

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

Puerto Rico

**FY 2022 Application/
FY 2020 Annual Report**

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Table of Contents

I. General Requirements	5
I.A. Letter of Transmittal	5
I.B. Face Sheet	6
I.C. Assurances and Certifications	6
I.D. Table of Contents	6
II. Logic Model	6
III. Components of the Application/Annual Report	7
III.A. Executive Summary	7
III.A.1. Program Overview	7
III.A.2. How Federal Title V Funds Complement State-Supported MCH Efforts	11
III.A.3. MCH Success Story	12
III.B. Overview of the State	13
III.C. Needs Assessment FY 2022 Application/FY 2020 Annual Report Update	27
Five-Year Needs Assessment Summary (as submitted with the FY 2021 Application/FY 2019 Annual Report)	43
III.D. Financial Narrative	58
III.D.1. Expenditures	60
III.D.2. Budget	63
III.E. Five-Year State Action Plan	67
III.E.1. Five-Year State Action Plan Table	67
III.E.2. State Action Plan Narrative Overview	68
<i>III.E.2.a. State Title V Program Purpose and Design</i>	68
<i>III.E.2.b. State MCH Capacity to Advance Effective Public Health Systems</i>	72
III.E.2.b.i. MCH Workforce Development	72
III.E.2.b.ii. Family Partnership	81
III.E.2.b.iii. MCH Data Capacity	83
<i>III.E.2.b.iii.a. MCH Epidemiology Workforce</i>	83
<i>III.E.2.b.iii.b. State Systems Development Initiative (SSDI)</i>	88
<i>III.E.2.b.iii.c. Other MCH Data Capacity Efforts</i>	91
III.E.2.b.iv. MCH Emergency Planning and Preparedness	95
III.E.2.b.v. Health Care Delivery System	98
<i>III.E.2.b.v.a. Public and Private Partnerships</i>	98
<i>III.E.2.b.v.b. Title V MCH – Title XIX Medicaid Inter-Agency Agreement (IAA)</i>	100
<i>III.E.2.c State Action Plan Narrative by Domain</i>	101

Women/Maternal Health	101
Perinatal/Infant Health	145
Child Health	196
Adolescent Health	228
Children with Special Health Care Needs	270
Cross-Cutting/Systems Building	300
III.F. Public Input	302
III.G. Technical Assistance	306
IV. Title V-Medicaid IAA/MOU	307
V. Supporting Documents	308
VI. Organizational Chart	309
VII. Appendix	310
Form 2 MCH Budget/Expenditure Details	311
Form 3a Budget and Expenditure Details by Types of Individuals Served	318
Form 3b Budget and Expenditure Details by Types of Services	320
Form 4 Number and Percentage of Newborns and Others Screened Cases Confirmed and Treated	326
Form 5 Count of Individuals Served by Title V & Total Percentage of Populations Served by Title V	329
Form 6 Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX	335
Form 7 State MCH Toll-Free Telephone Line and Other Appropriate Methods Data	337
Form 8 State MCH and CSHCN Directors Contact Information	339
Form 9 List of MCH Priority Needs	342
Form 9 State Priorities – Needs Assessment Year – Application Year 2021	345
Form 10 National Outcome Measures (NOMs)	348
Form 10 National Performance Measures (NPMs)	403
Form 10 National Performance Measures (NPMs) (2016-2020 Needs Assessment Cycle)	429
Form 10 State Performance Measures (SPMs)	435
Form 10 State Performance Measures (SPMs) (2016-2020 Needs Assessment Cycle)	440
Form 10 Evidence-Based or –Informed Strategy Measures (ESMs)	445
Form 10 Evidence-Based or -Informed Strategy Measures (ESMs) (2016-2020 Needs Assessment Cycle)	466
Form 10 State Performance Measure (SPM) Detail Sheets	476
Form 10 State Performance Measure (SPM) Detail Sheets (2016-2020 Needs Assessment Cycle)	478
Form 10 State Outcome Measure (SOM) Detail Sheets	481
Form 10 Evidence-Based or –Informed Strategy Measures (ESM) Detail Sheets	482

Form 10 Evidence-Based or -Informed Strategy Measure (ESM) (2016-2020 Needs Assessment Cycle)	492
Form 11 Other State Data	500
Form 12 MCH Data Access and Linkages	501

I. General Requirements

I.A. Letter of Transmittal



GOBIERNO DE PUERTO RICO
DEPARTAMENTO DE SALUD

August 13, 2021

Christopher Dykton, MA
Acting 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
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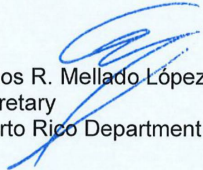
Dear Mr. Dykton:

The Puerto Rico Department of Health is submitting the Title V – Maternal and Child Services Block Grant Application for FY 2022 including the Annual Report for FY 2020. 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 \$15,856,806 in federal funds to be matched with \$11,892,605 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**. Based on the 5 Year Health Needs Assessment (2020-2025) the PR Title V selected nine priorities for the next five years.

PR TITLE V PRIORITIES (2020-2025)

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

It must be noted that PR Title V faced two major critical events in 2020: 1) In January, earthquakes struck the southwest region with tremors lasting all year round; 2) From Mid-March onwards, the strict lockdown to handle the COVID-19 pandemic led to disruptions and modifications in services. Within this context, a summary of each domain for the reporting **FY 2019- 2020** is presented.

Women/Maternal Health:

Pre-Pandemic. The MCAHP continued offering education and support to women - on oral health, prenatal care, pregnancy health, preconceptive health, mental health, and preventive medical visits - including home visits to pregnant and parenting women participants of the Title V Home Visiting Program (HVP). The 4-session **Prenatal Course** improved knowledge among participants in all sessions as shown by the pre- and post-test scores. For example, the average test scores of pregnant women in session one was 98% post-test vs 70% pre-test. The MCAHP staff also tended to the needs of women and families living in areas struck by the earthquakes: visited shelters and communities, coordinated services, and helped them face the disaster and mental health effects like constant fear, insecurity, and sense of loss. Likewise, the Home Visiting Nurses (HVNs) assessed the needs of HVP participants providing support, referrals, and psychological first aid techniques.

Pandemic. Since all in-person services were stopped including the prenatal course, actions were adjusted to continue providing services albeit limited. The HVP rapidly developed a COVID-19 protocol to guide HVNs virtual interventions via texting or calls. A challenge the HVNs faced was the inability to observe the home environment and have visual clues of infants' development which they creatively handled by using the WHATSAPP or by asking mothers to send videos or describe infants' motor movements that enabled them to make referrals as needed. They

also responded to emergent needs of families like support to access online critical services (WIC, Demographic Registry, Medicaid). The Community Health Workers (CHWs) contacted government agencies and private providers to verify what services were being offered and how they could be access and assisted in service coordination. The Health Educators (HEs) offered virtual education to families, professionals and the HVP staff. The MCAHP began the process of designing a virtual prenatal course to fill the void left by the paralysis of the in-person prenatal course.

Perinatal/Infant Health:

Pre-Pandemic. The MCAHP implemented strategies and collaborated with stakeholders to decrease infant mortality (i.e., safe sleep practices, promotion of healthy pregnancy, prenatal care and breastfeeding, infant care, unintentional injury prevention, and parenting skills) through the HVP, the Perinatal Services (PS), Health Promotion and Community Outreach (HPCO) and the Pediatric Consultant (PC). The PC and collaborators also addressed the delivery of high-risk infants at facilities that fulfill the requirements for the recommended level of care. The staff rapidly responded to the earthquake event to protect MCA populations health in shelters and communities. For instance, displaced pregnant women in shelters received support and orientation on pregnancy health and prenatal care. Displaced families with infants received support in breastfeeding, safe infant feeding and safe sleep practices.

Pandemic. Many hospitals adopted strict protocols ceasing non-emergency services such as elective surgeries and non-clinical services that led to the disruption of the PS in birthing hospitals. The Perinatal Nurses (PNs) maintained communication with each hospital they serve to make inquiries about COVID-19 birthing protocols as well as protocols and dates for resuming the PS. The information on birthing protocols was shared with the HVNs to inform HVP participants, thus easing fears and concerns. Most PNs resumed hospital visits in late 2020 summer. The PC participated in a Task Force that developed recommendations for the management of postpartum women, newborns, and breastfeeding in hospitals. These recommendations were adopted as public policy by the PR COVID-19 Medical Task Force and the PRDOH. Short educational videos were created and published via social media – in collaboration with leaders from pediatric medical organizations - to encourage parents to continue with pediatric preventive care, scheduled immunizations, newborn well care, breastfeeding, and protective measures to prevent contagion. Webinars on pediatric health care, newborn care and feeding during the pandemic were presented with the collaboration of academic and primary care pediatricians.

Child Health:

Pre-Pandemic. The staff continued efforts in promoting child health (i.e., physical activity, nutrition, responsible parenting, immunization, unintentional injury prevention, child maltreatment prevention and preventive care). The parenting courses offered to parents of 0-5 y/o and 6-11 y/o successfully improved knowledge on child health topics. The staff promptly responded to the earthquake crisis by identifying the needs of families with children in shelters and making referrals to services. The PC and collaborators visited families in shelters and provided orientation on management and health preventive measures in overcrowded conditions. Dislocated families received flu vaccinations, basic hygiene kits, mosquito repellents, sunscreen and health educational materials including safe sleep and oral care. The staff also collaborated with stakeholders in initiatives geared to mitigate emotional distress among affected children and promote their health and wellbeing. Their efforts included the dissemination of the book *Trinka and Juan, when the earth moved* – created by Dr. Chandra Ghosh Ippen- a tool to help families handle children's stress caused by the earthquakes.

Pandemic. The MCAHP efforts to address child health under COVID-19 pandemic were led by the PC. In collaboration with the PR AAP Chapter, she held a virtual meeting with the staff of day care centers, Head Start (HS), Early Head Start (EHS) and parents on the spread of COVID-19 and infection control measures in public settings to promote the adoption of personal protective behaviors. The content was based on the most recent recommendations by the CDC, AAP, and the PR DOH. A chat with the participation of multiple stakeholders was created by the PC to share updated information on COVID-19 and initiatives to support the MCA population. Among chat participants were representatives of United Way of PR, ACOG, Breastfeeding support groups, psychologist,

pediatricians, MCAH advocates, Voces (vaccine advocate NPO), PR AAP leaders, presidents of all the Pediatric Organization on the Island and the pediatric representative of the PR COVID Task Force. Very importantly, webinars and videos related to Title V objectives and strategies were produced and/or disseminated through the PR AAP virtual platform. Short video clips were also created with messages for parents encouraging preventive pediatric care, immunization, and measures to prevent infection and transmission of COVID-19.

Adolescent Health:

Pre-Pandemic. The school-based Youth Health Promoters Project (YHPP) - housed in the Comprehensive Adolescent Health Program or CAHP- was comprised by 949 Youth Health Promoters (YHPs) that reached 2,135 peers and 252 adults on a variety of youth health topics including the annual health visit. The YHPs like their school peers were impacted by the January earthquakes as all public schools in PR closed until government-hired engineers certified they were safe to use. Given the effects on youth lives, the CAHP staff moved quickly and created the *Hope After Earthquakes* intervention (adapted from YHPP's Hope after Hurricanes) to address youth experiences and emotions. The intervention with the YHPs was done once schools opened in February.

The Youth Advisory Council (YAC) contributed to the health and wellbeing of youth in PR through a variety of actions of which several stand out. They oversaw and designed contents of Nivel Maximo's (multimedia campaign to promote health among youth) website educational materials that can be reached at www.minivelmaximo.com. The YAC members actively participated in the 5YR Health Needs Assessment (2020-2025) processes. They also assisted the PR Children and Youth Task Force design a plan to develop a youth advisory group using YAC as a model to be replicated. The YAC adopted internal measures to address global climate change such as the use of reusable utensils, cloth grocery bags and non-paper digital forms for agenda, presentations, and evaluations. These measures were posted in social media to motivate other youth to take similar actions.

Pandemic. The YHPP was severely impacted by the pandemic crisis as it was forced to temporarily halt activities due to school closings. The CAHP staff stayed in contact – via telephone calls or text messages – with liaisons from participating schools and provided COVID-19 information and stress management support to these. School liaisons passed the information on to the students, the YHPs and/or their parents. At the same time, the YHPs were sent letters of gratitude and a participation certificate by mail to let them know that the CAHP staff care about them. The CAHP staff began the process of adapting the 3-yr (45 sessions) YHPP curriculum's in-person sessions to digital ones to be able to meet virtually with the YHPs in the immediate future, if needed.

YAC members continued meeting and working together through the virtual modality but in reduced hours compared to the in-person meetings that normally lasted all day. The YAC created educational COVID-related videos to share with peers through social networks (washing hands, how they have handled physical distancing or what they did as young people during the pandemic). The videos can be seen at <https://fb.watch/4H9F1gb3rz/>. In 2020, the members were due to end their 2-year participation in the YAC but decided to continue participating until new advisors are selected in 2021. This can be seen as a sign of duty and commitment to the YAC, the MCAHP, and the promotion of youth health.

CSCHN Health:

Pre-Pandemic. The MCH-JS (2019) placed PR's CSHCN prevalence in 27.3% (screener database). The 2020 HNA showed that there is still the need for accessibility to pediatric specialists and ASD resources. Priorities selected are overarching from the past five-year cycle. To strengthen the 2021-2026 SAP, efforts to identify stronger ESMs for NPM 11 and 12 has been carried out, as well as increasing staff participation in evaluative activities for all priorities selected.

It is important to point out that the four (4) emergent public health issues during last five-year cycle impacted the CSHCN Title V operational framework along the way. The previous ZAPSS is now the PR-SET-NET, monitoring

emergent threats to pregnant women and babies. Meanwhile the PR BDSPPS, EHDI-IS and TDC Registry continued the surveillance of children and families, while the Title V CSHCN Program assured that identified CSHCN and families would receive the comprehensive/coordinated care they need. During the south-west earthquakes, the program collaborated with an initiative known as “Coordinated Response” to identify and contact families in displaced shelters with CSHCN. Displaced shelters were tents prepared by families afraid of living under their roof because of the continuous tremor sequences. RPCs also contacted families of children with PKU to assure they had sufficient supplies of nutritional formula during that time. Follow-up was provided to 255 children registered in the TDC Registry, including those dependent on dialysis. The six core elements of Got Transition continued at the RPCs, as well as educational activities for communities in general and for health care professionals on early signs of ASD, the importance of timely developmental and ASD screenings and the consumption of folic acid for the prevention of NTD births.

Pandemic. Telework was the main strategy implemented by the CSHCN Program during the pandemic lockdown, including tele-health services from the health care provider’s home to the CSHCN’s home. The EHR team was temporarily reassigned to offer technical assistance and support to staff providing tele-health. Trainings offered included HIPAA Law; Protected Health Information (PHI); safe practices during remote work; and online applications. An approximate total of 1,025 children and families were served remotely during this period. Partial reopening of RPCs started on August 2020 providing face to face services on a controlled basis. Since March 2020 the PR-SET-NET initiated monitoring pregnant women with evidence of positive COVID-19 results. The team also developed protocols to identify and de-duplicate individuals with multiple positive COVID-19 test results, increasing the accuracy of the reported number of cases. Education on the early signs of ASD and ASD capacity building to professionals continued, face to face and virtually. Currently, support is being provided to the Department of Education, private schools and childcare/preschool programs for the development of COVID-19 protocols for the re-opening of public and private schools. Schools and childcare programs have been closed since March 2020.

Closing Remark:

On Sunday March 15, 2020, PR imposed a strict (24/7) lockdown effective the same day. This meant the sudden closings of all government offices and stopping in-person services which caused great concern about program and service continuity among the Title V staff. The words of this staff best express the first reactions to the sudden lockdown “*The first days [of the lockdown] there was uncertainty, I would rather say fear; we were disoriented because we didn’t know what we would be doing*”.

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.

The Federal Title V CSHCN Program funds provides a foundation for community-based, family centered services to improve PR systems of care for children and youth with special health care needs and their families, by increasing access to health care services through enabling and direct services, developing and leveraging key partnerships and collaborations, and planning and implementing program components that reach the CSHCN population and their families in collaboration with community-level partners. The program oversees surveillance, data collection, evaluation and assessment activities that inform the CSMN Division programs and public policy decisions. It also plays a critical role in emergency planning and preparedness efforts to assess capacity to respond to emerging public health threats and disasters (examples: hurricanes, earthquakes, Zika and COVID-19), that could potentially impact CSHCN and their families.

III.A.3. MCH Success Story

The COVID-19 pandemic brought about drastic changes to the ways the PR Title V staff worked, communicated, and provided services. These two success stories show how the staff with resolve continued helping families amid the havoc caused by the pandemic in our society.

Story one. The **Title V- HVP** made a quick adaptation from home visits to virtual services via texting or phone calls having retained families and recruited new ones in 2020. Despite stressful challenges (e.g., inability to observe the home environment, limitations to perform screenings, and technological issues), the HVNs provided continuity of services by being available - on their own accord - beyond work hours and by being creative. For example, they were able to identify infants' motor difficulties by asking mothers to send videos or describe infants' movements that led to referrals to appropriate services. The HVNs responded to the emergent need of participants to access online services (WIC, Demographic Registry, Medicaid) by first learning how to use these platforms to help families navigate the virtual system. The HVNs gave emotional support related to participants' worries and anxieties about COVID-19 infection. The HVN of Adjuntas, a highland municipality, deserves special mentioning. This HVN used ingenuity to educate and support families. For instance, she took photos of online forms (provided by her collaborators), HVP educational materials and screening forms sending them over to participants to facilitate understanding during the interventions. The Adjuntas HVN had highly complex cases that required constant communication to offer support about pregnancy and infant daily care. She also had cases whose needs required several referrals (in one case about eight referrals) which she completed successfully due to her demeanor and a strong local collaborative network. In her words, "...using the telephone was the bridge to communicate with my participants...it was the most useful tool that I had all the time...we were able to do much more than it was expected."

Story two. Einstein used to say, "it is in time of crisis where inventiveness, discoveries and great strategies are born". During this uncertain and challenging year, we recognize the CSHCN Program's administrators, directors, health care providers and enabling providers, who in the middle of the COVID-19 pandemic lockdown and amid the fears, uncertainties, and lack of experience in services from providers' homes to families' homes, had the courage to urgently implement and carry out a telework system of care for CSHCN and their families. The care and commitment for the wellbeing of families demonstrated by the Program's staff during this unprecedented time was laudable. We also recognize the EHR team that provided constant technological support to staff and families. These information technology experts were always available to solve technological issues so that families and providers could maintain their communication and offer/receive the needed services. The lessons learned are of added value for the CSHCN, families and providers. As the saying goes: "Every cloud has a silver lining".

III.B. Overview of the State

The Puerto Rico Department of Health (PRDOH) is the state agency responsible for all matters related to public health including the administration of programs funded through the Title V Block Grant. The PR Title V consists of the Maternal, Child and Adolescent Health Program (MCAHP) housed in the Maternal, Child and Adolescent Division and the Children with Special Health Care Needs Program (CSHCNP) located in the Children with Special Medical Needs Division that provide services and implement initiatives in the seven PRDOH Health Regions.

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 in 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 small planes and/or 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. PR residents do qualify for the Child Tax Credit only if they have three or more children, whereas in the states it is applicable to working families with 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.

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. Through ACA several benefits such as family planning and contraception methods services were added to the GHP's coverage. Medicaid assigned additional funds to cover GHP's expenses on health services, especially during the pandemic crisis.

In FY 2019-2020 there were 1,159,158 persons covered by the GHP through five insurance companies. Vital Statistics 2020 data show that 65% of mothers' health insurance at the time of birth was the GHP which means that it pays for most births in PR. 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. PRHIA 2020 database shows 38,552 CSHCN children enrolled in this SCR. The GHP also has a SCR for ASD. When ASD is suspected, children are enrolled in a temporary coverage for up to 6 months for the 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 2020 database shows 2,656 children enrolled in the ASD-SCR.

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.

In early 2021, the Accreditation Council for Graduate Medical Education notified the University of Puerto Rico School of Medicine, the withdrawal of the accreditation of the Neurosurgery Residency Program (the only one existing in PR) effective on June 30, 2022. The withdrawal implies that medical residents must relocate to the US.

Population

Puerto Rico is an area of about 3,500 square miles and a population of 3.2 million (PRCS 2019 estimates) that tend to cluster in urban areas.

Puerto Rico is mainly a Spanish speaking country where most of its residents are Puerto Ricans (95.4% in the 2010 Census) followed by other foreign Hispanic ethnic groups like Dominicans and Cubans. Regarding racial composition, 75.8% of people in PR identified themselves as white, 12.4% as black, 7% as other race, and 3.3% as two or more races in the 2010 Census.

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 that are 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). According to PR cultural standards, a person is white if he/she has light skin color (fair and light brown) and straight and/or curly hair, regardless of ancestry.

People in PR may opt 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 are identifying 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 in 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.

In addition to Census and federal race categories, experts on the race issue in PR propose the use of local-specific racial categories for gathering data to determine racial disparities. Indeed, recent research using local PR racial categories found health disparities according to skin tone (termed colorism).

The population of Puerto Rico decreased by 532,095 (14.3%) from 3,725,789 000 in 2010 to 3,193, 694 in 2019, representing a 14.3% according to the State Data Center of PR. 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 US mainland in search of better job opportunities and living conditions. From 2005 to 2016 about 525,769 people left PR, equivalent to 14% of its population. This trend continued and 69,343 people migrated between July 2016 and July 2017. The migration from PR to the US intensified after Hurricane María and approximately 130,000 people left the island between 2017 and 2018, according to Census estimates.

The MCA population constituted 40% of the total 3.2 million population in 2020. The MCA population composition was as follows: 0.8% infants; 7.8% children 1-9 years of age; 11.7% adolescents aged 10-19 (6.0% males and 5.7% females) and; 19.6 % reproductive age women between the ages 20-49.

Education

The 2019 PRCS (1YR estimate) reports that people 25 years and over with less than 9th grade was 13.9 % and those with a high school diploma was 28.2%. Of those 25 years and over with post-secondary education, 11.2% had an associate degree; 18.8% a bachelor's degree and; 7.9% a graduate or professional degree.

Student enrollment (kindergarten to 12th garden) in the public system diminished greatly from 544,076 in 2006 to 345,920 in 2019. 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.

Socioeconomic Conditions

In the last decade, PR has experienced a reduction in employment in the private and public sectors. 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 45.1% in 2019.

Lack of employment is accompanied by income levels that in PR are still far behind from the states. The per capita income for PR in the 1YR 2019 PRCS was \$13,345 compared with the US \$35,977. The 1YR 2019 PRCS median household income was \$20,474, less than half of Mississippi (\$44,787), the state with the lowest US median household income in 2019.

Poverty is a significant problem in PR affecting women, children, and families. In 2019, the poverty rate in PR (43.5%) was higher than the US (10.5%) and higher than the poverty rate in Mississippi (19.6%). Children under 18 years of age living in poverty in PR were 56.8% in 2019. 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 2019 PRCS in married-couple families with children was 37.7%, the percent of families with children headed by a female with no husband present was 65.6%. Residents of rural areas in PR have higher poverty rates than those living in urban areas. High poverty rates and low-income levels leads families to rely on public assistance programs for survival. The 1YR 2019 PRCS reports that 43.2% of households in PR received nutritional assistance (food stamps) benefits compared to 12% in the US.

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 meets 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. Presently, the court proceedings are underway.

Amid the fiscal crisis, Hurricane Maria, with 155 mph winds struck PR on September 20, 2017. The hurricane caused billions of dollars in damages leaving behind widespread destruction to 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 are still thousands of houses with blue tarps, damaged roads in rural and urban areas, a significant number of damaged traffic lights in the Metro Area, and many closed small businesses all over the island. Yet, it was not until recently (July 2020) that FEMA disbursed the funds for home repairs. The hurricane's devastation also pushed people out of Puerto Rico to the US mainland.



In Puerto Rico, a sociohistorical event known as “the Puerto Rican Summer of 2019” occurred during the month of July 2019. For almost 12 consecutive days, massive protests - including two marches - of people from all walks of life, ages, and different parts of the island took place clamoring the resignation of Governor Ricardo (Ricky) Roselló with the chant “Ricky, resign”. All demonstrations included TV personalities, singers, actors/actresses, and sport personalities. The massive 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. The messages (published by the PR Center of Investigative Journalism) included profane insults, mockery, and contempt for victims of Hurricane María, LGBT community, people with obesity, women, political opponents, and celebrities. These demonstrations led to Roselló’s resignation, the first governor of PR to ever resign. On August 2, 2019, thousands of people across PR celebrated the governor’s last day in office, chanting Ricky te botamos! (Ricky, we threw you out!)



Ricardo Roselló was succeeded by Wanda Vázquez Garced - back then the Secretary of Justice - according to the line of succession to the governorship in the absence of a Secretary of State.

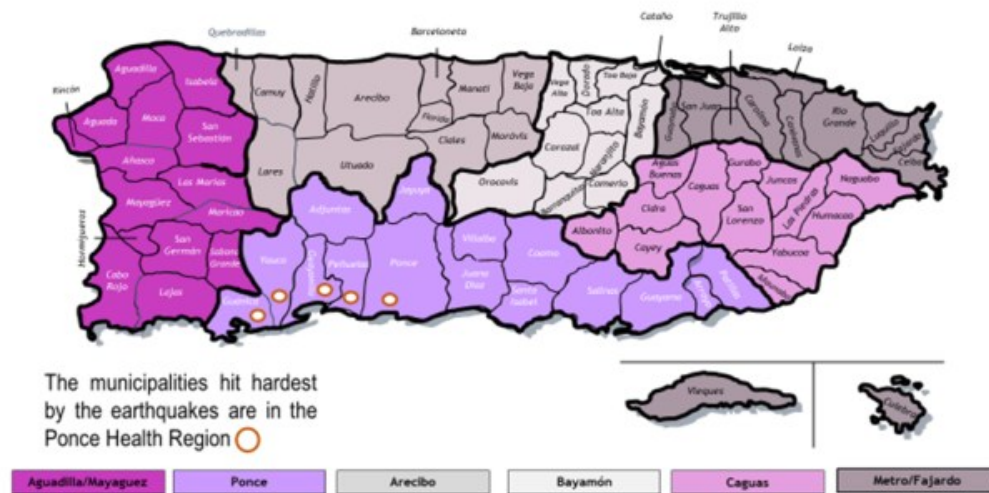
While still struggling to recover from the devastation caused by Hurricane María, in early January 2020 Puerto Rico was hit by two major earthquakes. On January 6, the day of the three kings’ day celebration, an earthquake of 5.6 magnitude struck the southwestern region. Ironically, this is one of the 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 after shake of 6.0 magnitude. Although the earthquakes were felt all over Puerto Rico, the south and southwestern part of the island was the most affected as it was near or in the epicenter.

The most affected areas are five municipalities located in the south/southwestern part of the Island. These municipalities are: Guánica, Ponce, Peñuelas, Guayanilla and Yauco. This area had been experiencing a series of earthquakes since December 28 2019, of what the experts call an unusual earthquake activity. All these five municipalities are in the 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 are higher than that of PR (43.1%): Guánica (63.8%), Ponce (50.9%), Peñuelas (56.5%), Guayanilla (55.6%), and Yauco (48.4%). Child poverty in some of these municipalities are higher than that of PR (57%). For example, child poverty in Guánica stands at 83% while Ponce and Guayanilla have 69% rates.

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 structural damages or no damage at all to their homes, slept outside in community/family or government tent camps because of fear to sleep in their homes due to the constant tremors. Many families opted to remain in community/familiar camps to be closer to home or because they felt more secure.



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 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 damages to homes and buildings, there were mud slides and an iconic tourist attraction in the Guayanilla municipality simply disappeared.



Puerto Rico's main power plant (Costa Sur) that supplies energy to the northern regions was severely damaged and could be out of operation for more than a year. Economists in Puerto Rico estimated that the economic losses could total 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 collapsed 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 across Puerto Rico 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 tremors continued.

Over the past months (January through August) the earthquake activity in the southwest has continued with more than 10,000 quakes, according to the PR Seismic Network [US Geological Survey – USGS). On May 2, amid the COVID-19 pandemic, lockdown, and night-time curfew, the southwest was struck by an earthquake magnitude 5.4 intensifying fears and distress among residents. It was then that the mayors of the five municipalities most affected by the January earthquakes, told the press that they have not been able to remove the debris of collapsed houses and buildings because they have yet to receive all the approved emergency funds set aside for debris removal. In mid-May, the central government announced that the FMOB approved \$47 million to be used for home reconstruction in these municipalities.

On June 28, two earthquakes, 4.8 and a 4.3 and three minutes apart, hit the southwest. Once again, fear, distress, and anxiety burdened residents of the area’s municipalities. As the mayor of Guánica described to the press “...I saw the people in backyards and balconies...It is despairing to see so many people feeling impotent, scared, crying...it is very hard. I do not know what would happen.” Since then, the earth has continued shaking with tremors ranging from 2.3 to 4.8 magnitude.

