimiento para autismo a los 18 y 24 meses a todos los niños.

El Departamento de Salud ha desarrollado el folleto *Pasaporte a la Salud* con el propósito de informar a las familias sobre las destrezas que deben esperar en sus niños durante los primeros cinco (5) años y las señales de alerta que pueden indicar que el niño no se está desarrollando de acuerdo a lo esperado. El *Pasaporte a la Salud* se le entrega a cada familia al momento de inscripción de su bebé en el Registro Demográfico.

Además, como estrategia para fortalecer la vigilancia del desarrollo y del TEA, los Centros para el Control de Enfermedades (CDC, por sus siglas en inglés) han lanzado la campaña, *Aprende los Signos. Reacciona Pronto*. La Sra. Nancy Nieves Muñoz de la División Niños con Necesidades Médicas Especiales del Departamento de Salud, fue designada como embajadora de la misma en Puerto Rico. Todo proveedor de servicios o líderes comunitarios que tengan interés en recibir orientación o materiales libre de costo para apoyar el esfuerzo de vigilancia del desarrollo y del TEA pueden comunicarse al 787-765-2929 ext. 5572 o escribir a nancy.nieves@salud.pr.gov. Nancy Nieves Muñoz, EdM, CAS Embajadora para Puerto Rico para la Campaña del CDC Aprende los Signos. Reacciona Pronto División Niños con Necesidades Médicas Especiales Departamento de Salud 787.765.2929 ext. 5572 o 4587



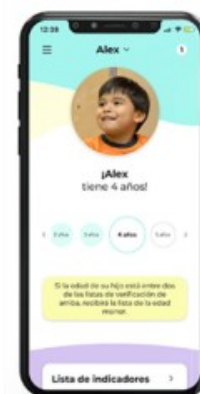
Reaccione Pronto

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Pasaporte a la Salud de:



The Puerto Rico Act Early Ambassador Liaison to the CDC's "Learn the Signs. Act Early" initiative, who is also a staff of the CSMN Division, established the goal to help promote the early identification of children with developmental delays in families served by the PR- WIC Program. During reporting year, 15,000 "Development Indicators Booklets" from Learn the Signs. Act Early, were provided to the WIC Program, as well as information for the promotion of the electronic application "Milestone Tracker App" (*Sigamos el Desarrollo*). This helped WIC staff to have the tools to help families monitor their children's developmental stages.



The “Guide for Evidence-based Interventions for Children and Adolescents with ASD” was released. This guide was developed by specialized ASD educators from the CSHN Program and revised by the BIDA Law Steering Committee members. Committee members are comprised of physicians, psychologists, speech and language pathologists, occupational therapists, and one nutritionist. The Guide is now available for download on the DOH website: <https://www.salud.pr.gov/CMS/319>, and on the APNI website: www.apnpr.org, (library section). It was also sent by email to key entities: PR-Autism Center, CEPA, the seven RPCs, Part C Early Intervention Program, Department of Education, University of Puerto Rico, PR-Inter-American University, Carlos Albizu University, PR-Psychology Association, APNI, F2F Informational Center, Institute for Developmental Deficiencies, Autism Alliance, Head Start State Collaboration Office, Early Head Start and Head Start Directors Association, and to ACUDEN and its Child Care Centers. It was also exhibited at the Summit of the PDG 0-5 of ACUDEN, at the Annual Conference of Pediatricians of the east (AMPRE Spanish acronym) and at the Annual Conference of the PR- Psychology Association.

Department of Health ASD Registry

The ASD Registry was created in keeping with dispositions of the BIDA law, and it is overseen by CSMN Division staff. The Registry collects demographic data of the population diagnosed with autism. This will facilitate the planning and allocation of services and future policy. It includes any resident of Puerto Rico with an autism diagnosis that complies with the criteria established in the PR-DOH diagnostic protocol. For the purpose of the Registry, ASD is defined based on the DSM-IV-TR and DSM-5 categories. As of 2022, registry data showed the following distribution based on the DSM ASD severity levels:

	Level 1: Requires support	Level 2: Requires substantial support	Level 3: Requires very substantial support
Social communication and social interaction	72 = 12.68%	174 = 30.63%	322 = 56.69%
Repetitive and restrictive patterns of behavior, interests, or activities	95 = 16.72%	204 = 35.91 %	95 = 16.72%

The Office of Informatics and Technological Advances (OIAT Spanish Acronym) maintains the Autism Registry page. The page includes information for health care professionals about the purpose of the Autism Registry, confidentiality, and the instructions to enter information. The format is prepared to generate a monthly report and a cumulative report. During 2022, staff from the Central Level held several meetings with Mr. Christian Rodríguez from OIAT to discuss improvements to the Registry. The CSMND assigned an epidemiologist who now monitors the registry data monthly. During reporting year and with the help of the Demographic Registry data linkages, he corrected data errors and updated data. Since then, he monitors the Registry’s data quality.

The Registry collects the following information on the person diagnosed with ASD: name and initial; sex; father’s and mother’s last names; last 4 digits of Social Security number; birth date; place of birth; information on the diagnosis; for DSM-5 diagnosis, levels of severity; instruments and/or references used to document behavior observed; date the diagnosis was established; date that symptoms were first observed; residence when diagnosis was established; other conditions or diagnoses the person has; services, if any, the person receives; other family members with autism; information on contact person; and information on medical coverage. It also includes the following information about the professional who established the diagnosis: name and their license number; profession; and contact information.

For patients over 22 years of age, the Registry also collects the following information: highest academic level achieved; employment status; and if employed if part time or full time. A question was added asking if the mother

reports laboratory evidence of possible virus infection during pregnancy? They would have to check all that apply: Zika, SARS-CoV-2 (COVID-19), other (specify), or none. The PR SET-NET is currently using data from the Autism Registry to investigate ASD among children with/without laboratory evidence of Zika virus infection during the pregnancy.

The CSMN Division continues to promote the use of the ASD Registry through all the variety of ASD activities that the division carried out. In collaboration with the Division, APNI distributes the Registry's brochure to the participants of their outreach and training activities.

ASD evaluation waiting lists

The CSHCN Program is experiencing an increased number of referrals from community resources for ASD evaluations. Referrals may come from PCPs, pediatric specialists, Part C Early Intervention, Head Start, among others. Program's Autism Centers are equipped with teams of qualified professionals who are experts in the matter, and the centers are progressively being recognized in the community as specialized sites for ASD evaluation, increasing the referrals to these centers. In addition, the lack of health care access during the Covid-19 pandemic may have delayed referrals for evaluations that are being realized now. The increase of referrals has also increased the waiting lists for ASD assessments. This can be a challenge to achieve SPM 1: the early identification of children with ASD. The table below shows for years 2020, 2021 and 2022 the number of referrals to Autism Centers and RPCs, the percent of ASD evaluations completed, percent of positive results for ASD, percent of males with positive results, and the number of children in waiting lists in December of each target year as the cutoff date.

	2020	2021	2022
Number of ASD evaluation referrals	646	1,247	1,390
Percent of ASD evaluations completed	59.0%	53.4%	52.5%
Percent of positive ASD results	77.7%	81%	84.2%
Percent of males in the group of positive ASD results	78.7%	73.4%	74.5%
Number of children in ASD evaluation waiting list as of December of each target year	300	334	501

Note: There may be duplication of children if a child is referred from an RPC to another RPC, including autism centers.

As of March 2023, the Autism Centers have five (5) clinical psychologists, two (2) speech and language pathologists, two (2) occupational therapists, and a specialized pediatrician. Most of ASD evaluations at the centers are realized by multidisciplinary teams, generally by a psychologist and occupational therapist, but other professionals may participate.

To address waiting lists, strategies to increase the capacity for ASD evaluations were implemented. For example, although the first visit for ASD evaluation is mostly a face-to-face visit, the number of tele-health assessments increased for the child's remaining visits, saving the traveling time for families, and increasing the number of evaluations at the centers. Also, the Autism centers prioritize ASD evaluations for children less than 36 months and refer most of the older children to the other RPCs to be evaluated. On the other hand, children less than 36 months of age in the ASD evaluation waiting list are being referred to Part C Early Intervention even if they have still not been diagnosed. Other strategies to address families while in waiting lists are being identified and will continue during application year.

Orientations to groups of families is also being carried out at the Metro Autism Center to provide support to the maximum number of families after confirming a positive ASD Dx. This has also increased the capacity to serve families, while at the same time they get to know and support each other. These group sessions provide families with information about the disorder, how to manage it, how to help the child at home, resources in the community, among other information. After assuring families are better empowered, children are referred to community resources. However, the island lacks enough skilled ASD providers and resources, so this continues to be a challenge.

During reporting year, the CSMND technological team implemented in the Autism Centers' Redcap platform a

feature to track the time from the referral to the evaluation coordination. This is another attempt to make sure a child waits the less time possible for the evaluation. Also, a tracking system was implemented in the platform to monitor where the child is in terms of his care process, including referrals from the CSHCN program to the community.

Autism Centers are localized at the Metro area and in Ponce, facilitating access to families in the north-east and south areas of the island. Families who live in the west are sometimes referred to the Metro Autism center, however, some families prefer to visit the Mayaguez RPC because it is geographically within their region. This center also has a specialized professional team for ASD evaluations.

SPM 2: Decrease Prevalence of Neural Tube Defects at Birth

The AAP, as well as many other health societies and associations, endorse the recommendation that women of reproductive age consume 400 mcg of folic acid daily to prevent neural tube defects (NTDs). After 30 years of this recommendation in the US, it's still in effect today (Crider, et al. 2022 and CDC, 2022). For women who have previously had an NTD pregnancy, the CDC recommends increasing the intake of folic acid to 4000 mcg per day, beginning at least 1 month before conception and continuing through the first trimester. Implementation of these recommendations is essential for the primary prevention of these birth defects. The consumption of folic acid is an evidence-based practice, and the PR-BDSPS continues its promotion in the population of women of reproductive age. The surveillance system also uses the data collected to identify populations at risk of congenital defects.

The PR-BDSPS continued working with NTDs prevention and folic acid promotion as part of the main goals of the Program. This is achieved through health education promotion and with the orientation component worked by our social worker. The PR-BDSPS social worker contacts families of children born with birth defects, to provide orientation, referral to services, and support. Also, families with a pregnancy loss are contacted to provide orientation regarding birth defects prevention and to share educational materials.

In February 2022 a new Medical Record Abstractor (MRA) for the Caguas region was hired. The PR-BDSPS Coordinator visited all the Caguas region birthing hospitals as part of the training provided. A total of seven (7) birthing hospitals, one (1) urologist medical office, and the Caguas and Fajardo Pediatric Centers were visited. The PR-BDSPS coordinator met with the head nurses to introduce the new MRA. All working areas were also visited. Five hundred (500) copies of educational materials, reporting forms, a list of birth defects under surveillance with ICD-10 codes, and the BDSPS 2017 Annual Report were distributed.

In March 2022, the coordinator gave a presentation on the PR-BDSPS and the pulse oximetry screening in the Special Olympics Activity from the "Apoyo a Padres de Niños con Impedimentos (APNI)" and Puerto Rico Early Hearing Detection & Intervention (PCANU by its Spanish acronym) programs. Parents and caregivers from both programs were invited to this activity.

A new hospital from the Bayamón region opened in 2022 called Sabanera Health Hospital in the Dorado County. In May 2022, the PR-BDSPS coordinator gave a presentation regarding the program's protocols, the diagnostics under surveillance, and the pulse oximetry screening. A total of six (6) health professionals including: doctors, hospital administrators, and head nurses participated. A total of 200 copies of educational material and forms were provided.

In June 2022, the PR-BDSPS coordinator offered a presentation regarding the implementation of a virtual campaign of folic acid to 13 young members of the "Consejo Asesor Juvenil (CAJ)" from the MCHD. In this activity, the importance of folic acid intake to prevent NTDs was explained. Also, ideas from virtual publications, educational infographics, and other materials were shared with the 13 members to have feedback from them. These young people are leaders and advocates representing different counties and communities in Puerto Rico.

In addition, PR-BDSPS educational materials are also distributed by the CSHCN Program staff to families served and through other activities such as health fairs. During this period, CSHCN staff participated in a total of six (6) activities: Head Start community health fair in the Ponce County (October 2021), Ponce RPC health fair (December

2021), ACUDEN health fair (April 2022), NYMAC Regional Genetics Network symposium (May 2022), “Instituto de Deficiencias en el Desarrollo” activity from the University of Puerto Rico, Medical Sciences Campus (September 2022), and a Camuy’s community health fair (September 2022). A total of 1,865 educational materials were distributed to the general public.

One of the main goals of our program is to contact >80% of the families identified by our medical record abstractors with an NTD affected, intending to provide guidance and recurrence prevention counseling; offering educational material, and referring the child to different services when necessary. The main referrals are to Early Intervention, and Regional Pediatric Centers. The social worker also refers the child to other community programs if needed, such as My Down Syndrome Friends (MASD by its Spanish acronym), Down Syndrome Puerto Rico Association, Spina Bifida Association, Association of Parents of Children with Disabilities (APNI by its Spanish acronym), Jarcho-Levin and Trisomy 18 family support community and parent support groups. During this period, the PR-BDSPS successfully reached 93% (13/14) of the cases identified with an NTD. Only one case was not reached by phone after several attempts. In addition, 317 families identified by the PR-BDSPS were contacted. A total of 109 referrals were realized to Pediatric Centers, 68 to Early Intervention, and 37 to community programs were performed. Additionally, 77 families received a follow-up call, this call occurs in a 4-6-month period after the initial call.

The PR-BDSPS webpage was updated, new educational material was uploaded and it’s available for everyone. The PR-BDSPS social worker (SW) shares the link via email with the families.

January is the national birth defects prevention and awareness month as stated by the National Birth Defects Prevention Network (NBDPN) and Centers for Diseases Control and Prevention (CDC) in the US. In 2021, the PR-BDSPS worked on a digital campaign using the Puerto Rico Department of Health social media: Twitter, Instagram, and Facebook. During January 2021, a total of four (4) weekly publications were made. These publications had a total of 317,345 views.

Some of the informational written material can be seen below:



Children with Special Health Care Needs - Application Year

NPM 11: Increase the number of CSHCN who receive regular ongoing comprehensive health care within a medical home.

Based on the 2023 MCH-JS, 53.1% of CSHCN age 0 to 17 in PR have a medical home. Previous studies showed a 24.7% for 2010 and a 30.8% for 2014 (PR-CSHCN Survey).

The PR-CSHCN Program has advanced in the selection of strong and evidence-based strategies measures (ESMs) for medical home thanks to the MCH-Evidence Center. Now we have two emerging evidence ESMs connected to medical home, and one moderate evidence ESM connected to HCT. The four CSHCN domain ESMs were evaluated by the MCH-Evidence Center as strong quantifiable measures.

ESM 11.1: Percent of families at the CSHCN Program who report that they “always” have a care coordinator or other professional available to help them find the services they need.

This measure is linked with the goal of ensuring an enhanced care coordination system at the CSHCNP to improve health care accessibility and integrated services, and to support the expansion of the medical home community at the seven health regions of the island. The ESM has increased during the last three years as follows: 74.6 for 2021, 75.2 for 2022, and 80 for 2023. Last year's increase may be related to the recruitment of more care coordinators and quality improvement activities at the RPCs.

ESM 11.2: Percent of families at the CSHCN Program who “totally agree” that their child has a better health status thanks to the efforts of the care coordinator to help them access the needed services.

Through this ESM we pretend to understand the perceptions of families about the impact of care coordination services in their child's health. This measure is linked to the quality of the care coordination services. Results for this ESM may help future strategic planning. The measure baseline was established in 2022 (58%), and showed a slightly, not significant decrease for 2023 (57.4%).

ESMs have served as a guide for SAP's decision making. There are other tools that serve as a guide to continue advancing the system of care for the CYSHCN and their families. One of these tools is the *Blueprint for Change*. With the input from diverse stakeholders, the MCHB identified a set of core principles in 4 critical areas: health equity, family and child well-being and quality of life, access to services, and financing of services. Although different, the four areas are interconnected, and one may influence the other. The PR-SAP's strategies for NPM 11 (care coordination, family engagement, and family support) may impact at least three of these critical areas in the following ways: 1- care coordination is a key element for the increase of access to services for CSHCN and their families; 2- the growth of family engagement and leadership in the system may impact health equity in the long term; 3- family/professional partnerships and family support may result in an increase of family's well-being and for that matter, the health and well-being of the CYSHCN.



FIGURE 1
Blueprint for Change.

From: A Blueprint for Change: Guiding Principles for a System of Services for Children and Youth with Special Health Care Needs and their Families

For the application year, efforts will continue focused on care coordination quality improvement, family engagement and participation, family to family support, improved communication between PCPs/pediatricians and PR-CSHCN providers, and the quality of tele health services.

Meetings with care coordinators will be carried out to hear their experiences and barriers when performing their work, and their participation as members of the health care work team. Special attention will be given to their experiences with the initiative to identify families' needs using the Family Needs Survey and providing support accordingly. Strategies to inform families will also be addressed. Their inputs will help assess care coordination at the program, identify areas that need improvements, detect workforce development needs, and have better informed decision-making. In addition, other topics will be provided to them such as a refresher of Title V, the impact of care coordination in the health care system, and health equity.

A special activity is being developed which consists of each FESA giving a presentation to their co-workers, including health care providers, about their experiences as a mother of a CSHCN. The purpose is to continue increasing consciousness and responsiveness in the staff about how family representatives are a key component to help them develop family-professional partnerships, and to support them during significant moments with families, such as a family with a recent diagnosis for the child. In addition, information will be provided to staff about health equity, determinants of health, and the levels of family engagement.

Meetings with FESAs and care coordinators will be carried out to explore the possibility of achieving shared plans of care for identified families with children with complex and/or multiple conditions and services that may benefit from this tool. This activity comes as a recommendation from last year's annual report reviewers. Also, education will be provided to FESAs on family-professional partnerships as well as on data registration to improve the reports about the number of CSHCN and families that are impacted by educational activities and support services at the program. The lack of registered information generates an underreporting by the program.

The PR-CSMND together with the PR-MCAD will develop educative activities and family engagement conversations to be afterwards coordinated for the entire Title V staff. Personnel related in some way to Title V will also be included in this grand activity. The goal is to increase staff awareness about family engagement and to prepare staff to be an active part of including families to participate at all levels. The core Family Engagement Work Team which is comprised of two epidemiologists, three evaluators, a cultural anthropologist, and a family representative, will develop the activities' logistics during application year. It is expected that more than 350 staff members will be

impacted through this activity.

Together with the QIC and with the support of our psychologists, will try to identify mechanisms to increase integration with mental health services for CSHCN families that need it. Mechanisms may include the identification and promotion among families of how to access mental health services. Families who face chronic stressors related to the caregiving responsibilities of children with complex conditions may have significant psychological and emotional effects, leading to mental health issues. The management of these stressors requires effective coping strategies and may need the access to appropriate resources that promote mental well-being. By acknowledging and addressing family stressors, families can experience improved outcomes.

The Telehealth Program coordinator is developing a survey for the PR-CSHCN health care providers who use tele health. The purpose is to better understand their experiences and needs. It is expected that the survey will be administered during the application year. The results will be used to better understand how the program helps increase access to care, to identify barriers, and to increase efficiency. The Telehealth Program is following the governmental decisions about tele health waivers in case there are changes to be made at the program.

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care.

The 2023 MCH-JS showed that 22.2% of YSHCN 12 to 17 years of age in PR had a successful health care transition. Previous HCT studies showed a 24.5% in 2010 and 24.7% in 2015 (PR-CSHCN Survey). This may indicate that successful HCT continues to be a weakness in the PR health care system for YSHCN.

The PR-CSHCN Program has advanced in the selection of strong and evidence-based strategies measures (ESMs) for medical home thanks to the MCH-Evidence Center. Now we have two emerging evidence ESMs connected to medical home, and one moderate evidence ESM connected to HCT. The four CSHCN domain ESMs were evaluated by the MCH-Evidence Center as strong quantifiable measures.

ESM 12.1: Percent of YSHCN who receive care at the RPCs and has completed a transition readiness assessment.

This measure is linked with the goal of increasing the number of YSHCN who have a successful transition to an adult health care provider at the program. The transition readiness assessment is the 3rd core element of the Got Transition model. The readiness assessment gives information to the health care provider about how ready the YSHCN is to start developing the health transition plan together. The MCH Evidence Center found no similar strategy in the established evidence for this NPM. However, the center found that it aligns with Innovation Hub's Youth and Young Adult Transition, and with Medicaid Managed Care programs using the Six Core Elements of HCT. This measure has decreased during the last three years (71.8% for 2020 data; 71% for 2021 data; and 70.4% for 2022 data). Although the decrease is not significant, the measure has not met the expected objectives and will be addressed during application year.

ESM 12.2: Percent of YSHCN at the CSHCN Program who has a transition action plan in place after completing a transition readiness assessment.

This measure is linked with the goal of increasing the number of YSHCN who have a successful transition to an adult health care provider at the program. By tracking this measure, we monitor the number of YSHCN at the CSHCN Program that are ready for transition and have a transition action plan in place. This is the 4th core element of the Got Transition model. The measure baseline is from year 2021 (57.1%) and showed an increase of 2.6% in 2023 (60%).

For the application year, efforts will be focused on informing physicians about HCT and HCT processes, educating families, and continue with HCT quality improvement strategies at the PR-CSHCNP.

Physicians are a key component of the health care system. Their knowledge and support to HCT processes will increase the possibility of successful transitions for YSHCN. For that reason, a survey was developed and implemented to collect information about physicians' perspectives and knowledge about HCT. Findings have been

shared with the PR-F2F Center, and with the State Council on Developmental Disabilities (CEDD, Spanish acronym). This served as the starting point of conversational brainstorming on the development of strategic collaborations which will continue to be defined during application year. Findings will also be shared with the PHF and any other interested stakeholder in order to continue encouraging these conversations.

A meeting will be coordinated with the PR-CSHCN Program's pediatricians to discuss the HCT survey results and how to provide HCT tools for both community pediatric physicians as well as those physicians who serve the adult population. In addition, the program's referral form for community adult physicians will be discussed. This comes as a concern from some of our pediatricians who believe the form should be adapted and updated.

The development of HCT educational material for youth, including YSHCN, will be discussed with the Youth Advisory Council and with the PR-F2F Center. The F2F center already has developed educational material, as well as the beautiful diagram shown below. This diagram will be presented to the HCT committee as a possibility to be adapted and shared with families and YSHCN at the RPCs.



Another HCT tool to be used during the application year is PACMA, acronym for “*Puente al Cuidado Médico Adulto*”, or “*Bridge to Adult Health Care*” in English. PACMA is an initiative of the PHF and the Medpeds Residency of the School of Medicine, University of PR. It consists of a web page that provides educational and practical content to adolescents and young adults who received care at the University Pediatric Hospital of the Medical Center of San Juan, have chronic health conditions and are soon to turn 21 years of age (<https://www.pacmapr.org/>). This webpage has comprehensive information about HCT addressed to families. Information about how to access PACMA will be shared with the PR-CSHCN Program staff so that in turn, they share it with families and YSHCN.

After five years of implementing the Got Transition model at the RPCs (2018-2023), the six core elements of Got Transition will be evaluated again to assess progress and changes from the baseline which was collected in 2018. This activity has been delayed, especially because of the Covid-19 lockdown, and it has been planned to be implemented during the application year. The same measurement tool will be used: “*Health Care Transition Process Measurement Tool*”. This tool scores each of the six core elements.

The HCT committee will continue their meetings to monitor and assure HCT quality improvement at the program. For the application year this includes the revision and update of HCT forms and protocols.

SPM 1: Decrease the age when children at risk for autism spectrum disorders receive their first diagnostic

Based on 2020 data, approximately 1 in 36 children in the US is diagnosed with ASD (CDC-ADDM 2023). Boys are four times more likely to be diagnosed with autism than girls. Most children are diagnosed after age 4. Thirty one

percent (31%) of children with ASD have an intellectual disability (IQ <70), 25% are in the borderline range (IQ 71–85), and 44% have IQ scores in the average to above average range (IQ >85). Autism affects all ethnic and socioeconomic groups. Minority groups tend to be diagnosed later and less often. Early intervention is the best opportunity for healthy development and benefits across the lifespan.

Based on the 2023 MCH-JS, the prevalence in PR of ASD in children 3 to 17 years of age is 4.7% (1 in 21). This shows a continuous increase in ASD prevalence when compared to the 2019 MCH-JS (3.1%; 1 in 32), and previous PR-CSHCN surveys (2.5%; 1 in 40 for 2015; 1%; 1 in 100 for 2010). If these data were comparable, it would translate in an average increase of .3% per year.

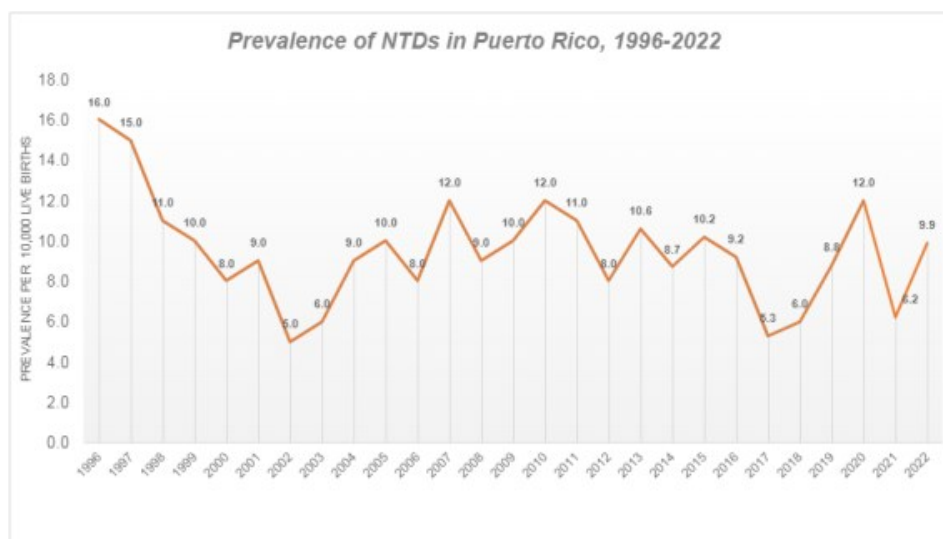
During present year the PR-DOH was awarded a grant to be part of the CDC-Autism and Developmental Disabilities Monitoring (ADDM) Network. Currently the network consists of 14 states and the jurisdiction of PR. With the technical assistance of CDC, the network reviews health and education data sources of a selected geographically contiguous area to identify and abstract data from cases diagnosed with ASD or other developmental disabilities. The purpose is to track the number and characteristics of 4- and 8-year-old children with ASD or DD in multiple and diverse communities. Through this systematic record review activity, we expect to have more data about ASD in PR within the next years.

Plan for the application year related to SPM 1 will focus on strategies to decrease the waiting lists for ASD evaluations at the PR-CSHCN program. The ASD diagnostic protocol at the program has been revisited to identify and implement strategies that will help comply with the mandate of completing the diagnosis process within 90 days from the referral date. Meetings with the QIC and with key program's staff will be carried out to discuss how to continue addressing the increasing demand for diagnostic evaluations and how to reinforce evaluations for children less than 36 months of age. Efforts to continue and expand collaborations with the Part C Early Intervention Program will continue to increase the access to early intervention in children less than 36 months diagnosed with ASD or who present the ASD early signs, even if not still diagnosed.

A challenge to be addressed during application year is that the CSMND staff member responsible to coordinate SPM 1 activities was moved to the new PR-ADDM to help implement and coordinate the project. Mrs. Nancy Nieves-Muñoz was the person in charge of programming the education activities for health care providers and other professionals who treat ASD, reinforce CSHCN program's staff on ASD, promote the use of the Autism Registry, coordinate the distribution of educative material among other activities. As the PR ambassador for the CDC-Learn the Signs. Act Early, Mrs. Nieves-Muñoz will continue to promote ASD early identification and intervention among families and professionals. On the other hand, to continue the implementation of strategies and activities as well as identifying additional mechanisms for SPM 1, an ASD committee will be created during application year. We expect to have representatives from key entities such as the AAP (PR Chapter), Puerto Rican Pediatric Society, Medicaid, Part C Early Intervention Program, Autism Centers, PR-ADDM, health care professionals who serve ASD population among others. This committee will be allied to the BIDA Law Steering Committee.

SPM 2: Decrease Prevalence of Neural Tube Defects at Birth

The PR-BDSPS continues using surveillance data to identify at risk population. NTDs pregnancies is one of the most important populations at risk identified by the program. NTD prevalence in PR decreased from 16.0 (per 10,000 live births) in 1996 to 6.0 in 2002. Folic acid intake is recommended in PR since 1994 and enriched grain products were implemented in 1998 (Garcia, 2008). However, in the past twenty years NTDs prevalence in PR has been inconsistent. (See figure below).



NTDs prevalence globally range between 0.3-199.45 (per 10,000 live births). In America the median prevalence of NTDs from 1990 to 2014 was 11.5 (per 10,000 live births) (Zaganjor, et al 2016). Estimates shows that folic acid consumption and fortification of foods can reduce NTDs prevalence do 5.0-6.0 (per 10,000 live births) (Zaganjor, et al 2016).

According to the “Pregnancy Risk Assessment Monitoring System” (PRAMS) in PR, only 20% of women in 2017 and 2018 reported to have folic acid intake every day before pregnancy. The percentage of folic acid consumption during pregnancy was 85%. This data evidence that health promotion in this matter is needed.

The PR-BDSPS will continue linking surveillance data, birth, and death records. The PR-BDSPS receives vital statistics data sets and databases for livebirths and death records. This information is used for statistics calculations, data linkages, case ascertainment and to complete missing variables. The PR-BDSPS coordinator/epidemiologist also has access to the birth certificates view-only platform to corroborate the information reported in the case abstraction forms.

The PR-BDSPS is working in an educational campaign of folic acid intake using the PR Department of Health webpage and social media such as: Instagram, Facebook, and Twitter. As part of this campaign the program seeks to promote folic acid intake to prevent NTDs using internet and other virtual sources to impact more people. Also, as part of this campaign the program will update educational material on folic acid intake, birth defects prevention and NTDs.

Identifying pregnancies that have been affected by NTDs can help target prevention and education efforts for future pregnancies. The PR-BDSPS has a strong primary prevention strategy for this population where the mothers are contacted by the program’s social worker (SW) to provide orientation about how to reduce the risk of a recurrent NTD-affected pregnancy. This strategy will be continued.

The PR-BDSPS will continue the publication of the PR-BDSPS Biennial Report. The Report presents the prevalence of birth defects under surveillance and is distributed to collaborators, health care professionals, medical specialists, social workers, and nurses throughout Puerto Rico. It is also published in the PR-DOH webpage. The PR-BDSPS also provides data for the National Birth Defects Prevention Network (NBDPN) biennial report and fulfills data requests from the public, health professionals, hospitals and other agencies requesting birth defects statistics for presentations, small community grants, thesis, and research projects among others.

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 Public Input focused on the reviewed 2020-2025 State Action Plan (SAP). PR Title V prepared a report with the proposed SAP and distributed it by email along with the translated FY 2020-2021 State Snapshot and a URL address that would allow them to provide their input and recommendations through Google Forms. It was shared with stakeholders such as members of the HNA Advisory Committee (HNAAC) and the Regional Boards (RBs), as well as other Title V partners. A period of 3 weeks was allowed for participants to offer their input.

The Form allowed stakeholders to determine if the established strategies were contributing “a lot”, “quite a lot”, “somewhat”, or “nothing” for each of the priorities set in the SAP, as well as to identify unknown strategies. It also allowed stakeholders to make recommendations for each of the strategies, as well as giving suggestions for new strategies and identifying areas for collaboration.

The HNA Steering Committee discussed the SAP input, along with 2023 HNA findings, accounting for resource and staff availability to develop and implement said strategy. As for those strategies that the MCAHD and the CSMND cannot carry out, PR Title V will reach with other agencies - that also serve the MCA population so they can join us in our efforts.

Forty-eight inputs were received (Figure 1): 56.3% by government agencies, 22.9% by non-profit organizations, 10.4% by private agencies, 8.4% by community and families with CSHCN, and 2.1% by HNA Advisory Committee. Of all the participants 64% belongs to MCAHD Regional Boards.

Figure 1: PR Five Year State Action Plan Participants Distribution for 2023 Public Input

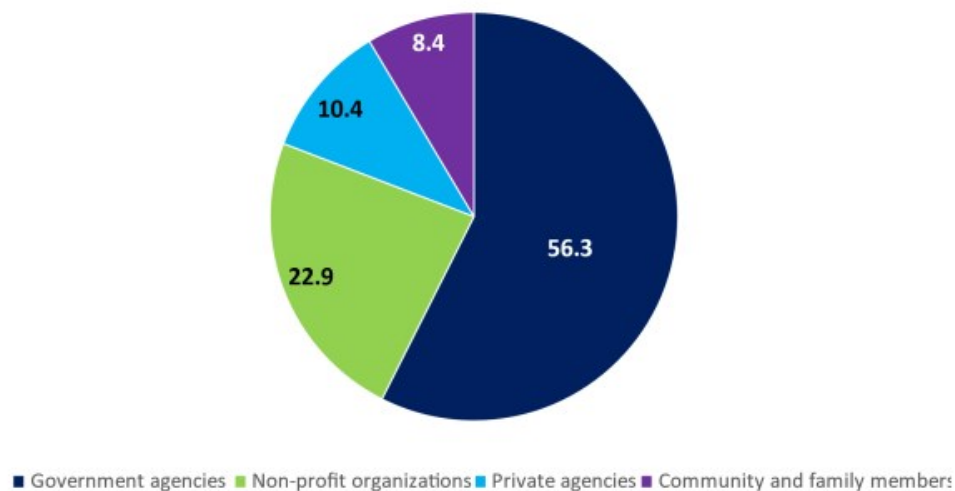


Table 1 provides a detailed list of the Public Input participants. The Youth Advisory Council (YAC) met as a group and 15 members provided one input. Added to the other 47 individuals inputs, about 48 individuals shared their input and recommendations.

Table 1: PR Five Year State Action Plan Participants List for 2023 Public Input

Government agencies	Non-profit agencies	Private agencies	Community/Families
Head Start/Early Head Start	Support for Parents of Children with Disabilities	Health Insurances	Youth Advisory Council
PR Health Department	Foundation for the Development of Own Home	Puerto Rican Family Institute	Damas Foundation
PR Education Department	FQHC		Community leaders
PR Family Department	ESCAPE (Family Strengthening Center)		
PR Housing Department	Continuum Mental Care Corp.		
Government Municipality Office	PR's Education and Rehabilitation Society		
WIC	ESPIBI (Center for Development and Specialized Services)		
Medicaid	"Norte Verdadero" Home (a shelter for mistreated girls)		
	COSIANI (integrated services for children)		

Overall, 90% or more of participants agreed that most of the strategies aimed at improving the health and wellbeing of each population contributed to reach said priorities "a lot" or "quite a lot". The following is a brief description of the stakeholders' input by domain.

Women Maternal Health

A total of 7 strategies were proposed to promote health and wellbeing of WRA and 7 to improve birth outcomes. Six of the seven strategies, according to about 96% of the participants, contributed "a lot" or "quite a lot" to the success of WRA's health and wellbeing. Most participants—between 92% and 98%—said that all the strategies suggested to improve birth outcomes contribute "a lot" or "quite a lot."

Few participants (4%–6%) thought three strategies contributed to this domain's priorities "a little". These strategies are promoting person-centered services among health care providers and WRA; disseminating and promoting the Prenatal Health Care Services Guidelines to the target population and health care providers; and promoting preventive dental visits among Title V Home Visiting Program (HVP) pregnant participants. The first two strategies are no longer included in the SAP because all the activities were completed as previously stated in the 2023 HNA update. However, the HVP has consistently demonstrated the value of this service, particularly for expectant women with risk factors, so this strategy will continue in the SAP.

About 9% of stakeholders were not aware of the Maternal Mortality Review Surveillance System in PR, and 4% were not aware of the strategy for promoting healthy pregnancy lifestyles through social media and community education activities. This represented a small number of stakeholders; therefore, the committee chose to preserve the strategies as part of the SAP as they effectively support the health of pregnant women and WRA.

About 42% of the suggested strategies to improve birth outcomes involved educating the population about breastfeeding, prenatal care, or WRA rights in settings like workplaces, health fairs, or schools. Other recommendations were about health promotion and media campaigns (17%). These recommendations are activities considered in the SAP. Prenatal and parenting courses that cover many of the suggested subjects are available through the MCAH Community Outreach Program, which is made up of Community Health Workers (CHWs) and Health Educators (HEs). Participants in the MCAHD receive education on a variety of topics from the Home Visiting Nurses (HVN) and Perinatal Nurses (PNs). The "Encuentro de mi vida" (Encounter of My Life) prenatal care webpage offers access to the virtual prenatal course as well as details on pregnancy and postpartum care. HNA 2023 showed that social media, websites, and virtual platforms for webinars and workshops have also been utilized frequently and will continue to be used because of their effectiveness.

After discussing the 2023 HNA findings and the Public Input, the SAP for this domain now has 5 strategies to promote WRA health and wellness and 6 strategies to improve birth outcomes.

Perinatal/Infant Health

A total of 10 strategies were proposed to decrease infant mortality. Six of the strategies, according to about 94% or more of the participants, contributed "a lot" or "quite a lot" to address this priority.

About 4% of the participants concurred that raising awareness of the symptoms and signs of premature births helps "a little" with this priority. The committee decided that this strategy should be maintained as part of the PDSA because it is crucial for preventing preterm births, which account for nearly 12% of births in PR.

Almost 20% of stakeholders were unaware of the Hard Stop Policy plan. Since hospital employees and administrators are more familiar with this policy, it is unsurprising that some stakeholders are unaware of the efforts made to reduce early elective deliveries before 39 weeks of gestation through this policy. In accordance with Regulation No. 9184 of the PRDOH (requirements for hospital operations), PR MCAHD will keep collaborating with the Hospital Association and March of Dimes to adopt and oversee this practice. Likewise, 17% of the participants had never heard of LOCATe, an approach that is mostly known among hospital staff. The PR MCAHD creates policies and strategies to address high-risk pregnancies and poor birth outcomes with the support of LOCATe when determining the distribution of services across the Island.

A little over 40% of the recommended strategies for this priority focused on sharing PR MCHAD projects and activities or could be summarized in prenatal and parenting courses offered to the community, as well as the "Encuentro de mi vida" (Encounter of My Life) webpage that supports the outreach initiatives conducted by the CHWs, HEs, HVNs, and PNs.

Following public input and PDSA revision, the SAP for Perinatal/Infant Health will now have 6 strategies to reduce infant mortality.

Child Health

Six strategies were proposed to improve preventive health in children. Five of the strategies, according to about 92% or more of the participants, contributed "a lot" or "quite a lot" to address this priority.

A little under 9% of the participants agreed that promoting the use of the high-risk caries screening tool for an early referral to create a dental home help "a little" in improving preventive health in children. The PR MCAHD efforts to work with stakeholders to encourage the early identification of infants at higher risk for caries are, on the other hand, unknown to 4% of the participants. This strategy was eliminated from the SAP and combined with the promotion of using the screening tool among primary healthcare providers, such as FQHC, as was noted in the 2023 HNA update.

About 37% of the suggested interventions are about parenting and development, education, and functional diversity. Healthy eating, early stimulation, preventive medical exams, security, physical activity, toxic stress, and lovingly enforcing discipline are among the themes that are covered in the parenting courses that the CHWs and HEs offer to the community.

The HNA Steering Committee recommended to only keep 4 strategies in the SAP to improve preventive health in children.

Adolescent Health

A total of 10 strategies, associated with two NPMs (NPM 9 and NPM 10), were proposed to improve health and wellbeing of adolescents. Between 92% to 96% of the participants agreed that seven strategies contribute “a lot” or “quite a lot” to this priority.

The PR Youth Friendly Healthcare Guidelines pilot initiative was unfamiliar to about 13% of the participants. Additionally, 6% of participants were uninformed of the Youth Health Promoter efforts (YHPP), including the initiatives to lessen bullying in schools associated with the YHPP.

Between 2% and 4% of participants report that all strategies contribute “a little” to enhancing the health and wellbeing of teenagers. When compared to the other participants, this is a relatively small share of the group—1 to 2 people.

About 25% of the suggested strategies were focused on agency collaboration, while another 25% were on educational initiatives that address parenting, development, transition, and mental health. A Collective Impact workgroup for youth mental health has just begun under CAHP leadership. Peer-to-peer counseling on the suggested topics is offered through the YHPP and the YAC. Additionally, “Mi nivel máximo” talks about health promotion and other issues specifically relevant to adolescents.

After reviewing the PDSA and as mentioned in the 2023 HNA update, one strategy of this domain was modified, hence the SAP remained with 10 strategies to improve the health and wellbeing of adolescents.

CSHCN Health

Forty-seven (47) stakeholders revised the strategies for NPM 11 and NPM 12. For the eight (8) medical home strategies, 92% of participants agreed that the strategies contribute “a lot” or “quite a lot” to this priority, ranging from 83% for the strategy “continue the efforts to implement the electronic health record system at the CSHCN Program”, to 96% for the “identification of families’ needs and support”, and for “strengthening collaborations”. Two (2) participants (4.5%) reported that the contribution is “none” or “a little” for every strategy. Four percent (3.5%) reported that they “do not know”. For the four (4) HCT strategies, 88% of participants agreed that the strategies contribute “a lot” or “quite a lot”, ranging from 85% for the strategy of “increasing HCT quality at the CSHCN Program”, to 91.4% for “providing HCT tools to CSHCN staff”. Seven percent (7%) reported they believe the contribution would be “none” or “a little” for some of the strategies, and 5% reported they “do not know”.

For the eight (8) SPM1 strategies (early identification and diagnosis of ASD), 92.5% of participants agreed that they contribute “a lot” or “quite a lot”, ranging from 83% for the strategy of the “distribution of the booklet *Passport to Health* in the Demographic Registry Office”, to 96% for “informing pediatricians, PCPs, childcare centers, Early Head Start, FQHC, WIC, among others, about the early signs of ASD”. Seven percent (7%) of participants (3) reported that the contribution would be “none” or “a little”. Two (2) of them reported the same answer for each one of the strategies. Only one percent (1%) of participants expressed that they “do not know”. For the five (5) SPM 2 strategies (decreased NTD birth prevalence) 94% of participants agreed that the strategies would contribute “a lot” or “quite a lot” to this priority, ranging from 91.5% for the “update and publishing of the PR-BDSPS Report”, to 96% for the “education and follow-up of families affected by NTDs births”.

Seven (7) participants provided recommendations for NPM 11 and NPM 12, most of which are already included as activities in the work plan. One of the participants recommended to increase the number of educative centers. For SPM 1 we received four (4) recommendations and one commentary. Recommendations were aligned with the provision of early interventions. One recommendation was the creation of a registry of certified caregivers so that families could call when they have the need. Three recommendations for SPM 2 were aligned with the increase of

promotion about folic acid consumption.

Final thoughts

The committee's recognition of the need for modification in requesting input from stakeholders and the community was aided by this feedback. Strategies that are unknown or acknowledged to be of "little" contribution in addressing the relevant priorities are target specific and, if discussed in depth, will enable the participants to be more accurate in their assessment of the strategies. On the other hand, most of the recommendations are considered by the SAPs activities, and the remaining recommendations cannot be carried out since they fall outside the reach of PR Title V.

The HNA Advisory Committee hasn't convened in person for three years due to the pandemic limitations. A different approach will be used for the next Public Input. The team will share detailed activities for each SAP strategy during a face-to-face meeting with each Regional Board, the HNA Advisory Committee, the YAC, and other stakeholders, giving attendees a deeper understanding of the PR MCAHD SAP. This way, additional recommendations will be gathered and included into the SAP.

III.G. Technical Assistance

The Title V MCAH/CSHCN programs did not identified a specific area for TA at this moment. In the event of an emergent need, the proper request will be submitted.