Amid earth tremors, the COVID-19 pandemic reached Puerto Rico in early March 2020. The first known cases were of an Italian couple who arrived in Old San Juan on Sunday, March 8 on the Costa Luminosa cruise ship. The woman got sick while at sea and the couple was taken to a hospital in the Capital City where they were tested for COVID-19. The PRDOH officials maintained that it was just a case of pneumonia and not COVID-19, but the tests done on the couple came out positive, ensuing government concern over the pandemic. Meanwhile, the PR DOH chief epidemiologist asserted that the COVID-19 pandemic did not pose a risk as China is far away from PR. The mishandling of the pandemic and constant downplaying the risk to the island’s residents led to the resignation of the PRDOH Secretary and the Chief Epidemiologist 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 from 9 pm to 5 am and school closings. Services considered essential 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.

The measures taken in March included the establishment of a Medical Task Force composed of faculty (public health and medicine) from the University of Puerto Rico Medical Sciences Campus to advise the governor on all health matters related to the management of the pandemic. Parallel, an Economic Task Force, comprised of representatives from the business sector was established to provide recommendations related to the reactivation of economic activities.

The initial lockdown was extended until April 12, but this time the night curfew started two hours ahead, from 7 pm to 5am. Some businesses that had been banned such as auto repair shops, tire centers and hardware stores were allowed to operate on a limited schedule and by appointment only.

Subsequently, the governor of Puerto Rico 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.

On May 1, 2020, began the implementation of phase one (EO-2020-038) of the reopening involving outdoor activities (5 am-3 pm), 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.

The second phase of the reopening (EO-2020-041 May 25) extended the operating hours of businesses already opened and the re-opening of the ones that were closed. The permitted activities included: use of restaurant dining rooms (at 25% capacity), barbershops/beauty salons by appointment and malls and retail stores at 50% capacity with preference for curbside pick up. Other activities allowed included the utilization of recreational boats, public use of beaches, natural reserves, and golf courts.

The third phase of reopening (EO-2020-044 June 16) re-activated most of the economic sectors. The new economic sectors allowed to open included 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 that had been banned previously were permitted.

The crowding of the surroundings of bars and food places while consuming alcoholic beverages, and noncompliance with physical distancing and use of face masks, along with an increase in COVID-19 cases and hospitalizations led the governor of PR to reverse the fourth phase (EO-2020-048) of the economic reopening that allowed increasing restaurant capacity at 75%, among other measures.

Therefore, an executive order (EO-2020-54) - effective July 16-31 - was issued closing clubs, movie theaters, concert halls, casinos, gyms, bars, and all marinas (recreational vessels). Public transportation like buses and the urban train were also closed. The sale of alcoholic beverages was prohibited after 7 pm and all day on Sundays. The 10 pm- 5 am curfew remained in place as well as the mandatory use of face masks and physical distancing in all commercial establishments, offices, and public places. No commercial activity, except for pharmacies, grocery stores, restaurants (take out only) was allowed on Sundays. The most recent COVID-19 executive order (EO-2020-060) effective August 1 through August 15 maintains the same measures as the previous one with some changes like permitting hardware stores to operate on Sundays (due to hurricane season) and the closing of beaches on

Sundays.

The COVID-19 pandemic has impacted Puerto Rican society in various ways. The sharp reduction in the economic activity had adverse effects on small businesses that struggle to stay afloat, and many could be forced to close permanently. Reduced economic activity also resulted in reduced hours and job loss. Since March 2020, more than 467,000 people have filed unemployment claims including the self-employed. Problems with unemployment claims has 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.

A challenge faced by many families with children is related to school closures and distance learning. Distance schooling poses 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 not able 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. The result has been that 20% of public-school students will have to repeat grades and remedial classes are being offered to them.

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

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

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 troubled and anxiety among families as the birth certificate is required by the WIC and Medicaid to receive service.

A problem during the pandemic has been the temporary closing of police stations while placing police officers in quarantine. At any given time, there could be anywhere between 200 and 600 police in quarantined across Puerto Rico.

Hospitals in Puerto Rico 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 the 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. Lately, hospital use by non-COVID-19-patients have increased as more people seem to trust the prevention 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.

The interruption of health services endangers the lives of patients with chronic conditions such as cancer, diabetes, renal and other. A telephone survey conducted by the PR chapter of the American Cancer Association among 409 cancer patients reveals that 34% saw their treatments affected, 50% had economic difficulties and 14% had

problems to acquire medications.

Since data from contact-tracing has revealed that recent COVID-19 surges in Puerto Rico come in part through people who arrive at the airport, the government issued an order requiring arriving airport travelers to show proof of a negative molecular test result or in its absence must self-quarantine for 14 days. However, it has been admitted by government officials that only 20% of passengers comply with the rule while pointing to difficulties following travelers supposedly on isolation.

Although the measures taken have been quite effective in containing the virus there was a spike in COVID-19 cases and hospitalizations that coincided with the third phase of the re-opening phase. This surge created deep concern among members of the medical task force (who had reservations about widespread re-opening), physicians and epidemiologists. A shortage of reagents for molecular tests hampered widespread testing of the virus.



After the third phase of re-opening, PR experienced ups and downs of COVID-19 cases and hospitalizations and the pandemic-related executive orders issued modified restrictions according to the positivity rate. Between April and May 2021, 73 municipalities had a positivity rate between 5 and 10 %. Afterwards, the COVID-19 hospitalizations and cases dropped steadily. Presently, the positivity rate is about 2% or less and the latest executive order lifted the night curfew, allowed 75% occupancy in restaurants, live concerts, and no use of masks in outdoors for those fully vaccinated, among other measures.

There have been massive and local-specific vaccinations (stadiums, churches, community centers, supermarkets, pharmacies, town squares, hospitals, shopping malls). As of June 17, 2021, 42 % of the population is fully vaccinated.



Amidst the pandemic and earthquakes, tropical storm Isaias hit Puerto Rico in an unexpected way on Thursday July 30, 2020. The storm produced strong wind gusts, heavy rain, mudslides, flooding, and fallen trees. Over 400,000 homes were without electricity and about 230,000 people had no potable water. While it is too early to get a complete picture of damages, many homes were flooded with water (over 4 feet high), agricultural crops were destroyed, and principal and secondary roads were severely damaged across the island.



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 parent’s 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 leading 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. The drive to help is best portrayed in the following social media art.










During the COVID-19 pandemic lockdown 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 risk of contagion, among other actions.

PR Title V Roles, Challenges and Strengths

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

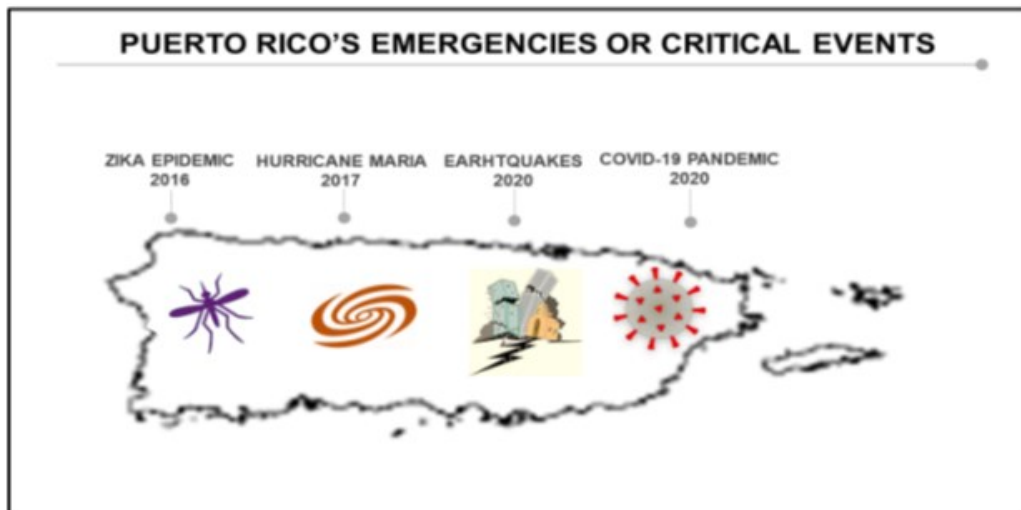
PUBLIC POLICY EXAMPLES

-  Law 186 (2016): PR Maternal Mortality Epidemiologic Surveillance System (PRMMESS)
-  Administrative Order 336 (2015): Compels all hospitals to establish a Breastfeeding Support Program as requirement for hospital operation licensed by SARAFS
-  Administrative Order 357 (2016): Requires all 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): Establishes Positive Youth Development as the main approach for adolescent health and creates the Youth Advisory Council (YAC).
-  Administrative Order 366 (2017): Requires all birthing hospitals in PR to establish a Hard Stop Policy for non-medically indicated labor inductions before 39 weeks
-  Administrative Order 369 (2017): establish the policy for testing symptomatic and asymptomatic pregnant women for ZIKA
-  Administrative Order 388 (2018): PRDH Guidelines for the Evaluation and Management of Infants Born to Mothers with Laboratory Evidence of Possible Zika Virus Infection During Pregnancy

An important asset of PR Title V is leadership through committees and coalitions including the Regional Boards - composed of representatives from government and non-government entities, and community - located in each of the 7 DOH Health Regions. It has also a well-established health promotion component that includes massive media campaigns, community education, and professional training.

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 greatest strength of PR Title V is a highly committed workforce and capacity to respond speedily to emergencies or critical events Puerto Rico has experienced in the last four years (epidemic, hurricane, earthquakes, pandemic) that have impinged on the health and wellbeing of populations and families.



A summary of PR Title V efforts to grapple these crises is presented below.

Zika Epidemic: The PR Title V was highly active in the management of the ZIKA epidemic that affects pregnant women and their offspring (fetal stage).

The Title V implemented two CDC funded surveillance and population-based assessment projects: a) The *Zika Active Pregnancy Surveillance System (ZAPSS)* to monitor pregnant women with laboratory evidence of Zika infection and prenatally or perinatally exposed infants born to these women. ZAPSS collected information about Zika infection during pregnancy, delivery, and outcomes in children up to 3 years of age and; b) the *Zika Postpartum Emergency Response Survey in Puerto Rico (PRZPER I and PRZPER II)* to conduct a rapid population- based assessment of maternal behaviors, experiences and attitudes related to Zika virus exposure among recently pregnant women in PR including a partner survey and telephone follow-up.

Staff from Title V and other programs received training on the Zika virus and disease, transmission, and prevention enabling them to provide accurate information to women, families, and communities on Zika topics. Zika topics included signs and symptoms, risks, effects on the fetus, birth control, condom use, prevention of mosquito bites, elimination of mosquito breeding sites, and prevention within the household. Materials distributed included brochures, posters, mosquito repellents and condoms. The staff 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: The PR Title V experienced severe damage to Central Level facilities forcing staff to relocate temporarily in cramped spaces. The State Action Plan was also affected as strategies and timelines had to be adjusted across domains.

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 Title V 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: 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/CSCHN 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.

Title V staff collaborated and shared resources with its 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 continued providing services to CSCHN children/youth and families once it assessed the damages to the physical facility. To assure 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: Upon the threat of the COVID-19 pandemic in March 2020 and subsequent lockdown, the PR Title V adjusted strategies, activities, and timelines across all domains. 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 the 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.

Health education digital adaptations were made. For instance, the prenatal course that targets pregnant women and companions was adapted to a 24-minute video that includes pre-and post- tests. The health educational materials across domains are available online at the PRDOH website, Google Drive, You Tube, and the websites of health partners.

The staff in collaboration with partners developed virtual conferences and webinars. For example, the pediatric consultant in collaboration with health partners organized a virtual conference on COVID-19 topics relevant to pediatric medical care that was attended by pediatricians from PR and abroad.

Title V in-person services have gradually been resumed according to the executive orders issued. For example, the perinatal services resumed hospital visits back in July 2020, while the HVP resumed home visits (if the participant consents) in March 2021.

III.C. Needs Assessment

FY 2022 Application/FY 2020 Annual Report Update

Process Description

The interim Health Needs Assessment (HNA) assessed the impact of the COVID-19 pandemic crisis on Title V in the PR jurisdiction.

The Maternal, Child and Adolescent Health Program (MCAHP) focused on the effects on Title V core services as these experienced disruptions and modifications in 2020. The MCAHP carried out 12 virtual Dialogues with 41 staffs from the core services that provide education and support to the MCA populations. The purpose was to gather first-hand information from the staff to document how each program was affected, how they faced the effects and challenges, their strengths, and their assessment of the MCA populations needs. It also conducted one interview with home visiting nurse that gave testimony about her experience in helping families. The Dialogues were carried out by the HNA Research Team (cultural anthropologist and the maternal epidemiologist/SSDI coordinator) between November 2020 and January 2021 and the Interview in April 2021. The Dialogues and Interview lasted 1 ½ to 2 hours, were recorded, transcribed verbatim and analyzed qualitatively.

Conducting the Dialogues through the TEAMS platform presented challenges that ranged from unstable internet connection to inability to use microphone to make comments. Yet, the HNA research Team was able to handle the problems. For example, participants unable to use the microphone wrote their comments in the TEAMS chat that were read aloud by one of the researchers.

The Children with Special Medical Needs Division (CSMND) focused on the telework system urgently implemented during COVID-19 pandemic lockdown at the CSCHN Program. The telework system implemented at CSHCNP includes telemedicine and tele-health services. Telemedicine was carried out by program's pediatricians and tele-health was carried out by health professionals authorized by Act 68, 2020 (physical/occupational therapists, speech and language pathologists, audiologists, psychologists, nutritionists, social workers). Care coordinators and FESAS supported families through telework. Public health staff also used telework. This survey addresses the different types of telework implemented.

A survey was carried out for state and regional CSHCN Program staff on how they felt and dealt with the telework implementation, their needs on telework capacity development, and the strengths and barriers experienced. A similar survey was administered to CSHCNP families about their experience, opinions and recommendations on the virtual services received. Two (2) questionnaires with open and closed ended questions were created, pre-tested, and distributed online to the CSHCNP staff and families during the summer of 2020. A total of 187 staff members and 387 families participated.

Health Status

In 2019 (IDB) the number of WRA was 806,330, while 2020 Vital Statistics (VS) reported 19,026 live births (LB). The number of children as reported by IDB by 2019 were 25,095 infants, 250,214 children 1 to 9 y/o, and 456,984 adolescents 10 to 21 y/o. According to MCH-JS (2019) the prevalence of CSHCN 0 to 17 years of age was 27.3%.

According to BRFSS 2019, the percent of women, 18 to 44 y/o, with a preventive medical visit in the past year remained almost the same as 2018 (78.5% vs. 78.7%, respectively), while PRAMS 2019 reported a 10% increase of the percent of women who had a preventive dental visit during pregnancy compared to 2018 (53.3% vs. 48.7%, respectively).

Mothers placing their infants to sleep in a safe environment slightly increased from 2018 (4.1%) to 2019 (4.5%). PRAMS 2019 also reported that approximately half of mothers usually placed their infants to sleep on a separate firm sleep surface (46.4%), followed by placing their infants on their back (42.2%). Fewer reported avoiding soft objects and loose bedding (27.8%). While SUIDs rates (VS), increased from 74.7/100,000 live births (LB) in 2018 to 98.3/100,000 LB in 2019.

About 78% of children 1 to 17 y/o reported a preventive dental visit in the past year (MCH-JS 2019). While adolescents 12 to 17 y/o reporting being bullied (including cyber bullying) had a 45% significant decrease since 2017 (YRBSS 2019: 12%).

The priority needs remained as proposed in 2020 HNA. Some strategies of the state Action Plan were reviewed and updated according to the findings of this HNA (for details refer to section III.E.1. Five-Year State Action Plan). It should be noted that due to COVID-19, families had problems accessing services and this is reflected in the current HNA.

Findings

The findings are organized by program and/or staff category. Due to character and page limitations, it is not possible to present all the complexities of the situations the staff faced in 2020. The full report is available upon request to marianacruz@salud.gov.pr.

PROGRAM: Home Visiting Program (HVP)	HEALTH DOMAINS: Women/Maternal, Perinatal/Infant, & Child
The HVP serves pregnant and parenting women, their children up to age 2, and their families. The Home Visiting Nurses (HVN) offer case management, care coordination, support, and education on maternal and infant/child health topics; perform screenings (maternal depression, intimate partner violence, substance use, oral health, and child development); and make referrals and follow up to ensure completion. Families that do not qualify for services are helped as non-participants.	
Dialogue Participants: 11 staff- <i>Central Level Team (Coordinator, Evaluator, Mental Health Consultant) and 7 Region Level Supervisors of the HVNs. The Testimonial Interview with 1 HVN was included.</i>	

Facing the Effects

When the HVP was ordered to stop the home visits, uncertainty about program and employment continuity prevailed among the regional staff. As a HVN supervisor said:

"The first days [of the lockdown] there was uncertainty, I would rather say fear; we were disoriented because we didn't know what we would be doing"

By April 2020, the HVP had developed a protocol to guide services during the pandemic, thus making a quick adaptation from home visits to virtual services. The HVNs used their phones to continued services via texting or calls. The staff reported difficulties and challenges in virtual interventions. Inability to retrieve HVP forms and participants' files was a difficulty while offices were closed. To handle this barrier, the HVNs were instructed to use a notebook to keep detailed records of their interventions. The data was transferred to participants' records once the HVNs returned to in-office work.

The staff also noted service limitations as the HVNs were not able to perform all screenings, particularly those that asked sensitive questions. Another difficulty reported was the inability to observe the home environment. Likewise,

services via telephone hampered the HVNs ability to have visual clues of infants' development. The HVNs handled this challenge by using the WHATSAPP or by asking mothers to send videos or describe infants' motor movements. The staff also reported other challenges in the provision of virtual services such as contacting participants, participants' distractions while receiving the service, and confidentiality. Coordinating services with providers was also a challenge as health and other services experienced disruptions.

Despite the challenges, the HVP provided as much continuity of services as possible as well as responding to participants' emergent needs such as support to access online services (WIC, Demographic Registry, Medicaid). To help families, the HVNs had first to learn the ropes of virtual platforms as the HVN reported:

"I won't deny that at a certain moment I had a headache and felt stressed and I said to myself it is going to be very difficult because I don't know how to do it. First, I took some sort of mini-course with each program [services] so that they could give me an update on the new format so that I could explain her [participant] in the simplest way possible"

Other emergent situations among families as reported by the HVNs to their supervisors included: job loss or reduce work hours, little or no access to health services, anxiety over COVID-19 infection, and fear of giving birth without companions, among others. The HVNs dealt with these situations by listening with empathy, contacting collaborators, and addressing participants' anxieties under the guidance and support of their supervisors and the Central Level Team. Staff reported retention of participating families and the enrollment of new ones owed to the HVNs dedication. Noteworthy, the HVNs- on their own accord -answer participants' calls beyond work hours (weekend, night, evening).

The supervisors pointed out that remote work was particularly challenging since they could not perform file review and field evaluation, thus they had to trust that the work was done. Yet, some commented having undergone positive changes as they became more understanding, more communicative, and more involved with the HVNs work.

The staff reported they had to learn the use of digital platforms that allowed them to hold meetings and trainings productively. Yet, they had challenges in terms of devices and access to internet services. They also spoke about listening sessions facilitated by the Mental Health Consultant that allowed the staff to speak freely about their worries.

Staff Strengths

A dedicated, qualified, and committed staff was mentioned as key strengths during the pandemic. The staff also emphasized the ability to adapt to new ways of working, communicating, and providing services as a major asset. As one stated:

"...I think the main strength is that the program has been able to adapt to meet the new needs of the population. That we have been able to make the necessary structural changes to continue offering the services, albeit limited and different."

Staff Needs

1. Some Dialogue participants see the need to digitalize (forms and participants' records) and furnish the HVNs with tablets and/or laptops.
2. A Supervision Protocol for the HVN supervisors.
3. Digital skills building trainings.

HNA Researchers' Comments on the HVP

- The HVN in her testimony stressed the usefulness of the webpage www.encuentrodemivida.com during the pandemic. Rather than just referring women to visit the page, she took screenshots of the educational materials and sent them over to participants.
- The purchase order to buy mobile phones for each HVN took months to be completed as it commonly happens in government. These were distributed in early 2021.
- The staff learned to use the virtual platforms through basic official training and/or self-training.
- One HVN supervisor thinks that virtual services could be an option to participants that may be reluctant to return to or begin (in the case of those enrolled during the pandemic) to home visits.
- The MCAHP could consider incorporating into the Action Plan a strategy related to emotional health and stress management for all staff.
- The MCAHP could consider incorporating into the Action Plan a strategy related to build digital skills for all staff to enable and/or enhance the use of virtual platforms.

PROGRAM:
Perinatal Services (PS)

HEALTH DOMAINS:
Perinatal/Infant

Education and support on maternal and infant health to women in birthing hospitals. Services include referrals and recruitment into the HVP. The PNs are supervised by the HVN supervisors.

Dialogue Participants: 8 staff - *Perinatal Nurses (Regional Level)*

Facing the Effects

The perinatal services were completely disrupted as hospitals ceased non-emergency services. The PNs reported having maintained communication with each hospital in their respective regions to make inquiries about COVID-19 birthing protocols as well as protocols and dates for resuming the PS.

By July 2020, the PNs had resumed services in most of the hospitals they serve. The exception were the PNs from the Metro Region that up to the time of the Dialogue (November 2020) had not been granted permission from hospitals' administrators to resume their services because "this is the region where COVID-19 patients concentrate". According to the Metro PNs they sent flyers with information and telephone number to be posted in the hospital's bulletin board so that women could contact them. They further explained that two hospitals made some concessions to access women. One hospital would send lists of women and their phone numbers (who had given permission) so the PNs could contact them for telephone orientations and education. The other hospital would include a flyer with the PS information in the discharge packet.

Once services were resumed, some PNs had fears of being infected and in turn infect members of their families. As one indicated:

“At the beginning [once services are resumed] to visit hospitals because I have two daughters, one is three years old and the other is eight years old. My mother who is a senior takes care of my daughters. I was afraid to be infected and then infect my daughters my mother “

The PNs said they had to adjust the ways they normally carried out their services in hospitals which they vividly described in the dialogue. They wear personal protective equipment (PPE) like face masks, gloves, and hair nets and in some hospitals, shoe covers and kept distance while providing services. They pointed out they now give the telephone number (personal and office phone) to women in case they have any further questions after the educational session. From their comments, women did seem to contact them via telephone to ask questions mainly on breastfeeding, baby care and nutrition. They commented that providing breastfeeding education and support under distancing measures was a challenge since it requires helping women how to latch their babies.

Besides the usual health topics covered, the PNs offered information and support related to accessing critical online services like the Demographic Registry. A PN, who is also a HVN, described the hurdles of registering babies:

“...people have no knowledge of the new platform Online Renovations. There you have to create an account and then go to the Demographic Registry to request register the baby. What happens? After they [women] fill out all the information, they have to wait for the local Demographic Registry Office to contact them for an in-person appointment where they must bring all documents to register the baby. I have one [participant] whose baby was registered in months, but others took longer....they become stressed and I calm them by saying 'look, this is what is happening, let's be calm, don't worry that your baby is not going to be left out of registering”.

This account points to how stressful it is for families to register infants that adds to other life stressors. The PNs address women's worries and anxieties that include apprehension to take their babies to their first pediatric visit (fear that the baby could become infected) and questions about if a woman infected with the virus could breastfeed.

Staff Strengths

In speaking about their strengths, the PNs emphasized availability, disposition, commitment, and empathy as key attributes in carrying out their services. They all showed hope and pride as perinatal nurses. The following comment best expresses these feelings:

“...I embrace the words of my co-workers that are present; it is the love for my profession and commitment toward our participants. And I congratulate you all because each one loves and is committed to this program, to what we studied, to what we are.”

Staff Needs

Printed educational materials to distribute as their supplies were dwindling.

HNA Researchers' Comments on the PS

- The Dialogue served to gather the PNs as one group as they generally have little or no contact among themselves.
- Unlike the HVNs, the PNs have no written PS protocol with standard rules.
- Suggestions: 1) Develop a written protocol to enhance the PS; 2) Organize periodic PS meetings attended by the PNs and their supervisors to share knowledge and experiences.

PROGRAM:
Health Promotion and
Community Outreach (HPCO)

HEALTH DOMAINS:
*Women/Maternal, Perinatal/Infant, Child, and
Adolescent*

Offers community and professional health education and training, prenatal and parenting courses, and mass campaigns. The Health Educators (HEs) design educational materials, offer trainings to professionals, offer workshops and courses, and provide technical assistance to the Community Health Workers (CHWs). The CHWs recruit participants to the HVP, make referrals, and provide community health education including prenatal and parenting courses. A Curricula Consultant oversees media/internet campaigns, curriculum development and the courses.

Dialogue Participants: 14 staff - Curricula Consultant, 5 Health Educators (HEs) and 6 Community Health Workers (CHWs), and one MCAHP Regional Director who is a Health Educator. The health promotion efforts of the Pediatric Consultant were included.

Facing the Effects

HEs, CHWs and Curricula Consultant

The health promotion and outreach staff were hit hard by the pandemic as all in-person educational and outreach activities (e.g., workshops, trainings, talks, dissemination of educational materials, parenting courses and prenatal course) were completely stopped. Consequently, the staff experienced surprise and uncertainty about what to do.

The staff said they had turned to virtual modalities (e.g., telephone calls, online platforms, webpage, among others) to perform health promotion and outreach tasks albeit limited. The HEs developed and provided virtual trainings and refresher presentations to other staff such as the HVNs. They also offered trainings and presentations on health topics to the staffs of other agencies like Head Start and Early Head Start. The HEs also created pandemic related educational materials targeted at families (e.g., handling children's emotions, unintentional injury prevention tips, and tips for making home baby wipes). According to the staff, these materials could not be disseminated (via online) due to the electoral ban that mandates government agencies to submit to the State Commission on Elections all publicity and educational materials for approval. The HEs informed they never received a response which caused frustration in them.

The CHWs – unable to do in-person outreach - used their own cell phones to contact collaborators and families. They reported that families faced difficulties accessing health services and vaccines. Registering babies have been particularly difficult for families with limited or no internet connection to access the online services of the Demographic Registry. They commented families had to wait several months to register babies. The CHWs were instrumental in helping families to access online services and like the HVNs and the PNs had to learn first how to use them.

The limitations imposed by the novel situation put a strain on the staff that somewhat felt out of place for not being able to assume their duties properly. A CHW expressed the way she felt:

“Personally, sometimes I feel anxiety because I can’t do much of what I used to do before [the pandemic], especially the workshops. We are just in the office searching for referrals from programs...I call them [women] and then refers to them to the nurse [HVN]. But there could be only one per week or five per week and it is not quantity that one would like”.

The staff reported that the use of virtual platforms for meetings and internal communications posed challenges including inadequate equipment, weak internet signal, and longer meeting time compared to in-person meetings.

The trying times required to push further virtual health promotion. To this end, two digital educational tools were created. One, is a 3-minute video clip on safe sleep that is available in the Department of Health (DOH) Facebook and webpage. This video, shown to the HNA researchers can be characterized as being simple, concise, clear, and visually attractive. The Curricula Consultant reported the video was shown in October 2020 (DOH Facebook) reaching over 65,000 views.

The other tool is a 24- minute digital version of the prenatal course that was created to fill the void left by the paralysis of the in-person course. The virtual course – that uses sign language - includes participant’s socio-demographic information, pre-test, course topics, post-test, evaluation, and an open-ended question to share experience. A certificate is sent via online or post office to persons that complete the course.

When asked about the virtual prenatal course, the HEs - while recognizing its quality in form and content - expressed some concerns : 1) it does not cover in-depth the topics discussed in the in-person prenatal course; 2) the participants do not interact virtually with facilitators as other online courses do; 3) participants’ questions and doubts are left unanswered.

The HEs made suggestions to handle the limitations they see in the prenatal digital course. These are: 1) create a mechanism whereby participants can contact a CHW or an HE to ask questions and more information about topics covered in the course; 2) offer the course through the government TV channel; 3) create stand-alone videos on each topic presented in the virtual course that a participant can watch, if interested.

Staff Strengths

Disposition, knowledge, commitment, teamwork, perseverance, mutual support, and open communication were mentioned as main strengths that made possible to face the challenges brought on by the pandemic. A HE echoing others said:

“The Division never stopped working. Contrary to other programs that literally were paralyzed, it remained active. And that shows that the Division have a human resource full of interest, willpower, disposition to work and to move forward despite the adversities of the pandemic.”

Staff Needs

1. Better internet connection and signal in the regional offices
2. Open DOH email accounts for the CHWs so they can access online webinars and trainings.
3. Trainings on a variety of topics and digital building skills.

Pediatric Consultant

Under the leadership of the pediatric consultant, the PR chapter of the American Academy of Pediatricians (PR AAP) was instrumental in addressing emergent needs. This partner has plenty of experience and a YouTube channel to inform and educate its members, other professionals, the public, and families.

Among the actions undertaken by the pediatric consultant several stand out. One action was the creation of webinars and chat groups targeted at the medical professionals to learn and discuss COVID-19 related health topics. Another type of action was the creation of policy recommendations (in collaboration with a group of neonatologists and Obstetric /gynecologists) for the management of the health of women and newborns in hospitals including breastfeeding. Very importantly, webinars and videos related to Title V objectives and strategies were produced and/or disseminated through the PR AAP virtual platform. These included safe sleep, infant nutrition, and infant/child development, among others. These webinars were attended by the staff from head start, early head start, childcare centers as well as parents and are available in the PR AAP website. In addition, short video clips were created with messages for parents encouraging preventive pediatric care, immunization and breastfeeding during the pandemic and measures to prevent infection, and transmission of COVID-19. She also collaborated in the creation of the video on safe sleep.

When asked about staff strengths, she emphasized strong collaborative networks and ability to do teamwork as major assets. In her view, the staff did their best under duress.

She identified stress management as a major need among the staff to prevent burnout.

HNA Researchers' Comments on the HPCO

- Stopping the parental and prenatal courses left families without an important source of knowledge. For example, in FY 2018-2019, there was increased knowledge of participants as shown in the pre-and post-test scores. Pregnant women in prenatal course (95% post-test score vs 70% pre-test); parents in 0-5 y/o course (94% post-test vs 78.6% pre-test); parents in 6-11 y/o (96% post-test vs 80% pre-test).
- The multimedia campaign on pregnancy health continued its course without interruptions.
- The virtual prenatal course does a service to pregnant women unable to attend in-person courses. Nevertheless, it will be necessary to consider the recommendations of the HEs regarding the identified limitations.
- The staff learned to use the virtual platforms through basic official training and/or self-training.
- As a non-government organization, the PR AAP was free from the barriers imposed by the PR electoral ban to promptly respond to the crisis.
- The Pediatric consultant had the advantage of having developed technological skills prior to the pandemic that allowed her to act immediately.

PROGRAM:
Comprehensive Adolescent
Health Program (CAHP)

HEALTH DOMAINS:
Adolescent

Promotes adolescence health and wellbeing – based on the Positive Youth Development Model. The CAHP is staffed by an Associate Director, a Youth Health Promoter Center Coordinator (YHPC-C), a Healthy Youth Development System Coordinator (HYDS-C) and 6 Regional Coordinators (CAHP-C). The CAHP-Cs implement the Youth Health Promoters Project (YHPP) composed of voluntary students that promote healthy lifestyles among their peers in participating schools. The Youth Advisory Council (YAC), led by the HYDS-C, is composed of adolescents that help the DOH identify and implement strategies to improve youth health.

Dialogue Participants: 9 staff – Central Level CAHP Associate Director, YHPP-C, HYDS-C, and the Regional CAHP-Cs.

Facing the Effects

YHPP

The YHPP was severely impacted by the pandemic crisis. Being a school-based project, it ceased operations completely in 2020 leaving out 949 youth health promoters in 51 participating schools.

The most immediate reaction among the CAHP-Cs was uncertainty, fear of job loss, and anxiety. As one said:

“Honestly, the first concern I had was if I was going to be left without a job...a big feeling invaded me for not knowing what was going to be the future of our program because we know that our program is based on our approach to the schools and work with our youths in the schools’

For the CAHP-Cs, stopping the YHPP has been hard to bear. As they explained, the YHPP meetings had begun several weeks prior to the lockdown in Mid-March 2020 due to the January earthquakes that kept many schools closed. Therefore, the time spent with the Youth Health Promoters (YHPs) was extremely short in 2020. They reported feeling sad because they were not able to say goodbye to the youth, particularly the ones in their last year of participation.

The CAHP-Cs reported they stayed in contact – via telephone calls or text messages – with liaisons from participating schools. The CAHP-Cs provided COVID-19 information and stress management support to the school liaisons. Some liaisons passed the information on to the YHPs and/or their parents. The liaisons told the CAHP-Cs they were experiencing difficulties with online platforms as schools were not as ready as it was expected.

In the meantime, the CAHP staff engaged in workforce development activities (e.g., webinars, online trainings, book reviews, in-house training) to enhance their knowledge and skills. They also engaged in the evaluation of the YHPP.

Encouraged by the YHPC-C, the CAHP-Cs shifted gears and took on the task of adapting the YHPP curriculum in-person sessions to virtual ones. The staff commented that this a very challenging process as the YHPP is a 3-phase project whereby the promoters get involved for 3 consecutive years which makes it difficult to quickly turn the in-person sessions into digital sessions. They said the process is highly strenuous, time consuming, and drains energy.

While digitalization is important, the staff expressed concerns about virtual sessions: confidentiality and privacy; youth capacity to use digital platforms; internet access; having the right equipment.

The use of virtual platforms for internal communication and teamwork also posed a big challenge for the staff, especially those *“who are not technological”* that had to learn *“new processes”*. The CAHP staff used their own economic resources to buy or upgrade existing equipment. The technological challenge continued after they returned to in-office work as the desktop computers have no microphone or cameras. What some staff have done is to buy cameras with microphones to be able to use the office computers for virtual meetings.

The CAHP-Cs also spoke about anxiety and frustrations they experienced in fulfilling their duties under the new circumstances. As one described:

“ I had my own personal equipment but sometimes it did not function well for what it was needed. And that creates a lot of anxiety since you cannot meet what is being demanded from you. To be able to fulfill all of that created anxiety and there were nights that I could not sleep.”

Despite these challenges, the staff spoke of gains resulting from doing remote teamwork. First, acquisition of at least basic technological skills to enhance capacity to develop the virtual sessions. Second, blending their varied capacities, strengths, and skills (technological, artistic, writing, and logistics). Third, to know one another in different ways both personally and professionally (togetherness and sense of family).

YAC

YAC members continued meeting and working together through the virtual modality but in reduced hours compared to the in-person meetings that normally lasted all day. The YAC created educational COVID-related videos to share with peers through social networks (washing hands, how they have handled physical distancing or what they did as young people during the pandemic). Their main concerns as reported to the HYDS-C were family obligations (e.g., shopping, banking, and childcare, helping younger siblings with school tasks) and academic duties, all of which cause stress.

In 2020, the members were due to end their 2-year participation in the YAC but decided to continue participating until new advisors are selected in 2021. This can be seen as a sign of duty and commitment to the Council.

Staff Strengths

The staff mentioned desire to learn and to improve themselves, commitment, teamwork, human quality, mutual support, capacity to adapt to novel situations, perseverance, and creativity as key strengths in the CHAP. This comment best expresses staff feelings:

“The greatest strength that we have is the human resource. We have it, teamwork, independently from the technological limitations that we have. That is our main strength. And the way that we are resilient and do not get down on our knees.”

Staff Needs

1. Computers equipped with cameras, microphones and programs needed to work online.
2. Training on the use of digital platforms.

HNA Researchers' Comments on CAHP

- A ripple effect of the YHPP discontinuity during 2020 has been that other students in participating schools could not receive correct health information from the youth health promoters.
- The staff clarified that the YHPP in-person sessions serve to develop teamwork among youth and in the process conflicts do occur. The CAHP-Cs as social workers help them handle and resolve conflicts. Teamwork development and conflict resolution are big challenges to be considered in conducting virtual sessions.
- The staff learned to use the virtual platforms through basic official training and/or self-training.
- The staff as well as the members of YAC received support from the mental health consultant of the MCAHP.
- The HNA Research Team suggests: 1) to explore the possibility of creating short videos or a virtual campaign on bullying to reach out to youth across PR; 2) to keep electronic lists of the YHPs to enable direct contact with them and their families (names, parents names, address, email, telephone); 3) to explore the feasibility of creating a YHPP webpage.

STAFF CATEGORY: Health Care Providers	HEALTH DOMAIN: <i>Children with Special Health Care Needs</i>
Type of Professionals: Physicians; audiologists; speech and language pathologists; physical, occupational and speech therapists and assistants; nurses; nutritionists; psychologists.	
Percent Staff Survey Respondents: 43 %	

Health care providers described some of their feelings when they started offering remote services: anxiety, doubts, fear, hesitation, and disorientation. A speech and language pathologist expressed that she said to herself:

“But how am I going to do this? I have never given a therapy other than with the patient in front of me!”

Most providers reported being grateful for a variety of reasons: having the opportunity to continue working, staying in contact with their CSHCN and families, staying safe at home with their family while working, having a sense of usefulness and stability, earning a salary. Some providers stated that they auto trained in health virtual modality through webinars, literature review and reading. For example, an occupational therapist expressed:

“I took time to prepare myself , studied the tele-health law, and I took webinars from the United States ... and I accepted the challenge. At the beginning I felt a little anxious , but then I was satisfied to see the results and the benefits that this modality has brought families and children”.

Eighty three percent (82.5%) of health care providers reported the need of developmental capacity in addition to those offered information system work team. Frequent examples are how to offer effective physical and occupational therapies virtually, carrying out virtual evaluations and screenings, making families feel safe with telemedicine, working with severe cases, psychological evaluation and intervention processes and regulations of teleworking practice for each discipline.

STAFF CATEGORY: Top and middle management	HEALTH DOMAIN: <i>Children with Special Health Care Needs</i>
Type of Professionals: Medical directors; administrators; program managers; supervisors.	
Percent Staff Survey Respondents : 9 %	

The greatest challenge reported by the top/middle management was the urgent implementation of a telework system which was different to the one planned previous to the pandemic. An administrator, for example, expressed:

“There were many doubts about how to perform the functions (implement) since there was no precedent...in this modality.”

They also reported that some providers adapted rapidly while others showed difficulty in the use of electronic equipment and virtual communication platforms. They stated that teamwork was key for remote services success, and that the number of families served has increased due to professionals reaching-out to those families that were not complying with the in-person appointments.

Eighty eight percent (87.5%) of top/middle management reported the need for developmental capacity. Some of the needs are: virtual service monitoring/supervision techniques, virtual service billing, insurance coverage, empowering families on tele-practice, encrypting documents, protected health information, handling documents in digital form, how to create a remote workspace, and techniques to preserve emotional and physical health.



The great majority of the enabling providers group stated they felt grateful and satisfied when the remote modality started because they could maintain contact with families, including those that had not visited the centers for some time, and support them during this crisis. Few participants reported feelings of doubts, most of them regarding to the lack of electronic skills. A FESA expressed:

“I do not know how to handle all the situations that we are going through (referring to the pandemic), and my role with the parents is to be able to project security, knowledge and be a figure of support and optimism, which I cannot project in these moments”.

A social worker expressed:

“...There were therapeutic approaches that I was using with some families in person that cannot be applied through teleworking”.

Eighty four percent (83.6%) of this group reported the need of capacity development. Some of the needs include: working with parents of ASD children; documenting virtual services in the medical record; virtual activities for children with attention, visual or sensory deficits; techniques of virtual services focused on young people in transition to adult life; time management during a tele-consultation and managing stress in parents.

STAFF CATEGORY:
Public Health

HEALTH DOMAIN:
Children with Special Health Care Needs

Type of Professionals: Epidemiologists, Evaluators, Health Educators; Program Coordinators; Community Coordinators.

Percent Staff Survey Respondents: 7.5%

The public health group did not express concerns or doubts in relation to telework. On the contrary, they expressed satisfaction and gratification. Forty three percent (42.9%) reported development capacity needs such as accessing and using applications where documents can be uploaded such as Sharepoint and Google Docs; education about programs like google meets, google forms, operation and functionality of the cloud.

HNA Researchers' Comments on CAHP

- Findings related to support staff (accountants; data collectors; clinical clerks; information systems team which represents 9% of respondents) are not reported on the CSHCN HNA Update Summary.
- The reported staff perceptions on barriers and strengths of the telework implementation are:

Strengths: Staff reported an excellent communication with leaders, senior management, and work team. They reported on how virtual meetings and communication maintained the work cohesion and described communication as "continuous", "effective", "good" and "excellent". Other reported strengths were the availability and disposition of leaders and coworkers, support, EHR work team accessibility, continuity of follow-up to families, flexibility and adaptability.

Barriers: because staff was working from their homes, some barriers reported were: intermittent internet, unstable signal, unsupported operating systems, power outages, inaccessibility to the paper clinical records. Other barriers reported are difficult coordination with some families, service difficulty with families with multiple children, and working from homes in shared places.

Lastly, 72% of the staff reported they prefer the combination of face-to-face and virtual modalities, while 18.2% indicated they prefer only face-to-face modality and 9.1% virtual modality alone.

CSCHN FAMILIES

HEALTH DOMAIN: Children with Special Health Care Needs

Families who participated in the survey received virtual services from the seven RPCs and the Metro Autism Center. Their CSCHN's ages ranged from 0 to 11 years of which 70.3% were aged 2 and 3. Most of families (95%) referred they have technological equipment always available at home.

Number of Survey Participating Families: 387

Fifteen percent of families (15%) reported they had some technical difficulty during the remote services. Of this group, 53.4% expressed having received the technical support they needed, of which 70.7% indicated the situation was resolved quickly. Seventy four percent (73.6%) of families reported their child managed remote sessions well.

Ninety eight percent of families (97.5%) reported having received clear instructions on the remote services, and 87.6% reported that the Consent Form was provided. The Consent Form explains in simple terms the different communication alternatives of distance services, with whom the information will be shared (multidisciplinary team), definition of protected health information (PHI) and how it is protected when interacting through electronic means. Ninety five percent (94.6%) of families expressed receiving guidance about the service they would be receiving.

Ninety seven percent (96.5%) of the families reported that educational material provided during virtual interventions has been useful; 53.7% reported having obtained services from FESAs; of this group, 90% agreed this was very supportive.

Regarding the quality of communication with providers, more than 95% of the families expressed that there is good communication with the two groups of providers that represent health and enabling services.

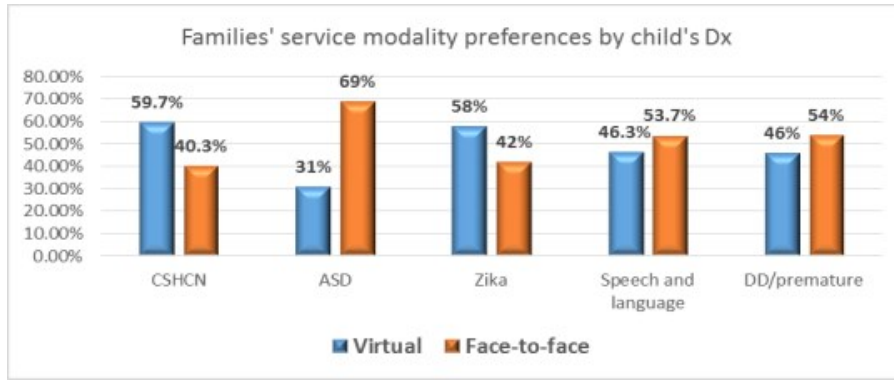
The family survey included an open question for families to provide additional comments. Eighty-three (83) families commented in this section. Twenty-seven (27) families rated the service as: "excellent", "very good", "super-good", and "good". Fifteen (15) families described the staff as: "very professional", "very humane", "caring", "kind", "responsible", "committed", "willing", "patient", and "available". Five (5) families described the service as: "organized", "good management", "good follow-up", and excellent work team".

Thirteen (13) families reported they prefer the face-to-face modality, but some expressed they prefer to wait until COVID-19 pandemic ends. Some families with children with complex conditions stated that they prefer the face to face services right away.

"It will always be better in person, but during the emergency it is a solution for everyone".
"...concentration and progress are much faster and effective for the child (when face to face)".

A family recommended to: "...receive children (visits) for **evaluations**... following health and safety protocols; and to "evaluate who are candidates for the face-to-face (modality)".

Based on the survey results, families with children with ASD, speech/language delay and developmental delay tend to prefer face-to-face services. The graphic below shows the percentage distribution of modality preferences per child's Dx. Results may vary out of pandemic



Changes in organization structure and leadership:

In January 2021, the new elected Governor of PR, Pedro Pierluisi, appointed Carlos Mellado, MD as the Secretary of Health. Therefore, the PRDOH is currently undergoing re-organization in its structure and top management.

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.

MCAH/CSHCN Programs continue partnering with agencies described in the 5YR HNA. Following is an updated list

Title V Program Partnerships, Collaboration, and Coordination

Other MCH Investments	
SSDI MIECHV	
Other federal investments	
WIC Program FEMA Immunization Program Early Intervention Program Sexual Risk Avoidance Education Program	Personal Responsibility Education Program CDC (PRAMS & HIV/STDs Prevention Division) Centers for Medicare and Medical Services CMS Zika Health Care Services Program
Other HRSA programs	
HRSA Funded Health Centers Ryan White HIV/STD Program Zika Maternal and Child Health Service Program	
State and local MCH programs	
MCAHP regional offices Regional pediatric centers Autism centers	
Other programs within the State Department of Health	
Chronic Disease and Health Prevention Programs Administration of Mental Health and Anti-Addiction Services Office of Informatics and Advanced Technology Demographic Registry Office	Medicaid Program Office of Regulation and Certification of Health Professionals Emergency Medical Services for Children Office of Public Health Preparedness and Response
Other governmental agencies	
Insurance Commissioner Office PR Health Insurance Administration Education Department	Family Department Head Start and Early Head Start Programs PR Institute of Statistics
PR has no tribes, Tribal Organizations, and/or Urban Indian Organizations	
Public health and health professional educational programs and universities	
UPR University – Agricultural Extension Health and Justice Center, San Juan Bautista School of Medicine Institute on Developmental Disabilities, UPR Medical Science Campus	PR Family to Family Health Information Center Medical Science Campus, University of PR PR-Neonatal Screening Laboratory
Other state and local public and private organizations that serve the state's MCH population	
United Way March of Dimes Hospital Association AAP Puerto Rico Chapter PR Pediatric Society Association of Primary Health Care of PR Highway Safety Commission Oral Health Alliance La Leche League PR Proyecto Lacta PR Breastfeeding Coalition Promani ASI	Quality Office of La Fortaleza Women and Patient Procurator Institute for Youth Development PR Boys and Girls Club Pro Familia (Planned Parenthood) PR-ACOG PR Society of Pediatric Dentistry Proyecto Nacer Maternal Fetal Medicine Specialist APNI SER de PR MAVI

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

III.C.2.a. Process Description

The Puerto Rico (PR) Title V Maternal, Child and Adolescent Health Program (Component A & B or MCAHP) and the Children with Special Health Care Needs (Component C or CSHCNP) are essential public health programs that provide and advocate for services for over 42.1% of the PR population (Census International Data Base 2019, CIDB).

The Goals and Guiding Principles of the PR 2020 Health Needs Assessment (2020 HNA) were:

Goals	Guiding Principles
Collect data and evidence to inform the priority needs of the Maternal, Child, and Adolescent (MCA) populations including children with special health care needs (CSHCN).	Study Feasibility: Design a study that can be carried out with the available resources and the quality that the population deserves. This is achieved by considering the resources and time available while seeking to safeguard the quality and validity of the information and data to be collected.
Identify PR Priority Health Needs for the MCA populations including CSHCN.	Target Population: Women of reproductive age (10-49 years), pregnant women, infants, children and youth (1-21 years) and children and youth with special health care needs (1-21 years) and their families.
Enhance stakeholders' participation in all aspects of the HNA.	<p>Participation: Involve MCA populations, families and all interested sectors.</p> <p>Communication: Systematically communicate to the MCA community and stakeholders.</p> <p>Transparency: Ensure that the decision-making processes based on the findings are clear and understandable to all stakeholders. Promote accountability.</p>
Improve health outcomes for the MCA populations.	<p>Approach: Consider assets and gaps, risk and protective factors, and positive outcomes.</p> <p>Data-driven Decisions: Use quantitative and qualitative data to inform decision making.</p>
Strengthen collaborations with agencies and organizations working for the wellbeing of MCA population and families, including CSHCN.	MCAH Community and Stakeholder Integration: Seek MCA community and stakeholders' experiences and views to inform decisions, efforts and results.

The 2020 HNA used a three-phase framework guided by the socio-ecological model (SEM) and the life course approach. This framework enabled us to link MCA needs, system capacity and prioritization that led to the 5YR Action Plan (priorities, performance measures, outcome measures, evidence-based measures, strategies, and activities).

Phase One: Assessment of the Needs of MCA population groups. Quantitative and qualitative data collection and analysis for each population group: pregnant women, reproductive-age women, infants, children, and adolescents, including children and youth with special health care needs.

Phase Two: Assessment of the Capacity of the System to meet MCA population needs. Assessment of the capacity of the broader system to meet the identified MCA population needs and the strengths and challenges faced by PR Title V in relation to the core MCAH functions.

Phase Three: Setting potential priorities based on the assessment of needs and capacity. Prioritization (narrow down) of potential needs priorities and matching needs to capacity, setting targets, identifying activities and/or actions, and allocating resources.

Stakeholders' engagement was crucial in each phase as they: gave input into the research design, survey, and interview guides; shared their knowledge, experiences, and concerns; and actively participated in the prioritization process.

Three interconnected HNA committees focused on the prioritization processes.

HNA Advisory Committee: Composed of stakeholders from the public and private sectors, non-profit organizations, academia, and family representatives from the CSHCN Program, the Home Visiting Program and the Youth Advisory Council. The Committee's task was to discuss HNA findings, rank potential needs, recommend strategies, and give input into the PR State Action Plan 2020-25.

CSHCN Advisory Board: Composed of CSHCN experts from the health and social fields that closely collaborated with Title V in the selection of the state priorities and development of the State Action Plan for the CSHCN domain. This group was organized due to the unique needs and situations faced by the CSHCN population and families. The Board based its decisions on Title V mission, available funds, existing evidence-based practices, challenges, and opportunities as well as CSHCN domain's needs prioritized by the HNA Advisory Committee.

HNA Steering Committee: Composed of the Evaluation, Monitoring, Research and System Development Section (EMRSDS) researchers (SSDI Coordinator, Biostatistician, Epidemiologists, Health Program Evaluator, and Cultural Anthropologist), Pediatric 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 HNA Advisory Committee, the committee engaged in the selection of state priorities and development of the State Action Plan. This Committee also devised the framework, strategies, and methodologies used in phase one of the Needs Assessment.

The main methods and data sources used to assess the MCA population needs were:

Self-Administrated Survey in HRSA Funded Community Health Centers (FCHCs).

To identify MCA population needs in communities according to five categories for each domain: socioeconomic situation, habits and lifestyle, preventive practices, health conditions, and access to services. Surveyed 500 women aged 18-49 years that received services in one of the 33 participating FCHCs. Of these, 83% had the Government Health Plan (GHP) and 1 for every 10 were pregnant.

FCHCs Health Care Providers Survey.

To identify the barriers health providers' face to provide services to the MCA population. Surveyed 190 health care providers of the 33 FCHCs: 17% general physicians; 12% pediatricians; 8% family medicine, and 4% OB/Gyns. Other respondents were nurses, social workers, psychologists, case management coordinators and nutritionists.

Qualitative Analysis of PRPRAMS Back-Page Comments.

To identify the concerns and situations raised by women in their free comments. Analyzed 199 back-page comments from the telephone interviews corresponding to batches 1-8 (2017).

WRA Key Person Interviews.

To obtain information based on first-hand experience and observations about the issues impacting the health and wellbeing of PR pre-conceptive young adult women (21-34 y/o). Interviewed seven (7) women staff with no children from the Maternal, Child, and Adolescent Health Division (Central Level).

CSHCN Key Person Interviews.

To gain providers' insights into CSHCNs and families' main needs and the limitations and barriers they face to serve children as they would like. Interviewed twelve (12) key persons: 3 pediatricians, 1 general physician, 1 social worker, 3 GIP case managers, 1 nurse, 1 speech pathologist/health educator and 2 staff from the Independent Life Movement (MAVI, Spanish Acronym).

Focus Groups and Conversational Meeting.

To ascertain the needs of families caring for a CSHCN; CSHCN health services' needs; perceptions on health system's care coordination and family-centered care; individual and family needs. Conducted seven (7) focus groups in which a total of 35 CSCHN families participated. A conversational meeting with 31 young adults with special health care needs was also held. The meeting was coordinated in collaboration with MAVI.

Other quantitative data sources included: population-based data from PR Vital Statistics (VS); public and NGO agencies providing services to MCA populations on morbidity, lifestyle, screening and risk factors; PR Community Survey, Monitoring the Future, PRPRAMS, Perinatal Period of Risk, Asthma Surveillance System, PR Immunization System, YRBSS, BRFSS, NIS, PR STDs Surveillance System, KIDS Count, IDEA Child Count, PR-CSHCN Survey, MCH-JS, PR Autism Registry, PR Birth Defects Surveillance and Prevention System (BDSPS) Annual Report, and Technology Dependent Children Registry. We also assessed capacity through the CAST-5 Needs Assessment Survey with 49 staff from the MCAH and CSMN divisions: divisions' and regional directors, RCPs directors, managers, consultants, coordinators, family support and health care providers.

III.C.2.b. Findings

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

A summary of the key findings corresponding to the 25 potential needs (stratified by domains) identified by the stakeholders is presented below. For graphs and charts see the Supporting Document #4 in the Title V FY 2021 Application/2019Annual Report or access the following link:

https://drive.google.com/file/d/1ttnIGd4Pqz93onKhUtwAs9B2ov5_F5QS/view?usp=sharing

WOMEN/MATERNAL HEALTH DOMAIN

In 2018 the number of WRA was 812,204 (ACS 2018) that represents 25.4% of PR total population (10-14 y/o: 10.9%; 15-17 y/o: 7.2%; 18-19 y/o: 5.4%; 20-21 y/o: 5.4% and 22-49 y/o: 71.2%). About half (53%) of WRA is covered by the GHP. 2019 Vital Statistics (VS) reports 20,409 live births (LB), a 28% decrease since 2015 (28,335 LB). Most births occur in women between 20 and 34 y/o (78%), followed by women 35 y/o or older (13%) and teens 10 to 19 y/o (9%). 67% of live

births are from mothers covered by GHP.

The 5 identified needs in this domain are:

Depression, Stress, And Anxiety

FCHCs Survey. About 30% of respondents identified depression, stress and anxiety as the health condition that mostly affects women. Depression and anxiety were in the top five conditions three months before pregnancy as reported by women who had a LB (PRPRAMS 2017-18). According to PRBRFSS, women 35 to 54 y/o reported that a health care professional told her more frequently that she has depression when compared with the other age groups, still this proportion is decreasing (AAPC: 0.6%) from 2014 to 2018 (24% vs. 23%), while an increase is observed in the other age groups, mostly in women 35 to 44 y/o (19% vs. 21%; AAPC: 4% increase).

PRPRAMS Back-page Comments. Women brought up issues related to emotional health after pregnancy. Mothers of pre-term babies felt sadness, anxiety, and distress. There were women who experienced post-partum depression and expressed the need for more understanding and support.

WRA Key Persons. They pointed out that situations such as fast pace of life, economic responsibilities, combining work and study, and social pressure to have children often leads to anxiety and stress among young adult women (21-34 y/o) with no children.

Communication and Sensitivity of The Provider

PRPRAMS Back-page Comments. Women brought up situations they had faced with health providers (e.g. physicians, nurses, and hospital staff) that caused them disgust. Those situations included unfair treatment, no response to their questions, failure to give them explanations, having a C-Section, and no breastfeeding support from nurses during their stay in the hospital. From their comments, what mothers want is to be listened to, have information, and respect for their decisions.

WRA Key Persons. They all spoke about the need for respectful, sensitive and open communication on the part of physicians as there are those that: a) seldom and/or barely offer explanations; b) scold patients; c) do not allow women to make their own decisions (informed) regarding procedures and/or treatment. They strongly advocate for what the literature calls “person-centered care” that entails seeing the patients as partners, being responsive to their needs and values, and engaging them in health decision making.

Health Conditions in WRA

FCHCs Survey. About 41% of respondents identified that the preventive practice that WRA perform less frequently is the preventive medical visit that may increase health risks. According to PRBRFSS (2014-18) a significant increase (AAPC: 4.7%; $p < 0.05$) is observed in the annual preventive visits in women 18 to 44 y/o. The proportion of women that reports that a health care provider informed that she has diabetes or high blood pressure is also decreasing for all age groups. However, these conditions are more significantly reported ($p < 0.05$) by women 35 to 54 y/o when compared to younger women. Preventive oral check-ups are also important during the preconception period. PRBRFSS (2014-18) also reports an increase in all age groups (AAPC 25-34 y/o: 0.3%; AAPC 35-44 y/o: 6.5%; AAPC 45-54 y/o: 2.9%), except in women 18 to 24 y/o (0.2% decrease).

WRA Key Persons. A key issue raised is the need to promote preventive visits among young adult women (21-34 y/o) with no children as they only seek health care when they feel sick. Indeed, they said that working in the MCAH Division made them aware of the importance of preventive visits. Other health related conditions mentioned were unhealthy eating, STDs, asthma and cancer. They also noted that costly health insurance hinders pre-conceptive women’s access to health care.