IV. Title V-Medicaid IAA/MOU

The Title V-Medicaid IAA/MOU is uploaded as a PDF file to this section - [Acuerdo Interagencial 2020.pdf](#)

V. Supporting Documents

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

Supporting Document #01 - [ABBREVIATIONS MCAH 2023.pdf](#)

Supporting Document #02 - [Title V Matching Funds FY 2021-2022.pdf](#)

Supporting Document #03 - [PR 2023 Health Needs Assessment Supporting Document.pdf](#)

Supporting Document #04 - [2021 Integrated Index of Maternal and Child Health.pdf](#)

Supporting Document #05 - [List of conditions under the Special Health Coverage_2022.pdf](#)

VI. Organizational Chart

The Organizational Chart is uploaded as a PDF file to this section - [Organization Diagram PRDOH and PR Title V_English.pdf](#)

VII. Appendix

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Form 2
MCH Budget/Expenditure Details

State: Puerto Rico

	FY 24 Application Budgeted	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	\$ 16,136,271	
A. Preventive and Primary Care for Children	\$ 4,840,882	(30%)
B. Children with Special Health Care Needs	\$ 6,051,102	(37.5%)
C. Title V Administrative Costs	\$ 1,613,627	(10%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	\$ 12,505,611	
3. STATE MCH FUNDS (Item 18c of SF-424)	\$ 12,102,203	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	\$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	\$ 159,838	
6. PROGRAM INCOME (Item 18f of SF-424)	\$ 518,000	
7. TOTAL STATE MATCH (Lines 3 through 6)	\$ 12,780,041	
A. Your State's FY 1989 Maintenance of Effort Amount \$ 10,226,318		
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	\$ 28,916,312	
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)	\$ 6,537,108	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	\$ 35,453,420	

OTHER FEDERAL FUNDS	FY 24 Application Budgeted
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Sexual Risk Avoidance Education (SRAE)	\$ 1,565,963
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	\$ 445,266
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	\$ 175,000
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	\$ 166,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Early Hearing Detection and Intervention (EHDI) State Programs	\$ 235,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	\$ 1,293,976
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	\$ 100,000
US Department of Education > Office of Special Education Programs > Early Identification and Intervention for Infants and Toddlers with Disabilities (Part C of IDEA)	\$ 2,555,903

	FY 22 Annual Report Budgeted		FY 22 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	\$ 15,856,806 (FY 22 Federal Award: \$ 16,136,271)		\$ 14,109,864	
A. Preventive and Primary Care for Children	\$ 4,757,042	(30%)	\$ 4,530,192	(32.1%)
B. Children with Special Health Care Needs	\$ 5,549,882	(35%)	\$ 5,959,324	(42.2%)
C. Title V Administrative Costs	\$ 1,585,680	(10%)	\$ 757,957	(5.4%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	\$ 11,892,604		\$ 11,247,473	
3. STATE MCH FUNDS (Item 18c of SF-424)	\$ 11,892,605		\$ 11,786,553	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	\$ 0		\$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	\$ 395,880		\$ 1,127,211	
6. PROGRAM INCOME (Item 18f of SF-424)	\$ 124,000		\$ 229,892	
7. TOTAL STATE MATCH (Lines 3 through 6)	\$ 12,412,485		\$ 13,143,656	
A. Your State's FY 1989 Maintenance of Effort Amount \$ 10,226,318				
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	\$ 28,269,291		\$ 27,253,520	
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)	\$ 16,520,136		\$ 8,476,854	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	\$ 44,789,427		\$ 35,730,374	

OTHER FEDERAL FUNDS	FY 22 Annual Report Budgeted	FY 22 Annual Report Expended
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	\$ 474,955	\$ 448,014
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Birth Defects Tracking Systems	\$ 160,000	\$ 1,684
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	\$ 160,020	\$ 160,020
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Early Hearing Detection and Intervention (EHDI) State Programs	\$ 235,000	\$ 248,277
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	\$ 50,000	\$ 50,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Zika Maternal and Child Health Services Program	\$ 1,787,645	\$ 1,078,445
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Zika Surveillance Systems Grant Program	\$ 0	\$ 0
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	\$ 8,140,646	\$ 1,168,087
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	\$ 1,232,359	\$ 950,230
US Department of Education > Office of Special Education Programs > Early Identification and Intervention for Infants and Toddlers with Disabilities (Part C of IDEA)	\$ 2,713,548	\$ 2,713,548
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Sexual Risk Avoidance Education (SRAE)	\$ 1,565,963	\$ 1,658,549

Form Notes for Form 2:

None

Field Level Notes for Form 2:

1.	Field Name:	1.FEDERAL ALLOCATION
	Fiscal Year:	2022
	Column Name:	Annual Report Expended
	Field Note: Reflects real expenditures. Working plans were implemented to enhance services for the Preventive and Primary Care of children.	
2.	Field Name:	Federal Allocation, C. Title V Administrative Costs:
	Fiscal Year:	2022
	Column Name:	Annual Report Expended
	Field Note: Difference from Components A & B. Reflects real expenditures.Budgeted funds for administration were reassigned and invested in services provision for preventive and primary care for children.	
3.	Field Name:	5. OTHER FUNDS
	Fiscal Year:	2022
	Column Name:	Annual Report Expended
	Field Note: Reflects real expenditures.Budgeted funds for administration were reassigned and invested in services provision for preventive and primary care for children.	
4.	Field Name:	6. PROGRAM INCOME
	Fiscal Year:	2022
	Column Name:	Annual Report Expended
	Field Note: Reflects real program income. Working plans were implemented to enhance services.	

Data Alerts: None

Form 3a
Budget and Expenditure Details by Types of Individuals Served
State: Puerto Rico

I. TYPES OF INDIVIDUALS SERVED

IA. Federal MCH Block Grant	FY 24 Application Budgeted	FY 22 Annual Report Expended
1. Pregnant Women	\$ 1,815,329	\$ 1,431,195
2. Infants < 1 year	\$ 1,815,331	\$ 1,431,196
3. Children 1 through 21 Years	\$ 4,840,882	\$ 4,530,192
4. CSHCN	\$ 6,051,102	\$ 5,959,324
5. All Others	\$ 0	\$ 0
Federal Total of Individuals Served	\$ 14,522,644	\$ 13,351,907

IB. Non-Federal MCH Block Grant	FY 24 Application Budgeted	FY 22 Annual Report Expended
1. Pregnant Women	\$ 2,601,973	\$ 4,279,985
2. Infants < 1 year	\$ 2,601,974	\$ 2,185,250
3. Children 1 through 21 Years	\$ 6,898,256	\$ 5,321,318
4. CSHCN	\$ 518,000	\$ 229,892
5. All Others	\$ 159,838	\$ 0
Non-Federal Total of Individuals Served	\$ 12,780,041	\$ 12,016,445
Federal State MCH Block Grant Partnership Total	\$ 27,302,685	\$ 25,368,352

Form Notes for Form 3a:

None

Field Level Notes for Form 3a:

1.	Field Name:	IB. Non-Federal MCH Block Grant, 1. Pregnant Women
	Fiscal Year:	2024
	Column Name:	Application Budgeted
	Field Note: Catastrophic Remediabale Diseases Program Funds: Women 22 to 49 years FY 2021-22	
2.	Field Name:	IB. Non-Federal MCH Block Grant, 2. Infant < 1 Year
	Fiscal Year:	2024
	Column Name:	Application Budgeted
	Field Note: Catastrophic Remediabale Diseases Program Funds: Infants FY 2021-22	
3.	Field Name:	IB. Non-Federal MCH Block Grant, 3. Children 1 through 21 years
	Fiscal Year:	2024
	Column Name:	Application Budgeted
	Field Note: Catastrophic Remediabale Diseases Program Funds: Children 1 to 21 years FY 2021-22	

Data Alerts: None

Form 3b
Budget and Expenditure Details by Types of Services
State: Puerto Rico

II. TYPES OF SERVICES

IIA. Federal MCH Block Grant	FY 24 Application Budgeted	FY 22 Annual Report Expended
1. Direct Services	\$ 477,732	\$ 443,515
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	\$ 477,732	\$ 443,515
2. Enabling Services	\$ 9,411,985	\$ 8,081,495
3. Public Health Services and Systems	\$ 6,246,554	\$ 5,584,854
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		\$ 58,535
Physician/Office Services		\$ 334,452
Hospital Charges (Includes Inpatient and Outpatient Services)		\$ 0
Dental Care (Does Not Include Orthodontic Services)		\$ 0
Durable Medical Equipment and Supplies		\$ 50,528
Laboratory Services		\$ 0
Direct Services Line 4 Expended Total		\$ 443,515
Federal Total	\$ 16,136,271	\$ 14,109,864

IIB. Non-Federal MCH Block Grant	FY 24 Application Budgeted	FY 22 Annual Report Expended
1. Direct Services	\$ 12,102,203	\$ 11,786,553
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	\$ 5,445,991	\$ 4,279,985
B. Preventive and Primary Care Services for Children	\$ 6,656,212	\$ 0
C. Services for CSHCN	\$ 0	\$ 7,506,568
2. Enabling Services	\$ 518,000	\$ 229,892
3. Public Health Services and Systems	\$ 0	\$ 0
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)		\$ 11,786,553
Dental Care (Does Not Include Orthodontic Services)		\$ 0
Durable Medical Equipment and Supplies		\$ 0
Laboratory Services		\$ 0
Direct Services Line 4 Expended Total		\$ 11,786,553
Non-Federal Total	\$ 12,620,203	\$ 12,016,445

Form Notes for Form 3b:

None

Field Level Notes for Form 3b:

1.	Field Name:	IIA. Federal MCH Block Grant, 1. A. Preventive and Primary Care Services for all Pregnant Women,Mothers, and Infants up to Age One
	Fiscal Year:	2024
	Column Name:	Application Budgeted
	Field Note:	MCAH funds components A and B do not provide direct services with federal funds. Direct services for this population is provided by PRHIA.
2.	Field Name:	IIA. Federal MCH Block Grant, 1. B. Preventive and Primary Services for Children
	Fiscal Year:	2024
	Column Name:	Application Budgeted
	Field Note:	MCAH funds components A and B do not provide direct services with federal funds. Direct services for this population is provided by PRHIA.
3.	Field Name:	IIB. Non-Federal MCH Block Grant, 1. A. Preventive and Primary Care Services for all Pregnant Women,Mothers, and Infants up to Age One
	Fiscal Year:	2024
	Column Name:	Application Budgeted
	Field Note:	MCAH components A and B- direct services provided by PRHIA. Budgeted with FY 22 final data Reported by PRHIA for this population.
4.	Field Name:	IIB. Non-Federal MCH Block Grant, 1. B. Preventive and Primary Services for Children
	Fiscal Year:	2024
	Column Name:	Application Budgeted
	Field Note:	MCAH components A and B- direct services provided by PRHIA. Budgeted with FY 22 final data Reported by PRHIA for this population.
5.	Field Name:	IIA. Federal MCH Block Grant, 1. A. Preventive and Primary Care Services for all Pregnant Women,Mothers, and Infants up to Age One
	Fiscal Year:	2022

	Column Name:	Annual Report Expended
	Field Note:	MCAH funds components A and B do not provide direct services with federal funds. Direct services for this population is provided by PRHIA.
6.	Field Name:	IIA. Federal MCH Block Grant, 1. B. Preventive and Primary Services for Children
	Fiscal Year:	2022
	Column Name:	Annual Report Expended
	Field Note:	MCAH funds components A and B do not provide direct services with federal funds. Direct services for this population is provided by PRHIA.
7.	Field Name:	IIB. Non-Federal MCH Block Grant, 1. A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One
	Fiscal Year:	2022
	Column Name:	Annual Report Expended
	Field Note:	Catastrophic Remediable Diseases Program Funds: Women 22 to 49 years FY 2021-22
8.	Field Name:	IIB. Non-Federal MCH Block Grant, 1. C. Services for CSHCN
	Fiscal Year:	2022
	Column Name:	Annual Report Expended
	Field Note:	Due to the nature of diagnose, children receiving funds from the Catastrophic Remediable Diseases Program, Pediatric and Autism Centers.
9.	Field Name:	IIB. Non-Federal MCH Block Grant, 4. Pharmacy
	Fiscal Year:	2022
	Column Name:	Annual Report Expended
	Field Note:	The Catastrophic Remediable Diseases Program provided the funds by gender and age for FY 2021-22. However, PR Title V is not able to breakdown the funds for type of services. This funds are used by the patient to receive all the services necessary for his/her diagnose. Therefore, this may include pharmacy, physician/office services, hospital charges, durable medical equipment and supplies and laboratory services. Therefore, all of the funds will be reported under hospital charges.
10.	Field Name:	IIB. Non-Federal MCH Block Grant, 4. Physician/Office Services
	Fiscal Year:	2022

	Column Name:	Annual Report Expended
	Field Note:	The Catastrophic Remediabale Diseases Program provided the funds by gender and age for FY 2021-22. However, PR Title V is not able to breakdown the funds for type of services. This funds are used by the patient to receive all the services necessary for his/her diagnose. Therefore, this may include pharmacy, physician/office services, hospital charges, durable medical equipment and supplies and laboratory services. Therefore, all of the funds will be reported under hospital charges.
11.	Field Name:	IIB. Non-Federal MCH Block Grant, 4. Hospital Charges (includes inpatient and outpatient services)
	Fiscal Year:	2022
	Column Name:	Annual Report Expended
	Field Note:	The Catastrophic Remediabale Diseases Program provided the funds by gender and age for FY 2021-22. However, PR Title V is not able to breakdown the funds for type of services. This funds are used by the patient to receive all the services necessary for his/her diagnose. Therefore, this may include pharmacy, physician/office services, hospital charges, durable medical equipment and supplies and laboratory services. Therefore, all of the funds will be reported under hospital charges.
12.	Field Name:	IIB. Non-Federal MCH Block Grant, 4. Dental Care (does not include Orthodontic Services)
	Fiscal Year:	2022
	Column Name:	Annual Report Expended
	Field Note:	The Catastrophic Remediabale Diseases Program provided the funds by gender and age for FY 2021-22. However, PR Title V is not able to breakdown the funds for type of services. This funds are used by the patient to receive all the services necessary for his/her diagnose. Therefore, this may include pharmacy, physician/office services, hospital charges, durable medical equipment and supplies and laboratory services. Therefore, all of the funds will be reported under hospital charges.
13.	Field Name:	IIB. Non-Federal MCH Block Grant, 4. Durable Medical Equipment and Supplies
	Fiscal Year:	2022
	Column Name:	Annual Report Expended
	Field Note:	The Catastrophic Remediabale Diseases Program provided the funds by gender and age for FY 2021-22. However, PR Title V is not able to breakdown the funds for type of services. This funds are used by the patient to receive all the services necessary for his/her diagnose. Therefore, this may include pharmacy, physician/office services, hospital charges, durable medical equipment and supplies and laboratory services. Therefore, all of the funds will be reported under hospital charges.
14.	Field Name:	IIB. Non-Federal MCH Block Grant, 4. Laboratory Services
	Fiscal Year:	2022

Column Name:	Annual Report Expended
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Field Note:

The Catastrophic Remediabale Diseases Program provided the funds by gender and age for FY 2021-22. However, PR Title V is not able to breakdown the funds for type of services. This funds are used by the patient to receive all the services necessary for his/her diagnose. Therefore, this may include pharmacy, physician/office services, hospital charges, durable medical equipment and supplies and laboratory services. Therefore, all of the funds will be reported under hospital charges.

Form 4
Number and Percentage of Newborns and Others Screened Cases Confirmed and Treated
State: Puerto Rico

Total Births by Occurrence: 19,151

Data Source Year: 2022

1. Core RUSP Conditions

Program Name	(A) Aggregate Total Number Receiving at Least One Valid Screen	(B) Aggregate Total Number of Out-of-Range Results	(C) Aggregate Total Number Confirmed Cases	(D) Aggregate Total Number Referred for Treatment
Core RUSP Conditions	19,085 (99.7%)	261	26	26 (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	Guanidinoacetate Methyltransferase (GAMT) Deficiency	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 II (MPS II)	Primary Congenital Hypothyroidism	Propionic Acidemia
S, β -Thalassemia	S,C Disease	S,S Disease (Sickle Cell Anemia)	Severe Combined Immunodeficiencies	β -Ketothiolase Deficiency
Trifunctional Protein Deficiency	Very Long-Chain Acyl-CoA Dehydrogenase Deficiency			

2. Other Newborn Screening Tests

Program Name	(A) Total Number Receiving at Least One Screen	(B) Total Number Presumptive Positive Screens	(C) Total Number Confirmed Cases	(D) Total Number Referred for Treatment
Universal Newborn Hearing Screening Program	18,558 (96.9%)	444	12	12 (100.0%)

3. Screening Programs for Older Children & Women

None

4. Long-Term Follow-Up

The HDDDTP Coordinator, in collaboration with the PR-NS Program Genetic Counselor, monitors and follows-up families with positive screenings cases and confirmed cases to ensure confirmatory evaluations, that confirmed cases are receiving the health care they need, and to support families.

Form Notes for Form 4:

None

Field Level Notes for Form 4:

1.	Field Name:	Total Births by Occurrence
	Fiscal Year:	2022
	Column Name:	Total Births by Occurrence Notes
	Field Note: Reference Data: 1. Demographic Registry Vital Statistics 2022.	

Data Alerts: None

Form 5
Count of Individuals Served by Title V & Total Percentage of Populations Served by Title V

State: Puerto Rico

Annual Report Year 2022

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

		Primary Source of Coverage				
Types Of Individuals Served	(A) Title V Total Served	(B) Title XIX %	(C) Title XXI %	(D) Private / Other %	(E) None %	(F) Unknown %
1. Pregnant Women	14,080	66.5	0.0	33.4	0.0	0.1
2. Infants < 1 Year of Age	1,090	66.5	0.0	33.4	0.0	0.1
3. Children 1 through 21 Years of Age	11,442	60.0	0.0	37.0	3.0	0.0
3a. Children with Special Health Care Needs 0 through 21 years of age^	5,395	74.0	0.0	25.0	1.0	0.0
4. Others	3,054	43.0	0.0	50.0	6.0	1.0
Total	29,666					

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	19,304	No	19,115	100.0	19,115	14,080
2. Infants < 1 Year of Age	19,305	No	19,151	99.7	19,094	1,090
3. Children 1 through 21 Years of Age	675,397	No	649,745	48.9	317,725	11,442
3a. Children with Special Health Care Needs 0 through 21 years of age^	222,626	Yes	222,626	30.8	68,569	5,395
4. Others	2,442,698	No	2,550,450	35.6	907,960	3,054

^Represents a subset of all infants and children.

Form Notes for Form 5:

None

Field Level Notes for Form 5a:

1.	Field Name:	Pregnant Women Total Served
	Fiscal Year:	2022
Field Note: Data Source: 1. Title V Home Visiting Program Participants (3,044 served) 2. Women served by Perinatal Nurses (3,244 served) 3. Women reached by Health Promoters [including outreach activities, prenatal and parenting courses] (6,703 reached) 4. Women reached by Health Educators [including outreach activities, prenatal and parenting courses] (1,089 reached) Reference Data: Demographic Registry Vital Statistics 2022.		
2.	Field Name:	Infants Less Than One YearTotal Served
	Fiscal Year:	2022
Field Note: Data Source: 1. Infants served by Title V Home Visiting Program (1,090 served) Reference Data: Demographic Registry Vital Statistics 2022.		
3.	Field Name:	Children 1 through 21 Years of Age
	Fiscal Year:	2022
Field Note: Data Source: 1. Non-pregnant adolescents served by Perinatal Nurses (500 served) 2. Children reached by Health Promoters [including outreach activities, prenatal and parenting courses] (2,794 reached) 3. Children reached by Health Educators [including outreach activities, prenatal and parenting courses] (868 reached) 4. Children served by Title V Home Visiting Program (1,211 served) 5. Children served by the Comprehensive Adolescent Health Program [Youth Health Promoters and Youth Advisory Council] (674 served) **Two CAHP coordinators left the program in December 2021, but the program had already reached those students, so they were still counted as participants. All YAC members were included as of 2021, although as of now, the number of members has decreased (this information will be given for the following FY).** Reference Data: 1. American Community Survey, Census 2021.		

4.	Field Name:	Children with Special Health Care Needs 0 through 21 Years of Age
	Fiscal Year:	2022
<p>Field Note: Data Source: 1. CSHCN served in Pediatric (3,428 served) and Autism Centers (693 served) 2. CSHCN served at specialized pediatric clinics (965 served) 3. CSHCN who received coordination services by Title V State Level Coordinators (1,023 served) 4. Children who received services from the Catastrophic Remediable Diseases Program (43 served). 5. Family to Family Support (208 served).</p> <p>Reference Data: 1. PR Community Survey, 2021 Census</p> <p>**There may be duplication of children that were served at the Specialized Pediatric Clinics and then referred to a Regional Pediatric Center. To minimize duplication this number is not considered in the total of CSHCN served.**</p>		
5.	Field Name:	Others
	Fiscal Year:	2022
<p>Field Note: Data Source: 1. Participants >21 years old reached by Health Promoters [including outreach activities, prenatal and parenting courses] (2,312 reached) 2. Participants >21 years old reached by Health Educators [including outreach activities, prenatal and parenting courses] (122 reached) 3. Non-pregnant women >21 years old reached by Perinatal Nurses (585 reached) 4. Women >21 years old who received services from the Catastrophic Remediable Diseases Program (35 served)</p> <p>Reference Data: American Community Survey, 2021 Census</p>		

Field Level Notes for Form 5b:

1.	Field Name:	Pregnant Women Total % Served
	Fiscal Year:	2022
<p>Field Note: Data Source: 1. Prenatal media campaign "El Encuentro de Mi Vida". Count all Residents' Live Births in 2022 (19,115 reached) 2. Pregnant women served by "Healthy Family" (PR-MIECHV) (35 served) 3. Title V Home Visiting Program Participants (3,044 served) 4. Women served by Perinatal Nurses (3,244 served) 5. Women reached by Health Promoters [including outreach activities, prenatal and parenting courses] (6,703 reached) 6. Women reached by Health Educators [including outreach activities, prenatal and parenting courses] (1,089 reached)</p> <p>* To minimize duplication only women reached by the Campaign "El Encuentro de Mi Vida" is reported*</p>		

2.	Field Name:	Pregnant Women Denominator
	Fiscal Year:	2022
	Field Note: Reference Data: Demographic Registry Vital Statistics 2022. Resident Live Births.	
3.	Field Name:	Infants Less Than One Year Total % Served
	Fiscal Year:	2022
	Field Note: Data Source: 1. Infants served by "Healthy Family", PR MIECHV (26 served) 2. Newborn Screening Program (19,085 served). 3. Universal Newborn Hearing Screening Program (18,558 served) 4. Infants served by Early Intervention, IDEA C (153 served) 5. Infants served by Title V Home Visiting Program (1,090 served) *To minimize duplication only infants served by the Newborn Screening Program are reported*	
4.	Field Name:	Infants Less Than One Year Denominator
	Fiscal Year:	2022
	Field Note: Reference Data: Demographic Registry Vital Statistics 2022. Occurrent Live Births.	
5.	Field Name:	Children 1 through 21 Years of Age Total % Served
	Fiscal Year:	2022

Field Note:

Data Source:

1. Children served by PR-PREP (596 served)
2. Children served by PR-SRAE (2,152 served)
3. Children served by "Healthy Family" [PR-MIECHV] (63 served)
4. Children 1 to 2 years old served by PR Early Intervention [Part C of IDEA] (4,517 served)
5. Complete views Children 10 to 21 years old reached by YouTube media campaign "Alcanza tu Nivel Máximo" (333,746 reached)
6. Youth Advisory Council social media impressions (1,317)
7. Non-pregnant adolescents served by Perinatal Nurses (500 served)
8. Children reached by Health Promoters [including outreach activities, prenatal and parenting courses] (2,794 reached)
9. Children reached by Health Educators [including outreach activities, prenatal and parenting courses] (868 reached)
10. Children served by Title V Home Visiting Program (1,211 served)
11. Children served by the Comprehensive Adolescent Health Program [Youth Health Promoters and Youth Advisory Council] (674 served)

* To minimize duplication, only children 10 to 21 years old that entirely viewed the YouTube videos of the Campaign "Nivel Máximo" is reported*

6.	Field Name:	Children 1 through 21 Years of Age Denominator
	Fiscal Year:	2022
	Field Note:	ACS, Census 2021: children 1 to 21 years.

7.	Field Name:	Children with Special Health Care Needs 0 through 21 Years of Age Total % Served
	Fiscal Year:	2022

Field Note:**Data Source:**

1. CSHCN served in Pediatric (3,428 served) and Autism Centers (693 served)
2. CSHCN served at specialized pediatric clinics (965 served)
3. CSHCN served in Pediatric and specialized pediatric clinics [Zika funded] (1,439 served)
4. APNI's Family Information web page and Facebook page (62,430)
5. CSHCN who received coordination services by Title V State Level Coordinators (1,023 served)
6. Children who received services from the Catastrophic Remediable Diseases Program (43 served)
7. Transportation (238 served)
8. Evidence of participants in educational activities carried out by CSMND Health Specialist, PR-BDSPS, PRHDDDT, and BIDA Law Consultants [Act 220, for the Welfare, Integration, and Development of People with Autism] (32,066 served)
9. CSHCN under de GHP Special Health Coverage (60,149 covered) and Autism Coverage (3,091 covered)
10. Family to Family support (208 served)

Database from the PR- Medicaid Information Management System (PR-MMIS Spanish acronym) shows 60,149 children 0 to 17 enrolled in the SCR during the year 2022. PR-MMIS is an integrated information system with operational procedures in accordance with CMS requirements and guidelines.

Professionals impacted by educational activities include healthcare providers and well as other types of professionals. The number of professionals and families impacted by educational activities might be larger than the number reported as not all are registered or identified.

To minimize duplication only CSHCN under the GHP Special Health Coverage and Autism Coverage are reported

8.	Field Name:	Others Total % Served
	Fiscal Year:	2022

Field Note:

Data Source:

1. Media Campaign "Encuentro de mi vida" (13 YouTube videos) to men and women 22 years or older (907,957 views).

Multiplication of the proportion of men and women 22 years or older according to the ACS 2021 ($82.3\% = 0.823$) to the total of individuals reached by the campaign (1,103,035)

2. "Encuentro de mi vida" Social Media (Instagram & Facebook) (28,568 clicks).

3. "Encuentro de mi vida" Push ads, contextual, programmatic and social display (21,642 clicks).

4. "Encuentro de mi vida" webpage (40,464 visits)

5. Media Campaign "Nivel máximo" (complete views YouTube videos) targeting parents (50,129 views).

6. "Nivel máximo" Social Media (Instagram & Facebook) targeting parents (1,125 clicks).

7. "Nivel máximo" contextual and programmatic display targeting parents (1,332 clicks).

8. "Nivel máximo" webpage (12,743 visits).

9. Parents or tutors reached by PR-PREP (20 reached)

10. Participants >21 years old reached by Health Promoters [including outreach activities, prenatal and parenting courses] (2,312 reached)

11. Participants >21 years old reached by Health Educators [including outreach activities, prenatal and parenting courses] (122 reached).

12. Non-pregnant women >21 years old reached by Perinatal Nurses (585 reached).

13. Women >21 years old who received services from the Catastrophic Remediable Diseases Program (35 served).

* To minimize duplication only women and men over 22 years old reached by the YouTube Campaign Encuentro de Mi Vida" were reported*

9.	Field Name:	Others Denominator
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Fiscal Year:	2022
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Field Note:

ACS, Census 2021: men and women 22 years or older.

Data Alerts: None

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

State: Puerto Rico

Annual Report Year 2022

I. Unduplicated Count by Race/Ethnicity

	(A) Total	(B) Non- Hispanic White	(C) Non- Hispanic Black or African American	(D) Hispanic	(E) Non- Hispanic American Indian or Native Alaskan	(F) Non- Hispanic Asian	(G) Non- Hispanic Native Hawaiian or Other Pacific Islander	(H) Non- Hispanic Multiple Race	(I) Other & Unknown
1. Total Deliveries in State	19,151	307	50	18,718	8	30	1	9	28
Title V Served	18,870	300	50	18,451	5	27	1	8	28
Eligible for Title XIX	13,399	213	36	13,100	4	19	1	6	20
2. Total Infants in State	18,390	295	48	17,973	8	29	1	9	27
Title V Served	18,120	288	48	17,717	5	26	1	8	27
Eligible for Title XIX	15,865	204	34	15,579	4	18	1	6	19

Form Notes for Form 6:

In PR, race taxonomies are built based on phenotypic characteristics including skin tone, lip and mouth shape, and hair texture. Additionally, racism and discrimination are generally denied on the island. Although race and ethnicity are reported in Vital Statistics, this information is unreliable since it depends on the mother's perception of the color of her skin. People in PR may also choose to report their race as white (regardless of skin tone) since they have an unspoken disdain for everything that comes with having dark or black skin.

Field Level Notes for Form 6:

1.	Field Name:	1. Total Deliveries in State
	Fiscal Year:	2022
	Column Name:	Total
	Field Note: Birth data, Vital Statistics 2022	
2.	Field Name:	2. Total Infants in State
	Fiscal Year:	2022
	Column Name:	Total
	Field Note: American Community Survey 2021.	

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

State: Puerto Rico

A. State MCH Toll-Free Telephone Lines	2024 Application Year	2022 Annual Report Year
1. State MCH Toll-Free "Hotline" Telephone Number	(787) 765-2929 x4550	(787) 765-2929 x4550
2. State MCH Toll-Free "Hotline" Name	Línea Informativa Madres, Niños y Adolescentes	Línea Informativa Madres, Niños y Adolescentes
3. Name of Contact Person for State MCH "Hotline"	Dr. Manuel I. Vargas Bernal	Dr. Manuel I. Vargas Bernal
4. Contact Person's Telephone Number	(787) 765-2929 x4583	(787) 765-2929 x4583
5. Number of Calls Received on the State MCH "Hotline"		39,122

B. Other Appropriate Methods	2024 Application Year	2022 Annual Report Year
1. Other Toll-Free "Hotline" Names	Línea PAS	Línea PAS
2. Number of Calls on Other Toll-Free "Hotlines"		211,571
3. State Title V Program Website Address	https://www.salud.pr.gov/CM S/396 ; https://www.salud.pr.gov/CM S/60 ; https://www.salud.pr.gov/CM S/67 ; https://www.salud.pr.gov/CM S/68 ; https://www.salud.pr.gov/CM S/455 ; https://www.salud.pr.gov/CM S/79 ; https://www.salud.pr.gov/CM S/71 ; https://www	https://www.salud.pr.gov/CM S/396 ; https://www.salud.pr.gov/CM S/60 ; https://www.salud.pr.gov/CM S/67 ; https://www.salud.pr.gov/CM S/68 ; https://www.salud.pr.gov/CM S/455 ; https://www.salud.pr.gov/CM S/79 ; https://www.salud.pr.gov/CM S/71 ; https://www
4. Number of Hits to the State Title V Program Website		86,531
5. State Title V Social Media Websites	PRDOH Facebook, Instagram and Twitter	PRDOH Facebook, Instagram, and Twitter
6. Number of Hits to the State Title V Program Social Media Websites		945,462

Form Notes for Form 7:

The number of calls received by the state MCH hotline has decreased. This may be due to the new Ministry of Health website and social media channels where the latest information is posted. The call registration platform has also experienced access issues, resulting in many calls not being registered during this period. The MCAHD is working to develop a new registration platform.

Website address:

MCAHD - <https://www.salud.pr.gov/CMS/396>

SSDI - <https://www.salud.pr.gov/CMS/60>

Early Intervention - <https://www.salud.pr.gov/CMS/67>

CAHP- <https://www.salud.pr.gov/CMS/68>

Youth Advisory Council - <https://www.salud.pr.gov/CMS/455>

Breastfeeding - <https://www.salud.pr.gov/CMS/79>

PRAMS - <https://www.salud.pr.gov/CMS/71>

"Mi agenda de salud" - <https://www.salud.pr.gov/CMS/433>

Form 8
State MCH and CSHCN Directors Contact Information
State: Puerto Rico

1. Title V Maternal and Child Health (MCH) Director

Name	Manuel I. Vargas Bernal
Title	MD, MPH
Address 1	PO BOX 70184
Address 2	
City/State/Zip	San Juan / PR / 00936
Telephone	(787) 765-2929
Extension	4550
Email	mivargas@salud.pr.gov

2. Title V Children with Special Health Care Needs (CSHCN) Director

Name	Angela Michelle Adams
Title	MSW, GCG
Address 1	PO BOX 70184
Address 2	
City/State/Zip	San Juan / PR / 00936
Telephone	(787) 765-2929
Extension	4588
Email	aadams@salud.pr.gov

3. State Family Leader (Optional)	
Name	Coralaidée Jimenez Burgos
Title	Family Representative
Address 1	PO BOX 70184
Address 2	
City/State/Zip	San Juan / PR / 00936
Telephone	(787) 765-2929
Extension	4575
Email	coralaidee@salud.pr.gov

4. State Youth Leader (Optional)	
Name	Gloria Montalvo Ortega
Title	MD
Address 1	PO BOX 70184
Address 2	
City/State/Zip	San Juan / PR / 00936
Telephone	(787) 765-2929
Extension	4565
Email	gmontalvo@salud.pr.gov

Form Notes for Form 8:

Angela Michelle Adams is the Acting Title V Children with Special Health Care Needs (CSHCN)

Form 9
List of MCH Priority Needs

State: Puerto Rico

Application Year 2024

No.	Priority Need
1.	Promote health and wellbeing in women of reproductive age (WRA)
2.	Improve birth outcomes
3.	Decrease infant mortality
4.	Improve preventive health in children
5.	Improve health and wellbeing of adolescents
6.	Increase the number of CSHCN who receive regular ongoing comprehensive health care within a medical home
7.	Increase the number of YSHCN who receive appropriate supports and services for their transition to adult health care.
8.	Decrease the age when children with Autism Spectrum Disorders (ASD) receive their first diagnostic evaluation.
9.	Decrease the prevalence of neural tube defects at birth.

Form Notes for Form 9:

None

Field Level Notes for Form 9:

Field Name:

Priority Need 1

Field Note:

The 2020 HNA identified depression, stress and anxiety, communication and sensitivity of the provider, and health conditions in WRA as the main needs of WRA. This priority is focused on health promotion and education in order to improve health and wellbeing during preconceptive or interconceptive period of WRA.

Field Name:

Priority Need 2

Field Note:

The 2020 HNA also identified health conditions and nutrition during pregnancy as the main needs of pregnant women. This priority is focused on early prenatal care and oral health to reduce health conditions during pregnancy and therefore improve birth outcomes.

Field Name:

Priority Need 3

Field Note:

The 2020 HNA identified causes of infant mortality, infant development, perinatal death, abuse and neglect, and asthma as the needs that are mainly impacting the perinatal and infant domain. Prematurity and LBW infants are among the first causes of infant mortality, however SUIDs is among the leading cause of death in infants 1 to 12 months of age.

Field Name:

Priority Need 4

Field Note:

The 2020 HNA identified child preventive visits, mental health, child obesity, immunization, and asthma as the main needs of children 1 to 9 years old. This priority is focused on preventive measures in childcare, such as preventive health care and oral health.

Field Name:

Priority Need 5

Field Note:

The 2020 HNA identified mental health, cyberbullying, alcohol use, bullying, and chlamydia as the needs that mostly impact adolescents.

This priority is focused on promoting preventive measures in adolescents for them to reach their full potential preventing diseases both in the short and long term.

Field Name:

Priority Need 6

Field Note:

CYSHCN require care beyond that of typical children and youth. The medical home (patient/family centered, comprehensive, coordinated, and accessible healthcare) is an effective model to meet their needs. The 2020 HNA identified needs related to medical home elements. This priority was revised and will continue with efforts to enhance the medical home approach for CSHCN and their families.

Field Name:

Priority Need 7

Field Note:

Medical advances have extended the life expectancy of CYSHCN and the transition to adult health care is a crucial life event. Yet, there are still many issues that may hinder a successful transition. The 2019 MCH-JS showed that only 6.4% of YSHCN, and 17.4% of non-YSHCN 14 to 17 years of age had a successful health care transition. Efforts to improve this performance measure will continue.

Field Name:

Priority Need 8

Field Note:

Growing evidence points to the importance of early screening, diagnose, and treatment for children with ASD. Evidence-based intervention can significantly improve the development and quality of life of children with ASD. The 2019 MCH-JS showed that 11.2% of children with ASD, 3 to 17 years of age, were identified or diagnosed before three years of age. Efforts to build system capacity for the early identification, diagnosis, and intervention of children with ASD continues to be a state priority.

Field Name:

Priority Need 9

Field Note:

NTD prevalence has decreased in PR from 9.2 in 2016 to 5.6 (provisional) in 2018. However, Healthy People 2020 targets are 3.08 for spina bifida and 2.2 for anencephaly. Efforts will continue to reduce NTD birth prevalence.

Form 9 State Priorities – Needs Assessment Year – Application Year 2021

No.	Priority Need	Priority Need Type (New, Revised or Continued Priority Need for this five-year reporting period)
1.	Promote health and wellbeing in women of reproductive age (WRA)	Revised
2.	Improve birth outcomes	Continued
3.	Decrease infant mortality	Continued
4.	Improve preventive health in children	New
5.	Improve health and wellbeing of adolescents	Continued
6.	Increase the number of CSHCN who receive regular ongoing comprehensive health care within a medical home	Revised
7.	Increase the number of YSHCN who receive adequate support and services for their transition to adult health care.	Revised
8.	Decrease the age when children with Autism Spectrum Disorders (ASD) receive their first diagnostic evaluation.	Continued
9.	Decrease the prevalence of neural tube defects at birth.	Continued

Form 10
National Outcome Measures (NOMs)

State: Puerto Rico

Form Notes for Form 10 NPMs, NOMs, SPMs, SOMs, and ESMs.

None

NOM 1 - Percent of pregnant women who receive prenatal care beginning in the first trimester


Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	84.2 %	0.3 %	16,170	19,199
2020	82.0 %	0.3 %	15,354	18,735
2019	82.4 %	0.3 %	16,742	20,330
2018	79.7 %	0.3 %	17,050	21,397
2017	81.5 %	0.3 %	19,792	24,280
2016	81.3 %	0.2 %	22,950	28,245
2015	81.9 %	0.2 %	25,415	31,050
2014	81.0 %	0.2 %	27,723	34,227
2013	77.2 %	0.2 %	27,969	36,243
2012	74.8 %	0.2 %	28,947	38,696
2011	76.2 %	0.2 %	31,073	40,800
2010	76.4 %	0.2 %	31,923	41,805
2009	74.4 %	0.2 %	33,098	44,501

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	
	2022
Annual Indicator	88.5
Numerator	16,555
Denominator	18,712
Data Source	Vital Statistics
Data Source Year	2022

NOM 1 - Notes:

Numerator and Denominator: 2022 Vital Statistics.
Missing data excluded from the denominator.

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	
	2022
Annual Indicator	422.2
Numerator	807
Denominator	19,115
Data Source	HICO and Vital Statistics
Data Source Year	2021-2022

NOM 2 - Notes:

Numerator: Billing information for maternal morbidity by ICD-10 from PR Health Insurance Companies. Includes private health insurance and government health plan (GHP), 2021-2022.

Denominator: 2022 Vital Statistics.

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2021	33.5	5.7	35	104,324
2016_2020	30.9	5.2	35	113,277
2015_2019	34.3	5.2	43	125,501

Legends:

🚫 Indicator has a numerator <10 and is not reportable

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

State Provided Data

	2022
Annual Indicator	68.0
Numerator	13
Denominator	19,115
Data Source	Vital Statistics
Data Source Year	2021

NOM 3 - Notes:


Numerator and Denominator: 2021 Vital Statistics, preliminar.

Since 2021, death certificates are completed on a digital platform. Currently, retrieving death shows various technical challenges. These inaccuracies are being fixed by the PR Demographic Registry's Office. Therefore, 2022 death data is not available, and 2021 data is provisional until the issue is totally resolved.

Data Alerts: None

NOM 4 - Percent of low birth weight deliveries (<2,500 grams)**Data Source: National Vital Statistics System (NVSS)****Multi-Year Trend**

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	10.5 %	0.2 %	2,030	19,295
2020	10.2 %	0.2 %	1,921	18,904
2019	10.1 %	0.2 %	2,054	20,352
2018	10.3 %	0.2 %	2,212	21,423
2017	10.5 %	0.2 %	2,556	24,307
2016	10.2 %	0.2 %	2,885	28,243
2015	10.5 %	0.2 %	3,282	31,142
2014	10.8 %	0.2 %	3,713	34,405
2013	10.5 %	0.2 %	3,846	36,473
2012	11.6 %	0.2 %	4,501	38,888
2011	12.5 %	0.2 %	5,119	40,909
2010	12.6 %	0.2 %	5,304	42,064
2009	12.4 %	0.2 %	5,525	44,709

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**Data Source: MCH Jurisdictional Survey (MCH-JS)****Multi-Year Trend**

Year	Annual Indicator	Standard Error	Numerator	Denominator
2023	11.5 %	1.2 %	62,783	545,790
2019	13.5 %	2.7 %	80,474	594,011

Legends: Indicator has a confidence interval width >20% or >1.2 times the estimate and should be interpreted with caution

State Provided Data	
	2022
Annual Indicator	10.1
Numerator	1,927
Denominator	19,115
Data Source	Vital Statistics
Data Source Year	2022

NOM 4 - Notes:

Numerator and Denominator: 2022 Vital Statistics.

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	12.0 %	0.2 %	2,322	19,303
2020	11.6 %	0.2 %	2,192	18,927
2019	11.8 %	0.2 %	2,397	20,353
2018	11.9 %	0.2 %	2,549	21,421
2017	11.4 %	0.2 %	2,783	24,308
2016	11.5 %	0.2 %	3,248	28,254
2015	11.4 %	0.2 %	3,547	31,145
2014	11.8 %	0.2 %	4,066	34,397
2013	11.2 %	0.2 %	4,069	36,354
2012	13.2 %	0.2 %	5,101	38,781
2011	17.4 %	0.2 %	7,127	40,937
2010	16.7 %	0.2 %	6,998	41,940
2009	17.6 %	0.2 %	7,871	44,664

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

Data Source: MCH Jurisdictional Survey (MCH-JS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2023	14.3 %	1.4 %	77,853	545,790
2019	21.6 %	3.3 %	128,262	594,011

Legends:

⚡ Indicator has a confidence interval width >20% or >1.2 times the estimate and should be interpreted with caution

State Provided Data	
	2022
Annual Indicator	11.8
Numerator	2,250
Denominator	19,093
Data Source	Vital Statistics
Data Source Year	2022

NOM 5 - Notes:

Numerator and Denominator: 2022 Vital Statistics.
Missing data excluded from the denominator.

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	34.6 %	0.3 %	6,680	19,303
2020	33.7 %	0.3 %	6,386	18,927
2019	34.3 %	0.3 %	6,987	20,353
2018	35.1 %	0.3 %	7,529	21,421
2017	34.7 %	0.3 %	8,445	24,308
2016	35.6 %	0.3 %	10,060	28,254
2015	37.1 %	0.3 %	11,545	31,145
2014	38.7 %	0.3 %	13,313	34,397
2013	40.9 %	0.3 %	14,861	36,354
2012	44.8 %	0.3 %	17,390	38,781
2011	43.3 %	0.2 %	17,719	40,937
2010	45.6 %	0.2 %	19,108	41,940
2009	45.2 %	0.2 %	20,181	44,664

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

	2022
Annual Indicator	35.0
Numerator	6,691
Denominator	19,093
Data Source	Vital Statistics
Data Source Year	2022

NOM 6 - Notes:

Numerator and Denominator: 2022 Vital Statistics.
Missing data excluded from the denominator.

Data Alerts: None

NOM 7 - Percent of non-medically indicated early elective deliveries

Data Source: CMS Hospital Compare

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021/Q1-2021/Q4	4.0 %			
2020/Q4-2021/Q3	4.0 %			
2020/Q3-2021/Q1	32.0 %			
2019/Q4-2020/Q3	40.0 %			
2019/Q1-2019/Q4	4.0 %			
2018/Q4-2019/Q3	5.0 %			
2018/Q3-2019/Q2	6.0 %			
2018/Q2-2019/Q1	6.0 %			
2018/Q1-2018/Q4	6.0 %			
2017/Q4-2018/Q3	8.0 %			
2017/Q3-2018/Q2	8.0 %			
2017/Q2-2018/Q1	9.0 %			
2017/Q1-2017/Q4	8.0 %			
2016/Q4-2017/Q3	6.0 %			
2016/Q3-2017/Q2	5.0 %			
2016/Q2-2017/Q1	5.0 %			
2016/Q1-2016/Q4	5.0 %			
2015/Q4-2016/Q3	6.0 %			
2015/Q3-2016/Q2	8.0 %			
2015/Q2-2016/Q1	11.0 %			
2015/Q1-2015/Q4	13.0 %			
2014/Q4-2015/Q3	16.0 %			
2014/Q3-2015/Q2	18.0 %			

Year	Annual Indicator	Standard Error	Numerator	Denominator
2014/Q2-2015/Q1	20.0 %			
2014/Q1-2014/Q4	30.0 %			
2013/Q4-2014/Q3	31.0 %			
2013/Q3-2014/Q2	32.0 %			
2013/Q2-2014/Q1	44.0 %			

Legends:

NOM 7 - Notes:

None


Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2020	7.4	0.6	141	19,001
2019	6.8	0.6	139	20,433
2018	7.1	0.6	152	21,512
2017	7.6	0.6	185	24,417
2016	8.0	0.5	226	28,382
2015	6.5	0.5	204	31,269
2014	7.9	0.5	272	34,580
2013	7.5	0.5	275	36,641
2012	8.3	0.5	326	39,054
2011	8.6	0.5	355	41,262
2010	7.5	0.4	317	42,313
2009	8.0	0.4	359	44,944

Legends: Indicator has a numerator <10 and is not reportable Indicator has a numerator <20 and should be interpreted with caution**NOM 8 - Notes:**

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2020	7.3	0.6	139	18,933
2019	6.6	0.6	134	20,353
2018	6.6	0.6	141	21,424
2017	6.7	0.5	164	24,310
2016	7.6	0.5	215	28,257
2015	7.0	0.5	217	31,157
2014	7.0	0.5	240	34,434
2013	7.1	0.4	259	36,486
2012	9.2	0.5	358	38,900
2011	8.4	0.5	344	41,080
2010	7.4	0.4	314	42,153
2009	7.7	0.4	346	44,773

Legends: Indicator has a numerator <10 and is not reportable Indicator has a numerator <20 and should be interpreted with caution**State Provided Data**

	2022
Annual Indicator	7.6
Numerator	145
Denominator	19,115
Data Source	Vital Statistics
Data Source Year	2021

NOM 9.1 - Notes:

Numerator and Denominator: 2021 Vital Statistics, preliminary.