Health Conditions During Pregnancy

FCHCs Survey. Forty-four percent (44%) respondents identified health conditions during pregnancy as a need of pregnant women. VS 2018 reported that 99.9% of women who had a LB received prenatal care irrespective of the trimester of initiation (83.2% began PNC during the 1st trimester). Between 2014-2018 VS reports a significant increase of gestational diabetes, preeclampsia, and eclampsia (AAPC: 13.3%, 7.7% & 34.9%; $p < 0.05$) in mothers that had a LB during this period. Other conditions during pregnancy that were reported by women with LB (PRPRAMS 2018) were anemia (20.1%), anxiety (12.8%), depression (9.2%) and thyroid problems (4.7%). Oral health during pregnancy is also related to poor pregnancy outcomes. About 43% of women who had a LB reported to visit a dentist or a hygienist for a routine dental cleaning (PR-

PRAMS 2018). Women who had a LB mainly reported not having a routine dental cleaning visit because they could not find a dentist or hygienist that would provide services to pregnant women (PRPRAMS 2018: 23.5%).

PRPRAMS Back-page Comments. Women spoke of the importance of “having a healthy pregnancy” to have a healthy baby. A healthy pregnancy is associated with prenatal care and avoidance of risks such as alcohol use and smoking. Women also commented on situations that caused them a great deal of stress, anxiety, and sadness while pregnant such as economic hardships and a high-risk pregnancy.

Nutrition During Pregnancy

FCHCs Survey. About 33% of participants identified inadequate nutrition during pregnancy as a habit that mostly affects this population. PRPRAMS (2017-18) reported that 92% of women who had a LB received education/orientation of healthy eating habits by a health professional. On the other hand, VS 2018 reports that 36% of women who had a LB had an adequate weigh gain during pregnancy. However, few women reported consuming fruits 5.1%) or vegetables (3.2%) during pregnancy (PRBRFSS 2017). Furthermore, according to the risk factors for WIC enrollment (FY 2017-18), 13.5% of women were underweight (IMC<18.5) and 71.1% was overweight (IMC≥25). For the last fiscal years (2015-16 to 2017-18) a significant increase (p<0.05) in women underweight (4.4%) and overweight (6.1%) was observed in women that received services.

PRPRAMS Back-page Comments. Healthy eating including prenatal vitamins was mentioned by women as a key factor to have a healthy pregnancy that can have a positive effect on the baby’s health.

PR TITLE V AND WOMEN/MATERNAL HEALTH: The domain’s needs are summarized in two main priorities: 1) promote health and wellbeing in WRA; and 2) improve birth outcomes. The PRMCAHP **Preventive Care Guidelines for WRA** (PCGWRA), address chronic conditions, mental and oral health, routine screenings, and prenatal care recommendations, among others. The guidelines will be distributed and continuously updated as needed. A WRA Preventive Care Log will be created and disseminated among GHP WRA and pregnant women to foster preventive health. The Title V Home Visiting Program (HVP), Prenatal Care Courses, and Community Outreach and Education will be continued to achieve the priorities set for the next 5 years.

PERINATAL/INFANT HEALTH DOMAIN

In 2019 the number of infants was 21,245 that represents less than 1% of the PR total population (ACS 2018). Among this population, 97.2% were insured during 2019. Infant mortality (IM) decreased in average 1% from 2014 to 2018 (7/1,000 vs. 6.7/1,000). Preliminary 2019 IM data is 6.5/1,000, remaining similar to the 2018 data.

The 5 identified needs in this domain are:

Causes of Infant Mortality

VS 2018 showed that the first cause of infant mortality was congenital malformations (50% of all deaths) followed by conditions originated during the perinatal period (17%). However, sleep-related Sudden Unexpected Infant Deaths (SUIDs), was among the leading causes of infant deaths between 1 to 12 months of age in 2016 and as the first cause in 2017 and 2018. PRPRAMS reported in 2018 that 43.6% of infants were placed on their backs to sleep and 29.1% are placed on a separate approved sleep surface, while 24.3% are placed to sleep without soft objects or loose bedding. Thus, only 8.7% were placed to sleep in safe environment (PRPRAMS 2018). From 2014 to 2018, infant mortality related to premature births has decreased in average 0.5%, keeping the rate below 3 deaths for every 1,000 LBs (VS 2018: 2.1/1,000 LB).

Infant Development

About 63% of FCHCs identified infant exposition to electronic devices as a need of infants that affect their development. Title V HVP performs ASQ-3 and ASQ:SE-2 screening tests to participant infants of the program. By 2018, 7.3% out of 1,409 screened infants presented high risk screening scores. All of them were referred to different services according to their needs. Only 1 refuse referral and 6 did not qualified for referral. About 82% of the infants with high risk screening scores completed the referral, while 12% did not.

Perinatal Death

Perinatal mortality (PM) was 7/1,000 live births in 2018. Since 2014 PM has decreased in average 1%. PPOR analysis from 2015 to 2018 reveals that most excess of deaths occurred during the Maternal Health and Prematurity (0.6/1,000) and Maternal Care (0.4/1,000) periods. Both periods together compose 74% of all fetal and infants’ deaths.

Abuse and Neglect

About 56% of FCHCs participants identified that infants are often exposed to abuse and neglect. The PRPRAMS data reported in 2017 that 3.3% of women who had a LB who reported physical abuse during pregnancy, decreasing 21.2% in 2018 (2.6%). According to data of the Family Department, the cases of child abuse and neglect have increase in the last three years (2016: 14.8% to 2018: 43.1%).

Asthma

About 22% of FCHCs respondents identified asthma and allergies as the condition that mostly affects infants. According to the Asthma Burden Report (PRBRFSS 2015-2017), 14.9% of children 0 to 4 y/o reported current asthma, lower than the other age groups, except 15 to 17 y/o (11.9%). On the other hand, 15.5% of children 0 to 4 y/o reported lifetime asthma, lower than the other age groups and with a significant difference ($p<0.05$) when compared with children 15 to 17 y/o (25.8%).

PR TITLE V AND PERINATAL/INFANT HEALTH: The needs in this domain are summarized in one priority: decrease of infant mortality. The PRMCAH Program **Prenatal Curriculum** – offered by the CHWs and HEs – for pregnant women and their families, promotes the importance of prenatal, natal, and post-natal health care with emphasis on healthy lifestyles, changes during pregnancy, alert signs, delivery plan, breastfeeding, baby care and family planning. Additionally, the media campaign “*Encuentro de mi Vida*” website provides valuable information for all pregnancy periods and infant care. Title V HVP nurses offer participants case management, care coordination, screening for risk factors, support, and education services with a biopsychosocial approach.

CHILD HEALTH DOMAIN

According to the 2019 ACS there were 273,144 children 1 to 9 y/o that represent 8.5% of the total PR population. About 97.4% of the child population were insured during 2018-2019. From 2014 to 2018 the child mortality rate presented variability, dramatically increasing in 2016 (17.1/100,000) and decreasing to 11.2/100,000 in 2018. Preliminary mortality data for 2019 shows an increase to 13.2/100,000. The three leading causes of death among children were: unintentional injuries (20.0%), neoplasms (17.1%) and septicemia 5.7%).

The 5 identified needs in this domain are:

Child Preventive Visits

About 28% of FCHCs participants reported that the prevention practice parents less perform is taking their children to their annual preventive visits. According to PRBRFSS a significant 8% increase ($p<0.05$) was observed in the annual preventive visits between 2017 (79.4%) and 2018 (85.4%). On the other hand, a significant ($p<0.05$) decrease was observed in the oral health preventive visits in children 1 to 11 y/o between 2017 (72.6%) to 2018 (68.4%). Furthermore, the percent of treated teeth with caries has significantly ($p<0.05$) increased between 2015 (7.2%) to 2018 (15.7%) in the same age group.

Mental Health

According to PRBRFSS, the percent of children 1 to 11 y/o diagnosed with depression, anxiety or behavioral problems has decreased from 2016 (18.9%) to 2017 (15%), while the percent of children with these mental health conditions receiving treatment increased during this period (84.3% to 90.1%).

Child Obesity

About 41% of FCHCs respondents identified that parents do not limit the time spent on electronic devices to their children 1 to 9 y/o. Currently there is no data in PR about children’s exposition to electronic devices. However, according to PR WIC, the percent of participating children 2 to 5 y/o with a BMI ≥ 85 has significantly increased ($p<0.05$) during the last three years (2016: 16.2% vs 2018: 18.6%). On the other hand, PRBRFSS reported that about 89% (2017) of children 1 to 11 y/o are physically active for at least 60 minutes a day, an increase of 3.6% since 2016 (85.2%).

Immunization

Despite the increase in preventive medical visits, data from the PR Immunization Registry (PRIR) show that the immunization rate has been decreasing in children 6 to 10 y/o for all mandatory vaccines since 2014. The fact that there are few pediatricians who vaccinate children may force parents to seek alternate ways to receive this service.

Asthma

About 44% of FCHCs respondents identified asthma and allergies as a need that affects children 1 to 9 y/o. Comparing between age groups, children 5 to 9 y/o, reported more frequently current asthma (16.9%) and lifetime asthma (24.6%) than children 0 to 4 y/o (14.9% and 18.5%, respectively). However, compare to older age groups, lifetime asthma is more prevalent in children 10 to 14 y/o (33.2%) and 15 to 17 (25.8%). No deaths were reported for asthma in children 1 to 9 y/o (VS 2018).

PR TITLE V AND CHILD HEALTH: All needs in children will be addressed by the priority for this domain: improve preventive health in children. Children's health promotion includes two parenting courses targeted at parents of 0-5 years and 6-11 years, respectively. The courses center on the physical, mental, and emotional health and wellbeing of infants and children, and include healthy eating, physical activity, preventive/routine medical visits, personal safety, home safety, growth/developmental stages, and positive parenting. The PRMCAHP also developed and constantly updates the **Pediatric Preventive Health Care Guidelines (PPHCG)** which is disseminated to the public, academia, health professionals and health insurance companies.

ADOLESCENT HEALTH DOMAIN

According to the ACS, in 2018 the number of adolescents 10 to 21 y/o was 483,016 that represents 15.1% of the total PR population (10-14 y/o: 37.3%; 15-17 y/o: 24.8%; 18-19 y/o: 18.7%; and 20-21 y/o: 19.3%). During 2018, 95.8% of adolescents 10-21 y/o were insured (ACS 2018). Mortality rates in adolescents are significantly ($p < 0.05$) decreasing for all age groups (10 to 14 y/o: 28%; 15 to 17 y/o: 18%; and 18 to 19 y/o: 16%). The leading causes of deaths vary according to age groups; however, motor vehicles crashes, homicides, unintentional injuries, and suicides are among the first four causes in all age groups.

The 5 identified needs in this domain are:

Mental Health

About 44% of FCHCs participants identified depression, stress, and anxiety as the health conditions that mostly affects adolescents. According to PRBRFSS, the percent of adolescents 12 to 17 y/o diagnosed with depression, anxiety or behavioral problems has slightly increased from 2016 (17.3%) to 2017 (17.4%), while the percent of children with these mental health conditions receiving treatment decreased by 8% during the same period (88.3% to 81.3%).

Bullying and Cyberbullying

Since bullying and cyberbullying are linked both needs will be addressed as one. About 41% of FCHCs participants identified bullying as the social situation that mostly affects adolescents. According to PRYRBSS, bullying/cyberbullying significantly increased ($p < 0.05$) between 2011 and 2017. In 2017, about 17% of 9th to 12th grade students reported being bullied, and this rate is higher in females (20.2%) than in males (13.6%); and 13% reported of being bullied cybernetically, higher in females (17%) than in males (9%). Consequently, 19.6% of students were frequently absent from school for feeling insecure (females: 21.1% vs. males: 17.9%).

Alcohol Use

Thirty six percent (36%) of FCHCs respondents identified the use and abuse of alcohol as a habit that is affecting adolescents. According to the PRYRBSS (2011-2017) alcohol consumption is significantly increasing ($p < 0.05$) in 9th to 12th grade students, even when stratified by gender. In 2017 more than half (61%) of the students reported drinking alcohol at some time in their life, higher in females (65.9%) than in males (55.6%). Alcohol consumption during the last month is significantly decreasing ($p < 0.05$). At least 24% of the students reported consuming alcohol during the last month (female: 25.6% vs. male: 22.2%).

Chlamydia in Adolescents (10 to 19 Y/O)

Alcohol consumption inhibits the senses and exposes adolescents to risky behaviors. For the HNA Advisory Committee chlamydia is an outcome of a risky behavior among adolescents. For the last 5 years, chlamydia incidence rates are increasing for the 10 to 14 y/o (2014: 6.3/100,000 vs. 2018: 8.1/100,000), and there is a significant difference ($p < 0.05$) when compared by gender (female: 12/100,000 vs. male: 3.9/100,000). The rate in adolescents 15 to 19 y/o are even higher when compared with the 10-14 age group. The incidence of chlamydia has increased by 8% in the last 5 years (2014: 379.9/100,000 vs. 2018: 474.7/100,000). During this period, when compared by gender, there is a significant difference ($p < 0.05$) between females (863.4/100,000) and males (102.8/100,000).

PR TITLE V AND ADOLESCENT HEALTH: The needs identified in this domain are summarized in the priority: improve health and wellbeing of adolescent. The **PPHCG** includes adolescent health. The Comprehensive Adolescent Health Program (CAHP) serves adolescents and young people from 10 to 22 years. It seeks to optimize their physical, mental, social, and spiritual development, health, and wellbeing. All actions are guided by the Positive Youth Development Model that views youth as resources capable of assuming responsibilities and contributing to health strategies and policies. The **Youth Health Promoters** (YHPs) and the **Youth Advisory Council** are the two main initiatives of the CAHP.

CHILDREN WITH SPECIAL HEALTH CARE NEEDS DOMAIN

According to the 2019 MCH-JS screener, the prevalence in PR of CSHCN 0 to 17 years of age is 27.3%. This translates into 162,101 CSHCN. Fifty nine percent (59.07%) are male and 42% are between the ages of 4 to 10. Most frequent conditions in the CSHCN group are asthma (38.4%), speech disorder (35.9%), anxiety (28.6%), learning disabilities (26.6%), ADD/ADHD (26.2% each), behavioral problems (22.1%), and headaches (19%). Prevalence of ASD in children 3 to 17 years of age has increased to 3.1% (1 in 33). Ninety nine percent (99.1%) of CSHCN are covered by a health insurance, of which 72.6% are under the GHP. Congenital defects were the leading cause of infant mortality in PR in 2018 (PR-BDSPD Annual Report, 2017).

The 5 identified needs in this domain are:

Access to pediatric specialists

Focus groups' participants concurred on the need of pediatric specialists in PR, especially geneticists. Some parents said they have waited up to a year to see a geneticist. Families living outside the metro area reported there is a lack of health specialized services for CSHCN where they live. This may result in hours of traveling, sometimes 2-3 times weekly to receive services. Based on the PR Health Licensing Board, the number of pediatric specialists has decreased by 3.4% from 2010 to 2018, mostly due to migration to the USA. MCH-JS shows that 19.2% of CSHCN families who needed a specialist during the last 12 months could not access one.

Families with ASD children feel there are physicians and other health and non-health ASD care professionals who lack knowledge about ASD and how to manage the condition. They also spoke about the lack of schools and services specialized on ASD after the child turns three (3) years of age, and about the high costs of the private ones. In fact, service waiting lists in the CSHCN Program Autism Centers increased around 126% during year 2019.

Access to chromosome and genetic labs

For some families with children diagnosed with genetic conditions, accessing a genetic laboratory may be difficult due to the high costs. Key informants reported that most public and private health insurance plans do cover or authorize the laboratories. However, for some laboratory panels the insurance deductibles may be too high for a family to pay. In those cases, the laboratory test may be delayed while the family gets the money. In addition, most of these specialized laboratory tests are done outside PR, which extends the time for the results to arrive. In the 2015 PR-CSHCN Survey, 19% of families with a child in need of a genetic or metabolic laboratory could not access the test. Of these, 66% said they could not access it because of the high costs, and 29% because the insurance plan did not cover the test.

Coordinated and continuous health care

Key informants pointed out that care coordination is part of the service protocol in health centers such as FCHCs, while for solo PCPs or small practices, adequate care coordination may be difficult since it is not covered by health insurance plans. They also pointed out the importance of including health plans when care coordinating. Based on the MCH-JS, 25.1% of families with CSHCN reported they received help to coordinate child's care among different doctors/services. Of the group of CSHCN families that reported the need for care coordination support (10%), 50% reported they usually, and 50% reported they sometimes received the need they wanted. Eighty two percent (82%) referred to be very satisfied with the communication among doctors. Overall, 83.9% of CSHCN families received an effective care coordination. As pointed out in focus groups, families with scarce resources may face more difficulties in finding the needed care. Based on the 2019 MCH-JS, 84.6% of CSHCN families with less than \$15,000 annual income received an effective care coordination compared to 100% of CSHCN families with more than \$50,000 annual income. This data is statistically significant ($p < 0.000$).

Family-centered care (FCC) and support

Focus groups' participants feel that their CSHCNs are well served in the PR-health care system but not so much the parents

or caregivers. They spoke of a wide range of feelings they had when they first were informed about the child's diagnosis: fear, sense of loss, guilt, overall life changes, accepting and adapting to this unexpected situation. The main needs they expressed were the access to information; find the correct place for their child to be treated (a place of reassurance); emotional support; family, social, and/or spiritual support; and health care professional sensitivity. Families also spoke of changes in needs across their life span while taking care of a CSHCN such as psychological and emotional needs, time for themselves, and respite. The 2019 MCH-JS indicated that 86.5% of families with CSHCN received FCC during the past 12 months.

Transition to adult health care

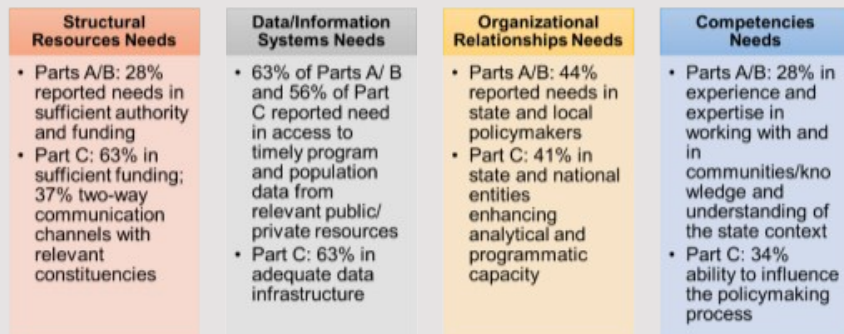
Transition to adult health care is a crucial life event for YSHCN. Some key informants raised the issue that there are physicians who lack knowledge about the conditions of adults with special health care needs. However, YSHCN participants at the conversational meeting reported they are satisfied with their adult health care but miss their pediatricians. Some of them still visit both. Focus groups' families with YSHCN spoke about barriers/difficulties during the transition process involving other aspects of adulthood, such as education and work. Independent living key informants talked about how late many parents go to receive transition to adulthood and independent living support. Frequently, parents realize the need of transition support when they are themselves getting older, and then it may be too late.

According to the 2019 MCH-JS, 6.4% of YSHCN and 17.4% of non-YSHCN received the necessary support for a successful adult health care transition. This might reflect a lack of skills in the YSHCN health field. PR-GIP special coverage ends at 21 years of age. Of the group of families who reported they did not know how the child will be insured after turning 21 (59.7%), only 3.4% reported someone discussed the topic with them.

PR TITLE V AND CSCHN HEALTH: The five prioritized CSHCN domain needs are all elements of the medical home approach: access to care, care coordination, FCC and transition to adult health care. NPM 11 and 12 has been part of the PR State Priorities during the past 10 years. The CSHCN Program will continue to address medical home components at both programmatic and community levels.

Capacity Needs (CAST-5)

The results of the CAST-5 survey are summarized in the following diagram:



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

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

The PRDOH is the umbrella agency legally responsible for all public health related matters. The Secretary of Health is appointed by the Governor and confirmed by the Legislature. The agency is organized in two main structural levels: 1) Advisers and Support Units and 2) Operational units and Implementation of Public Policy. The Assistant Secretariat for Family Health and Integrated Services is included in the second level, under which are the Maternal, Child and Adolescent Health Division (MCAHD) that houses the MCHAP (Component A & B) and the Children with Special Medical Needs Division (CSMND) that houses the CSHCNP (Component C). Each Division is organized into two sections:

MCAHD: 1) *Evaluation, Monitoring, Research and System Development Section* that houses the PR State Systems Development Initiative and; 2) *Perinatal, Child and Adolescent Services Section* composed of these programs: Title V Home Visiting Program; Maternal, Infant and Early Childhood Home Visiting Program (MIECHVP), Partnership for Optimize Family Support for Families of Children Affected by Zika; Early Intervention Services System Part C IDEA; Comprehensive

Adolescent Health Services; Personal Responsibility Education Program (PREP); Sexual Risk Avoidance Education Program (SRAE); and Pregnancy Risk Assessment Monitoring System (PRPRAMS).

CSMND: 1) **Birth Defects and Developmental Disabilities Surveillance and Prevention Section** which comprises the following: Birth Defect Surveillance and Prevention System (PR-BDSPS), Universal Newborn Hearing Screening Program (PR-UNHSP), Hereditary Disease Detection, Diagnosis and Treatment Program (HDDDTTP), Autism Registry, Emergent Threats to Mothers and Babies Surveillance System, Pulse Oximetry Screening for Critical Congenital Heart Defects, Zika Maternal and Child Health Service Program (PR-ZMCHSP), CMS Zika Health Care Services Program, and the Technology Dependent Children and Youth Registry and; 2) **Children with Special Health Care Needs Program Section (CSHCN Program)** which consists of seven (7) Pediatric Centers located in each PR health region and two Autism Centers.

For the Organizational Chart see: Part VI. Organizational Chart in Title V Annual Report.

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

Several core programs facilitate and complement the health services in PR health care system primary level.

The Home Visiting Program (HVP), staffed by Home Visiting Nurses (HVN), serves pregnant women and their children up to 24 months after delivery in 71 municipalities. The HVNs do screenings for maternal depression, intimate partner violence, substance use, child development and oral health. They also make referrals to appropriate services as needed and offer health education on maternal and infant/child health topics. A Mental Health Consultant (PHD in Psychology) provides training and support to the HVNs to effectively manage participants' emotional health.

The Community Outreach Program (COP) is staffed by 31 Community Health Workers (CHWs) that provide community health education. They also offer the following courses: a) Prenatal Course that provides pregnant women with tools to maintain a healthy pregnancy and prevent risk factors; b) Parenting Courses targeted at parents of children 0-5 y/o and parents of children aged 6-11y/o on healthy eating, physical activity, preventive medical visits, personal safety, home safety and positive childrearing.

Health Promotion is overseen by the Health Educators (HEs) – one in each Region – responsible for offering community education, parenting courses, and technical assistance to the COP. A key component are media/internet campaigns, dissemination of educational materials and tools, and training and information to health professionals.

The Perinatal Services are provided by the Perinatal Nurses (PNs) that visit birthing hospitals to offer pregnancy and breastfeeding support and post-partum and infant health education. They also promote the Title V HVP and the Prenatal and Responsible Parenting Courses among women.

The Comprehensive Adolescent Health Program (CAHP) promotes adolescence health and wellbeing. The CAHP is staffed by an Associate Director and a Healthy Youth Development System Coordinator (HYDS-C), Youth Health Promoter Center Coordinator (YHPC-C) and 6 Regional Coordinators (CAHP-C). The CAHP-Cs implement the Youth Health Promoters Project (YHPP) composed of voluntary students that promote healthy lifestyles among their peers in participating schools. The Youth Advisory Council (YAC), led by the HYDS-C, is composed of adolescents that help the DOH identify and implement strategies to improve youth health and wellbeing.

Pediatric and Autism Centers: offer primary level services like screening, pediatric medical evaluation, and referrals to eligible CSHCN 0 to 21 years of age. Service coordinators, social workers and graduate nurses offer enabling services - support and coordination - to CSHCN/families, helping them navigate the system and access care. Allied health professionals offer habilitative services. The staff also inform families and facilitate access to services in the community. While the centers do not qualify to be a medical home (they are not PHCC), they do strengthen the medical home community by connecting with CSHCN's PCPs, making referrals, and supporting families in decision-making. This support fills gaps within the PR health care system as it grows to the medical home approach. Blind and individuals with disabilities who are residents of Puerto Rico are not eligible for receiving Supplemental Security Income under Title XVI.

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

The MCAH Program Components A&B is formed by a multidisciplinary team of professionals housed in the Central Level and 7 Regional Offices. As of June 30, 2020, the workforce consists of 166 regular/transitory employees and 14 (professional services contracts. Of the regular employees 132 (132 FTE) are distributed in the 6 Regional Offices. Among them are 82 Home Visiting Nurses, 31 Community Health Workers, 7 Perinatal Nurses, 6 Adolescent Coordinators and 6 Health Educators across the Island. Among these personnel, there are 7 full-time employees that once were participants of MCAH led programs (HVP and YHPP) or collaborator at the regional level: 4 Home Visiting Nurses, 2 Community Health Worker and one Regional Coordinator. Most Regional teams have a Regional MCAH Director, Coordinator of Maternal and Infant Health Services, Coordinator of Adolescent Health Services, Health Educator, administrative and support staff.

At the Central Level, there are 9 regular (8.96 FTE) positions that include the MCAHD/MCAHP Director, Manuel Vargas, MD, MPH, an OBGyn with more than 30 years of experience. Thirteen (10.80 FTE) Professional Services Contracts of high skilled health professionals: one Biostatistician, two Epidemiologists, one Evaluator; one Cultural Anthropologist; and three Physicians (Comprehensive Adolescent Health Program Director, Pediatric Consultant, and OB/Gyn Consultant). Other highly skilled contract positions are: one Health Education Component Coordinator; one Healthy Youth Development System Coordinator; one Young Health Promoter Center Coordinator; one Title V Home Visiting Coordinator; one Title Home Visiting Evaluator; and one Consultant in Psychology.

Component C (CSHCNP) consist of a multidisciplinary team of professionals who provide services consistent with the three levels of the MCH pyramid. As June 15, 2020, Central Level holds 10 regular (10 FTE) and one temporary position (1 FTE). Senior level management includes the CSMND/CSHCNP Director, Miguel Valencia-Prado, MD, FAAP, a pediatrician with a developmental pediatrics fellowship, expert in the field of CSHCN, and who has worked for the DOH for 34 years; and the Auxiliary Director, Angela M. Adams, expert in the DOH administrative arena. There are 15 professional service contracts (14 FTE): 2 Consultants compromised with the re-enforcement of the 220 BIDA Law for the Well-being, Integration and Development of People with Autism, a Family Representative, an Evaluation Specialist, a Biostatistics Specialist, 2 Care Coordinators and 2 Data Specialists. Title V funds also supports the PR-BDSPS and the PR-UNSHP with two Social Workers for each program, and with a Maternal Fetal Sonographer Liaison who timely collects NTDs affected pregnancies ultrasound test results.

At the Regional Level, staff consist of 55 FTE regular/temporary positions, and 51.6 FTE contractual positions. The table below shows the total of FTE, and number of contracts/regular positions: pediatricians (Ped), nurses (RN/LPN), physical therapists and assistants (PT/PTA), occupational therapists and assistants (OT/OTA), speech and language pathologists and speech therapists (SLP/ST), social workers (SW), service coordinators (SC), nutritionists (Nt) and Clinical Psychologists (LCP). Other staff (administrative, data, informatics) are under the "Other" column.

Center	FTE	Regular/ transient	Contract	Ped	RN/ LPN	PT/ PTA	OT/ OTA	SLP/ ST	SW	SC	Nt	LCP	Other
Arecibo	11.6	9	3	1	3	0	1	2	1	1	0	0	3
Bayamon	9.7	2	8	1	1	0	1	2	1	1	0	1	2
Caguas	9.7	4	7	1	1	1	1	1	0	1	1	2	2
Fajardo	3	1	2	1	0	0	0	0	1	0	0	0	1
Mayaguez	10	8	3	1	2	2	0	2	0**	0	0	1	3
Metro	28.3	18	11	1	6	4	4	4	2	1	1	2	4
Ponce	20	13	8	0	2	3	3	2	1	0	0	1	9*
Metro AC	7.5	0	8	1	0	0	1	1	1	1	0	3	0
Ponce AC	6.8	0	7	0	0	0	1	1	1	1	0	2	1
Total	106.6	55	57	7	15	10	13	13	6	5	3	10	27

* This includes a dentist and a dental assistant ** Social Worker available through state funds.

In addition, the following staff provides services on a fee for service bases at the RPCs: 2 Audiologists (Metro and Ponce PCs); a Pediatric Surgeon in Metro; and a Pediatric Orthopedic in Mayaguez. Through an agreement with the Medical Science Campus, UPR, CSHCN receive the following services at the Metro PC: orthodontics, ophthalmology, neurosurgery, and orthopedics.