Since 2021, death certificates are completed on a digital platform. Currently, retrieving death shows various technical challenges. These inaccuracies are being fixed by the PR Demographic Registry's Office. Therefore, 2022 death data is not available, and 2021 data is provisional until the issue is totally resolved.

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2020	5.7	0.6	107	18,933
2019	3.9	0.4	79	20,353
2018	4.2	0.4	89	21,424
2017	4.8	0.4	116	24,310
2016	5.1	0.4	145	28,257
2015	4.6	0.4	142	31,157
2014	4.9	0.4	168	34,434
2013	4.8	0.4	175	36,486
2012	6.5	0.4	251	38,900
2011	6.0	0.4	246	41,080
2010	5.3	0.4	223	42,153
2009	5.9	0.4	263	44,773

Legends: Indicator has a numerator <10 and is not reportable Indicator has a numerator <20 and should be interpreted with caution**NOM 9.2 - Notes:**

None


Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2020	1.7	0.3	32	18,933
2019	2.7	0.4	55	20,353
2018	2.4	0.3	52	21,424
2017	2.0	0.3	48	24,310
2016	2.5	0.3	70	28,257
2015	2.4	0.3	75	31,157
2014	2.1	0.3	72	34,434
2013	2.3	0.3	84	36,486
2012	2.8	0.3	107	38,900
2011	2.4	0.2	98	41,080
2010	2.2	0.2	91	42,153
2009	1.9	0.2	83	44,773

Legends: Indicator has a numerator <10 and is not reportable Indicator has a numerator <20 and should be interpreted with caution**NOM 9.3 - Notes:**

None


Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2020	279.9	38.5	53	18,933
2019	172.0	29.1	35	20,353
2017	271.5	33.5	66	24,310
2016	244.2	29.4	69	28,257
2015	224.7	26.9	70	31,157
2014	232.3	26.0	80	34,434
2013	227.5	25.0	83	36,486
2012	352.2	30.1	137	38,900
2011	287.2	26.5	118	41,080
2010	237.2	23.8	100	42,153
2009	281.4	25.1	126	44,773

Legends: Indicator has a numerator <10 and is not reportable Indicator has a numerator <20 and should be interpreted with caution**State Provided Data**

	2022
Annual Indicator	277.3
Numerator	53
Denominator	19,115
Data Source	Vital Statistics
Data Source Year	2021

NOM 9.4 - Notes:

Numerator and Denominator: 2021 Vital Statistics, preliminary.

Since 2021, death certificates are completed on a digital platform. Currently, retrieving death shows various technical





































challenges. These inaccuracies are being fixed by the PR Demographic Registry's Office. Therefore, 2022 death data is not available, and 2021 data is provisional until the issue is totally resolved.

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2020	NR 	NR 	NR 	NR 
2019	98.3	22.0	20	20,353
2018	74.7	18.7	16	21,424
2017	49.4 	14.3 	12 	24,310 
2016	63.7 	15.0 	18 	28,257 
2015	51.4 	12.8 	16 	31,157 
2014	58.1	13.0	20	34,434
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**

	2022
Annual Indicator	83.7
Numerator	16
Denominator	19,115
Data Source	Vital Statistics
Data Source Year	2021

NOM 9.5 - Notes:

Numerator and Denominator: 2021 Vital Statistics, preliminary.

Since 2021, death certificates are completed on a digital platform. Currently, retrieving death shows various technical challenges. These inaccuracies are being fixed by the PR Demographic Registry's Office. Therefore, 2022 death data is not available, and 2021 data is provisional until the issue is totally resolved.

Data Alerts: None

NOM 10 - Percent of women who drink alcohol in the last 3 months of pregnancy

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

State Provided Data	
	2022
Annual Indicator	0.0
Numerator	5
Denominator	19,115
Data Source	Vital Statistics
Data Source Year	2022

NOM 10 - Notes:

Numerator: Alcohol consumption during the last three months of pregnancy. Birth Certificate 2022.

Denominator: All births. Birth Certificate 2022.

Note: PRAMS Survey phase 9 will include this indicator for the following years.

Data Alerts: None

NOM 11 - Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations

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

State Provided Data	
	2022
Annual Indicator	0.5
Numerator	10
Denominator	19,115
Data Source	HICO and Vital Statistics
Data Source Year	2021-2022

NOM 11 - Notes:

Numerator: Billing information for neonatal abstinence from Health Insurance Companies. Includes private health insurance and government health plan (GHP), 2021-2022.

Denominator: 2022 Vital Statistics.

Data Alerts: None

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

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

NOM 12 - Notes:

None

Data Alerts: None

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

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

NOM 13 - Notes:

None

Data Alerts: None

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

Data Source: MCH Jurisdictional Survey (MCH-JS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2023	12.4 %	1.3 %	65,297	527,155
2019	22.0 %	4.3 %	127,828	581,051

Legends:

 Indicator has a confidence interval width >20% or >1.2 times the estimate and should be interpreted with caution

State Provided Data

	2022
Annual Indicator	17.1
Numerator	53,789
Denominator	314,980
Data Source	PRHIA
Data Source Year	2021-2022

NOM 14 - Notes:

Numerator: Total Individuals Eligible for EPSDT

Denominator: Total Individuals Eligible for EPSDT for 90 Continuous Days

Data Alerts: None

NOM 15 - Child Mortality rate, ages 1 through 9, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	16.1	2.6	38	236,367
2020	11.6	2.2	29	250,214
2019	12.4	2.2	33	266,669
2018	10.2	1.9	29	284,159
2017	12.6	2.0	38	302,310
2016	17.1	2.3	55	321,534
2015	11.7	1.9	40	341,739
2014	11.9	1.8	43	360,447
2013	14.3	1.9	54	378,778
2012	11.5	1.7	45	390,179
2011	17.1	2.1	69	402,813
2010	11.0	1.6	46	416,894
2009	16.7	2.0	72	430,868

Legends:

🚫 Indicator has a numerator <10 and is not reportable

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

State Provided Data

	2022
Annual Indicator	16.1
Numerator	38
Denominator	236,367
Data Source	Vital Statistics
Data Source Year	2021

NOM 15 - Notes:

Numerator and Denominator: 2021 Vital Statistics.

Since 2021, death certificates are completed on a digital platform. Currently, retrieving death shows various technical challenges. These inaccuracies are being fixed by the PR Demographic Registry's Office. Therefore, 2022 death data is not available, and 2021 data is provisional until the issue is totally resolved.


Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	27.9	2.8	99	355,160
2020	26.9	2.7	100	372,008
2019	23.6	2.5	92	389,658
2018	27.4	2.6	111	405,635
2017	26.7	2.5	113	423,618
2016	26.5	2.5	117	441,778
2015	30.4	2.6	140	460,315
2014	31.1	2.6	149	478,818
2013	33.9	2.6	171	503,974
2012	39.3	2.8	205	521,058
2011	43.6	2.9	234	536,795
2010	36.5	2.6	201	550,303
2009	43.4	2.8	244	562,264

Legends: Indicator has a numerator <10 and is not reportable Indicator has a numerator <20 and should be interpreted with caution**NOM 16.1 - Notes:**

None


Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019_2021	6.5	1.1	38	584,297
2018_2020	6.2	1.0	38	612,384
2017_2019	6.4	1.0	41	642,709
2016_2018	7.3	1.0	49	673,463
2015_2017	7.5	1.0	53	703,066
2014_2016	9.3	1.1	68	729,318
2013_2015	8.7	1.1	66	755,567
2012_2014	7.8	1.0	61	778,951
2011_2013	8.3	1.0	67	808,534
2010_2012	9.1	1.1	75	828,627
2009_2011	10.6	1.1	90	847,317
2008_2010	10.8	1.1	93	863,092
2007_2009	13.3	1.2	116	874,158

Legends: Indicator has a numerator <10 and is not reportable Indicator has a numerator <20 and should be interpreted with caution**NOM 16.2 - Notes:**

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019_2021	2.1 ⚡	0.6 ⚡	12 ⚡	584,297 ⚡
2018_2020	NR 🚩	NR 🚩	NR 🚩	NR 🚩
2017_2019	2.0 ⚡	0.6 ⚡	13 ⚡	642,709 ⚡
2016_2018	2.5 ⚡	0.6 ⚡	17 ⚡	673,463 ⚡
2015_2017	2.7 ⚡	0.6 ⚡	19 ⚡	703,066 ⚡
2014_2016	2.3 ⚡	0.6 ⚡	17 ⚡	729,318 ⚡
2013_2015	2.4 ⚡	0.6 ⚡	18 ⚡	755,567 ⚡
2012_2014	2.8	0.6	22	778,951
2011_2013	2.7	0.6	22	808,534
2010_2012	2.8	0.6	23	828,627
2009_2011	2.8	0.6	24	847,317
2008_2010	3.6	0.7	31	863,092
2007_2009	3.3	0.6	29	874,158

Legends:

🚩 Indicator has a numerator <10 and is not reportable

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

NOM 16.3 - Notes:

None

Data Alerts: None


NOM 17.1 - Percent of children with special health care needs (CSHCN), ages 0 through 17

Data Source: MCH Jurisdictional Survey (MCH-JS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2023	21.5 %	1.4 %	117,607	545,790
2019	31.8 %	3.5 %	188,735	594,011

Legends:

 Indicator has a confidence interval width >20% or >1.2 times the estimate and should be interpreted with caution

NOM 17.1 - Notes:

None

Data Alerts: None

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

Data Source: MCH Jurisdictional Survey (MCH-JS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2023	9.9 %	1.9 %	11,623	117,607
2019	13.1 % ⚡	4.4 % ⚡	24,756 ⚡	188,735 ⚡

Legends:

⚡ Indicator has a confidence interval width >20% or >1.2 times the estimate and should be interpreted with caution

NOM 17.2 - Notes:

None

Data Alerts: None

NOM 17.3 - Percent of children, ages 3 through 17, diagnosed with an autism spectrum disorder

Data Source: MCH Jurisdictional Survey (MCH-JS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2023	4.7 %	0.8 %	22,961	489,589
2019	3.1 % ⚡	1.2 % ⚡	16,417 ⚡	523,056 ⚡

Legends:

⚡ Indicator has a confidence interval width >20% or >1.2 times the estimate and should be interpreted with caution

NOM 17.3 - Notes:

None

Data Alerts: None


NOM 17.4 - Percent of children, ages 3 through 17, diagnosed with Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)

Data Source: MCH Jurisdictional Survey (MCH-JS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2023	12.4 %	1.4 %	60,528	489,589
2019	10.4 %	2.2 %	54,467	523,056

Legends:

 Indicator has a confidence interval width >20% or >1.2 times the estimate and should be interpreted with caution

NOM 17.4 - Notes:

None

Data Alerts: None

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

Data Source: MCH Jurisdictional Survey (MCH-JS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2023	38.0 %	4.9 %	25,005	65,878
2019	46.4 % ⚡	9.2 % ⚡	55,067 ⚡	118,581 ⚡

Legends:

⚡ Indicator has a confidence interval width >20% or >1.2 times the estimate and should be interpreted with caution

NOM 18 - Notes:

None

Data Alerts: None

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

Data Source: MCH Jurisdictional Survey (MCH-JS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2023	82.5 %	1.7 %	450,520	545,790
2019	72.8 %	3.6 %	432,452	594,011

Legends:

 Indicator has a confidence interval width >20% or >1.2 times the estimate and should be interpreted with caution

NOM 19 - Notes:

None

Data Alerts: None

NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)

Data Source: WIC

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2020	12.1 %	0.2 %	4,864	40,056
2018	12.6 %	0.2 %	5,639	44,857
2016	12.0 %	0.1 %	7,621	63,251
2014	13.9 %	0.1 %	10,292	74,118
2012	15.7 %	0.1 %	12,826	81,751
2010	20.3 %	0.2 %	14,321	70,699
2008	18.9 %	0.1 %	15,349	81,321

Legends:

🚩 Indicator has a denominator <20 and is not reportable

⚡ Indicator has a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

Data Source: Youth Risk Behavior Surveillance System (YRBSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	21.0 %	1.3 %	16,305	77,823
2019	14.4 %	1.5 %	11,806	82,202
2017	11.2 %	1.0 %	11,072	99,102
2015	11.1 %	1.0 %	12,512	113,052
2013	10.9 %	0.8 %	12,562	115,394
2011	11.8 %	1.0 %	14,220	120,957
2005	11.8 %	0.7 %	19,836	168,570

Legends:

🚩 Indicator has an unweighted denominator <100 and is not reportable

⚡ Indicator has a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

Data Source: MCH Jurisdictional Survey (MCH-JS) - Age 10-17

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2023	17.8 %	1.9 %	52,474	294,154
2019	20.2 %	3.8 %	61,374	304,285

Legends:

 Indicator has a confidence interval width >20% or >1.2 times the estimate and should be interpreted with caution

NOM 20 - Notes:

None


Data Alerts: None

NOM 21 - Percent of children, ages 0 through 17, without health insurance

Data Source: American Community Survey (ACS)









Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	2.8 %	0.4 %	15,098	545,623
2019	3.7 %	0.4 %	21,224	572,788
2018	2.9 %	0.4 %	17,342	594,027
2017	3.3 %	0.5 %	21,486	656,804
2016	3.1 %	0.4 %	21,359	695,772
2015	2.7 %	0.3 %	19,890	737,310
2014	3.2 %	0.3 %	24,416	772,570
2013	3.5 %	0.3 %	28,247	813,865
2012	4.3 %	0.4 %	36,271	849,263
2011	4.0 %	0.4 %	34,677	876,289
2010	4.5 %	0.3 %	39,980	897,649
2009	4.2 %	0.3 %	40,271	963,572

Legends: Indicator has an unweighted denominator <30 and is not reportable Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

Data Source: MCH Jurisdictional Survey (MCH-JS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2023	1.0 % 	0.5 % 	5,266 	545,790 
2019	0.9 % 	0.7 % 	5,170 	594,011 

Legends: Indicator has a confidence interval width >20% or >1.2 times the estimate and should be interpreted with caution**NOM 21 - Notes:**

None

Data Alerts: None

NOM 22.1 - Percent of children who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4) by age 24 months

Data Source: National Immunization Survey (NIS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	47.7 %	4.1 %	9,000	19,000
2014	58.3 %	3.8 %	18,000	31,000
2013	62.5 %	4.7 %	22,000	35,000

Legends:

🚫 Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate >1.2

⚡ Estimates with 95% confidence interval widths >20 or that are inestimable might not be reliable

State Provided Data

	2022
Annual Indicator	47.8
Numerator	10,244
Denominator	21,416
Data Source	PREIS
Data Source Year	2021-2022

NOM 22.1 - Notes:

Numerator and denominator: 2021-2022 Puerto Rico Electronic Immunization System (PREIS).

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) – Flu

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016_2017	40.3 %	1.4 %	270,515	671,752
2015_2016	41.5 %	1.6 %	307,288	739,740
2014_2015	37.2 %	2.1 %	274,859	739,862

Legends:

🚫 Estimate not reported because unweighted sample size for the denominator < 30 or because the relative standard error is >0.3.

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

State Provided Data

	2022
Annual Indicator	8.0
Numerator	42,930
Denominator	536,596
Data Source	PREIS
Data Source Year	2021-2022



NOM 22.2 - Notes:

Numerator and denominator: 2021-2022 Puerto Rico Electronic Immunization System (PREIS).

Data Alerts: None

NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine**Data Source: National Immunization Survey (NIS) - Teen****Multi-Year Trend**

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	86.1 %	2.1 %	153,726	178,549
2019	75.7 %	4.9 %	141,317	186,750
2016	75.8 %	2.7 %	170,935	225,560
2015	72.6 %	3.0 %	170,973	235,623

Legends: Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate > 1.2 Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable**State Provided Data**

	2022
Annual Indicator	83.9
Numerator	159,360
Denominator	190,031
Data Source	PREIS
Data Source Year	2021-2022



NOM 22.3 - Notes:

Numerator and denominator: 2021-2022 Puerto Rico Electronic Immunization System (PREIS).

Data Alerts: None

NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine**Data Source: National Immunization Survey (NIS) - Teen****Multi-Year Trend**

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	85.4 %	2.2 %	152,547	178,549
2019	86.9 %	4.1 %	162,322	186,750
2016	91.2 %	1.6 %	205,718	225,560
2015	82.5 %	2.6 %	194,328	235,623
2014	81.7 %	3.7 %	202,898	248,374

Legends: Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate > 1.2 Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable**State Provided Data**

	2022
Annual Indicator	84.9
Numerator	161,394
Denominator	190,031
Data Source	PREIS
Data Source Year	2021-2022

NOM 22.4 - Notes:

Numerator and denominator: 2021-2022 Puerto Rico Electronic Immunization System (PREIS).

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	88.0 %	2.1 %	157,105	178,549
2019	93.5 %	3.2 %	174,671	186,750
2016	89.2 %	1.9 %	201,246	225,560
2015	87.9 %	2.2 %	207,210	235,623
2014	83.5 %	3.4 %	207,377	248,374

Legends:

🚫 Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate >1.2

⚡ Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

State Provided Data

	2022
Annual Indicator	87.7
Numerator	166,623
Denominator	190,031
Data Source	PREIS
Data Source Year	2021-2022

NOM 22.5 - Notes:

Numerator and denominator: 2021-2022 Puerto Rico Electronic Immunization System (PREIS).

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	14.0	0.4	1,265	90,484
2020	15.5	0.4	1,466	94,648
2019	18.9	0.4	1,882	99,624
2018	18.6	0.4	1,935	104,056
2017	24.2	0.5	2,650	109,611
2016	29.6	0.5	3,389	114,472
2015	33.8	0.5	4,013	118,620
2014	40.1	0.6	4,901	122,069
2013	44.9	0.6	5,706	127,075
2012	49.3	0.6	6,456	130,895
2011	52.4	0.6	7,031	134,268
2010	51.7	0.6	7,170	138,682
2009	56.5	0.6	7,992	141,571

Legends:

🚫 Indicator has a numerator <10 and is not reportable

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

State Provided Data

	2022
Annual Indicator	13.3
Numerator	1,169
Denominator	87,657
Data Source	Vital Statistics and International Database
Data Source Year	2022

NOM 23 - Notes:


Numerator: 2022 birth certificate.

Denominator: 2022 International Database, US Census

Data Alerts: None

NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth**Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)****Multi-Year Trend**

Year	Annual Indicator	Standard Error	Numerator	Denominator
2021	13.6 %	1.3 %	2,575	18,969
2020	11.3 %	1.2 %	2,103	18,546
2019	11.6 %	1.3 %	2,294	19,812
2018	10.8 %	1.3 %	2,260	20,943
2017	14.0 %	1.4 %	2,220	15,812

Legends: Indicator has an unweighted denominator <30 and is not reportable Indicator has an unweighted denominator between 30 and 59 or a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution**NOM 24 - Notes:**

Numerator and denominator: PRAMS 2021.

Data Alerts: None

NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year

Data Source: MCH Jurisdictional Survey (MCH-JS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2023	8.4 %	1.1 %	45,614	545,790
2019	4.1 % ⚡	1.7 % ⚡	24,181 ⚡	594,011 ⚡

Legends:

⚡ Indicator has a confidence interval width >20% or >1.2 times the estimate and should be interpreted with caution

NOM 25 - Notes:

None

Data Alerts: None

Form 10
National Performance Measures (NPMs)
State: Puerto Rico

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

Federally Available Data					
Data Source: Behavioral Risk Factor Surveillance System (BRFSS)					
	2018	2019	2020	2021	2022
Annual Objective			79.4	79.3	80.1
Annual Indicator		78.7	78.5	72.1	69.2
Numerator		481,355	484,022	442,111	421,471
Denominator		612,005	616,350	613,335	609,159
Data Source		BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year		2018	2019	2020	2021

i Previous NPM-1 BRFSS data for survey year 2017 that was pre-populated under the 2018 Annual Report Year is no longer displayed since it is not comparable with 2018 survey data.

Federally Available Data			
Data Source: MCH Jurisdictional Survey (MCH-JS)			
	2019	2020	2022
Annual Objective		79.4	80.1
Annual Indicator	77.9	77.9	89.8
Numerator	346,051	346,051	381,975
Denominator	444,413	444,413	425,358
Data Source	MCH-JS	MCH-JS	MCH-JS
Data Source Year	2019	2019	2023

Annual Objectives			
	2023	2024	2025
Annual Objective	80.9	81.6	82.4

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note: Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. The decrease in preventive visits may be due to the COVID-19 lockdown in 2020. Once 2023 data is available, it will be possible to determine with certainty whether a readjustment to the annual objectives is necessary.	
2.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note: Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. The decrease in preventive visits may be due to the COVID-19 lockdown in 2020. Once 2023 data is available, it will be possible to determine with certainty whether a readjustment to the annual objectives is necessary.	
3.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note: Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. The decrease in preventive visits may be due to the COVID-19 lockdown in 2020. Once 2023 data is available, it will be possible to determine with certainty whether a readjustment to the annual objectives is necessary.	

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

Federally Available Data				
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)				
	2019	2020	2021	2022
Annual Objective			44.4	50.6
Annual Indicator	43.6	44.0	49.6	55.2
Numerator	9,056	8,759	9,080	10,395
Denominator	20,766	19,897	18,315	18,842
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2018	2019	2020	2021
Federally Available Data				
Data Source: MCH Jurisdictional Survey (MCH-JS)				
	2019	2020	2022	
Annual Objective			50.6	
Annual Indicator	65.3	65.3	22.6	
Numerator	8,468	8,468	4,209	
Denominator	12,960	12,960	18,635	
Data Source	MCH-JS	MCH-JS	MCH-JS	
Data Source Year	2019	2019	2023	
Annual Objectives				
	2023	2024	2025	
Annual Objective	56.3	56.9	57.4	

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note: 2025 annual objectives based on baseline data (PR-PRAMS 2019) were reached. As a result, the objectives were changed to account for a 5% rise over the next five years.	
2.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note: 2025 annual objectives based on baseline data (PR-PRAMS 2019) were reached. As a result, the objectives were changed to account for a 5% rise over the next five years.	
3.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note: 2025 annual objectives based on baseline data (PR-PRAMS 2019) were reached. As a result, the objectives were changed to account for a 5% rise over the next five years.	

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

Federally Available Data				
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)				
	2019	2020	2021	2022
Annual Objective			23.3	25.7
Annual Indicator	29.1	23.1	25.2	23.6
Numerator	6,018	4,562	4,614	4,426
Denominator	20,645	19,765	18,305	18,776
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2018	2019	2020	2021

Annual Objectives			
	2023	2024	2025
Annual Objective	26.0	26.2	26.5

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-PRAMS2019 considering a 5% increase by 2025.
2.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-PRAMS2019 considering a 5% increase by 2025.
3.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-PRAMS2019 considering a 5% increase by 2025.

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

Federally Available Data				
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)				
	2019	2020	2021	2022
Annual Objective			24.3	27.3
Annual Indicator	24.3	24.1	26.8	30.0
Numerator	5,062	4,772	4,897	5,652
Denominator	20,809	19,808	18,275	18,837
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2018	2019	2020	2021

Annual Objectives			
	2023	2024	2025
Annual Objective	30.6	30.9	31.2

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	2025 annual objectives based on baseline data (PR-PRAMS 2019) were reached. Therefore, the objectives were adjusted considering a 5% increase by 2030.
2.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	2025 annual objectives based on baseline data (PR-PRAMS 2019) were reached. Therefore, the objectives were adjusted considering a 5% increase by 2030.
3.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	2025 annual objectives based on baseline data (PR-PRAMS 2019) were reached. Therefore, the objectives were adjusted considering a 5% increase by 2030.

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)				
	2019	2020	2021	2022
Annual Objective			11.7	11.7
Annual Indicator	21.8	12.0	12.0	6.7
Numerator	22,875	10,721	10,721	5,841
Denominator	104,752	89,358	89,358	86,865
Data Source	YRBSS	YRBSS	YRBSS	YRBSS
Data Source Year	2017	2019	2019	2021
Federally Available Data				
Data Source: MCH Jurisdictional Survey (MCH-JS)				
	2019	2020	2022	
Annual Objective			11.7	
Annual Indicator	27.9	27.9	14.9	
Numerator	58,635	58,635	32,825	
Denominator	209,819	209,819	219,847	
Data Source	MCH-JS	MCH-JS	MCH-JS	
Data Source Year	2019	2019	2023	

State Provided Data				
	2019	2020	2021	2022
Annual Objective			11.7	11.7
Annual Indicator				6.7
Numerator				5,793
Denominator				86,814
Data Source				YRBSS
Data Source Year				2021
Provisional or Final ?				Final

Annual Objectives			
	2023	2024	2025
Annual Objective	6.6	6.6	6.5

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2022
	Column Name:	State Provided Data
	Field Note:	Numerator and denominator: 2021 YRBSS database.
2.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	2025 annual objectives based on baseline data (PR-YRBSS 2019) were reached. As a result, the objectives were changed to account for a 5% decrease over the next five years.
3.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	2025 annual objectives based on baseline data (PR-YRBSS 2019) were reached. As a result, the objectives were changed to account for a 5% decrease over the next five years.
4.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	2025 annual objectives based on baseline data (PR-YRBSS 2019) were reached. As a result, the objectives were changed to account for a 5% decrease over the next five years.

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

Federally Available Data			
Data Source: MCH Jurisdictional Survey (MCH-JS)			
	2019	2020	2022
Annual Objective	72.3	72.3	73
Annual Indicator	92.0	92.0	76.5
Numerator	192,972	192,972	168,105
Denominator	209,819	209,819	219,847
Data Source	MCH-JS	MCH-JS	MCH-JS
Data Source Year	2019	2019	2023

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	76.1	72.3	72.3	72.3	73
Annual Indicator	72.3	72.3	72.3	72.3	87.8
Numerator	174,840	174,840	174,840	174,840	126,750
Denominator	241,976	241,976	241,976	241,976	144,428
Data Source	BRFSS	BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year	2017	2017	2017	2017	2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	89.6	90.4	92.2

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2018
	Column Name:	State Provided Data

Field Note:

PR does not participate in the National Survey of Children's Health. PR MCAH Program incorporated this indicator as one of the state added questions in the PR BRFSS.

Provisional data reported from PR BRFSS 2017. This will be the last data reported from PR BRFSS since it will be included in the Jurisdictional Survey.

2. **Field Name:** 2019

Column Name: State Provided Data

Field Note:

PR MCAH Program incorporated this indicator as one of the state added questions in the PR BRFSS for 2016 and 2017. Although it was included in the MCH-JS, this data does not reflect the reality of preventive visits in adolescents in Puerto Rico. 2016 PR-BRFSS reported that 76% of adolescents of this age range were having their annual preventive visits and by 2017 a 5% decrease was observed (72.3%). On the other hand, CMS-416 Form reports that the "Total Eligible Receiving at least One Initial or Periodic Screen 10 - 18 y/o" for FY 2018-19 was 27%.

Therefore, this indicator will be incorporated once again as part of the state added questions in the PR BRFSS 2021. Meanwhile, the Annual Objectives were estimated taking under consideration PR BRFSS 2017 and that is why we include the data once again as a state added data, until PR BRFSS 2021 is completed.

3. **Field Name:** 2020

Column Name: State Provided Data

Field Note:

PR MCAH Program incorporated this indicator as one of the state added questions in the PR BRFSS for 2016 and 2017. Although it was included in the MCH-JS, this data does not reflect the reality of preventive visits in adolescents in Puerto Rico. 2016 PR-BRFSS reported that 76% of adolescents of this age range were having their annual preventive visits and by 2017 a 5% decrease was observed (72.3%). On the other hand, CMS-416 Form reports that the "Total Eligible Receiving at least One Initial or Periodic Screen 10 - 18 y/o" for FY 2019-20 was 21.9%.

Therefore, this indicator was incorporated once again as part of the state added questions in the PR BRFSS 2021. Meanwhile, the Annual Objectives were estimated taking under consideration PR BRFSS 2017 and that is why we include the data once again as a state added data, until PR BRFSS 2021 is completed.

4. **Field Name:** 2021

Column Name: State Provided Data

Field Note:

PR MCAH Program incorporated this indicator as one of the state-added questions in the PR BRFSS for 2016 and 2017. Although it was included in the MCH-JS, this data does not reflect the reality of preventive visits in adolescents in Puerto Rico. 2016 PR-BRFSS reported that 76% of adolescents of this age range were having their annual preventive visits and by 2017 a 5% decrease was observed (72.3%). On the other hand, CMS-416 Form reports that the "Total Eligible Receiving at least One Initial or Periodic Screen 10 - 18 y/o" for FY 2020-2021 was 23.3%.

Therefore, this indicator was incorporated once again as part of the state added questions in the PR BRFSS 2021. Meanwhile, the Annual Objectives were estimated taking under consideration PR BRFSS 2017 and that is why we include the data once again as a state added data, until PR BRFSS 2021 is completed.

5.	Field Name:	2022
	Column Name:	State Provided Data
	Field Note:	Numerator and denominator: PR BRFSS state added questions for 2021.
6.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	2025 annual objectives based on baseline data (PR-BRFSS 2017) were reached. As a result, the objectives were changed to account for a 5% rise over the next five years.
7.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	2025 annual objectives based on baseline data (PR-BRFSS 2017) were reached. As a result, the objectives were changed to account for a 5% rise over the next five years.
8.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	2025 annual objectives based on baseline data (PR-BRFSS 2017) were reached. As a result, the objectives were changed to account for a 5% rise over the next five years.

NPM 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home - Children with Special Health Care Needs

Federally Available Data			
Data Source: MCH Jurisdictional Survey (MCH-JS) - CSHCN			
	2019	2020	2022
Annual Objective	32.4	57.1	57.4
Annual Indicator	57.1	57.1	53.1
Numerator	107,696	107,696	62,404
Denominator	188,735	188,735	117,607
Data Source	MCH-JS-CSHCN	MCH-JS-CSHCN	MCH-JS-CSHCN
Data Source Year	2019	2019	2023

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	31.6	32.4	57.1	57.1	57.4
Annual Indicator	30.8	57.1	57.1	57.1	
Numerator	46,505	107,696	107,696	107,696	
Denominator	150,935	188,735	188,735	188,735	
Data Source	PR-CSHCN Survey	MCH-JS-CSHCN	MCH-JS-CSHCN	MCH-JS-CSHCN	
Data Source Year	2015	2019	2019	2019	
Provisional or Final ?	Final	Final	Final	Final	

Annual Objectives			
	2023	2024	2025
Annual Objective	53.1	53.6	54.1

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Data is based on the 2015 PR-CSHCN Survey data. This survey is a representation of the former National Survey of CSHCN adapted to PR. There was no representation of typical children.
2.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives for NPM 11 were revised based on the 2023 MCH-JS indicator and with a projection of 5%.
3.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives for NPM 11 were revised based on the 2023 MCH-JS indicator and with a projection of 5%.
4.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives for NPM 11 were revised based on the 2023 MCH-JS indicator and with a projection of 5%.

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

Federally Available Data			
Data Source: MCH Jurisdictional Survey (MCH-JS) - CSHCN			
	2019	2020	2022
Annual Objective	26	6.4	6.6
Annual Indicator	6.4	6.4	22.2
Numerator	5,714	5,714	10,852
Denominator	89,053	89,053	48,853
Data Source	MCH-JS-CSHCN	MCH-JS-CSHCN	MCH-JS-CSHCN
Data Source Year	2019	2019	2023

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	25.3	26	6.4	6.4	6.6
Annual Indicator	24.7	6.4	6.4	6.4	
Numerator	16,226	5,714	5,714	5,714	
Denominator	65,560	89,053	89,053	89,053	
Data Source	PR-CSHCN Survey	MCH-JS-CSHCN	MCH-JS-CSHCN	MCH-JS-CSHCN	
Data Source Year	2015	2019	2019	2019	
Provisional or Final ?	Final	Final	Final	Final	

Annual Objectives			
	2023	2024	2025
Annual Objective	22.2	22.4	22.6

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note: Data is based on the 2015 PR-CSHCN Survey data. This survey is a representation of the former National Survey of CSHCN adapted to PR. There was no representation of youth without special health care needs.	
2.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note: The 2019 indicator (6.4%) should be interpreted with caution due to a small sample of YSHCN (unweight denominator < 100). The 2023 NPM 12 indicator (22.2%) is a better reliable indication of HCT for YSHN in PR. Annual objectives were revised based on the 2023 MCH-JS indicator, starting in 22.2% and with a projection of 5%.	
3.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note: The 2019 indicator (6.4%) should be interpreted with caution due to a small sample of YSHCN (unweight denominator < 100). The 2023 NPM 12 indicator (22.2%) is a better reliable indication of HCT for YSHN in PR. Annual objectives were revised based on the 2023 MCH-JS indicator, starting in 22.2% and with a projection of 5%.	
4.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note: The 2019 indicator (6.4%) should be interpreted with caution due to a small sample of YSHCN (unweight denominator < 100). The 2023 NPM 12 indicator (22.2%) is a better reliable indication of HCT for YSHN in PR. Annual objectives were revised based on the 2023 MCH-JS indicator, starting in 22.2% and with a projection of 5%.	

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

Federally Available Data				
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)				
	2019	2020	2021	2022
Annual Objective			53.3	53.8
Annual Indicator	48.7	53.3	38.3	42.0
Numerator	10,196	10,706	7,165	8,001
Denominator	20,921	20,073	18,687	19,039
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2018	2019	2020	2021
Federally Available Data				
Data Source: MCH Jurisdictional Survey (MCH-JS)				
	2019	2020	2022	
Annual Objective			53.8	
Annual Indicator	71.4	71.4	68.8	
Numerator	377,217	377,217	345,074	
Denominator	528,457	528,457	501,765	
Data Source	MCH-JS	MCH-JS	MCH-JS	
Data Source Year	2019	2019	2023	
Annual Objectives				
	2023	2024	2025	
Annual Objective	54.4	54.9	56.0	

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
2.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
3.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.

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

Federally Available Data			
Data Source: MCH Jurisdictional Survey (MCH-JS)			
	2019	2020	2022
Annual Objective	72.3	72.3	73
Annual Indicator	78.1	78.1	55.2
Numerator	453,736	453,736	291,078
Denominator	581,051	581,051	527,155
Data Source	MCH-JS	MCH-JS	MCH-JS
Data Source Year	2019	2019	2023

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	75.7	72.3	72.3	72.3	73
Annual Indicator	72.3	72.3	72.3	72.3	78.7
Numerator	433,883	433,883	433,883	433,883	322,711
Denominator	600,429	600,429	600,429	600,429	409,873
Data Source	BRFSS	BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year	2017	2017	2017	2017	2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	80.3	81.1	82.6

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2018
	Column Name:	State Provided Data

Field Note:

PR does not participate in the National Survey of Children's Health. PR MCAH Program incorporated this indicator as one of the state added questions in the PR BRFSS.

Provisional data reported from PR BRFSS 2017. This will be the last data reported from PR BRFSS since it will be included in the Jurisdictional Survey.

2. **Field Name:** 2019

Column Name: State Provided Data

Field Note:

PR MCAH Program incorporated this indicator as one of the state added questions in the PR BRFSS for 2016 and 2017. Although it was included in the MCH-JS, this data does not reflect the reality of preventive oral visits in children in Puerto Rico. 2016 PR-BRFSS reported that 75.7% of children of this age range were having their oral preventive visits and by 2017 a 5% decrease was observed (72.3%). On the other hand, CMS-416 Form reports that the "Total Eligible Receiving Preventive Dental Services 1 - 18 y/o" for FY 2018-19 was 35%.

Therefore, this indicator will be incorporated once again as part of the state added questions in the PR BRFSS 2021. Meanwhile, the Annual Objectives were estimated taking under consideration PR BRFSS 2017 and that is why we include the data once again as a state added data, until PR BRFSS 2021 is completed.

3. **Field Name:** 2020

Column Name: State Provided Data

Field Note:

PR MCAH Program incorporated this indicator as one of the state added questions in the PR BRFSS for 2016 and 2017. Although it was included in the MCH-JS, this data does not reflect the reality of preventive oral visits in children in Puerto Rico. 2016 PR-BRFSS reported that 75.7% of children of this age range were having their oral preventive visits and by 2017 a 5% decrease was observed (72.3%). On the other hand, CMS-416 Form reports that the "Total Eligible Receiving Preventive Dental Services 1 - 18 y/o" for FY 2019-20 was 40.8%.

Therefore, this indicator will be incorporated once again as part of the state added questions in the PR BRFSS 2021. Meanwhile, the Annual Objectives were estimated taking under consideration PR BRFSS 2017 and that is why we include the data once again as a state added data, until PR BRFSS 2021 is completed.

4. **Field Name:** 2021

Column Name: State Provided Data

Field Note:

PR MCAH Program incorporated this indicator as one of the state added questions in the PR BRFSS for 2016 and 2017. Although it was included in the MCH-JS, this data does not reflect the reality of preventive oral visits in children in Puerto Rico. 2016 PR-BRFSS reported that 75.7% of children of this age range were having their oral preventive visits and by 2017 a 5% decrease was observed (72.3%). On the other hand, CMS-416 Form reports that the "Total Eligible Receiving Preventive Dental Services 1 - 18 y/o" for FY 2020-2021 was 35.4%.

Therefore, this indicator will be incorporated once again as part of the state added questions in the PR BRFSS 2021. Meanwhile, the Annual Objectives were estimated taking under consideration PR BRFSS 2017 and that is why we include the data once again as a state added data, until PR BRFSS 2021 is completed.

5. **Field Name:** 2022

	Column Name:	State Provided Data
	Field Note:	Numerator and denominator: PR BRFSS state added questions for 2021.
6.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	2025 annual objectives based on baseline data (PR-BRFSS 2017) were reached. Therefore, the objectives were adjusted considering a 5% increase by 2030.
7.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	2025 annual objectives based on baseline data (PR-BRFSS 2017) were reached. Therefore, the objectives were adjusted considering a 5% increase by 2030.
8.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	2025 annual objectives based on baseline data (PR-BRFSS 2017) were reached. Therefore, the objectives were adjusted considering a 5% increase by 2030.

Form 10
State Performance Measures (SPMs)

State: Puerto Rico

SPM 1 - Percentage of children with ASD that are diagnosed at 36 month of age or earlier.

Measure Status:					Active
State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	15.3	16	11.2	11.2	11.3
Annual Indicator	15.3	11.2	11.2	11.2	11.2
Numerator	3,610	1,840	1,840	1,840	1,840
Denominator	23,581	16,413	16,413	16,413	16,413
Data Source	PRHIA	MCH-JS	MCH-JS	MCH-JS	MCH-JS
Data Source Year	2017	2019	2019	2019	2019
Provisional or Final ?	Provisional	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	11.4	11.5	11.6

Field Level Notes for Form 10 SPMs:

1.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Data is based in the number of ASD ICD-10 claims per child age in the PRHIA database and represents only the claims for children covered by the GHP.
2.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Data is based in the number of ASD ICD-10 claims per child age in the PRHIA database and represents only the claims for children covered by the GHP.
3.	Field Name:	2019
	Column Name:	State Provided Data
	Field Note:	Data is based on the 2019 MCH-JS and refers to children 3 to 17 years old.
4.	Field Name:	2022
	Column Name:	State Provided Data
	Field Note:	The data is based on the 2019 MCH-JS and refers to children 3 to 17 years old. Once the 2023 MCH-JS database is received, the SPM can be updated.
5.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	The projections are based on an increase of 5% in five years. The objectives will be updated, once the 2023 MCH-JS database is received.
6.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	The projections are based on an increase of 5% in five years. The objectives will be updated, once the 2023 MCH-JS database is received.
7.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	The projections are based on an increase of 5% in five years. The objectives will be updated, once the 2023 MCH-JS database is received.

SPM 2 - Prevalence at birth of neural tube defects.

Measure Status:					Active
State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	8.4	6.4	6.5	9.2	6.4
Annual Indicator	5.3	5.6	9.3	6.2	9.9
Numerator	13	12	19	12	19
Denominator	24,310	21,492	20,431	19,201	19,133
Data Source	PR- Birth Defects Surveillance System	PR- Birth Defects Surveillance System	PR-Birth Defects Surveillance System	PR-Birth Defects Surveillance System	PR-Birth Defects Surveillance System
Data Source Year	2017	2018	2019	2021	2022
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional	Provisional

Annual Objectives			
	2023	2024	2025
Annual Objective	8.6	8.4	8.2

Field Level Notes for Form 10 SPMs:

1.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note: PR NTD prevalence has inconsistently varied since 2000 from a maximum of 12 to a minimum of 5 (mean=8.9 and SD=2). Annual objectives were revised based on the last ten years' mean (8.6) with a projection of -1%.	
2.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note: PR NTD prevalence has inconsistently varied since 2000 from a maximum of 12 to a minimum of 5 (mean=8.9 and SD=2). Annual objectives were revised based on the last ten years' mean (8.6) with a projection of -1%.	
3.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note: PR NTD prevalence has inconsistently varied since 2000 from a maximum of 12 to a minimum of 5 (mean=8.9 and SD=2). Annual objectives were revised based on the last ten years' mean (8.6) with a projection of -1%.	

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

State: Puerto Rico

ESM 1.1 - Percent of women, ages 18 through 44, with a preventive medical visit in the past year who reported using the “Women of Reproductive Age Preventive Care Pocket Guide” to schedule a preventive medical visit in Puerto Rico by September 2021-2025

Measure Status:			Active	
State Provided Data				
	2019	2020	2021	2022
Annual Objective			0	0
Annual Indicator			0	79.1
Numerator				239
Denominator				302
Data Source			PRBRFSS	HVP participant survey
Data Source Year			2021	2021-2022
Provisional or Final ?			Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	79.9	80.7	81.5

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2019
	Column Name:	State Provided Data
	Field Note:	This indicator will be incorporated as part of the state added questions of PR BRFSS.
2.	Field Name:	2020
	Column Name:	State Provided Data

Field Note:

The women of reproductive age (10 to 49 years) preventive care pocket guide, known as “Mi agenda de salud” was developed taking under consideration the Women’s Preventive Services Initiative (WPSI) recommendations and the Pediatric Preventive Health Care Services Guidelines (PPHCSG) for Puerto Rico. It is expected to be distributed to WRA during the second half of 2021. Four question were added to the PR BRFSS in order to measure this indicator. This indicator is expected to be reported by 2023 with 2022 data.

3. **Field Name:** 2021

Column Name: State Provided Data

Field Note:

The women of reproductive age (10 to 49 years) preventive care pocket guide, known as “Mi agenda de salud” was developed taking under consideration the Women’s Preventive Services Initiative (WPSI) recommendations and the Pediatric Preventive Health Care Services Guidelines (PPHCSG) for Puerto Rico. Its distribution was delayed due to processes within the government, thus dissemination started in Spring 2022. Four questions were added to the PR BRFSS to measure this indicator. This indicator is expected to be reported by 2023 with 2022 data.

4. **Field Name:** 2022

Column Name: State Provided Data

Field Note:

The women of reproductive age (10 to 49 years) preventive care pocket guide, known as “Mi agenda de salud” was developed taking under consideration the Women’s Preventive Services Initiative (WPSI) recommendations and the Pediatric Preventive Health Care Services Guidelines (PPHCSG) for Puerto Rico. It was distributed to WRA during Spring 2022. Four question were added to the 2023 PR BRFSS to measure this indicator. This indicator is expected to be reported by 2024. Meanwhile, the same questions were added to the TV Home Visiting Program survey, allowing us to get a sense of how the pocket guide is being used by the participants.