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

Other MCHB investment: Within the MCAH structure, there are other MCHB programs that share the MCAH Director as their Project Director and receive support from administrative and support MCAH staff (accountant, purchasing agent, secretaries). The SSDI program is responsible for data collection, analysis, and linkages. The MIECHV program addresses WRA and pregnant women's health, infant and child health.

Other Federal investment: The WIC program fosters healthy nutrition in pregnant women, infants, and children and collaborates with the identification of children with positive hearing screening but with no diagnostic tests results. FEMA collaborates with the natural disaster preparedness of families with technology-dependent children. The Immunization Program addresses vaccines as a protective factor. Four grants housed in the MCAH also support our efforts: the *Early Intervention Program* offers services to children with developmental delays; the *Sexual Risk Avoidance Education* and the *Personal Responsibility Education* programs address adolescent health; the CDC PRAMS collects state-specific, population-based data on maternal attitudes and experiences before, during, and after pregnancy. MCAH also collaborates with the CDC HIV/STDs Prevention Division in community mobilization and the day to get tested for HIV/STDs. The Centers for Medicare and Medicaid Services provides data of EPSDT services for the Title V Annual Report and sponsors the CMS ZHCSP at the CSMND.

Other HRSA programs: The HRSA-funded Health Centers were the sites for the MCAH HNA survey carried out among their clients and providers and facilitated access to key informants for the CSHCN qualitative data collection. They also facilitated access to key persons for the CSHCN qualitative study. The Ryan White HIV/AIDS Program administratively housed at the DOH Central Office for the Management of AIDS and STD provides all services to low income HIV positive or AIDS patients. HRSA has supported PR during the Zika Outbreak through the PR-ZMCHSP.

State and local MCH programs: The MCAH Program has seven regional offices that implement the strategic plan; give feedback and report accomplishments and barriers to make needed revisions in achieving program goals. The CSHCN Program provides comprehensive, quality, and family-centered services and support to CSHCN and their families through the seven RPCs and two Autism Centers.

Other programs within the State Department of Health: MCAH share resources, trainings and data with the Chronic Disease and Health Prevention Programs of the Auxiliary Secretariat for Health Promotion. The Administration of Mental Health and Anti-Addiction Services (ASSMCA) offers trainings and shares mental health data. The Office of Informatics and Advanced Technology (OITA) links Medicaid participants with live births data and gives support to the Autism Registry and PR-EHDI-IS. The Demographic Registry Office has team up with MCAHD to conduct PRAMS, in addition to data access. It also hands out the developmental guide "*Passport to Health*" to families registering their newborn. The Medicaid Program participates in the MCAHP Regional Boards and accepts MCAH referrals of identified uninsured women, children, and adolescents. The Office of Regulation and Certification of Health Professionals provides requested data for the CSMND. The MCAHP shares data with the Emergency Medical Services for Children for the prevention of unintentional injuries that form part of the HNA Advisory Committee. The MCAHP also works in collaboration with the Office of Public Health Preparedness and Response and is part of the Behavioral and Mental Health Expert Committee.

Other governmental agencies:

1. Insurance Commissioner Office and PR Health Insurance Administration: provide data on health services for the MCA/CSHCN population.
2. Education Department: MCAHP provides resources and cross coordination of health promotion actions in public schools. The DE collaborates with the implementation of the protocols for ASD early identification and diagnosis, and with the identification of technology dependent children as well as in the implementation of YHPP.
3. Family Department: Has representation in MCAHP Regional Boards as well as providing data for Title V Annual Report. MCAHP also is a member of the Children Justice Act Committee aimed at improving the policies for the evaluation and management of child abuse. Through its Child Care Program, it collaborates with DD and ASD early identification.
4. Head Start and Early Head Start Programs: Participate in MCAHP Regional Boards in addition to providing data. MCAHP offers these programs resources and education to their staff and parents.
5. PR Institute of Statistics: Makes MCAHP reports and research findings available for the public through their website. The Institute also supports MCAH/CSHCN Programs by providing needed data for the HNA and Title V

Tribes, Tribal Organizations and Urban Indian Organizations: PR has no tribes, Tribal Organizations, and/or Urban Indian Organizations.

Public health and health professional educational programs and universities:

1. UPR University – Agricultural Extension: Collaborate with CAHP and are part of the MCAHP Regional Boards and the HNA Advisory Committee.
2. Health and Justice Center, San Juan Bautista School of Medicine: Provides training to Title V Home Visiting nurses and CAHP.
3. Institute on Developmental Disabilities, UPR Medical Science Campus: Collaborates in the revision of the Pediatric Care Guidelines and provides training to Title V Home Visiting nurses.
4. PR Family to Family Health Information Center: collaborates with the CSHCNP giving information to NICU families and promoting the CSHCNP.
5. Medical Science Campus, University of PR: collaborates with CSHCN access to pediatric specialists
6. PR-Neonatal Screening Laboratory: PR-HDDDTTP collaborates offering service coordination for infants with positive test results.

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

1. United Way: Sponsors the 211 line and supports MACH health promotion activities.
2. March of Dimes: Sponsors the Programmatic Committee in which MACH participates.
3. Hospital Association: Supports MCAH surveillances, research, and policy implementation in hospitals.
4. AAP Puerto Rico Chapter, PR Pediatric Society: child/adolescent health promotion.
5. Association of Primary Health Care of PR: Supports MCAH HNA and programmatic efforts and facilitates access to HRSA Funded Community Health Centers.
6. Highway Safety Commission: provides MCAHP with data related to injury prevention.
7. Oral Health Alliance: MCAHP is a member of the alliance.
8. La Leche League PR, Proyecto Lacta, PR Breastfeeding Coalition, Promani, ASI, Quality Office of La Fortaleza, Women and Patient Procurator: Participate in the MCAHP sponsored Breastfeeding Alliance.
9. Institute for Youth Development: Shares data of adolescent health to CAHP.
10. PR Boys and Girls Club: YAC collaborates in assisting them to develop a model for their advisory council.
11. Pro Familia (Planned Parenthood): Collaboration with CAHP in the development of the adolescent friendly services.
12. PR-ACOG: Is part of the HNA Advisory council. PRMCAH Program shares data that is needed for the creation of new programs and/or services for WRA and pregnant women.
13. PR Society of Pediatric Dentistry: Collaborates with MCAH Program in all oral health initiatives.
14. Proyecto Nacer: Collaborates with CAHP in the development of the adolescent's friendly services.
15. Maternal Fetal Medicine Specialist: Collaborate with LOCATe and the development of the PR Perinatal Care Guideline.
16. APNI: collaborates with the CSMND through health and services promotion, research, and studies' support, and with the enhancement of family engagement.
17. SER de PR: facilitates access with YSHCN to collect their inputs on transition guides and educative material.
18. MAVI: collaborates with YSHCN studies and surveys.
19. Office of Advocacy for People with Disabilities: collaborates with studies and surveys.

20. PR-PKU Association: PR-HDDDTTP participates in this association.

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

The process for the identification of priority needs involved 3 steps:

Step 1. Discussion of findings by domain and current NPMs and NOMs with the HNA Advisory Committee. Based on the findings, a total of 83 potential needs (23 WRA, 17 perinatal/infant, 10 child, 21 adolescents, and 12 CSHCN) were identified.

Step 2. Prioritization of potential needs by members of the HNA Advisory Committee (39 participants). Members were divided into each of the 5 Title V domains according to their expertise and population served or represented. Each Domain Group (DG) prioritized the potential needs based on the following criteria: 1) magnitude of the problem; 2) severity of the consequences; 3) socioeconomic impact; and 4) PR Title V human and economic resources (adapted from CDC's Prioritizing Public Health Problems 2013). Weights were assigned to each criterion. Each DG identified 5 needs and selected by consensus 3 possible strategies/activities that should be considered in addressing the needs. All together a total of 25 potential needs were identified.

Step 3. Based on the input of the HNA Advisory Committee, the HNA Steering Committee analyzed Title V resources allocation, data availability, other agencies efforts, and type of interventions and/or strategies for each domain. The CSHCN Advisory Board did the same for the CSHCN Program including evidence-based practices to address the identified needs.

PR Title V listed 9 Priority Needs for the next 5 years. Most priorities from the previous 5YR Action Plan remain the same while some were replaced or revised based on the priority main objective, resources, and capabilities. The 5YR Action Plan centers on the following priorities:

1. **Promote health and wellbeing in women of reproductive age (WRA):** This priority revises priority No.1 from the previous 5YR Action Plan. Unhealthy lifestyles that increase the likelihood of developing chronic conditions, and mental health problems affect women's health whether they plan to have a baby or not. These issues can be addressed by the preventive medical visit that helps women take control over their health, increments the probability of receiving treatment or follow-up care as needed, and reduces the likelihood of adverse birth outcomes, maternal and infant mortality. The percent of women with a past year preventive medical visit is a good indicator to measure WRA health and wellbeing (NPM 1).
2. **Improve birth outcomes:** This priority continues from the previous 5 YR Action Plan and includes preterm births and other conditions and procedures that may affect children's health and survival. Early prenatal care to reduce health conditions developed during pregnancy, oral health of pregnant woman and nutrition evaluation help improve birth outcomes. The percent of women who had a preventive dental visit during pregnancy (NPM 13.1) was selected as the measure to improve birth outcomes.
3. **Decrease infant mortality:** This priority continues from the previous 5 YR Action Plan. Prematurity and LBW infants are among the first causes of infant mortality in PR. Yet, sleep-related Sudden Unexpected Infant Deaths (SUIDs) was one of the leading causes of infant deaths age 1 to 12 months in 2016 and as the first cause in 2017 and 2018. A safe sleeping environment may well contribute to infant mortality reduction. Other contributors are breastfeeding promotion, baby-friendly hospitals, high risk babies born in appropriate hospitals and Hard Stop Policy implementation. The percent of infants placed on their backs, on a separate approved sleep surface without soft objects or loose bedding (NPM 5) was selected as the measure that could reduce infant mortality.
4. **Improve preventive health in children:** This priority replaces priority No. 4 from the previous 5YR Action Plan. Preventive child healthcare that includes the promotion of the Pediatric Preventive Health Care Guidelines (PPHCG) and oral health will enhance children's health and wellbeing. Other issues considered in this priority are unintentional injuries, children's socio-emotional development, immunizations, obesity and physical activity, abuse and neglect in children, mental health, and behavioral problems. The percent of children, ages 1 through 17, who had a preventive dental visit in the past year (NPM 13.2) was selected as the measure to follow up preventive health in children.
5. **Improve health and wellbeing of adolescents:** This priority continues from the previous 5YR Action Plan.

Healthy lifestyles and preventive visits that focus on adolescent physical, behavioral, and sexual needs can help them be responsible, lead a healthier life, and prevent diseases. Adolescence bullying experiences are related to certain behavioral, emotional, and physical adjustment problems. These are: depression, anxiety, low self-esteem, and isolation; poor school performance; and suicidal ideation and attempts. The percent of adolescents aged 12 to 17 years with a preventive medical visit in the past year (NPM 10) can improve adolescent health and wellbeing. The percent of adolescents, 12- 17 years who are bullied (NPM 9) will also be used to monitor their health and wellbeing.

6. **Medical home for children and youth with special health care needs**: This priority continues from the previous 5YR Action Plan. 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 2019 MCH-JS showed that 57% of CYSHCN and 55.2% of typical children ages 1-17 received health care within a medical home. This percent still needs to improve.
7. **Transition to adult health care for youth with special health care needs**: This priority continues from the previous 5YR Action Plan. 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.
8. **Early screening, diagnosis, and treatment for children with Autism Spectrum Disorders (ASD)**: This priority continues from the previous 5YR Action Plan. Growing evidence points to the importance of early screening, diagnose, and treatment for ASD children. Evidence-based intervention can significantly improve the development and quality of life of ASD children. 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 must continue to improve ASD early identification.
9. **Prevalence of neural tube defects (NTD) at birth**: This priority continues from the previous 5YR Action Plan. NTD prevalence has decreased in PR from 10.4 in 2014 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.

III.D. Financial Narrative

	2018		2019	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	\$15,636,032	\$15,613,262	\$15,613,262	\$15,800,897
State Funds	\$11,727,024	\$11,709,947	\$11,709,947	\$11,850,673
Local Funds	\$0	\$0	\$0	\$0
Other Funds	\$0	\$0	\$0	\$0
Program Funds	\$300,713	\$332,632	\$142,537	\$28,366
SubTotal	\$27,663,769	\$27,655,841	\$27,465,746	\$27,679,936
Other Federal Funds	\$21,418,204	\$16,020,171	\$21,396,109	\$14,042,756
Total	\$49,081,973	\$43,676,012	\$48,861,855	\$41,722,692
	2020		2021	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	\$15,800,897	\$14,922,501	\$15,785,792	
State Funds	\$11,850,673	\$12,410,969	\$11,839,344	
Local Funds	\$0	\$0	\$0	
Other Funds	\$0	\$596,071	\$0	
Program Funds	\$228,880	\$410,692	\$446,415	
SubTotal	\$27,880,450	\$28,340,233	\$28,071,551	
Other Federal Funds	\$17,325,276	\$9,661,573	\$19,336,365	
Total	\$45,205,726	\$38,001,806	\$47,407,916	

	2022	
	Budgeted	Expended
Federal Allocation	\$15,856,806	
State Funds	\$11,892,605	
Local Funds	\$0	
Other Funds	\$395,880	
Program Funds	\$124,000	
SubTotal	\$28,269,291	
Other Federal Funds	\$16,520,136	
Total	\$44,789,427	

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.

The PRHIA received federal and local funds to cover the expenses related to the medical services provided through the GHP to the Medicaid and CHIP eligible population. Up to FY 17-18, Medicaid funds were limited to a cap allocation for which reason the local funds surpass that amount to be able to cover the expenses necessary for the GHP. The local funds expended to provide the benefits of the GHP to WRA, infants and children up to 21 y/o including CSHCN eligible under Medicaid and CHIP criteria were used to cover the required TV matching.

Hurricane Maria destruction and impact to the economy increased the fiscal crisis in the presence of the government bankruptcy. Medicaid funds were increased to a level that covered for the expenses of the GHP and essentially a minimal amount of local funds were used during FY 18-19. In view of that event we change the source for the required TV matching to a local 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.

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 – Remediabile Diseases in the pediatric population (0-21 y/o) during FY 19-20 (\$4,468,682); and woman (22-49 y/o) during FY 18-19 (\$4,248,730) and FY 19-20 (\$3,693,557) for a total of \$12,410,969 (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 FY20 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 91% of the allotted funds for Component A&B

during FY20, a total of \$8,608,184.79 which represents a 55% of the total MCH Block Grant. There were no differences in Form 2 between budget and expenditures columns for the FY20 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 also a Human Consultant firm was contracted to maintain and fill any vacancies. A 48% of the FY20 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 FY20 are as follows:

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

A total of **\$3,911,489** was dedicated to the Component A population for woman and infants less than 1 yr. The amount of **\$4,479,956** 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 **\$4,501,549** 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 **\$4,106,635** 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

Federal Allocation: \$6,314,317.00

The total expenditure of Title V funds for FY 2020 was \$6,314,317.00. The amount breaks down as follows:

1. Direct Services: \$479,671.99. The amount breaks down as follows:

a) Pharmacy: \$70,387.85. Payment of special formulas for children and youth with inborn errors of metabolism ages 6-21 years.

b) Physicians/Charges: \$398,778.48. 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.

c) Durable Medical Equipment: \$10,505.66. Payment of earphones not reimbursed by public or private payers.

2. Enabling services: \$5,042,820.99 Salary and operational support to Regional Pediatric Centers to enable CSHCN access health care, case management, care coordination and referrals.
3. Public Health Services and Systems: \$791,824.02. Needs assessment, program planning, implementation and evaluation, and policy development activities.

Other funds: \$596,070.93

The total expenditure of other funds for FY 2020 was \$596,070.93. The amount breaks down as follows:

1. Enabling services: \$596,070.93. The amount breaks down as follows:
 - a) \$152,000.00 for the operational support of the newborn screening laboratory; and
 - b) \$444,070.93 for the operational support of the Regional Pediatric Centers.

Program Income: \$410,692.22

The total expenditure of Program Income funds for FY 2020 was \$410,692.22 for operational support to Regional Pediatric Centers to enable CSHCN access health care, case management, care coordination and referrals (enabling services).

Other Federal Funds: \$3,262,192.57

The total expenditure of other federal funds for FY 2020 was \$3,262,192.57. The amount breaks down as follows:

1. \$199,630.30, EHDI, for activities directed to reduce the lost to follow up and documentation of infants after the newborn hearing screening; and
2. \$149,797.01, BDSPS, for population-based birth defects surveillance and prevention activities.
3. \$107,484.53 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. \$2,299,246.28, 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. \$506,034.45 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 21 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 \$15,856,806(as assigned for BY 2020-21)

A) \$3,964,202 (25%): for the provision of services to pregnant women, mothers and infants.

B) \$4,757,042 (30%): for the provision of preventive services for children.

C) \$5,549,882 (35%): for the provision of services to CSHCN.

D) \$1,585,680 (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 is in compliance with the maintenance of effort requirements as described in Section 505(a)(4). Until Budget Period 16-18 the MOE was calculated with the local funds expended to provide the GHP in addition of the federal funds. For Budget Period 17-19 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) are presented as the MOE. The local funds (\$12,410,969) 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 covered services provided to 2 infants (\$431,860) and 33 children (1-21y/o) (\$4,036,822) during FY 2019. Also covered services for 73 females (22–49 y/o) during FYs 2018 & 2019 (\$7,742,287). See supporting documents for details.

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. In the event that federal funds cap will be reinstated, local funds have to be approved by the FMOB to cover the GHP expenses. The local funds allocated for the Program for Services against Catastrophic Remediabale Diseases and the portion in the GHP for MCA population can be presented for the MOE.

Several earmarked state funds allocated for special services and programs were also identified. These include \$395,880 for the operational support of the CSHCN Regional Pediatric Centers and \$750,000 for the Autism Program. The CSHCN Program Income estimated for FY2022 is \$124,000. The amount breaks down as follows: a) \$ 111,600.00 (90%) for operational and administrative support to the RPCs and the Autism Center and b) \$12,400.00 (10%) for administrative costs.

As described, the efforts of the Commonwealth of Puerto Rico surpass the matching requirements of Puerto Rico FY's1989 Maintenance of Effort (\$10,226,318). The table below summarize funds provided by the State for programs providing services to the MCA population.

**Programs Addressing Different MCH Needs
Supported with State Funds
2021-2022**

Program/Service	State Allocation
Government Health Plan (GHP) ¹	\$1,562,411,000.00
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 Remediable Diseases	\$8,200,000.00
Rape Crisis Center	\$1,000,000.00
Regional Pediatric Centers ²	\$395,880.00
Autism ²	\$750,000.00
Pediatric Hospital, Equipment and Cancer Treatment	\$3,560,000.00
In-Kind-Administration- Space in Facilities and Utilities	\$200,000.00
TOTAL	\$1,579,366,880.00

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

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:

FY22 budget for Components A&B is \$9,514,084, a 60% of the total MCH Block Grant budget. An estimated 55% (9,061,032) was assigned for services provision in both components and 5% (\$792,840) for administration of the funds.

Budget for Individual served for the Components A&B in FY22 are as follows:

A total of \$ 3,964,202 (25%) assigned for the Component A: woman and infants less than 1 yr. The amount of \$4,757,042 (30%) directed to the Component B for children 1 to 21 years.

Under Components A & B no Direct Services are provided. For FY22 the amount of \$4,302,371 was assigned to provide the enabling services and \$5,211,713 for level of Public Health Services and Systems. Other earmarked FY20 federal funds were reported in Form 2.

Children with Special Health Care Needs (CSHCN)

Federal Allocation: \$6,342,722.00 (40.0% of the total federal allocation)

Of the Title V Federal Allocation for FY 2022, the amount earmarked for CSHCN is \$5,549,882.00 (35.0%). In addition, an allocation of \$792,840.00 (5%) is earmarked for CSHCN Title V administrative costs (fiscal and administrative support for management of the CSHCN Title V allocation).

The \$5,549,882.00 breaks down as follows:

1) \$421,601.10 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) \$4,432,318.09 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) \$695,962.82 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: \$395,880.35

The amount of nonfederal state funds budgeted for FY 2022 to support services for CSHCN is \$395,880.35 for the operational support of the Regional Pediatric Centers (salaries).

Program Income: \$124,000.00

The estimated amount of program income funds for FY2022 is \$124,000.00. The amount breaks down as follows: a) \$ 111,600.00 (90%) for operational and administrative support to the RPCs and the Autism Centers and b) \$12,400.00 (10%) for administrative costs.

Other Federal Funds: \$10,322,795.98

The amount of other federal state funds budgeted for FY 2022 is \$10,322,795.98. 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) \$160,000.00, 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).

3) \$1,787,150.18, Zika MCH 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.

4) \$8,140,645.80, 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.

CSHCN Budget Grand Total: \$17,185,398.33

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 use 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 and with the adequate care of the baby will result in a healthier adult. 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 CHMs, HEs and PNs to channel the population to services needed, provide 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 achievement of our team and will provide the tools to help identify preventable causes of death that will serve to prioritize the strategies chosen toward promoting healthier WRA. The regulation that is required by law for the implementation of the Maternal Mortality Review Law was drafted. 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 to improve IM&M. The PFPCG, under the lead of MCAH staff promotes changes in regulations and practices and increased support for BF women in the community and in the hospitals.

PRPRAMS was awarded in May 2016, starting the first survey in July 2017. Due to Zika Virus, ZPER 101 started in August 2016 and ZPER 102 in October 2017. Both surveys asked questions regarding mosquitoes' bites protection and Zika virus infection prevention, however ZPER 102 also included fathers and provided an educational intervention. Also, a Zika Supplement was part of PRPRAMS during July 2017 to April 2018. Due to the impact of Hurricanes Irma and María, a Disaster Supplement was added to PRPRAMS during June 2018 to January 2019 in order to identify concerns or needs that affected pregnant women during and after the hurricanes. During April 2019 to December 2019 an Opioid Supplement was also added to PRPRAMS in order to identify exposure to opioids during pregnancy. Now, due to the pandemic situation with COVID-19, PRPRAMS will add a supplement in October 2020 regarding prenatal and postpartum care services during the pandemic and how they were affected. PRPRAMS data has helped develop strategies aimed at educating families and providing services according to the needs reflected in the surveys.

The MCAHD has multiple partners that actively collaborate in the achievements 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; 330 Community Health Centers; PRHIA; WIC;LLL; Department of Family Welfare; and the Department of Education. Our staff has a leading role facilitating the accomplishments of the FIMR, MMR, Early Childhood Alliance, and BFPCG; 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 sharing the needs of the population and supporting policy changes in the system so as foster improved 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 the resources available.

The PR-CSHCN Title V Program provides a foundation for community-based, family centered services to improve PR systems of care for children and youth with special health care needs and their families by increasing access to health care services through enabling and direct services, developing and leveraging key partnerships and collaborations, and planning and implementing program components that reach the CSHCN population and their families in collaboration with community-level partners. The program oversees surveillance, data collection, evaluation and assessment activities that inform the CSMN Division programs and public policy decisions. It also plays a critical role in emergency planning and preparedness efforts to assess capacity for response to emerging public health threats and disasters (examples: hurricanes, earthquakes, Zika and COVID-19), that could potentially impact CSHCN and their families.

PR-CSHCN Title V Infrastructure: Public Health Services and Systems Level

Programs and projects at the CSMN Division central level include: the 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); the Autism Registry; the Zika MCH Services Program; and the CMS Zika Health Care Services Program. At this level, the CSMN Division staff supports program management, data analysis, evaluation and quality improvement, policy development, key partnerships and collaborations development for health-care services, surveillance systems and special registries activities.

PR-CSHCN Title V Infrastructure: Enabling and Direct Services

At the community level, the CSHCN Program, the Zika MCH Services Program and the CMS Zika Health Care Services provide enabling and direct services through seven (7) Regional Pediatric Centers (RPCs) and two (2) Autism Centers. These programs offer workforce and operational support to pediatric clinics that enable 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 centers also provide pediatrics subspecialty services such as audiology, orthodontics, ophthalmology, neurosurgery, and orthopedics.

Leadership and Collaborations

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. This latter role has been critical in the past 5 years due to the Zika Outbreak in 2016, hurricanes Irma and Maria in 2017, and COVID-19 in 2020.

The PR-PKU Association and the PR-HDDDTP 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 studies and surveys. APNI collaborates through health and services promotion, research, and support to studies and through the enhancement of family engagement. The PR Family to Family Health Information Center provides information to NICU families that promotes the CSHCN. The PR-Neonatal Screening Laboratory and the PR-HDDDTP work together to coordinate services for infants with positive newborn screening test results. Through its Child Care Program, 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.

In early 2016, the PR-CSHCN Program and PR-SET-NET led the development and implementation of an electronic tracking system for the longitudinal surveillance of infants and children, up to five years of age, born to mothers with

laboratory evidence of Zika virus infection during pregnancy. The PR-SET-NET currently monitors the long-term outcomes of 1,990 children receiving services at the CSHCN Program's RPCs. As a result of this long-term follow up, a high rate of Autism Spectrum Disorder (ASD) has been identified in this cohort of children. In collaboration with the CDC, we will investigate if this is the result of the close developmental surveillance of these children, or if Zika virus infection (ZVI) represent a possible risk factor for ASD.

In late 2017, following hurricanes Irma and María, the PR-CSHCN Program in collaboration with pediatric home care services providers and other key community organizations, established the TDCY Registry. This database is continuously updated so that families can be reached, before and after an emergency or a disaster, to update their location and needs (shelter, meds, equipment, supplies) so as to provide orientation and support to satisfy their needs, and to allow for coordination with local and municipal agencies and services.

The TDCY Registry can fit into the medical home "neighborhood" concept established by the NCQA Patient-Centered Connected Care. Care coordination in the home setting may mean organizing home nursing/therapy services and/or respite care and adapting the home environment to safely support special technology such as a ventilator or motorized wheelchair.

In early 2020, the PR-CSHCN Program and the PR-SET-NET led in the development and implementation of a data management system to report COVID-19 cases using the Council of State and Territorial Epidemiologist (CSTE) case classification. Specifically, a database management system was created to identify and de-duplicate individuals with multiple positive test results. The team's work steered towards further data cleaning and analysis, thereby increasing the accuracy of reported COVID-19 cases. This effort allowed the PR-DOH to have timely, reliable, and complete data of COVID-19 cases critical for decision-making, and planning and implementing containment and mitigation measures by the Puerto Rico government leaders. It also allows the PR-CSHCN Program and the PR-SET-NET to identify COVID-19 affected pregnancies and monitor the mother- child dyad outcomes.

From March 2020 through December 2021, the PR-CSHCN Program, in collaboration with the PR-DOH Office of Epidemiology and Research (OEI), and the Puerto Rico Demographic Registry (PR-DR), led the review of COVID-19 associated deaths to characterize them as confirmed, probable or suspect using the Council CSTE classification guidelines. In January 2021, the OEI assumed the leadership of this activity in collaboration with PR-DR and the CSHCN Program. This collaboration allows the PR-CSHCN program to monitor COVID-19 associated deaths in children and youth, to learn if the COVID-19 delta variant poses a greater risk to young children than other variants of the coronavirus. CYSHCN may be at increased risk for more severe illness and complications. It is not yet clear whether the Delta variant causes more severe disease in children, but its high level of infectiousness is causing a surge of pediatric COVID-19 cases.

Since May 2021, the PR-CSHCN Program is providing leadership and support to the OEI, to improve the PR-DOH COVID-19 Surveillance System in Educational Institutions. The program developed the guidance for safe commencement ceremonies and graduation activities. In collaboration with the Puerto Rico Sports and Recreation Department (SRD), the PR-CSHCN Program developed the guidelines for safe operation of summer camps, which included special considerations for CSHCN; and participated in an orientation activity for summer camps operators. In partnership with the PR Department of Education (PRDE), the PR-CSHCN Program updated the operational guidelines for the safe operation and certifications of summer schools, including services for CSHCN; and also, in partnership with the PR-DE and the Private Education Association (PEA), updated the guidance on COVID-19 prevention in kindergarten (K)-12 schools for the 2021-2022 school year. Additionally, the CSHCN Program updated the guidance for operating early care and education/childcare programs. The CSHCN Program will continue its partnership with the PR-DE, the PEA and the Catholic Schools Superintendencies to ensure access to safe in-person participation/learning in early care and education/childcare programs, and K-12 schools for all children and youth, including CYSHCN.

There are two primary venues that serve as a “home” for coordination of service provision for CSHCN and their families—the “medical home” and the “educational home.” Because children spend a substantial amount of time in school and childcare settings, the linkages between health care and educational and child care systems are especially important for many children and youth with special health care needs. In-person education is the preferred goal for all children. However, high COVID-19 rates may disrupt in-person school and impact learning for some CYSHCN, particularly those at increased risk for severe COVID-19. The CSHCN Program will work with schools to increase their understanding of and enhance safety protocols to promote in-person learning that accommodate all CYSHCN.

Strategic Approach to Address the Identified MCH Priorities

The PR-CSHCN Program relies on the Five-Year HNA and its annual updates to identify its MCH priorities. The program priorities for the current five year-cycle 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 of Neural Tubes Defects.

To address these priorities, the program updated its State Action Plan (SAP) with improved ESMs strategies based on evidence-practices, and stronger measurements for the ESMs. The MCH Evidence Center Results-Based Accountability (RBA) framework was used to improve the qualities of the ESMs.

The CSHCN Program’s QIC will continue working with the RPCs’ and the Autism Centers’ staff to ensure the quality of services, increase family engagement and support, and maintain centers’ activities within the scope of the program priorities. The AMCHP’s National Consensus Standards for Systems of Care for CSHCN is being used to guide the quality improvement work plan (QIWP) related to care coordination.

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. Our team provides services from Central Level and 7 Regional Offices (ROs). As of July 31, 2021, workforce consists of 147 regular/transitory employees and 16 professional services contracts. Total of 113 (FTE) regular/transitory employees are located at the RO's, including 73 Home Visiting Nurses (HVNs), 25 Community Health Workers (CHWs), 8 Perinatal Nurses, 7 Adolescents Coordinators (SWs) and 6 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. At Central Level the team is composed by 9 regular (8.96 FTE) positions including the PR MCH Block Director, MD, MPH, an OB-Gyn with more than 30 years of experience. 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. The 14 (12.82 FTE) Professional Services Contracts are at Central Level, all of them skilled public health professionals and highly experienced in MCAH population. An Evaluation and Data Analysis Section is composed of: One Biostatistician, MPH; Two Epidemiologists (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, FAAP 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.

Previous year's intense work has continued to fill key vacant positions. As to date we have in place HVNs in 71 of 78 municipalities including the two small island municipalities of Vieques and Culebra; the other 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 positions for RD in Bayamón, Arecibo, Caguas and Ponce; 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

HVNs are offered 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. Beginning in March 2020, all training sessions have been done via Zoom or Microsoft Teams. The following table includes the topics covered during the reporting year.

Date	Topic	Audience
September 2019	Training on revised HVP participant forms and Documentation Manual	HVN (by region) Regional Supervisors
September 2019	Training: HVP basics, mental health and wellbeing, motivational interview techniques for new HVP staff	HVN – new hires only
March 2019 - June 2020	Beginning in March, information on COVID-19 has been shared with central level and regional staff using various channels of communication, including printed materials, brochures, webinars and other electronic means.	
January 2020	Psychological First Aid (SAMHSA Mental Health Awareness Training [MHAT] sponsored by United Way of PR)	HVN Regional Supervisors HVP Coordinator Mental Health Consultant
March 2020	Communicable Respiratory Infections: COVID-19 (Train-the-trainer workshop offered by the DOH Office of Public Health Preparedness and Response)	Regional Supervisors HVP Coordinator & Evaluator
March 2020	COVID-19: Prevention for day care centers, Early Head Start and Head Start	HVN Regional Supervisors
April 2020	Protocol for follow up of HVP participants during the COVID-19 lockdown period	HVN Regional Supervisors Regional Directors
April 2020	Leadership in the face of COVID-19: Strategies for effective management of health organizations	Regional Supervisors Regional Directors
April 2020	Pregnancy and Intimate Partner Violence during the COVID-19 Pandemic	HVN Regional Supervisors
April 2020	Pregnancy and COVID-19	HVN Regional Supervisors
April 2020	How to help a victim of domestic violence during the quarantine.	HVN Regional Supervisors
April 2020	Domestic violence, sexual aggression and gender violence in pregnancy	HVN Regional Supervisors

Date	Topic	Audience
April 2020	Prevention and attention to child abuse in times of COVID-19	HVN Regional Supervisors
April 2020	Recommendations for the care of infants and children during the pandemic	HVN Regional Supervisors
May 2020	Use of face coverings for persons with functional diversity	HVN Regional Supervisors
May 2020	Stress and Mental Health among Pregnant and Parenting Mothers during COVID-19	HVN Regional Supervisors
May 2020	How to increase productivity while working remotely	HVN Regional Supervisors
May 2020	The impact of COVID-19 on pregnant women in Puerto Rico	HVN Regional Supervisors
May 2020	Know the difference between the molecular and serologic tests	HVN Regional Supervisors
May 2020	Gender violence in times of social isolation	HVN Regional Supervisors
May 2020	Children's grief and loss during the COVID-19 crisis	HVN Regional Supervisors
June 2020	Strategies for explaining the new social expectations related to COVID-19 to persons with functional diversity	HVN Regional Supervisors
June 2020	How to deal with the COVID-19 lock-in (strategies for maintaining physical and mental health in the home)	HVN CHW Regional Supervisors Regional Directors
June 2020	Emotions and Self-care During COVID-19	HVN
June 2020	Emotions and Self-care During COVID-19 for Supervisors	Regional Supervisors
June 2020	Getting ready to return to in-person work	All MCAHD staff; separate sessions for central level and each health region
August 2020	Administration of the Edinburgh Postnatal Depression Scale via telephone during the COVID-19 pandemic	HVN & Regional Supervisors

As previously discussed, the regional HVP supervisors and MCAHD 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.

The Central level and regional level staff involve with the adolescent population received multiple trainings during the reporting period. Example are as follow:

Date	Title	Offered by:	Train around: digital technology, ethics, PJS topic, adolescent health topic, etc.
July 2019	Impact of community resilience on society	Ethics	Health topic
August 2019	Sexual Harassment Training in the workplace	Ethics	Health topic
August 2019	Strategies for the Management of Mental Health Situations in Families	Ethics	Ethics
September 2019	The social worker and behaviors	Catholic University	Health topic
October 2019	Resilience: in times of crisis and challenge	<i>IMPR, Hatillo</i>	Health topic
November 2019	Domestic Violence Prevention	Rape Crisis Center (CAVV)	Health topic
November 2019	Suicide Prevention	Health Department	Health topic
November 2019	Addictions and the brain	UPR, Medicine Campus	Health topic
December 2019	Workshop on self-care and psycho-corporal medicine	SISA	Health topic
January 2020	Psychological First Aid	SISA	Health topic
January 2020	Prevention of Sexual Arrestment in Disasters	SISA	Health topic
February 2020	COVID- 19	Health Department	Health topic
February 2020	COVID- 19	Health Department	Health topic
February 2020	Forence interview	Catholic University	Health topic

Date	Title	Offered by:	Train around: digital technology, ethics, PJS topic, adolescent health topic, etc.
February 2020	LGBTT population: Do not discriminate in the workplace	Coordinator of Peace for Women	Health topic
February 2020	Audiovisual First Aid Psychological Workshop	SISA	Health topic
March 2020	Codependent Relationships: Love or Toxicity?	Catholic University	Health topic
April 2020	Respiratory diseases	UPR, Medicine Campus	Health topic
April 2020	Reading: Strengthen your values	Ethics	Ethics
April 2020	Gender violence in times of COVID-19	Coordinator of Peace for Women	Health topic
April 2020	Psychological First Aid and Crisis Intervention Strategies	United Way of PR	Health topic
April 2020	Masculinities and sexual violence	Coordinator of Peace for Women	Health topic
April 2020	Trauma: Disclosure of Sexual Violence and social and psychological reaction	Coordinator of Peace for Women	Health topic
April 2020	Prevention and care of child abuse in times of COVID-19	Coordinator of Peace for Women	Health topic
April 2020	Intervention protocol with victims of Sexual Assault for health facilities	Coordinator of Peace for Women	Health topic
April 2020	The Importance of Healing: Alternatives for Intervention of the Complex Trauma of Child Sexual Abuse.	Coordinator of Peace for Women	Health topic
April 2020	The adolescent brain: insights from neuroscience an implication for policy.	Behavioral Neuroscience Professor	Health topic

Date	Title	Offered by:	Train around: digital technology, ethics, PJS topic, adolescent health topic, etc.
April 2020	Human Traffic and people with disabilities.	Coordinator of Peace for Women	Health topic
April 2020	The Importance of Healing: Alternatives for Intervention of the Complex Trauma of Child Sexual Abuse.	Coordinator of Peace for Women	Health topic
April 2020	Management of stress related to social-isolation and quarantine.	Coordinator of Peace for Women	Health topic
April 2020	Positive management of emotions in children	Coordinator of Peace for Women	Health topic
April 2020	Human trafficking	Coordinator of Peace for Women	Health topic
May 2020	The best selfie, my self esteem	Coordinator of Peace for Women	Health topic
May 2020	Planning for mental health in emergencies and disasters, with an emphasis on the workforce.	Ethics	Health topic
May 2020	Introduction to technology	Health Department	Health topic
May 2020	Prevention and education with cases of DV / IPV in diverse sex communities	Coordinator of Peace for Women	Health topic
May 2020	Cyber sexual harassment and childhood	Coordinator of Peace for Women	Health topic
May 2020	When abuse knocks on our door, how to help me and help others in quarantine.	Coordinator of Peace for Women	Health topic
May 2020	Loss of family due to COVID-19	Coordinator of Peace for Women	Health topic
May 2020	Be careful... Social networks and my participants	Coordinator of Peace for Women	Health topic

Date	Title	Offered by:	Train around: digital technology, ethics, PJS topic, adolescent health topic, etc.
May 2020	Resilience: finding your own strengths	Coordinator of Peace for Women	Health topic
May 2020	Racism, sensitivity, and violence	Coordinator of Peace for Women	Health topic
May 2020	Parents or guardians of LGBTQI people, what should I do to take care of and protect them?	Coordinator of Peace for Women	Health topic
May 2020	Love with meaning let's talk about consent in the context of the pandemic Part I	Coordinator of Peace for Women	Health topic
May 2020	Love with meaning let's talk about consent in the context of the pandemic Part II	Coordinator of Peace for Women	Health topic
May 2020	Grief and loss in children and adolescents before the COVID crisis	Coordinator of Peace for Women	Health topic
May 2020	Gender perspective and the inclusive language debate	Coordinator of Peace for Women	Health topic
May 2020	Secondary victims of gender violence	Coordinator of Peace for Women	Health topic
June 2020	Racism, sensitivity, and sexual violence	Coordinator of Peace for Women	Health topic
June 2020	Education Training for TEAMS Program	Education Department of PR	Health topic
June 2020	Return to work and emotions during COVID - 19	SISA	Health topic
June 2020	Controlling the Hulk: Managing Emotions	Familias CAPACES	Health topic
June 2020	Music as a tool to reduce anxiety	Centro para PR	Health topic

Date	Title	Offered by:	Train around: digital technology, ethics, PJS topic, adolescent health topic, etc.
June 2020	Training for TEAMS Program	Health Department	Health topic
June 2020	Biosafety Protocol	Health Department	Health topic
June 2020	Online presentations, techniques you should know	PR University	Technology

During 2019-2020 our **Health Educators** were trained on the following topics:

1. Leadership facing the uncertainty of COVID-19: Strategies to effectively manage health organizations.
2. "Infodemia": Discriminating between valid information and misinformation in the media and social networks.
3. How to be more productive working remotely? Best teleworking practices in times of pandemic.
4. Stigmas and discrimination associated with COVID-19
5. Managing stress associated with isolation
6. Emotion Management: How to deal with stress, fear, and anxiety during worldwide emergencies?
7. Strengthening Community Health Worker Programs
8. How to manage teams virtually?
9. How to deal with the confinement during COVID-19?

Workforce development is an ongoing process at the CSMND. Actions fluctuate from workforce needs assessments and qualified personnel recruitment to workforce capacity development. Activities for capacity development may vary as Program's goals, emergent issues, and working environment evolve over time.

Title V CSHCN Workforce Capacity Summary

The PR-CSHCN Program workforce encompasses the three levels of the MCH pyramid: 1) public health services and systems, 2) enabling services and 3) direct services. The public health services and systems level workforce includes: one (1) family representative, two (2) health policy consultants, two (2) public health managers, one (1) epidemiologist, two (2) biostatisticians, one (1) medical records abstractor, two (2) data managers and one (1) program evaluator. A public health educator position is vacant. Other public health professionals at this level, funded by the CDC and HRSA, include: two (2) epidemiologists, and one (1) biostatistician. The workforce also includes a five (5) members of the EHR team, one (1) tele-health coordinator and one (1) program evaluator funded by the Zika MCH Services Program through November 30, 2021. The CDC direct assistance PR-SET-NET workforce includes: two (2) epidemiologists, one (1) biostatistician, one (1) medical records abstraction lead, four (4) medical records abstractors, two (2) medical records abstraction schedulers and one (1) data entry.

The PR-CSHCN Program enabling services workforce at the central level includes two (2) care coordinators, one (1) social worker and one (1) family representative. Additional staff, funded by HRSA and CMS, includes: three (3) care coordinators, two (2) care coordination leads and two (2) program managers.

The CSHCN Program enabling services workforce at the community level is distributed within the seven (7) RPCs and two (2) Autism Centers. Staff is mostly comprised of health care professionals, social workers and care coordinators. The Title V workforce includes 79.4 FTEs. The table below specifies the number of FTEs per center, which varies depending on the number of children served and the availability of the health care professionals.

Number of FTEs by Pediatric Centers	
<i>Pediatric Center</i>	<i>FTEs</i>
Arecibo	10
Bayamón	7.8
Caguas	6
Fajardo	3
Mayagüez	6
Metro	23
Ponce	12.8
PR Autism Center (San Juan Metro Area)	6.5
Ponce Autism Center	4.3
Total	79.4

**Note: This workforce analysis is focused on public health staff and does not include administrative staff.*

In addition, the CSHCH program pays for the following direct services on a fee for service basis: audiology, neurosurgery, plastic surgery, orthodontics and pediatric orthopedic surgery. Through an agreement with the UPR Medical Science Campus, ophthalmology services are provided at the Metropolitan RPC.

Funding of the CMS Zika Health Care Services Program workforce that provides services at the RPCs will end in January 2022. A RPCs workforce needs assessment is in process to determine the staff to be funded by the CSHCN to ensure continuation of services. This staff includes: FESAs, care coordinators, pediatricians, speech and language pathologists, physical and occupational therapists and psychologists.

Workforce development

Workforce development is an ongoing activity at the CSMND. The HNA update (2021) identified the need to develop the workforce skills to work and provide remote services and use of the EHR. These include teleworking, telehealth and telemedicine. Health professionals reported unique skill development needs. For example, health care providers identified the following needs: providing effective virtual physical and occupational therapy interventions, carrying out virtual evaluations and screenings, making families feel safe with telemedicine, working with children and youth with complex conditions, administering psychological evaluations and interventions, and being informed of the regulations of telehealth practice per discipline. Social workers identified the following: documenting telehealth services in the medical record; providing transition services for YSHCN and managing stress in parents. High and middle management identified the need for remote service monitoring/supervision strategies, telehealth/telemedicine services billing, insurance coverage, encrypting documents, protecting health information, handling documents in digital form, and creating a remote workspace. Staff at the central level identified the need to use applications such as Sharepoint and Google Docs. In response to these needs, a general telehealth workshop is being developed. Virtual workshops on HIPPA and other EHR related topics are being provided. Staff feedback continues to be collected for the identification of barriers and quality improvement strategies.

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

Family engagement (parents, extended family, and youth) is vital to ensure health care services and program interventions that are responsive to their needs. Since 2010, the CSHCN/MCAH programs have been taking steps for family engagement at various levels (e.g. needs assessment, staff workforce, education/training, committees, public input).

Family engagement in the 2020 HNA was crucial in each phase as they gave input into survey and interview guides; shared their knowledge, experiences, and concerns; and actively participated in the HNA Advisory Committee that ranked potential needs, recommended strategies and gave input into the PR State Action Plan 2020-2025.

The MCAHP is a member of the Policy Council of the Administration for the Integral Development of Children (ACUDEN, Spanish acronym) of the Family Department, made up of education, social and health providers and parents representing each of the Healthy Start and Early Head Start programs of ACUDEN. The Council adopted the use of the infant at high risk for caries screening tool and oral health after receiving training by the MACHP pediatric consultant. They also have participated in Title V public input activities and health dialogues.

The Youth Advisory Council (YAC) met through digital platforms during the pandemic crisis (2020). It created videos related to COVID-19 pandemic: How to wash hands:

<https://www.facebook.com/121163774972290/videos/580976712528141>);

COVID-19 and Stress Management:

<https://www.instagram.com/p/CLhh-qvHG0F/>);

Managing Free Time During the Pandemic (2 videos):

https://www.instagram.com/p/B_oDHpgH0CG/; https://www.instagram.com/p/B_5amEIIz4a/);

Giving Thanks about Everything Good

<https://www.instagram.com/p/CIEK1c6nmFt/>).

The YAC members have also given input into the following: mass media campaign Maximum Level targeted at youth; public input in general; adolescent domain; and health needs assessment survey questionnaire. The YAC had representation in the HNA Advisory Committee.

The MCAHP developed a plan to engage families into its Regional Boards (RBs) composed of representatives from government and non-government entities that provide input into the state action plan and implement its strategies to achieve Title V goals in each health region. The plan calls for incorporating two family representatives into each Regional Board that will receive a stipend to cover expenses. A *Family Representative Orientation Guide* was developed to train families prior to their incorporation into the RB. The orientation session includes three main topics: what is Title V and its domains; what is family inclusion; and participation in the Regional Board (what is a regional board and governance processes, motivation to participate, strengths they bring, and expectations). The engagement process of family representatives was halted due to the COVID-19 pandemic and lockdown.

Between March and April 2021, 40 women of reproductive age – from the seven DOH health regions - participated in the evaluation (content, form, usability) of the Women of Reproductive Age Preventive Care Pocket Guide. The WRA Preventive Care Pocket Guide is an important tool developed by the MCAHP as one of the strategies in the Action Plan to promote health and wellbeing in women of reproductive age.

Families contribute invaluable insight and experience to the PR-CSHCN Program. Input from CSHCN families is regularly collected through focus groups, medical home surveys, including transition to adult health care, interviews and other types of strategies. Results are considered during strategic and program planning, and for workforce development. Families' recommendations and inputs are considered for quality improvement initiatives and action plan updates.

Since 2008, the Family Representative participation and leadership at the program has increased and has been key for decision-making. Her feedback as a mother of a CSHCN is routinely considered in all CSMND's programs and initiatives. She participates in the annual Title V Block Grant Application/Annual Report; provides feedback in the revision of new policies, education materials, brochures, literature, and reports; and also participates in outreach work and training for professionals and families. She is an active member of the CSHCN Program QIC and contributes to workforce capacity development by sharing her experience as a CSHCN mother. She has also been a coach and a mentor to our eleven (11) FESAs, who have grown to be empowered family leaders.

The FESAs, hired during the 2016 Zika outbreak to offer family to family support, have positioned themselves at the RPCs as key supportive staff not only for families but for professional personnel as well. FESAs are either mothers of CSHCN, or who had pregnancies with possible Zika virus infection during pregnancy. Because of their personal experience FESAs can relate to the individual family needs and help them to access needed services, while offering their support. During the COVID-19 pandemic lockdown FESAs offered family to family support through telework (telephone calls, SMSs, WhatsApp).

The PR CSHCN Program has maintained a collaborative relationship with APNI for many years. APNI staff is mostly made up of CSHCN parents. Collaboration with APNI during the pandemic lockdown was key to help CSHCN families manage home confinement. During this difficult period, our family representative participated in virtual support meetings for families in collaboration with APNI.

The PR Family-to-Family (F2F) Information Center was inaugurated in June 2019. Initial collaborations between F2F, the CSHCN family representative and the PR-UNSHP were put in hold due to the pandemic lockdown. Currently, the F2F Center inaugurated its webpage, which includes empowerment strategies, peer support, a training program, and an information center where the CSMND's programs are promoted. The center has also an initiative for tele-health access for CSHCN, which opens an opportunity for a new collaboration.

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). The following table, shows a brief description of this epidemiology workforce:

MCHA Program Epidemiology Workforce Description				
Position/Title	Education/Training	Program	FTE's	Funds
SSDI/ MEU Coordinator	MS, Epidemiology	SSDI	0.75	SSDI
		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
		PRAMS	In kind	
Cultural anthropologist	PHD, Anthropology	Title V	0.86	Title V
Pediatric Consultant	MD, FAAP Pediatrician	Title V	1	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
Project Coordinator	MPH, Epidemiology	PRAMS	0.93	PRAMS
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

During the threat of the COVID-19 pandemic and the subsequent lockdown, the MCH Epidemiology Staff adjusted their activities to work remotely, maintaining their commitment to continue working amid the new challenges that changed the daily routine. Virtual meetings, gathering the data needed for Title V indicators using different electronic methods (from governmental agencies and private health insurance companies) and getting input from stakeholders through virtual platforms, were part of the adaptations that were adopted to continuing the work. Some other activities were postponed until the Title V –in person work were resumed.

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)

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

The CSHCN Program, the PR-BDSPS, the PR-UNHSP and the PR- SET-NET have staff that manages and analyzes MCH data. The table below describes the designated roles/responsibilities, levels of education and training, funding structure and FTEs.

MCH Epidemiology Workforce Description				
Position/Title	Education/Training	Program	Funding	FTE's
Evaluation Specialist	Dr. PH Health System Analysis and Management	CSHCN Program	Title V	1
Data Manager	MPH Biostatistics/ Master Health Services Administration	CSHCN Program	Title V	0.5
Epidemiologist/ Program Coordinator	MS Epidemiology	PR-BDSPS	Title V	1
Data Manager	MS Biostatistics	PR-BDSPS	Title V	1
Program Evaluator	MS Health Systems Research and Evaluation	PR-ZMCHSP	HRSA	1
Surveillance Lead/Program Coordinator	MPH Epidemiology	EHDI-IS	CDC	1
Data Manager	MS Epidemiology	EHDI-IS	CDC	1
Information System Evaluator	MS Demography / Biostatistics	EHDI-IS	CDC	1
Epidemiologist/ Surveillance Coordinator	MPH Epidemiology	PR SET-NET	CDC	1
Data Quality Team Lead	MS Epidemiology	PR SET-NET	CDC	1
Data Manager	MPH Biostatistics	PR SET-NET	CDC	1

The 2016 Zika outbreak prompted organizational changes to increase the CSMND's surveillance capacity. In early 2016, the Zika Active Pregnancy Surveillance System (ZAPSS) was established to identify and monitor pregnant women with evidence of possible Zika infection and the long-term outcomes of their offspring. In August 2016, the Zika Birth Defects Surveillance program was implemented to complement ZAPSS and the PR-BDSPS by monitoring cases born with birth defects that might be associated with Zika virus infection, regardless of their laboratory tests results. In August 2019, ZAPSS was re-designed in order to monitor and respond to any other emerging threats, especially those related to infectious pathogens, which may affect pregnant women and their offspring. Its name was changed to Surveillance for Emerging Threats to Mothers and Babies Network (PR-SET-NET).

The first case of COVID-19 in PR was reported in March 2020. The PR SET-NET team was assigned to develop and implement a database management system and protocols to identify and de-duplicate individuals with multiple positive COVID-19 test results. Since March 2020, SET-NET is monitoring pregnancy outcomes among women with positive COVID-19 tests.

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

The Puerto Rico State Systems Development Initiative (PRSSDI) is housed in the MCAH Division (MCAHD). The aim of PRSSDI is to develop, enhance, and expand MCAH data capacity in a timely manner to allow for informed decision making and resource allocation that supports effective, efficient, and quality programming for women, infants, children, adolescents, and children and youth with special health care needs.

PRSSDI assists in improving the MCAH data capacity within the five-year Health Needs Assessment (HNA) and ongoing interim HNAs; supports data needs for the annual Title V MCH Block Grant Application/Annual Report; and develops and tracks data for the NOMs, NPMs, SPMs, and ESMs. PRSSDI also advances the development and utilization of linked information systems between key MCH datasets.

2021 Health Needs Assessment

This reporting year, PRSSDI carried out activities for the ongoing (interim) 2021 Health Needs Assessment (2021 HNA). The PRSSDI Coordinator – an Epidemiologist who also serves as the Coordinator of the Monitoring and Evaluation Unit (MEU) – played a key role in conceptualizing and organizing the quantitative methods for the HNAs. PRSSDI established the HNA workgroup composed by the Evaluator, Epidemiologists, Biostatistician and the Cultural Anthropologist that also compose the MEU. The Comprehensive Adolescent Program Director, Pediatric Consultant, OB/Gyn Consultant, MCAH Director and other key staff from MCAH program also participated as the Steering Committee. Leading the efforts of the HNA gives to the PRSSDI the advantage to support directly each step of the HNA process.

Due to the COVID-19 pandemic, the 2021 HNA was focused on the impact that the pandemic had on PR Title V capacity and programs through qualitative data gathering with the programs and/or projects staff from the Central and Regional levels. These included the Title V Home Visiting Program, Youth Health Promoters Project, Pediatric Consultant, and the Health Promotion and Education component. The PRSSDI Coordinator oversaw managing the platform as well as providing technical assistance to the staff that was invited to be part of the dialogues. The Cultural Anthropologist was the lead in the dialogues, as well as in their transcription and analysis.

MCAH data collection and analysis

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 Federally Available Data (FAD). Therefore, PRSSDI requests data to several governmental agencies, mostly within the PR Health Department, 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.

PRSSDI also leads the development of questions to have the necessary data for NPMs with no FAD, as well as ESMs for the next five years. These questions will be part of an MCAH Module that is included in the PR Behavioral Risk Factor Surveillance System (PRBRFSS). In addition, phase 8 of PRAMS was also reviewed to ensure that data needed for Title V for the following years is included in phase 9.

The Maternal and Child Health Jurisdictional Survey (MCH-JS) was developed as a data collection system that would ensure FAD data for all jurisdictions. MCH-JS is a face to face interview that collects data for selected maternal, child (including children with special health care needs) and adolescent health issues. It is composed of core questions and a jurisdiction-specific module. This survey is based on the National Survey of Children's Health and was performed by NORC at the University of Chicago. PRSSDI reviewed with MCAH Key Staff the MCH-JS retest Core Questionnaire (English and Spanish versions) and provided NORC with questions for the jurisdiction-specific module for PR according to NOMs, NPMs and SPMs in the MCAH and CSHCN programs State Action Plan.

PRSSDI also leads in the ESMs development and its data collection. PRSSDI reviews annually the ESMs along with

two Title V Evaluators to ensure ESM data quality. This year the PRSSDI Coordinator and the two Title V Evaluators reviewed the newly developed ESMs for 2020-2025 considering the “PR ESM Reviews” from the MCH Evidence Center provided by MCH Evidence.

To ensure data quality provided by PRHIA and PRHICO, PRSSDI carried out several activities. PRSSDI met with PRHIA to discuss the requested data and its purpose. This meeting allowed PRHIA to better understand the data requested and provided PRSSDI input in how to request data in a more effective way. In addition, PRSSDI created a data entry form to minimize the possibility of duplication and ensure data quality. This form was shared with PRHIA and PRHICO. Due to the pandemic situation, the flow of communication with PRHICO has been somewhat interrupted and approval of the Health Insurance Commissioner to disseminate the data request with the health insurances was delayed. Because of this, PRSSDI communicated directly with the main health insurances of PR to directly request data to them. All the insurances had a positive reaction to the request. Therefore, the data entry form was shared with all to ensure data quality and decrease duplicity.

To ensure Title V Public Input, PRSSDI translated the Title V MCH Block Grant Program State Snapshot for FY 2021 Application/ FY 2019 Annual Report in Spanish. Added to this snapshot, the PRSSDI included the reviewed 2020-2025 Action Plan and a summary of the 2021 HNA findings. The snapshot and evaluation form were sent by email to MCAHD stakeholders along with an Evaluation Form for public input that was uploaded in Google Form format. For more details please refer to section III.F. Public Input of this report.

Data Linkages

PRSSDI requests databases from different programs (birth data, infant mortality, Medicaid eligible, WIC) for data linkages purposes.

Only the deterministic record linkage between 2020 live births and Medicaid eligible participants was performed. With this algorithm about 87.8% of the cases matched. An evaluation of the matching file was performed, and all cases were true linkage.

A deterministic record linkage between 2020 live births and WIC was performed. With this algorithm about 67% of the cases matched. An evaluation of the matching file was performed, and all cases were true linkage.

For the 2020 live births – death linkage, PRSSDI linked 95.6% of the infant deaths with the birth certificate data using deterministic record linkage as well. Five of the deaths were born in 2020, however a match was not found in the birth certificates, this could be due to the COVID-19 lockdown that affected births inscription in the Demographic Registry. The remaining death was not born in PR, therefore there were no records in the birth certificates. This data linkage we will be repeated once all Vital Statistics are final.