5. **Field Name:** 2023

Column Name: Annual Objective

Field Note:

Annual objectives estimations consider a 5% increase for the following five years. Once BRFSS data is available annual could be adjusted.

6. **Field Name:** 2024

Column Name: Annual Objective

Field Note:

Annual objectives estimations consider a 5% increase for the following five years. Once BRFSS data is available annual could be adjusted.

7. **Field Name:** 2025

Column Name: Annual Objective

Field Note:

Annual objectives estimations consider a 5% increase for the following five years. Once BRFSS data is available annual could be adjusted.

ESM 5.1 - Percent of infants of 4 months of age, in the Title V Home Visiting Program (HVP), placed to sleep in a safe environment after receiving safe sleep counseling in Puerto Rico by September 2021-2025

Measure Status:		Active	
State Provided Data			
	2020	2021	2022
Annual Objective			0
Annual Indicator			28.9
Numerator			43
Denominator			149
Data Source			HVP participant records
Data Source Year			2021-2022
Provisional or Final ?			Final

Annual Objectives			
	2023	2024	2025
Annual Objective	29.2	29.5	29.8

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	Data is currently in the process of analysis. FY 2020-2021 data will be provided by 2022.
2.	Field Name:	2021
	Column Name:	State Provided Data
	Field Note:	There is currently no data for this ESM since it was modified last year by changing the numerator to 4-month-old infants (previously 6-month-old infants) because it is after this age that infants begin to roll over on their own. This led to a change in HVP reporting. Therefore, this information is currently in the process of being compiled and is expected to be reported for the next Annual Report.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives estimations consider a 5% increase for the following five years considering the 2021-2022 baseline.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives estimations consider a 5% increase for the following five years considering the 2021-2022 baseline.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives estimations consider a 5% increase for the following five years considering the 2021-2022 baseline.

ESM 9.1 - Percent of Youth Health Promoters (YHP) that completed the first year who report not being bullied in Puerto Rico by September 2021-2025

Measure Status:			Active	
State Provided Data				
	2019	2020	2021	2022
Annual Objective			0	0
Annual Indicator			0	88.5
Numerator				193
Denominator				218
Data Source			YHP Profile	YHPP First-Year Profile Survey
Data Source Year			NA	2021-2022
Provisional or Final ?			Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	88.0	88.0	88.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2019
	Column Name:	State Provided Data
	Field Note: During the next school year 8th grade Youth Health Promoters (YHP) will answer a survey, that among other relevant information, they will report any bullying experience. Baseline data is expected to be reported by 2021.	
2.	Field Name:	2020
	Column Name:	State Provided Data

Field Note:

ESM 9.1 was modified to measure the percent of all Youth Health Promoters (YHP) who report been bullied. Previously, ESM 9.1 measured the percent of 8th grade YHP who report not being bullied. Two (2) questions will be used to measure it: Have you ever been bullied on school property and have you ever been electronically bullied (texting, Instagram, Facebook or other social media). Those two questions were included in the reviewed YHP's Profile Questionnaire that is completed initially in 6th grade and in 8th grade when they finish the three years curriculum. During 2nd year YHPP the questions will be offered in one of the meeting's activities.

Data for this ESM is expected to be available for the next Block Grant Report. YHP' Project was not able to continue its implementation at schools since February 2020 due to PR seismic events followed by COVID-19 lockdown during 2020-2021. Although schools started virtually in 2020, not all students had the equipment or internet to connect and the YHPP was not yet available to be offered virtually. The Comprehensive Adolescent Health Program (CAHP) began the process to adapt virtually the 45 meetings of the three year's curriculum in March 2020. The YHP's Profile was also evaluated and completed with the changes described above to include the items with which the ESM 9.1 is expected to be reported. The CAHP is ready to implement YHPP in August 2021 using any of three modalities: virtually, in presence or a combination of both depending on the school's organization mode.

3. **Field Name:** 2021

Column Name: State Provided Data

Field Note:

Data for this ESM is expected to be available for the next Block Grant Report. YHP's Profile Questionnaire was revised, including two (2) questions that will measure this ESM. Due to the pandemic and government processes the impression of the YHP's Profile was delayed and not available to test and implement of before the end of 2021-2022 school year. The profile is currently on the testing process and it is expected to be administered during next school year (2022-2023) to all YHPs.

4. **Field Name:** 2022

Column Name: State Provided Data

Field Note:

Numerator and denominator: YHPP First-Year Profile Survey.

Because of the pandemic, the revised profile survey was distributed for the first time among YHP during the school year 2022-2023. This data corresponds to the 218 students that completed the first year of the project (6th grade) during the school year 2021-2022.

5. **Field Name:** 2023

Column Name: Annual Objective

Field Note:

Annual objectives are estimated to maintain an 88% (baseline: YHPP Profile Survey 2021-2022) until data is available to calculate a trend.

6. **Field Name:** 2024

Column Name: Annual Objective

Field Note:

Annual objectives are estimated to maintain an 88% (baseline: YHPP Profile Survey 2021-2022) until data is available to calculate a trend.

7.

Field Name:**2025**

Column Name:**Annual Objective**

Field Note:

Annual objectives are estimated to maintain an 88% (baseline: YHPP Profile Survey 2021-2022) until data is available to calculate a trend.

ESM 10.1 - Percent of Youth Health Promoters (YHP) reached with the PR Youth Health Literacy Toolkit (PR-YHLT) that increase their awareness regarding how to use the health care system (pre-post survey) in Puerto Rico by September 2021-2025

Measure Status:					Active
State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	60	84.8	84.9	85	85.1
Annual Indicator	59.3	84.7	68.3	68.3	55.1
Numerator	64	72	28	28	43
Denominator	108	85	41	41	78
Data Source	PR Youth Health Literacy Pre-Post Survey	PR Youth Health Literacy Pre-Post Survey	PR Youth Health Literacy Pre-Post Survey	PR Youth Health Literacy Pre-Post Survey	PR Youth Health Literacy Pre-Post Survey
Data Source Year	2017-18	2018-19	2019-2020	2019-2020	2020-2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	85.2	85.3	85.4

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note: Numerator: The amount of youths reached that increased their awareness regarding how to use the healthcare system. Denominator: The total amount of youths from YHPP in year two reached with YLT intervention that completed pre and post surveys.	
2.	Field Name:	2018
	Column Name:	State Provided Data

Field Note:

Numerator: The amount of youths reached that increased their awareness regarding how to use the healthcare system.

Denominator: The total amount of youths from YHPP in year two reached with YLT intervention that completed pre and post surveys.

3. **Field Name:** 2019

Column Name: State Provided Data

Field Note:

Numerator: The amount of youths reached that increased their awareness regarding how to use the healthcare system.

Denominator: The total amount of youths from YHPP in year two reached with YLT intervention that completed pre and post surveys.

After Hurricane Maria the amount of youth YHP reached by the Project decreased.

4. **Field Name:** 2020

Column Name: State Provided Data

Field Note:

Numerator: The amount of youths reached that increased their awareness regarding how to use the healthcare system.

Denominator: The total amount of youths from YHPP in year two reached with YLT intervention that completed pre and post surveys.

Note: 2019-2020 was an irregular school year that affected YHPP. In January 7, 2020 a 6.4 earthquake occurred in SE of PR followed by a series of seismic events that had continued to this date (June 2021). Several schools were destroyed and all schools closed until certified by structural engineers. On March 16, 2016 PR Governor ordered a complete lockdown due to COVID-19 Pandemic. Schools were not able to open again for the rest of 2019-20. Although schools started virtually, not all students had the equipment or internet to connect. The YHPP was not able to continue at schools since the curriculum was only to be provided in person. CAHP began the process to adapt virtually the three year curriculum (45 meetings) in March 2020. The amount of youth reached in 2019-20 significantly decreased because it includes only those students reached from August 2019 to March 2020.

5. **Field Name:** 2021

Column Name: State Provided Data

Field Note:

During 2020-2021 school year, DOE classes were held virtually. Since YHPP was not available to be offered in a virtual mode, its implementation was not possible and data for this ESM is not available for this school year. During this period, CAHP staff worked to adapt YHPP to a virtual mode and continued its implementation in August 2021 through face to face or virtually as determined due to COVID-19 prevention protocols. Data for 2021-2022 will be available for the next annual report.

6. **Field Name:** 2022

	Column Name:	State Provided Data
	Field Note:	<p>Numerator: The number of youths reached that increased their awareness regarding how to use the healthcare system.</p> <p>Denominator: The total number of youths from YHPP in year two reached with YLT intervention that completed pre and post-surveys.</p>
7.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	<p>Because of the pandemic, 2019–2020 was an unusual school year that had an impact on YHPP. Since the curriculum was only to be delivered in person, the schools began virtually but the YHPP was unable to continue. During the 2020-2021 school year, DOE classes were held virtually. Since YHPP was not available to be offered in a virtual mode, its implementation was not possible. As a result of the decline in data for this ESM, annual targets may change depending on the data reported for the subsequent academic years.</p>
8.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	<p>Because of the pandemic, 2019–2020 was an unusual school year that had an impact on YHPP. Since the curriculum was only to be delivered in person, the schools began virtually but the YHPP was unable to continue. During the 2020-2021 school year, DOE classes were held virtually. Since YHPP was not available to be offered in a virtual mode, its implementation was not possible. As a result of the decline in data for this ESM, annual targets may change depending on the data reported for the subsequent academic years.</p>
9.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	<p>Because of the pandemic, 2019–2020 was an unusual school year that had an impact on YHPP. Since the curriculum was only to be delivered in person, the schools began virtually but the YHPP was unable to continue. During the 2020-2021 school year, DOE classes were held virtually. Since YHPP was not available to be offered in a virtual mode, its implementation was not possible. As a result of the decline in data for this ESM, annual targets may change depending on the data reported for the subsequent academic years.</p>

ESM 11.1 - Percent of families at the CSHCN Program who report that they “always” have a care coordinator or another professional available to help them find the services they need.

Measure Status:			Active
State Provided Data			
	2020	2021	2022
Annual Objective			75.2
Annual Indicator	74.6	75.2	80
Numerator	223	85	192
Denominator	299	113	240
Data Source	Medical Home Family Index Survey	PR-CSHCN Program Care Coordination Survey	PR-CSHCN Program Care Coordination Survey
Data Source Year	2021	2022	2023
Provisional or Final ?	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	76.6	77.3	78.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	Data source: Medical Home Family Index Survey (adapted) at the CSHCN Program (March 16 to May 20, 2021).
2.	Field Name:	2021
	Column Name:	State Provided Data

Field Note:

Data source: PR-CSHCN Program Care Coordination Survey. This survey was developed as a shorter version of the Medical Home Family Index Survey (MHFIS) of the Center for Medical Home Improvement (CMHI). It is focused on care coordination. Reasons for the change of tool are:

1. Complaints from some of the pediatric and autism centers' staff about the length of the adapted MHFIS for families to complete
2. The need of adding indicators to report ESM 11.2.
3. The indicator for ESM 11.1 needed to be in accordance with the program's care coordination concept (see below).

Wording adaptation for ESM 11.1: item in the adapted MHFIS refers to "I always have a care coordinator assigned..."; item in the PR-CSHCN Program Care Coordination Survey refers to "someone is always available when I need help or support to make appointments, manage referrals, or receive information about services my child or youth needs."

3. **Field Name:** **2022**

Column Name: **State Provided Data**

Field Note:

Data source: PR-CSHCN Program Care Coordination Survey. This survey was developed as a shorter version of the Medical Home Family Index Survey (MHFIS) of the Center for Medical Home Improvement (CMHI), which was the first tool used to measure this ESM. Reasons for the change of tool were:

1. The need of adding indicators to report ESM 11.2.
2. The need of modifying wording for indicator for ESM 11.1 to include other professionals who perform care coordination in addition to care coordinators.
3. Complaints from some of the pediatric and autism centers' staff about the length of the adapted MHFIS for families to complete.
4. The new version focuses on care coordination.

4. **Field Name:** **2023**

Column Name: **Annual Objective**

Field Note:

Annual objective for 2023 (76.2) was exceeded (80). Annual objectives were revised based on the ESM 11.1 indicators' mean (76.6) and with a projection of 5%.

5. **Field Name:** **2024**

Column Name: **Annual Objective**

Field Note:

Annual objective for 2023 (76.2) was exceeded (80). Annual objectives were revised based on the ESM 11.1 indicators' mean (76.6) and with a projection of 5%.

6. **Field Name:** **2025**

Column Name: **Annual Objective**

Field Note:

Annual objective for 2023 (76.2) was exceeded (80). Annual objectives were revised based on the ESM 11.1 indicators' mean (76.6) and with a projection of 5%.

ESM 11.2 - Percent of families at the CSHCN Program who "totally agree" that their child has a better health status thanks to the efforts of the care coordinator to help them access the needed services.

Measure Status:		Active	
State Provided Data			
	2020	2021	2022
Annual Objective			74.1
Annual Indicator		57.8	57.4
Numerator		63	132
Denominator		109	230
Data Source		PR-CSHCN Program Care Coordination Survey	PR-CSHCN Program Care Coordination Survey
Data Source Year		2022	2023
Provisional or Final ?		Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	57.4	58.0	58.6

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	Baseline to be measured through the Medical Home Family Index at the CSHCN Program between 2022 and 2023.
2.	Field Name:	2021
	Column Name:	State Provided Data
	Field Note:	Data source: PR-CSHCN Program Care Coordination Survey (March 30 to June 2, 2022).
3.	Field Name:	2022
	Column Name:	State Provided Data
	Field Note:	There was an error on the 2022 denominator. The error was amended.
4.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives were revised because of an error in the 2022 denominator.
5.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives were revised because of an error in the 2022 denominator.
6.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives were revised because of an error in the 2022 denominator.

ESM 12.1 - Percent of YSHCN who receive care at the RPCs and has completed a transition readiness assessment in Puerto Rico by September 2021-2025

Measure Status:				Active
State Provided Data				
	2019	2020	2021	2022
Annual Objective			71.8	71.8
Annual Indicator	48.5	71.8	71	70.4
Numerator	128	173	98	100
Denominator	264	241	138	142
Data Source	Regional Pediatric Centers	CSHCN Program database	PR-CSHCN Program REDCap Census	PR-CSHCN Program REDCap Census
Data Source Year	2018-19	2019-20	2020-21	2021-22
Provisional or Final ?	Provisional	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	71.0	71.7	72.4

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	This ESM overarches from the previous five-year cycle.
2.	Field Name:	2021
	Column Name:	State Provided Data
	Field Note:	This is the first year to report from data collected through the REDCap census implemented at the RPCs and Autism centers during the reporting year.
3.	Field Name:	2022
	Column Name:	State Provided Data
	Field Note:	<p>1. Data reported in 2023 is from fiscal year 2021-2022.</p> <p>2. Data source for fiscal years 2018-2019 and 2019-2020 is the same: numbers reported by each RPC to central level when requested. In fiscal year 2020-2021 a REDCap system was implemented at the RPCs for regional staff to report their daily work. Central level can receive the data in the moment staff reports. Fiscal year 2020-2021 was the first year to be reported with data from Redcap.</p> <p>3. This is the second year to report from data collected through the REDCap census (fiscal year 2021-2022).</p>
4.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Projected objective for 2023 (72.8) was not accomplished (70.4). Annual objectives were revised based on the ESM 12.1 indicators' mean (71) and with a projection percent of 5%.
5.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Projected objective for 2023 (72.8) was not accomplished (70.4). Annual objectives were revised based on the ESM 12.1 indicators' mean (71) and with a projection percent of 5%.
6.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Projected objective for 2023 (72.8) was not accomplished (70.4). Annual objectives were revised based on the ESM 12.1 indicators' mean (71) and with a projection percent of 5%.

ESM 12.2 - Percent of YSHCN at the CSHCN Program who has a transition action plan in place after completing a transition readiness assessment (4th core element of Got Transition).

Measure Status:			Active
State Provided Data			
	2020	2021	2022
Annual Objective			57.1
Annual Indicator		57.1	60.4
Numerator		56	58
Denominator		98	96
Data Source		PR-CSHCN Program REDCap Census	PR-CSHCN Program REDCap Census
Data Source Year		2020-21	2021-22
Provisional or Final ?		Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	58.8	59.4	60.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	Baseline to be measured through the CSHCNP Database. Data is expected to be available between 2022 and 2023.
2.	Field Name:	2021
	Column Name:	State Provided Data
	Field Note:	This is the first year to report from data collected through the REDCap census implemented at the RPCs and Autism centers during the reporting year.
3.	Field Name:	2022
	Column Name:	State Provided Data
	Field Note:	<ol style="list-style-type: none"> 1. Data reported in 2023 is from fiscal year 2021-2022 2. Four (4) cases were excluded from the 2021-2022 denominator because of one of these factors: <ul style="list-style-type: none"> - no success of contact with family - family moved to the states - no interested in continuing with the transition process
4.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objective for 2023 (57.7) was exceeded (60.4). Annual objectives were revised based on the ESM 12.2 indicators' mean (58.8) and with a projection percent of 5%.
5.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objective for 2023 (57.7) was exceeded (60.4). Annual objectives were revised based on the ESM 12.2 indicators' mean (58.8) and with a projection percent of 5%.
6.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objective for 2023 (57.7) was exceeded (60.4). Annual objectives were revised based on the ESM 12.2 indicators' mean (58.8) and with a projection percent of 5%.

ESM 13.1.2 - Percent of persons who recognize oral health as part of routine prenatal care after participating in the MCAHP prenatal course by September 2021-2025

Measure Status:		Active
State Provided Data		
	2021	2022
Annual Objective		
Annual Indicator	100	97.5
Numerator	4	39
Denominator	4	40
Data Source	Pre and post Prenatal Course	Pre and post Prenatal Course
Data Source Year	2020-2021	2021-2022
Provisional or Final ?	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	99.0	99.0	99.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2021
	Column Name:	State Provided Data
	Field Note:	A total of 56 people participated in the Prenatal Course during FY 2020-2021. This course was offered in a virtual or face-to-face session. Of the total number of participants, 4 did not recognize oral health as part of routine prenatal care before taking the course. After taking the course, these same 4 participants recognize oral health as part of routine prenatal care. The rest of the participants, except one, remained as they had initially, recognizing oral health as part of routine prenatal care.
2.	Field Name:	2022
	Column Name:	State Provided Data
	Field Note:	The prenatal course had 257 participants during the fiscal year 2021–2022. There were two ways to take this course: in person or online. Of the total participants, 40 were unaware that routine prenatal care included dental health before taking the course. After attending the course, 39 out of 40 participants agree that dental health is an important part of conventional prenatal care. The other participants continued to concur that regular prenatal care should cover oral health.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	The annual objective is to maintain the percentage of persons who recognize oral health as part of routine prenatal care after participating in the MCAHP prenatal course at 99%.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	The annual objective is to maintain the percentage of persons who recognize oral health as part of routine prenatal care after participating in the MCAHP prenatal course at 99%.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	The annual objective is to maintain the percentage of persons who recognize oral health as part of routine prenatal care after participating in the MCAHP prenatal course at 99%.

ESM 13.2.1 - Percent of infants of 6 months or more in the Title V Home Visiting Program at high risk for caries who received early oral preventive services in Puerto Rico by September 2021-2025

Measure Status:				Active	
State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective			39.3	34.1	34.2
Annual Indicator		39.3	34	26.3	47.7
Numerator		210	127	142	148
Denominator		534	373	539	310
Data Source		HVP Participants Records	HVP Participants Records	HVP Participants Records	HVP Participants Records
Data Source Year		2018-2019	2019-2020	2020-2021	2021-2022
Provisional or Final ?		Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	48.5	49.3	50.1

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note: Due to the COVID-19 lockdown (beginning in March 2020), HVP nurses had limited access to HVP participants, which impacted follow-up interventions and increased pending referrals to early oral preventive services. Furthermore, dentists charging an additional fee to provide services also presented a challenge/barrier for HVP participants (mostly low income) to seek early oral preventive services for their infants. This translated into a 13% decrease of infants of 6 months or more in the Title V HVP at high risk for caries who received early oral preventive services during 2019-2020 when compared to 2018-2019. HVP nurses will continue to follow-up participants in order to ensure infants receive early oral preventive services despite the challenges that COVID-19 has brought for the program.	
2.	Field Name:	2021
	Column Name:	State Provided Data
	Field Note: Due to the COVID-19 lockdown (beginning in March 2020), HVP nurses had limited access to HVP participants, which impacted follow-up interventions and increased pending referrals to early oral preventive services. Furthermore, dentists charging an additional fee to provide services also presented a challenge/barrier for HVP participants (mostly low income) to seek early oral preventive services for their infants. This translated into a 13% decrease of infants of 6 months or more in the Title V HVP at high risk for caries who received early oral preventive services during 2019-2020 when compared to 2018-2019. During 2020-2021 this continue decreasing by 23% when compared to 2019-2020. The HVP continues to recover from the challenges of the pandemic and HVP nurses will continue to follow-up participants in order to ensure infants receive early oral preventive services despite the challenges that COVID-19 has brought for the program.	
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note: 2025 annual objectives based on baseline data (2019-2020 HVP Participants Records) were reached. As a result, the objectives were changed to account for a 5% rise over the next five years.	
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note: 2025 annual objectives based on baseline data (2019-2020 HVP Participants Records) were reached. As a result, the objectives were changed to account for a 5% rise over the next five years.	
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note: 2025 annual objectives based on baseline data (2019-2020 HVP Participants Records) were reached. As a result, the objectives were changed to account for a 5% rise over the next five years.	