PRPRAMS is housed in the MCAHD, making its database readily available to PRSSDI for analysis and reports. PRPRAMS data is linked to Vital Birth Records and PRSSDI completes linkages with Vital Death Records in case of an infant mortality within participants. On the other hand, Newborn Hearing Screening is housed in the Children with Special Health Care Needs program. The database is updated daily and is readily available as requested for use for the PRSSDI Minimum Dataset Workbook.

PRSSDI will continue the development and utilization of linked information systems between key MCH datasets, in order to evaluate a more comprehensive range of MCAH outcomes between agencies.

Other PRSSDI Program Activities

The PR Minimum Dataset Workbook was completed, taking under consideration the sources availability and time period for 23 of the 26 jurisdictional indicators.

Race taxonomies in PR are constructed on the basis of phenotype traits such as texture of hair, skin tone, and lip and mouth shape and intermediate categories exist between white and black that are not represented in the US Census or Birth Certificates. The black/white infant mortality (IM) ratio showed incongruities, thus for 2015 to 2020 was

considered unreliable data.

Indicators such as breastfeeding at 6 months of age and breastfeeding exclusively through 3 months of age are not available for PR since the 2015 National Immunization Survey (NIS), whereas immunization 19 to 35 months of age is available up to 2014 in NIS. Therefore, these indicators could not be updated. In addition, Medicaid and CHIP income eligibility for children and pregnant women was requested, however Medicaid was not able to provide as is requested in the Dataset because is not available by age group.

Most of the indicators are reported from the Vital Statistics Reports. PRSSDI has strong collaboration with the Demographic Registry, which allows immediate access to Vital Statistics data. The Minimum Dataset Indicators also provided for partnership opportunities with the Hearing Screening Program, Early Intervention Program and Medicaid to ensure periodic data availability. PRSSDI held a meeting with Early Intervention and the Hearing Screening Program to ensure that data from these programs in the Minimum Dataset reflects the early intervention enrollment before 6 months of age.

The Minimum Dataset Workbook facilitated trend analysis and graphs across time. Since 50% of the indicators are Title V NOMs, these data served as support for the Title V MCH Services Block Grant Application/ Annual Report. Data trends allowed to identify those areas in which the MCAHD needs to continue addressing in the 2020-25 State Action Plan, while also allowing to identify areas where improvement has been observed.

PRSSDI also leads the Regional Boards (RBs) across the Island. The RBs objective is to collaborate with the MCAHD in the design of the Title V State Action Plan and in the establishment and implementation of a work plan that achieves the goals and objectives outlined of the Action Plan throughout the island. The RBs also provide input of the revised Action Plan. The PRSSDI Coordinator provided a workshop on how to use Microsoft Teams to all Regional Directors and Health Educators so they can use this platform to meet with the RBs members while COVID-19 restrictions are still active. Among the activities considered by RBs to extend the State Action Plan across the Island are: preventive oral care during pregnancy, oral care in children, and healthy eating habits and its relation with a better mental health.

PRSSDI, along with MEU, also develops an index that allows the evaluation of the maternal and child health status, known as the Integrated Index of Maternal and Child Health by municipality (IIMCH attached as a supporting document). Among the wide range of indicators used to evaluate the maternal and child health status, 14 were selected to develop IIMCH. These indicators were selected because of the constant availability in the Vital Statistics System. The 14 indicators selected are divided in three categories: three sociodemographic indicators, three indicators related with the adequacy of prenatal care, eight indicators related to birth outcomes, one breastfeeding indicator, and five indicators related to mortality. IIMCH is distributed to all regional offices, allowing them to know the maternal and child health status of their region and the municipalities that compose it. In addition, IIMCH is shared with the RB and is available for public request.

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

One of the main advantages of the MCHAD is the wide array of professional resources available in MEU, foreseen by the PRSSDI Coordinator, which helps ensure the accomplishment of PR Title V goals and objectives and other MCAH data capacity efforts.

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

MEU is also responsible in identifying MCA topics that are relevant to the State Action Plan in order to complete more in depths analysis that would support the programs and services of MCAHD.

To ensure that all aspects of maternal, child, and adolescent's health, including CSHCN, are considered within all processes and analysis, MEU receives support of the Comprehensive Adolescent Program Director, Pediatric Consultant, OB/Gyn Consultant, TV-HVP Coordinator, TV-HVP Evaluator, CSHCN Evaluator, Cultural Anthropologist, and Mental Health Consultant.

For the past several years, PR Title V has been improving the availability, timeliness, and quality of the MCH data toward multiple mechanisms to report in the Title V MCH Block Grant Application/Annual Report. Through letters signed by the Secretary of Health, MEU gathers MCAH data and information from multiple programs within and outside the DOH. Strengthening the network of collaborating programs has been an effective method for improving data quality. Following is a list of agencies within and outside of the PRDOH, as well as databases that are analyzed in order to monitor Title V indicators:

Agencies	Data bases
Administration of Mental Health and Anti-Addiction Services	Birth Certificate
ACAA	Death Certificate
PR Health Insurance Administration	Fetal Death Certificate
WIC	Public Use Microdata Sample
Center for Assistance to rape Victims	PRPRAMS
Poison Control	PRBRFSS
PR Family Department	Census International Database
Catastrophic Remediable Diseases	PRYRBSS
Tabaco and Oral Health Program	
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	

PR is not included in the National Survey of Children's Health (NSCH), nor was included in the National Survey of Children with Special Health Care Needs (NS-CSHCN) conducted on three occasions between 2001 and 2010. For years 2010 and 2015, Title V funds were used to conduct an adapted version of the NS-CSHCN. Therefore, MCAHD and CSMND developed and implemented customized national surveys such as PRAMS-like and NS-CSHCN-like surveys in order to access supplemental data not available thru other sources. By 2016 PR became the first jurisdiction participating in PRAMS which allows comparable data between PR and mainland. In addition, for year 2020, the MCH-JS, sponsored by HRSA's MCHB, collected data on the physical and emotional health of mothers and children younger than 18 years of age in PR. However, data collected through this face-to-face survey could not be compared to previous surveys, due to differences in methodology, and annual objectives were modified.

The MCH-JS data was used to measure and report progress on the national performance and outcome measures, and for the 2020 Five-Year HNA update. Also, MCHAD will continue to collect data for NPMs such as preventive medical visits and oral health in children thru the MCA module in the PRBRFSS, allowing to have access to updated data to monitor the progress of these indicators.

Also, to provide data for EMS 1.1 (the percent of women, ages 18 through 44, with a preventive medical visit in the past year and reported using the “Women of Reproductive Age Preventive Care Pocket Guide), MEU lead a series of meetings with MCAHD key staff to create a preventive care pocket guide named “Mi agenda de salud” and to develop question that are also included in PRBRFSS to measure this ESM in the following years. It is very important to highlight, that before disseminating “Mi agenda de salud”, MEU also lead the evaluation of this pocket guide with 35 women around the Island. Their input was considered valuable information to ensure a pocket guide that would be useful for WRA to follow up their preventive visits. MEU will also have a meeting with private and public stakeholders so they can join MCAHD efforts disseminating “Mi agenda de salud”.

Other sources used to monitor and evaluate the progress of ESMs are the TV-HVP participant records, Youth Health Promoters Pre-Post Surveys, and PR Youth Health Literacy Tool Kit Pre-Post Survey.

HVP patient records includes monthly reports and participant program records. Monthly reports are used to monitor HVN's performance and collect data on the population reached each month. These reports are sent monthly to the Central Level and are analyzed by the evaluator to share feedback to the HVP regional supervisors. HVP participant records, which include family profiles, screening instruments and follow up forms, recently underwent a complete revision to facilitate record keeping in a more structured manner. These documents collect biopsychosocial information of the participant and her family, and are designed to guide the HVP's interventions during the pregnancy and postpartum period. HVNs gather information gradually on their home visits and send the records to Central Level once the family completes its participation in the program.

The school based program Youth Health Promoters Project (YHPP), recruits 6th grade students of participating schools for three years. YHPP participants complete a profile that allows to learn basic information of the students reached by YHPP. The profile has 62 items that are divided into different topics such as sociodemographic data, students' interests, medical visits, risk behaviors, risk factors at school, family relationships, among others. It is self-administered and has a simple language that young people can understand. The profile is administered in two occasions, first during the fourth meeting of the first year and the second is administered to students in their third year of the project. During the second year of YHPP (meetings 8 thru 11), the PR Youth Health Literacy Toolkit (PR-YHLT) is offered to empower youths about health including the importance to attend the annual health visit. A pre-post tests are also administered during this period, allowing to measure the number of youth with increased perception of how to use the healthcare system after receiving PR-YHLT.

The PR-UNHSP receives funds under the CDC cooperative agreement “Enhancement of the PR EDHI-IS for Documentation and Use of Follow-up Diagnostic and Early Intervention Services Data (EHDI-IS) to enhance and fully develop the PR-UNHSP information system. Once fully implemented, the EHDI-IS will collect screening, diagnostic and early intervention data. By routinely capturing comprehensive data, the EHDI-IS can quickly provide accurate and precise information at both the individual and population levels. This will allow the PR-UNHSP to ensure that infants and young children are receiving services, as well as to assess progress and answer questions from leadership and other stakeholders. Currently, the EHDI-IS has the capacity to collect the hearing screenings results (Module 1) and the audiological evaluation results (Module 2) reported by hospitals and audiology clinics.

Regarding access to electronic health data, PRSSDI resumed data linkages with several sources (birth data, infant mortality, Medicaid eligible, WIC). OITA collaborates in performing the birth – Medicaid eligibility. The linkage between birth and WIC participants file and birth – infant deaths linkage files is executed by the PRSSDI. An evaluation process was implemented by MEU to ensure the validity and completeness of the data linkages which is continuously performed to all linkage files to assess the quality of the linkage.

MEU monitors maternal deaths thru the Puerto Rico 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 the maternal mortality surveillance and the review process, the PRDOH submitted a bill to the PR legislature to establish as a State Act the SiVEMMa and the Maternal Mortality Review Committee (MMRC). The MCAHD played a leading role in developing the proposed bill including participation in public hearings. Act 186 of 2016, known as the Puerto Rico Maternal Mortality Epidemiological Surveillance System Act, provides the legal tools for the collection of data needed for a complete review of maternal deaths in Puerto Rico (underlying health, social and other contributing factors). The Act also provides for the creation of the MMRC (composition, privacy, legal protection, and responsibilities) to review maternal deaths to make recommendations for preventive actions. All members of the MMRC must be 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 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 PRFIMR concentrates on deaths occurring to families participating in the HVP, all of whom are considered at high risk for IM. The PR FIMR has identified critical community strengths and weaknesses as well as unique health/social issues associated with poor outcomes.

The implementation of the EHR at the CSHCN RPCs, funded by the Zika MCH Services Program and in progress, presents an important opportunity to advance the CSMND's public health surveillance capacity. EHR data have the potential to further increase the breadth, detail, timeliness, and completeness of public health surveillance and thereby provide better data to guide the CSHCN Program's public health priorities and interventions.

The PR-SET-NET routinely performs data linkages with the BDSPS, the Biological and Chemical Emergencies Laboratory (BCEL), and the EHDI-IS databases. Data linkages are conducted on a case-by-case basis to identify cases meeting the surveillance system's inclusion criteria and to corroborate data quality and completeness. The PR Vital Statistics Record Office (VSRO) granted access to and shares birth certificate data with PR SET-NET epidemiologists to improve the capacity for rapid case ascertainment of birth defect cases and to validate information. An agreement with the PR-HIA allows for the exchange of information to validate demographic and other data information, and to ensure case monitoring and follow-up.

To formalize data sharing collaboration with agencies, MCAHD has been performing several memorandums of understanding (MOU). Among these are: the PR Primary Health Association that supports and endorses the participation of HRSA Qualified Health Centers in the HNA and other investigations to be carried out; the Demographic Registry Office that ensures the continuous access to the vital events data at any time (provisional or final data files); and the CDC for data sharing for the Multi-Jurisdiction Risk-Appropriate Care Analysis. MCHAD and ASSMCA have been working on a MOU for data sharing collaboration and ensuring services for participants identified in the different programs that need mental health support. Before COVID-19 lockdown, both legal advisors offices were reviewing the final draft. However, due to the pandemic and the government administration changes, the process has been delayed. Once all the principal ASSMCA officials, responsible in completing the MOU, are assign to their post, MCAHD expects to continue with this MOU.

For data and information dissemination, MEU provides their support to MCAHD sharing statistics at the general public as well as to the media. In addition, MCAHD data and statistics is shared in meetings with stakeholders and in conferences such as AMCHP, City Match, among others. MEU, overseen by PRSSDI, also developed instruments such as the Integrated Index of Maternal and Infant Health Status (IIMIHS) that includes 14 maternal and infant health indicators by municipality to assess the health needs of the target population by geographic area (attached as part of the Supporting Documents). Other analyses are performed such as the CDC Levels of Care Assessment Tool (CDC LOCATE) to help MCAHD monitor neonatal and maternal risk appropriate care and the Perinatal Periods of Risk (PPOR) to identify periods of increase risk of fetal/infant deaths.-

PR Title V supports prevention and awareness initiatives such as Month of Prematurity Prevention of March of Dimes, the Adolescent Pregnancy Prevention Month and Safe Christmas Campaign. For the pregnancy prevention, MEU provides updated data for maternal and infant health indicators that CAHP disseminates to the press and stakeholders, organizations, and general public. In addition, data for the initiatives developed by March of Dimes PR Chapter as well as data of non –intentional injuries to EMSC for the Christmas Campaign are provided.

In terms of the five-year health needs assessment (HNA) and the ongoing HNA, they are performed mainly by MEU. The MEU team plays a key role in conceptualizing, organizing, and carrying-out the HNAs. An internal steering committee - led by the PRSSDI Coordinator- supports the HNA process and decision-making. The steering committee consists of the MEU staff, the Pediatric Consultant, the MCH Director, staff from several MCH programs and key stakeholders is established to support the HNA process. Leading the efforts of the HNA gives to the PRSSDI the advantage to support directly the data capacity in each step of the HNA process. MEU shared the 2021 HNA findings with the MCAH Steering Committee in order to review the 2020-25 State Action Plan, as well as the selected indicators. MEU and key staff that composes the Steering Committee discussed the 2021 HNA findings and reviewed the proposed 2020-25 Action Plan.

A challenge the PR Title V faces is reporting and monitoring non FAD data, as well as collecting data in order to monitor indicators for the current annual report. Since lockdown, back in March 2020, many agencies still have employees working remotely. In addition, 2021 started with a new government administration, thus changing many of the heads of governmental agencies. Thus the combination of both situations delayed data sharing and in some cases data was never provided. For example, Vital Statistics data provided by the Demographic Registry Office is preliminary for deaths and fetal deaths because lockdown affected the registration process, while the PR Immunization Registry data that is used to complement data provided by the NIS was never provided because of technical difficulties in the system that were not able to be fixed before the submission of the current report.

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

The PRDOH Office of Public Health Preparedness and Response (OPHPR) prepares a comprehensive Public Health Emergency Guide that is updated every year. The most recent edition, “Guía de Salud Pública para Emergencias y Desastres 2021” is accompanied by the Emergency Operations Plan (“Plan de Operación de Emergencia 2020-21” as well as several appendices that cover specific risks and populations (e.g., Mass Care, Mental and Behavioral Health, Storms and Hurricanes, among others). More information on the OPHPR planning and response activities can be found at:

[salud.gov.pr/Sobre-tu-Salud/Pages/Salud%20P%C3%BAblica%20en%20Emergencias%20y%20Desastres-
Informaci%C3%B3n.aspx](http://salud.gov.pr/Sobre-tu-Salud/Pages/Salud%20P%C3%BAblica%20en%20Emergencias%20y%20Desastres-Informaci%C3%B3n.aspx)

There is limited consideration of the MCH population in the main EOP. The Health Conditions or Special Needs section mentions that pregnant women should speak to their obstetrician regarding continuity of prenatal care before a storm or hurricane. Regarding infants and children, the only mention is that when going to a shelter, parents must bring formula for the child.

From October 2019 to July 2020 the MCAHD participated in the AMCHP Emergency Preparedness and Response Action Learning Collaborative (EPR ALC) project, which is intended to 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. The EPR ALC team included the Title V Director, HVP Coordinator, Evaluator, Mental Health consultant, Pediatric consultant, and representatives of the DOH Office of Public Health Preparedness and Response. The team made progress in several of the areas covered by the EPR ALC, the most salient was making meaningful connections between Title V and DOH Office of Public Health Preparedness and Response (OPHPR) staff that have led to much of the accomplishments mentioned below. Although the events of 2020 (the earthquake sequence that began in December 2019 and is still active, followed by the COVID-19 pandemic) have interfered with the ability to carry out the steps as set forth in the Framework, plans to continue to work towards achieving the goals of the ALC are extant.

Since 2019, MCAHD staff have participated in several initiatives of the OPHPR, although not directly involved in the creation of the EOP.

- The HVP Coordinator is currently participating in the PRDOH's Public Health Preparedness Academy.
- The HVP Coordinator made recommendations to the Mass Care Daily Shelter Report to ensure the needs of pregnant persons and infants were accurately recorded in the form.
- The HVP Coordinator and the Pediatric Consultant collaborated in the Analysis of Threats, Vulnerability and Risks of the Public Health, Medical Services and Mental Health Services in Puerto Rico. They participated in the Hazard Risk Assessment exercise, reviewing the areas related to maternal and infant care.
- The HVP Coordinator and Evaluator participate in the OPHPR Mental and Behavioral Health Committee.
- The HVP Coordinator participates in the OPHPR People with Access and Functional Needs in Emergencies Committee.
- For the first year of the COVID-19 emergency, the HVP Coordinator participated in regular virtual meetings convened by the OPHPR Community Planning Analyst to discuss needs of the population with functional and access needs, which included the needs of pregnant and parenting persons and their children.

Although MCAHD has not had an active role in the development of statewide preparedness activities, Title V staff at the regional level 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. However, they are not part of the IMS structure. They are instead called on to act as needed in emergency situations.

The Home Visiting Nurses (HVNs) 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 necessary. 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.

During the COVID-19 pandemic, the HVP developed a modified intervention protocol to allow the HVNs to serve their participants virtually. This plan has proved successful in offering continuity of services to the families for over a year. At this writing, home visits have resumed for most families, combined with some virtual interventions.

In terms of educational materials, the MCAHD developed a leaflet on disaster preparedness directed at pregnant women that is available through the “Encuentro de mi vida” (“The encounter of my life”) website. It is also available on the PRDOH’s website disaster preparedness section, but there has not been a statewide outreach or dissemination activity in this regard.

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 relief staff the strategies to ensure the health and safety of infants and children after a crisis situation.

In terms of coordination with other agencies and programs, Title V has developed the “Juntas regionales” or advisory boards in each of the health regions. These are composed of local public and private entities that serve the MCH population. Through the regular board meetings throughout the year, MCAHD staff cultivate a close relationship with these agencies to facilitate coordination of services not only in times of crisis but year-round. After an emergency, the need for coordination of services includes:

- WIC offices, which are an important support system for pregnant and parenting persons.
- Local Demographic Registry offices, to facilitate newborn registration and other processes after emergencies.
- Referrals to hospitals, medical and dental offices, and other health providers.
- Local government offices, including mayors, which can provide assistance in housing, utilities, basic services, road clearing and other needs.

CSHCN

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.

At the Central level, the CSHCN Program was a regular member of the 2016 Zika Outbreak Incident Command System actively participating in the development of strategies to enhance PR preparedness for addressing the short and long-term outcomes of congenital Zika virus infection. In early 2020, the PR-CSHCN Program and the PR-SET-NET led the development and implementation of a data management system to report COVID-19 cases. This effort allowed the PRDH to have timely, reliable, and complete data of COVID-19 cases critical for decision-making, and planning and implementing containment and mitigation measures by the Puerto Rico government leaders. Since May 2021, the CSHCN Program is serving as the COVID-19 Incident Command System Deputy Director.

Among other preparedness activities, 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. Workshops on emergency and disaster planning for CSHCN has been offered to the CSHCN Program staff to provide them with tools to help families to prepare for any type of emergency or disaster. In collaboration with CSHCN Program nutritionists, an emergency protocol was developed by the PR-HDDDT Program coordinator to ensure adequate nutritional products are available to sustain a three-week supply for families of children with newborn errors of metabolisms in case of an emergency or disaster and that families are contacted to know their child’s nutritional needs.

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 channel through the PRHIA that contract private Health Insurance Companies (HICs) to provide de 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 not included in the PR State Plan. That limitation has provided a good opportunity for TV MCAHD staff collaboration 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 provide the 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 provide data to respond to emerging issues that arise during the collection cycle, alongside with regular data, which help to guide our efforts toward healthier MCH population. During 2018-19, a Disaster Supplement was included in the regular PRAMS questionnaire, whose data helped to establish preventive measures on health care services. From 2019 to 2020, an Opioids Supplement was implemented due to the opioid misuse epidemic recognized as a nationwide crisis. From 2020 to 2021, a COVID-19 Supplement has been implemented to compile a full-year of data. A COVID-19 Vaccine supplement also started in 2021.

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

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, that specifically prohibits or denies payment for elective inductions, as well as the 17-P administration in pregnant women with a previous premature birth, are initiatives 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, PR Children's Hospital, Society of Pediatric Dentist of PR, Puerto Rican Society of Pediatrics and other experts in the field. These guidelines are according to Bright Future Guidelines and are distributed to the health care providers steer primary health care providers to deliver high-quality preventive health care that have 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)

The government of Puerto Rico has both, Title V and Title XIX Programs as part of the organizational structure of the Department of Health. Medicaid and SCHIP funds are administered by the PRHIA, the government organization in charge of contracting and monitor the Managed Care Organizations that will be providing services for the eligible population, including CSHCN.

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

Regarding the CSHCN population, the PRHIA requires insurances under the GHP to have a system that allows the health care provider to submit a request for a child to be registered under several GHP special coverages. These include the CSHCN, the aplastic anemia, the hemophilia, the cystic fibrosis and the autism coverage, and 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 needing 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 offered at the CSHCN Program to CSHCN covered by GHPs to be billed to the proper insurance. Services offered to CSHCN under private insurance are also billed to the insurance company. Title V covers for 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 CSMND, following the PRHIA data safety standards. From March 2021 through July 2021, under the leadership of the CSHCN Program, PRHIA and CSHCN Program staff met every two weeks to revise and update the list of conditions to be included under the CSHCN special coverage. The proposed list of conditions was reviewed, pro bono, by community pediatric specialists, including pediatric hematologists, neurologists, an allergist and immunologist, a plastic surgeon, neonatologists, endocrinologists, medical geneticists, psychiatrics, gastroenterologists, orthopedists, infectious disease specialists, cardiologists and pediatricians.

Educational materials availability and distribution is also included in the collaboration agreement between Title V and Title X Programs. Educational 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. During the most recent funding period, MCAH team forwarded 246 referrals to the Medicaid local offices for eligibility determinations.

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

Women/Maternal Health

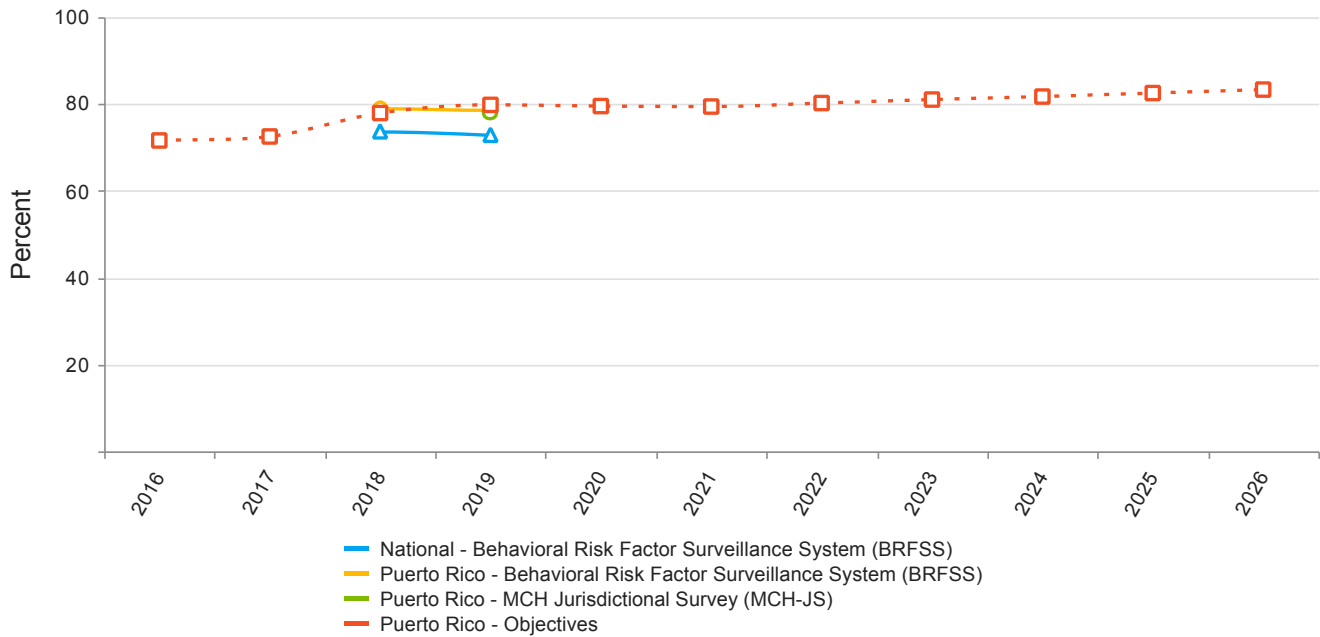
Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID	Data Not Available or Not Reportable	NPM 1
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2015_2019	34.3	NPM 1
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)	MCH-JS-2019	13.5 %	NPM 1
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)	NVSS-2019	10.1 %	NPM 1
NOM 5 - Percent of preterm births (<37 weeks)	MCH-JS-2019	21.6 %	NPM 1
NOM 5 - Percent of preterm births (<37 weeks)	NVSS-2019	11.8 %	NPM 1
NOM 6 - Percent of early term births (37, 38 weeks)	NVSS-2019	34.3 %	NPM 1
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2019	6.8	NPM 1
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2019	6.5	NPM 1
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2019	3.8	NPM 1
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2019	2.7	NPM 1
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2017	271.5	NPM 1
NOM 10 - Percent of women who drink alcohol in the last 3 months of pregnancy	PRAMS	Data Not Available or Not Reportable	NPM 1
NOM 11 - Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations	SID	Data Not Available or Not Reportable	NPM 1
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	MCH-JS-2019	22.0 %	NPM 13.1

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	NSCH	Data Not Available or Not Reportable	NPM 13.1
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	MCH-JS-2019	13.1 %	NPM 13.1
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH	Data Not Available or Not Reportable	NPM 13.1
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	MCH-JS-2019	72.8 %	NPM 13.1
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH	Data Not Available or Not Reportable	NPM 13.1
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females	NVSS-2019	18.9	NPM 1
NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth	MCH-JS	Data Not Available or Not Reportable	NPM 1
NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth	PRAMS-2019	11.6 %	NPM 1

National Performance Measures

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



Federally Available Data

Data Source: Behavioral Risk Factor Surveillance System (BRFSS)

	2016	2017	2018	2019	2020
Annual Objective					79.4
Annual Indicator				78.7	78.5
Numerator				481,355	484,022
Denominator				612,005	616,350
Data Source				BRFSS	BRFSS
Data Source Year				2018	2019

i Previous NPM-1 BRFSS data for survey years 2015, 2016 and 2017 that was pre-populated under the 2016, 2017 and 2018 Annual Report Years 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
Annual Objective		79.4
Annual Indicator	77.9	77.9
Numerator	346,051	346,051
Denominator	444,413	444,413
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	79.3	80.1	80.9	81.6	82.4	83.2

Evidence-Based or –Informed Strategy Measures

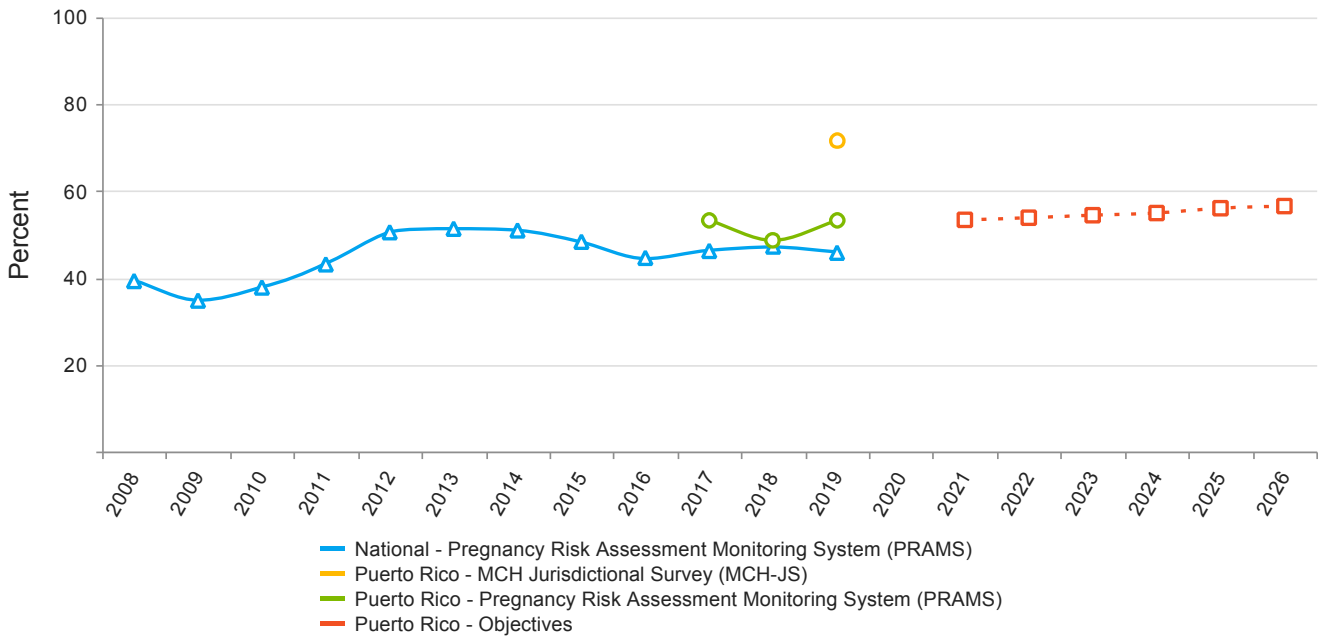
ESM 1.1 - Percent of women, ages 18 through 44, with a preventive medical visit in the past year who reported using the “Women of Reproductive Age Preventive Care Pocket Guide” to schedule a preventive medical visit in Puerto Rico by September 2021-2025

Measure Status:	Active
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Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	0.0	0.0	0.0	0.0	0.0	0.0

**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
Annual Objective		
Annual Indicator	48.7	53.3
Numerator	10,196	10,706
Denominator	20,921	20,073
Data Source	PRAMS	PRAMS
Data Source Year	2018	2019

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

	2019	2020
Annual Objective		
Annual Indicator	71.4	71.4
Numerator	377,217	377,217
Denominator	528,457	528,457
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

Annual Objectives

	2021	2022	2023	2024	2025	2026
Annual Objective	53.3	53.8	54.4	54.9	56.0	56.5

Evidence-Based or –Informed Strategy Measures

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

Measure Status:	Active
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Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	0.0	0.0	0.0	0.0	0.0	0.0

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 updated Preventive Care Guidelines for women of reproductive age to the target population and health care providers.