Form 10
State Performance Measure (SPM) Detail Sheets
State: Puerto Rico

SPM 1 - Percentage of children with ASD that are diagnosed at 36 month of age or earlier.
Population Domain(s) – Children with Special Health Care Needs

Measure Status:	Active								
Goal:	Increase the percentage of children with ASD that were diagnosed less than three years of age.								
Definition:	<table border="1"> <tr> <td>Unit Type:</td><td>Percentage</td></tr> <tr> <td>Unit Number:</td><td>100</td></tr> <tr> <td>Numerator:</td><td>Number of children with ASD who were diagnosed at 36 months old or earlier.</td></tr> <tr> <td>Denominator:</td><td>Number of children diagnosed with ASD.</td></tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of children with ASD who were diagnosed at 36 months old or earlier.	Denominator:	Number of children diagnosed with ASD.
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	Number of children with ASD who were diagnosed at 36 months old or earlier.								
Denominator:	Number of children diagnosed with ASD.								
Data Sources and Data Issues:	PR-Jurisdictional Survey.								
Significance:	<p>A growing body of evidence supports the significance of early intervention and treatment for children with ASD. Early interventions for children with ASD occur at or before preschool age, as early as 18 months of age. During this period the child's brain has more plasticity to learn and change than at later ages. Early experiences affect the development of brain architecture, which provides the foundation for all future learning, behavior, and health. (Center for the Developing Child, 2020). Thus, early evidence-based interventions can provide the best start and the opportunity to develop communication, social and emotional skills. The best opportunity for early interventions is an early ASD identification and diagnosis.</p>								

SPM 2 - Prevalence at birth of neural tube defects.**Population Domain(s) – Children with Special Health Care Needs**

Measure Status:	Active	
Goal:	By 2021 decrease by 10% the NTDs prevalence at birth. Baseline: 10/10,000 live births	
Definition:	Unit Type:	Rate
	Unit Number:	10,000
	Numerator:	Number of live births with NTD in Puerto Rico.
	Denominator:	Number of live births in Puerto Rico.
Data Sources and Data Issues:	PR-BDSS Data	
Significance:	NTDs are an important public health problem that can be prevented with folic acid supplementation and fortification of staple foods. Globally, it is estimated that approximately 300,000 babies are born each year with NTD, resulting in approximately 88,000 deaths and 8.6 million disability adjusted life years. NTD birth surveillance is important to assess trends, impact of public health prevention strategies, and for decision-making.	

Form 10
State Outcome Measure (SOM) Detail Sheets
State: Puerto Rico

No State Outcome Measures were created by the State.

Form 10
Evidence-Based or –Informed Strategy Measures (ESM) Detail Sheets

State: Puerto Rico

ESM 1.1 - Percent of women, ages 18 through 44, with a preventive medical visit in the past year who reported using the “Women of Reproductive Age Preventive Care Pocket Guide” to schedule a preventive medical visit in Puerto Rico by September 2021-2025

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

Measure Status:	Active	
Goal:	By 2025, increase the use of the Women of Reproductive Age Preventive Care Pocket Guide as part of the preventive medical visits of women in reproductive age.	
Definition:	Unit Type:	Percentage
	Unit Number:	100
	Numerator:	Women, ages 18 through 44, with a preventive medical visit in the past year who reported using the Pocket Guide to schedule a preventive medical visit by September 2025 (ongoing).
	Denominator:	Women, ages 18 through 44, with a preventive medical visit in the past year.
Data Sources and Data Issues:	PR - BRFSS	
Evidence-based/informed strategy:	ESM 1.1 is linked to the caregiver/parent (patient navigation) strategies included in the PR State Action Plan. It is also consistent with the Innovation Hub’s Women’s Health Education Navigation program (WHEN). Our approach is to educate WRA about the importance of preventive medical visits. Evidence for this strategy was found using the MCH Digital Library. Patient navigation is a patient-centered intervention that uses trained personnel to identify patient-level barriers, including financial, cultural, logistical, and educational barriers to health care, and then removes these barriers to facilitate full and timely access to health care services (MCH Evidence Center). According to the MCH Evidence Center, the effectiveness of patient/consumer-targeted interventions, such as patient navigation, appears to be moderate.	
Significance:	Preventive health care visits open the door to early identification and management of conditions and diseases that can affect a woman’s mental and physical health and wellbeing. Too often, women are not aware of the desirability of the annual preventive care visit, screenings and immunizations according to age and risk factors. The Women of Reproductive Age Preventive Care Pocket Guide sets out the recommended visit and service schedule and is a handy, portable tool that serves both as a guide to the recommended schedule and a place to record visits and test results. The Pocket Guide will be distributed through the health insurance companies, in community health education events, and to participants of the Home Visiting Program.	

ESM 5.1 - Percent of infants of 4 months of age, in the Title V Home Visiting Program (HVP), placed to sleep in a safe environment after receiving safe sleep counseling in Puerto Rico by September 2021-2025
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

Measure Status:	Active	
Goal:	By 2025, increase the number of infants of 4 months of age, in the Title V Home Visiting Program, placed to sleep in a safe environment.	
Definition:	Unit Type:	Percentage
	Unit Number:	100
	Numerator:	Infants up to 4 months of age, in the Title V Home Visiting Program, placed on a safe sleep environment (on their backs, on a separate approved sleep surface, and without soft objects or loose bedding) after receiving safe sleep counseling by Septemb
	Denominator:	Infants up to 4 months of age, in the Title V Home Visiting Program, who were placed in a high risk sleeping environment by September 2025.
Data Sources and Data Issues:	Title V Home Visiting Program logs, reports and produced documents.	
Evidence-based/informed strategy:	ESM 5.1 is linked to the caregiver/parent education strategy included in the PR State Action Plan. Our approach is to provide safe sleep education and counseling to PR Title V Home Visiting Program participants. Evidence related to this strategy was identified using the MCH Digital Library. Peer-reviewed evidence suggests that interventions with families and caregivers appear to have a positive impact on the adequate sleeping position of infants. Promoting safe sleep practices through prenatal and parenting courses, in addition to offering counseling to Title V Home Visiting Program participants, is expected to increase the percent of children in Puerto Rico placed in a safe sleep environment, thus impacting NPM 5.	
Significance:	In Puerto Rico safe-sleep-related Sudden Unexpected Infant Deaths (SUIDS), were among the leading causes of infant deaths between 1 to 12 months of age in 2016, and was the first cause in 2017 and 2018. The PR-PRAMS results raise concern of the knowledge and practices of safe sleep in PR, with only 2.7% placing their infants in a safe sleep sleeping environment. Recognizing this as a priority, the Title V Home Visiting Program promotes infant safe sleep practices participants by offering prenatal and post-partum orientation and evaluating safe sleep practices periodically. Participants in the HVP receive orientation on safe sleep practices beginning in the second trimester of pregnancy and continued in the post-partum period. The participants for this program are chosen based on the identification of risk factors that increase infant mortality such as adolescent pregnancy, chronic disease, previous pregnancy loss, and maternal age older than 35 years.	

ESM 9.1 - Percent of Youth Health Promoters (YHP) that completed the first year who report not being bullied in Puerto Rico by September 2021-2025

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

Measure Status:	Active	
Goal:	Increase the percentage of YHP who report not being bullied	
Definition:	Unit Type:	Percentage
	Unit Number:	100
	Numerator:	YHP that completed the first year and report not being bullied on the survey
	Denominator:	YHP of the first year that completed the survey
Data Sources and Data Issues:	YHPP survey	
Evidence-based/informed strategy:	ESM 9.1 aligns with peer-led counseling, mentoring, and support as emerging evidence. There is growing evidence that peer-led counseling, mentoring, and support positively impact children and adolescents. The Youth Health Promoters Project provides a range of educational interventions over a three-year period and develops activities each year to promote peer health and well-being and raise awareness about various issues, including bullying. Peer-reviewed evidence can be accessed through the MCH Digital Library. Using this approach, it is expected that the impact of the YHPP on bullying among students will be seen in PR.	
Significance:	Bullying experiences are associated with a number of behavioral, emotional, and physical adjustment problems. Victims of bullying tend to report feelings of depression, anxiety, low self-esteem, and isolation; poor school performance; suicidal ideation; and suicide attempts. Around 22% of students from 9th to 12th grade in Puerto Rico reported being bullied (2017 PR-YRBSS). Every year, the YHPP recruits 6th-grade students in order to provide a series of educational interventions during a period of three years. Recognizing bullying as a priority, effective communication, interpersonal relationships, communication, and no discrimination, are among the topics that are discussed with the YHP during the three years cycle. Furthermore, the YHP create activities each year to promote health and wellbeing with their peers and raise awareness of various topics, including bullying. The YHP completed pre (6th grade) and post (8th grade) surveys focused on their attitudes and behaviors before and after receiving the three years of the project. It is expected that 8th-grade promoters report less frequently any events related to bullying after the YHPP intervention.	

ESM 10.1 - Percent of Youth Health Promoters (YHP) reached with the PR Youth Health Literacy Toolkit (PR-YHLT) that increase their awareness regarding how to use the health care system (pre-post survey) in Puerto Rico by September 2021-2025

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

Measure Status:	Active	
Goal:	To increase the percentage of youths reached with the PR-YHLT increased their awareness regarding how to use the health care system by September 2025.	
Definition:	Unit Type:	Percentage
	Unit Number:	100
	Numerator:	The number of YHP surveyed after receiving PR-YHLT with increased perception of how to use the healthcare system.
	Denominator:	The number of YHP reached with the PR- YHLT.
Data Sources and Data Issues:	PRYHLT Pre and post intervention surveys.	
Evidence-based/informed strategy:	Although there is limited research on this strategy related to this NPM, MCH Evidence informs there is growing evidence of this strategy related to other NPMs. Thus, it is reasonable to assume that this strategy will also prove effective with this NPM; however, further research is needed. The Youth Health Promoters Project (YHP) provides a series of educational activities over three years and develops activities each year to promote health and wellness among peers and to raise awareness of various topics, including health literacy. As this strategy is adopted, YHP data will be evaluated to ensure an impact on this topic.	
Significance:	The patient Protection and Affordable Care Act of 2010, defines health literacy as the degree to which an individual has the capacity to obtain, communicate, process and understand health information and services to make the appropriate health decisions. Young people need to be empowered to make informed and appropriate decisions about health, including attending the annual health visit and participate in treatments. Cultural competency is vital in the implementation of public health initiatives. The implementation of culturally competent PR Youth Health Literacy Toolkit will help to empower Puerторrican youths about health including the importance to attend the annual health visit. The implementation of this toolkit will incorporate the experience from the piloting programs with YHPs island wide.	

ESM 11.1 - Percent of families at the CSHCN Program who report that they “always” have a care coordinator or another professional available to help them find the services they need.

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:	Ensure an enhanced care coordination system at the CSHCNP to improve the health care accessibility and integrated services for CSHCN, and to support the development of the medical home community at the seven health regions of the island.	
Definition:	Unit Type:	Percentage
	Unit Number:	100
	Numerator:	Number of families at the CSHCN Program who report that they “always” have access to a care coordinator or another professional to help them find the services they need.
	Denominator:	Number of families at the CSHCN Program who participated in the 2023 PR-CSHCN Program Care Coordination Survey.
Data Sources and Data Issues:	2023 PR-CSHCN Program Care Coordination Survey	
Evidence-based/informed strategy:	<p>Evidence-based/informed strategy measured: Inclusion of a dedicated care coordinator or outreach worker (MCH-Evidence Center Brief, https://www.mchevidence.org/documents/reviews/NPM-11-Medical-Home-Evidence-Report.pdf)</p> <p>The medical home model offers care that is accessible, family-centered, continuous, comprehensive, and coordinated. Care coordinators help families to connect with the appropriate resources, and they partner with the PCP to assure the child access the services that he/she needs.</p>	
Significance:	Care coordination has been identified as an important way to improve how the healthcare system works, especially for CSHCN, and to increase the potential for better outcomes for CSHCN, providers, and payers. Care coordination is a core component of the medical home model for CSHCN.	

ESM 11.2 - Percent of families at the CSHCN Program who "totally agree" that their child has a better health status thanks to the efforts of the care coordinator to help them access the needed services.

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

Measure Status:	Active								
Goal:	By tracking this ESM we pretend to understand the perceptions families have on the impact of care coordination with their child's health status. This understanding will support future strategic planning.								
Definition:	<table border="1"> <tr> <td>Unit Type:</td><td>Percentage</td></tr> <tr> <td>Unit Number:</td><td>100</td></tr> <tr> <td>Numerator:</td><td>Number of families at the CSHCN Program who totally agree that their child has a better health status thanks to the care coordination services they receive at the CSHCN Program.</td></tr> <tr> <td>Denominator:</td><td>Number of families at the CSHCN Program who reported they agree or totally agree that they observe an improved health and well-being in their child after receiving services at the CSHCN program.</td></tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of families at the CSHCN Program who totally agree that their child has a better health status thanks to the care coordination services they receive at the CSHCN Program.	Denominator:	Number of families at the CSHCN Program who reported they agree or totally agree that they observe an improved health and well-being in their child after receiving services at the CSHCN program.
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	Number of families at the CSHCN Program who totally agree that their child has a better health status thanks to the care coordination services they receive at the CSHCN Program.								
Denominator:	Number of families at the CSHCN Program who reported they agree or totally agree that they observe an improved health and well-being in their child after receiving services at the CSHCN program.								
Data Sources and Data Issues:	PR-CSHCN Program Care Coordination Survey								
Evidence-based/informed strategy:	<p>Evidence-based/informed strategy measured: Inclusion of a dedicated care coordinator or outreach worker (MCH-Evidence Center Brief, retrieved at https://www.mchevidence.org/documents/reviews/NPM-11-Medical-Home-Evidence-Report.pdf)</p> <p>The medical home model offers care that is accessible, family-centered, continuous, comprehensive, and coordinated. Care coordinators help families to connect with the appropriate resources for their CSHCN, and they partner with the PCP to assure the child access the services that he/she needs.</p>								
Significance:	For CSHCN, coordinated care is essential to their health and well-being because it helps enhance communication and coordination across systems of care, improving the quality of care, enhancing family engagement and improving health care outcomes. Care coordination is a core component of the medical home model for CSHCN.								

ESM 12.1 - Percent of YSHCN who receive care at the RPCs and has completed a transition readiness assessment in Puerto Rico by September 2021-2025

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

Measure Status:	Active	
Goal:	Increase the number of YSHCN who have a successful transition to an adult health care provider.	
Definition:	Unit Type:	Percentage
	Unit Number:	100
	Numerator:	Number of YSHCN 14 to 21 years of age receiving services at the RCPs who completed the Transition Readiness Assessment Tool.
	Denominator:	Number of YSHCN 14 to 21 years of age receiving services at the RCPs.
Data Sources and Data Issues:	PR-CSHCN Program REDCap Census.	
Evidence-based/informed strategy:	<p>Six core elements of the Got Transition Model (MCH-Evidence Center Transition Brief https://www.mchevidence.org/documents/reviews/NPM-12-Transition-Report.pdf)</p> <p>Got Transition is a model that aims to improve transition from pediatric to adult health care using evidence-driven strategies. The development and updates of a transition plan with the participation of the YSHCN will facilitate a successful transition. The plan should include findings of the readiness assessments, goals of the youth and family, a medical summary and what to do in emergencies.</p>	
Significance:	<p>As youth get older, their ability to manage their medical needs becomes increasingly important, especially for YSHCN. The goals of a successful health care transition is to facilitate a proper process of transition from pediatric to an adult health care provider, and to improve the ability of YSHCN to manage their health care, based on their capacity to do so. The administration of the Transition Readiness Assessment Tool is the 3rd core element of the Evidence Based Got Transition Model. The purpose is to identify and discuss with youth and parent/caregiver their needs; concerns and aspirations in self-care and to jointly develop a written transition plan with goals, priorities and actions.</p>	

ESM 12.2 - Percent of YSHCN at the CSHCN Program who has a transition action plan in place after completing a transition readiness assessment (4th core element of Got Transition).

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

Measure Status:	Active									
Goal:	By tracking this ESM we pretend to assure the increase in the number of YSHCN at the CSHCN Program that have a transition action plan in place after being assessed for transition readiness.									
Definition:	<table><tr><td>Unit Type:</td><td>Percentage</td></tr><tr><td>Unit Number:</td><td>100</td></tr><tr><td>Numerator:</td><td>Number of YSHCN 14 to 21 years of age receiving services at the CSHCN Program who have a transition plan in place after being assessed for readiness.</td></tr><tr><td>Denominator:</td><td>Number of YSHCN receiving services at the CSHCNP who have completed a transition readiness assessment.</td></tr></table>		Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of YSHCN 14 to 21 years of age receiving services at the CSHCN Program who have a transition plan in place after being assessed for readiness.	Denominator:	Number of YSHCN receiving services at the CSHCNP who have completed a transition readiness assessment.
Unit Type:	Percentage									
Unit Number:	100									
Numerator:	Number of YSHCN 14 to 21 years of age receiving services at the CSHCN Program who have a transition plan in place after being assessed for readiness.									
Denominator:	Number of YSHCN receiving services at the CSHCNP who have completed a transition readiness assessment.									
Data Sources and Data Issues:	PR-CSHCN Program REDCap Census									
Evidence-based/informed strategy:	<p>Six core elements of the Got Transition Model (MCH-Evidence Center Transition Brief https://www.mchevidence.org/documents/reviews/NPM-12-Transition-Report.pdf)</p> <p>Got Transition is a model that aims to improve transition from pediatric to adult health care using evidence-driven strategies. The development and updates of a transition plan with the participation of the YSHCN will facilitate a successful transition. The plan should include findings of the readiness assessments, goals of the youth and family, a medical summary and what to do in emergencies.</p>									
Significance:	<p>Over 90% of CSHCN now live to adulthood, and at some point will need to transition from a pediatric to an adult health care provider. Changing doctors is never easy, much less for a teenager with a chronic condition and new to advocating for his/her own health care. YSHCN and families need support and guidance during this process. Health care transition has become a priority issue to improve the quality of health care for YSHCN.</p>									

ESM 13.1.2 - Percent of persons who recognize oral health as part of routine prenatal care after participating in the MCAHP prenatal course by September 2021-2025

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

Measure Status:	Active	
Goal:	By 2025, increase the number of MCAHP prenatal course participants who recognize oral health as part of routine prenatal care.	
Definition:	Unit Type:	Percentage
	Unit Number:	100
	Numerator:	Number of persons who in the course pre-test did not recognize preventive oral healthcare as part of routine prenatal care and in the post-test recognized that preventive oral healthcare visit is a part of routine prenatal care by September 2025.
	Denominator:	Number of persons who in the course pre-test did not recognize the preventive oral healthcare visit as part of routine prenatal care by September 2025.
Data Sources and Data Issues:	MCAHP prenatal course pre and post tests	
Evidence-based/informed strategy:	As included in the PR State Action Plan, ESM 13.3.1 is linked to the strategy that aims to provide educational activities to the target population through MCAHP workshops. Our approach is to promote the importance of oral care as part of routine prenatal care to participants of the prenatal courses. Although there is limited evidence about interventions to increase dental visits during pregnancy, promoting the preventive oral care visit among the target population is expected to increase knowledge regarding the importance of oral care during pregnancy, thus impacting NPM 13.1.	
Significance:	Oral health during pregnancy has an impact on the health of both mother and child that can last a lifetime. Poor maternal oral health is associated with adverse health outcomes, and the infant's own oral health is influenced by the mother's oral status. In spite of this knowledge, dentists are reluctant to provide oral care to pregnant women. To address this, PR MCAHP proposes to strengthen collaborations with dentists and other stakeholders to develop strategies that promote preventive oral health care visits. The PR MCAHP will monitor and guide public policies to improve access to preventive oral health services for all pregnant women. Health educators and promoters offer education on this subject through the prenatal course to all participants.	

ESM 13.2.1 - Percent of infants of 6 months or more in the Title V Home Visiting Program at high risk for caries who received early oral preventive services in Puerto Rico by September 2021-2025

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

Measure Status:	Active									
Goal:	At least 50% of completed referrals of the Puerto Rico Home Visiting Program infants identified at high risk for caries by September 2025 (ongoing).									
Definition:	<table><tr><td>Unit Type:</td><td>Percentage</td></tr><tr><td>Unit Number:</td><td>100</td></tr><tr><td>Numerator:</td><td>The number of completed referrals of HVP infants identified by high risk for caries to receive preventive oral care.</td></tr><tr><td>Denominator:</td><td>The number of HVP infants identified at high risk for cares who receive referrals for preventive oral care.</td></tr></table>		Unit Type:	Percentage	Unit Number:	100	Numerator:	The number of completed referrals of HVP infants identified by high risk for caries to receive preventive oral care.	Denominator:	The number of HVP infants identified at high risk for cares who receive referrals for preventive oral care.
Unit Type:	Percentage									
Unit Number:	100									
Numerator:	The number of completed referrals of HVP infants identified by high risk for caries to receive preventive oral care.									
Denominator:	The number of HVP infants identified at high risk for cares who receive referrals for preventive oral care.									
Data Sources and Data Issues:	Program logs, reports and produced documents.									
Evidence-based/informed strategy:	ESM 13.2.1 is aligned with the MCHbest strategy, "Preventive Oral Care Outreach with Early Head Start, Head Start, Home Visiting, and WIC Clinics, and the Innovation Hub's Improving Oral Health Outcomes for Pregnant Women and Infants by Educating Home Visitors program. This approach allows Home Visiting Nurses to identify infants at high risk for caries early so they can be promptly screened and referred, and early fluoride prevention can be implemented to reduce early childhood caries.									
Significance:	Oral health has an impact on general wellbeing throughout life. Risks for the development of caries in infants are well known and a screening test to identify high-risk infants by health professionals is recommended by the American Dental Association. To improve the early identification of high-risk infants for dental caries a screening test will be developed for use by the HVN. The screening test will be accompanied by an intervention plan for oral care and prevention of caries Early identification for prompt dental evaluation and early fluoride prevention is aimed at decreasing the incidence of early childhood caries. Follow-up of completed referrals will serve to evaluate the effectiveness of HVN interventions.									

Form 11
Other State Data
State: Puerto Rico

The Form 11 data are available for review via the link below.

[Form 11 Data](#)

Form 12
MCH Data Access and Linkages

State: Puerto Rico

Annual Report Year 2022

Data Sources	Access				Linkages	
	(A) State Title V Program has Consistent Annual Access to Data Source	(B) State Title V Program has Access to an Electronic Data Source	(C) Describe Periodicity	(D) Indicate Lag Length for Most Timely Data Available in Number of Months	(E) Data Source is Linked to Vital Records Birth	(F) Data Source is Linked to Another Data Source
1) Vital Records Birth	Yes	Yes	Annually	4		
2) Vital Records Death	Yes	Yes	Annually	4	Yes	
3) Medicaid	Yes	Yes	Annually	3	Yes	
4) WIC	Yes	Yes	Annually	3	Yes	
5) Newborn Bloodspot Screening	Yes	No	Annually	6	No	
6) Newborn Hearing Screening	Yes	Yes	Daily	0	No	
7) Hospital Discharge	No	No	Annually	0	No	
8) PRAMS or PRAMS-like	Yes	Yes	Annually	9	Yes	

Form Notes for Form 12:

None

Field Level Notes for Form 12:

None