Develop and 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.

Apply a mental health intervention model among participants of the Home Visiting Program as mandated in the model's implementation guide.

Develop a course on the health rights of women of reproductive age for government employees to submit to the Government Ethics Office.

Promote person-centered services among health care providers and women of reproductive age.

Continue the current Maternal Mortality Review Surveillance System in Puerto Rico.

Develop and disseminate an Emergency Preparedness and Response guide that takes into account 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.

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

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

Continue to distribute information regarding signs and symptoms of premature labor through OB/GYN's Office to all pregnant women.

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.

Develop and disseminate an Emergency Preparedness and Response guide that takes into account the needs of WRA, pregnant and parenting women, including violence prevention, prenatal care, adequate nutrition, prevention of premature birth, among others.

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 Active

NOMs

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

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

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

Women/Maternal Health - Annual Report

During the reporting year (2019-20), 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 WRA/MH

The MCAHD has traditionally reached the population of WRA and pregnant women 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 (HVNs) offer education, support and care coordination to women from pregnancy through two years after the birth of their child. Perinatal Nurses visit birthing hospitals to provide education and referrals to new mothers, regardless of risk level. At the community level, the Health Educators design educational activities and materials on maternal and child health topics and lead the public education efforts. The Community Health Workers (CHWs), in turn, offer health promotion activities in varied community settings. As will be described in this section, beginning in March 2020 the COVID-19 pandemic restrictions have resulted in substantial modifications to the aforementioned intervention strategies. In spite of this, MCAHD has not stopped providing support and education to women in the community.

The MCAHD regional staff that implemented these activities in 2019-20 included 81 Home Visiting Nurses offering services in 70 of the 78 municipalities; 7 regional HVP nurse supervisors; 8 Perinatal Nurses who visit birthing hospitals throughout the Island; 5 Health Educators; and 32 Community Health Workers. At the regional level, they respond to the 7 regional MCAH directors, who in turn report to the MCAHD director.

Home Visiting Program

The Home Visiting Program (HVP), staffed by the Home Visiting Nurses (HVNs), operates throughout the island, including the island municipalities of Vieques and Culebra. The HVP was originally modeled on the Nurse Family Partnership program. 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. 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. HVNs 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.

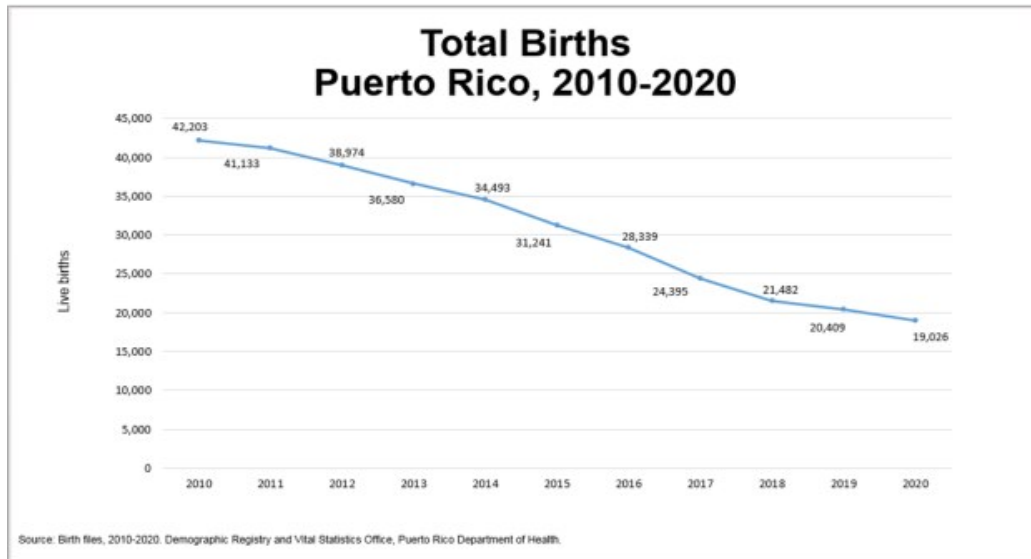
HVNs refer participants to care providers in the community according to the identified needs and offer follow up to ensure services are received. They also monitor whether pregnant women are receiving adequate prenatal care and that infants and children are receiving care according to EPSDT guidelines.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

- primigravidas up to 21 or over 35 years of age;
- primigravidas with chronic health conditions (diabetes, hypertension, lupus, epilepsy, among others), morbid obesity, Zika virus infection, or other conditions, regardless of age; in 2020, COVID-19 was added to the list of qualifying conditions;
- pregnant women with a previous pregnancy or infant loss and no living children.

HVP – Intervention with Participants

Puerto Rico has suffered a significant loss of population in the last decade. According to the 2020 Census, there was a decrease of 11.8% of the population between 2010 and 2020, the largest loss of any US jurisdiction^[1]. This decrease is attributed to two factors: migration due to the economic collapse that began in 2006, and a steep decline in births^[2].

Figure 1 - Births in PR 2010-20



Puerto Rico has faced a series of dramatic natural and political events in the last 4 years. The status of the fragile MCH population had been 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 appearance of the COVID-19 pandemic early in 2020 further complicated life in Puerto Rico, particularly for the most vulnerable populations. The HVP has striven to adapt and respond to these very different emergency situations in order to continue offering services as effectively as possible.

Earthquake sequence: The earthquake sequence that began in December 2019 and is still active have been described elsewhere in this document. The HVP had developed an emergency data collection form to record participants’ status and needs after Hurricane María, and it was quickly adapted to reflect the situation. HVNs were able to make contact with the majority of their participants by telephone or in person (in their homes, with relatives or in shelters). Some of the HVNs in the area were assigned to offer assistance in the emergency shelters on a temporary basis. Over the following months HVNs worked diligently on identifying available providers in the community and coordinating services needed by the affected families.

At the time of writing this report the seismic sequence is still active, with over 15,000 quakes in the period December 2019 – May 2021^[3]. Much of the earthquake damage has been left untouched, since the COVID-19 emergency arrived on the heels of the earthquakes. However, most services have been restored in the area, albeit with limitations imposed by COVID-19 protocols.

COVID-19: In early 2020, the earthquake sequence was still affecting the southwest of the Island with daily tremors, and residents of the stricken areas were struggling to deal with housing, employment, basic services, child care (schools in the region were closed), and daily chores. Information regarding a new viral disease that would come to be called COVID-19 was trickling in, but the impact it would have in PR was not clear.

On March 5 the first guidelines for HVP staff (“Recomendaciones para personal del PVH ante el coronavirus”), which collected the recommendations given at the time by health authorities, were written and distributed. That initial document included the information available at the time regarding the virus and basic infection control measures to

minimize the risk of contagion with SARS-CoV-2 during home visits.

However, this protocol was short lived, as it was followed soon after by the PR government's radical measures to control the spread of SARS-CoV-2. This included a sweeping lockdown, a nightly curfew, closure of nearly all businesses except for essentials like supermarkets, drug stores and gas stations, and shuttering of all government offices. The majority of government employees, including all the HVNs and other MCAHD staff, were ordered to work from home.

One of the most important inputs available to HVNs is the home visit, which allows them to observe living conditions that directly influence the health, safety and wellbeing of the participant mother and child and their family. The stay-at-home order precluded in-person visits to participant families; HVNs thus lost a crucial source of information. This led to the development of a protocol for a modified intervention to be done via telephone and text messaging, which was key to achieving a uniform response to an unstable, rapidly fluctuating situation. Since the governor's order had been published over a weekend and took effect on the following Monday, most HVNs were not able to retrieve records, forms or materials from their offices. To simplify the interventions that would be carried out by phone, an abbreviated interview form was designed by HVP staff in consultation with regional supervisors and MCAH program directors to ensure appropriateness and usability (see Figure 1). A guide entitled "Protocolo para el seguimiento de las participantes del Programa de Visitas al Hogar durante el período de aislamiento físico por la pandemia de COVID-19" was developed and distributed to the staff on April 3, 2020. Supplemental instructions were issued on June 3, 2020 and July 8, 2020, to adapt the protocol to changes in the official government orders.

The HVP Coordinator, Evaluator and Title V Mental Health Consultant carried out training sessions via Zoom to discuss the emergency protocol with HVNs, regional supervisors and directors. A separate meeting was held for each of the health regions to encourage active participation. In addition to explaining the protocol, we took the time to explore the HVNs' experiences and feelings regarding the pandemic and their work with our participant families.

Figure 2 - Abbreviated interview form for telephone follow up of HVP participants during the lockdown period

ANEJO A: SEGUIMIENTO TELEFÓNICO A PARTICIPANTES DEL PVH

Instrucciones: Debe dar seguimiento a cada participante cada dos semanas, o más frecuente si es necesario.
Puede usar una libreta u hojas sueltas para anotar las intervenciones.
Use una hoja de papel para cada intervención, para que posteriormente pueda integrarlos a los expedientes correspondientes

I. RECOPIACIÓN DE INFORMACIÓN

- A. Fecha
- B. Hora de la llamada
- C. Núm. de expediente
- D. Nombre de participante
- E. Municipio
- F. Edad
- G. Categoría: Gestante - semanas de gestación / Inter - edad de bebé
- H. Respuestas a preguntas de seguimiento (a - e)
- I. Necesidades identificadas que permitan planificar la orientación y apoyo que le dará a la participante.
- J. Acción tomada por EV para atender necesidades - educación ofrecida y referidos, si alguno. Sabemos que en estos momentos los servicios disponibles son muy limitados y no necesariamente podrá dirigir a la participante a una oficina o agencia que esté abierta.

II. GUÍA DE PREGUNTAS

Comience la llamada con una introducción similar a esta, usando sus propias palabras. Use estas preguntas como una guía para la conversación.

"Saludos. No te he podido visitar / no hemos hablado en las últimas semanas debido a la situación que vive el país ante el COVID-19. Desde el PVH no queremos dejarte desprovista de apoyo y aclarar las dudas que puedas tener." Luego haga las siguientes preguntas y ofrezca la información y apoyo que requiera la participante. Dele tiempo a expresarse, escuche y valide sus sentimientos. Anote los puntos más relevantes para poder dar seguimiento posterior.

Preguntas de seguimiento:

- A. ¿Cómo te has sentido desde la última vez que nos vimos o hablamos?
- B. ¿Qué preocupación o necesidad tienes en este momento?
- C. ¿Has tenido alguna preocupación o un cambio significativo en tu vida (ej. salud, relación, etc.)?
- D. ¿Qué preguntas tienes sobre el COVID-19?
- E. ¿Tú o alguien en tu familia o amistades ha tenido síntomas de COVID-19? ¿Has estado cerca de esa persona?

Rev. 3/junio/2020 p. 7

The protocol provided five questions to guide the interventions:

1. How have you felt since the last time we spoke?
2. What concerns or needs do you have at this time?
3. Have you had any significant changes or worries in your life? (related to health, employment, relationships, etc.)
4. What would you like to know about COVID-19?
5. Have you or any friends or family members had symptoms related to COVID-19?

The HVNs were encouraged to allow participants to express their feelings and concerns, especially since the stay-at-home order meant many people were isolated and lonely. The replies to these questions were then used to determine the course of action the HVN would take with the participant. In the initial months of the pandemic, it was deemed more important for the HVN to have frequent contact and offer support than it was to adhere to a protocol that was not applicable due to the difficult circumstances.

A simple electronic form was designed in Google Forms to record all interventions and the information gathered in the telephone interviews. This proved to be a valuable tool that enabled the supervisors and the evaluator to have ready access to the data and monitor HVNs' productivity.

*Figure 3 - Weekly intervention report
(only first screen is shown)*

Informe semanal de intervenciones PVH

Informe provisional para registrar las intervenciones del personal del PVH durante el tiempo que dure la situación de emergencia provocada por la pandemia del COVID-19.

Cada lunes se debe reportar la labor realizada en la semana anterior.

La dirección electrónica se usará para enviar copia del informe sometido.

Revisado 05-20-20
* Required

Email *

Your email

Nombre de EV *

Your answer

Región de EV *

Arecibo
 Bayamón
 Caguas
 Fajardo
 Mayagüez
 Metro
 Ponce

Municipio de EV *

Your answer

The adaptation process was not without challenges. The most salient was the lack of uniformity in the mobile phones and cell/data plans held by the HVNs. At the time the stay-at-home order was decreed, HVNs did not have a government-issued mobile phone, so their communication capabilities varied widely. Some of the HVNs had antiquated equipment, limited data plans or weak signal strength in their homes. Nevertheless, all were able to find ways to carry out their work; some went to a relative's home or drove to a location that had a stronger signal. This demonstrates the commitment HVNs have to their work and their participants. In addition, many HPV participants had similar technological limitations. Therefore, care was taken to develop interventions that worked with minimal technology requirements.

A second challenge was the limitation of the kinds of interventions HVNs were able to carry out during a phone call or by text messaging (the method preferred by many of the younger participants). It would be difficult to fill out complex forms or to administer sensitive screening tools, such as for substance use, ACEs, and intimate partner violence; in terms of the children, the HVNs could not observe their developmental milestones. Therefore, the telephone intervention protocol focused on offering emotional support, education regarding COVID-19 prevention, covering the most important topics for the prenatal or interconceptional period, identifying pressing needs, and assisting participants in obtaining needed services. Although the instruments were not being administered, the HVNs were alert to signs that could suggest instances of domestic violence, substance use or other threats to the participant's safety and wellbeing. They asked the mothers detailed questions to assess the children's growth and development and some were able to share photos or videos showing the babies' movements and demeanor.

The third challenge that presented a barrier to services was that during the initial phase of the lockdown all government and private services were closed or severely limited, except for emergency services, making it difficult to access Demographic Registry, WIC, other aid programs, as well as regular medical attention including prenatal and pediatric care. The HVNs have contacts at the local level to coordinate services, but these channels were not readily

available. The MCAH regional directors were able to communicate with peers in various agencies to identify workarounds and alternate means of obtaining the assistance needed. In addition, many medical offices and hospitals developed strict infection control protocols that placed a burden on patients. For instance, many dentists and physicians requested a negative COVID-19 test before seeing patients; limited clinic hours meant appointments were hard to obtain; hospitals restricted the presence of a support person during labor and delivery and limited or prohibited visitors to hospitalized persons.

Before the pandemic, regional HVP supervisors and the central level HVP staff met monthly to discuss programmatic and administrative matters relating to the implementation of the program. In order to deal more effectively with the changing environment after the lockdown, weekly meetings via Zoom (later Microsoft Teams) were held beginning in March and the group was expanded to include the regional directors, the coordinator of the Health Education component, and the Title V director. This enabled the program staff to discuss implementation challenges and opportunities to ensure quality of services offered to participants in the face of challenges presented by the COVID-19 emergency. During the meetings, the regional staff report on barriers to service or cases that present difficulties and share success stories. Once a month an HVN presented a case that had proved to be particularly challenging and the group gave feedback on the handling and results. As a complement to the virtual meetings, a group was formed in an instant messaging application to exchange information quickly and efficiently.

By September 2020 the situation had stabilized enough that the meetings were scaled back to every other week; as of this writing they are scheduled monthly, still via Microsoft Teams. These meetings made an important contribution to the success of the interventions during the pandemic.

After the stay-at-home orders were lifted, the HVNs gradually returned to their offices as allowed by the prevailing government mandates but they continued to carry out virtual interventions with their participants since the risk of transmission was deemed too high to send the HVNs to participants' homes.

HVP Participant Information

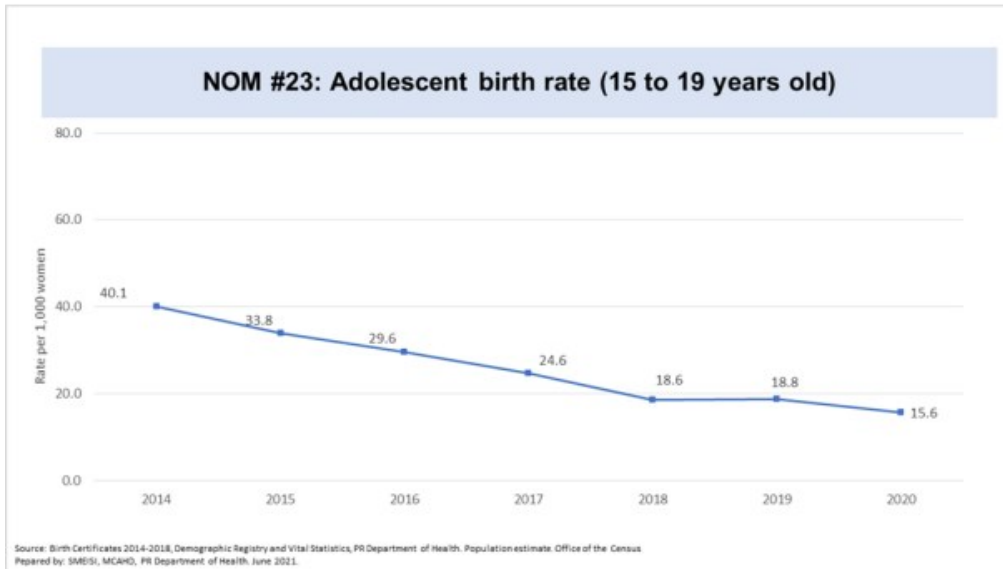
The pace of admissions to the HVP slowed down after March 2020. The usual sources of referrals to the HVP – mainly WIC, Medicaid and OB/GYN offices – were closed or providing limited services. HVNs and CHWs were not able to go out in the community to promote the services or identify candidates for the program. As shown in the following table, the total number of pregnant persons admitted to the HVP in 2019-20 was 979, a decrease of 16.54% over 2018-19. The largest decrease was seen in the number of newly admitted younger participants.

Table 1 - Pregnant persons admitted to the HVP

AGE GROUP	2019-20	2018-19	DIFFERENCE			
<15	14	20	-6	-30.00%	-169	21.67%
15 - 17	153	236	-83	-35.17%		
18 - 19	215	269	-54	-20.07%		
20 - 21	229	255	-26	-10.20%		
22 - 34	320	349	-29	-8.31%	-25	6.36%
35 - 54	48	44	4	9.09%		
TOTAL	979	1,173	-194	-16.54%		

This change might be related to the decrease in the adolescent birth rate for PR over the last decade, which is shown in the following graph:

Figure 4 - Adolescent birth rate in PR, 2014-2020



The HVNs focus their interventions on pregnant and parenting persons, their babies, and their families. During 2019-20, the HVP provided services to 5,130 participants in 2,785 families, distributed as follows:

Table 2 - HVP participants by category, 2019-20

PARTICIPANT CATEGORY	# (%)
Pregnant ≤21 y/o	279 (67.6%)
Pregnant ≥22 y/o	134 (32.4%)
Total pregnant	413
Interconceptional ≤21 y/o	1,439 (63.0%)
Interconceptional ≥22 y/o	846 (37.0%)
Total interconceptional	2,285
Pregnant interconceptional ≤21 y/o	55 (63.2%)
Pregnant interconceptional ≥22 y/o	32 (36.8%)
Total pregnant interconceptional	87
Infants (<12 months)	1,110 (47.3%)
Children (12-24 months)	1,235 (52.7%)
Total infants/children	2,345

The women participants ranged in age from 12 to 43 years old, with a mean of 21.23 years. Two thirds (63.7%) were 21 years of age or under. Figure 5 shows their age distribution and Figure 6 their civil status.

Figure 5 - Age distribution of HVP pregnant and interconceptional participants

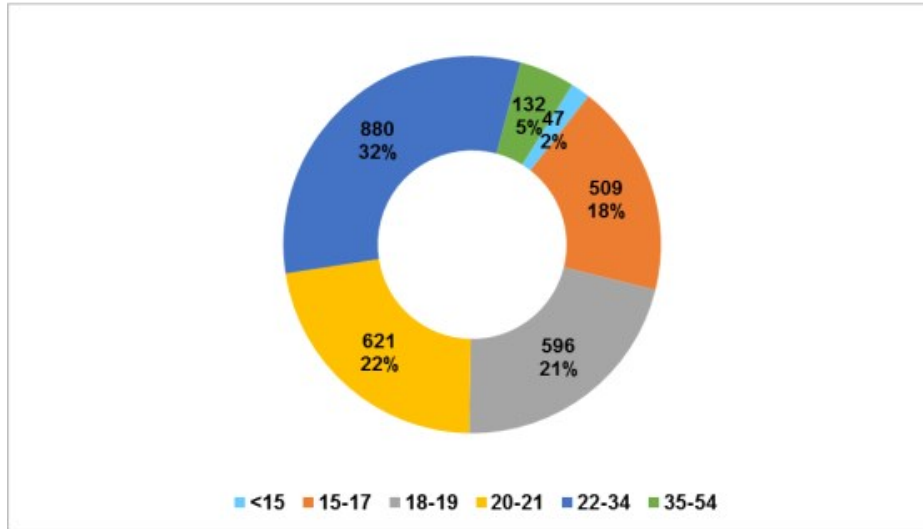
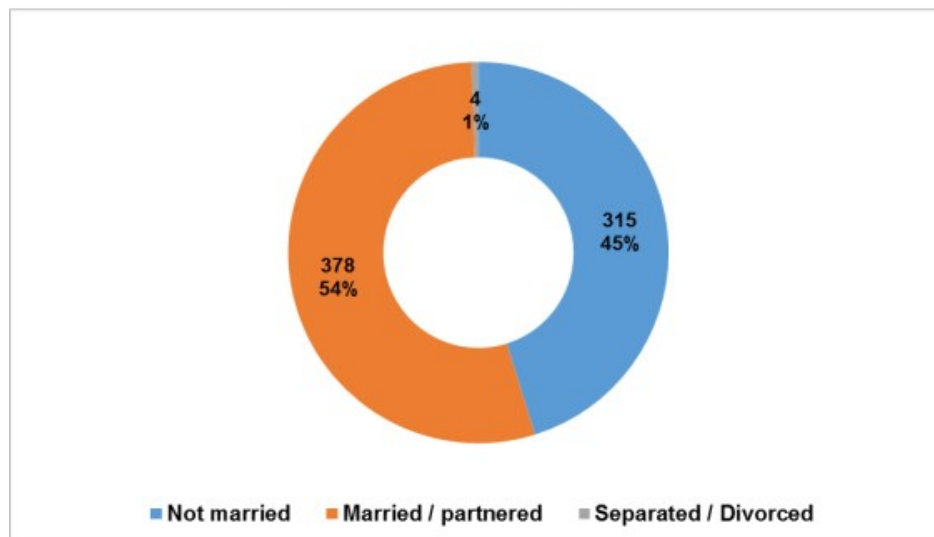


Figure 6 - Civil status of HVP participants



Of the 2,785 women participants, 979 (35.2%) were newly-admitted pregnant participants. One third (37.0%) entered the HVP in the first trimester of pregnancy, a similar proportion to 2018-19. The majority (85.5%) had initiated their prenatal care in the first trimester of pregnancy. Almost all (89.3%) HVP participants were GHP beneficiaries; 9.9% had private insurance and only 0.8% report paying out of pocket for medical care. Accordingly, more than half (57.3%) received prenatal care in an IPA, 39.1% in a private practice and 3.7% elsewhere. No women reported they lacked a prenatal care provider.

Two thirds of pregnant participants (62.5%) reported having a dental care provider. 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. Some dentists are reluctant to treat pregnant women, fearing possible complications. The HVNs identify the dentists in the community that accept pregnant patients and refer participants to them. Data regarding completion of referrals of HVP participants will be presented in 2022. PRAMS data for NPM 13.1 reveal that in 2019, 53.3% of respondents had a preventive dental visit during pregnancy.

During 2019-20, HVNs had an average caseload of 23 families (range: 7-40 families), down from 27 families in 2018-19 (range: 13-40). They completed 18,695 home visits, which represents 5,848 (23.8%) fewer visits than in 2018-19. This can be attributed to a decline in new admissions and the limitations imposed by the COVID-19 pandemic measures explained above. However, the drop in in-person visits does not equate to a decrease in services provided to the participants. On the contrary, in the reporting year HVNs carried out 61,696 interventions with participants (see Table 3 for details), an increase of 4,187 (7.3%) over 2018-19. The average number of interventions per participant also increased, as shown in table 4.

Table 3 - Type of intervention by participant category

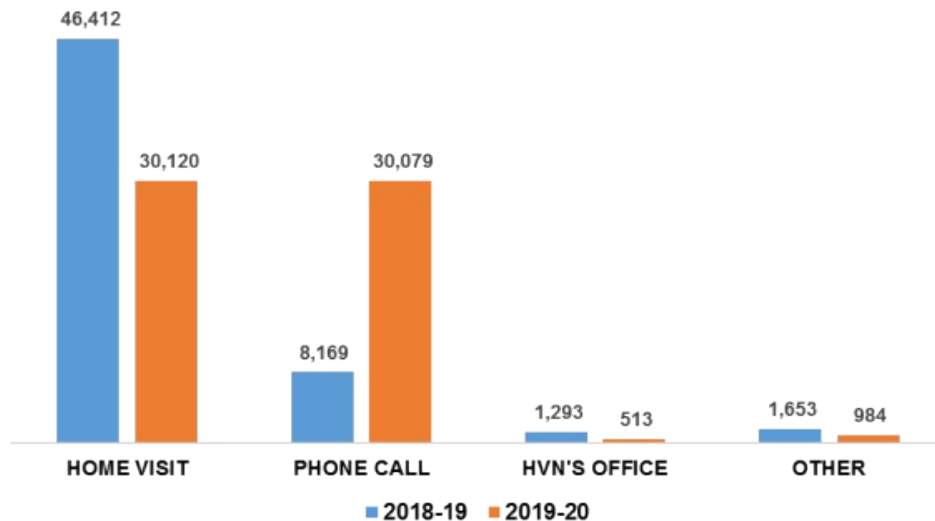
Category	Interventions FY 2019-20				
	Home visit	Phone call	HVN's office	Other	Total
Pregnant	7,111	4808	107	302	12,328
Interconceptional	11,227	13,276	239	348	25,090
Interconcep/pregnant	311	523	67	21	931
Infants	7,535	7,233	47	172	14,987
Children	3,936	4,230	53	141	8360
TOTAL	30,120	30,079	513	984	61,696

Table 4 - Average interventions per participant

Reporting year	Number of interventions	Number of cases	Average interventions per case
2019-20	61,696	5,130	12.02
2018-19	57,509	5,643	10.19

The following graph shows the comparison of interventions in 2018-19 and 2019-20 according to the type of contact between the HVN and the participant.

Figure 7 - Interventions with participants

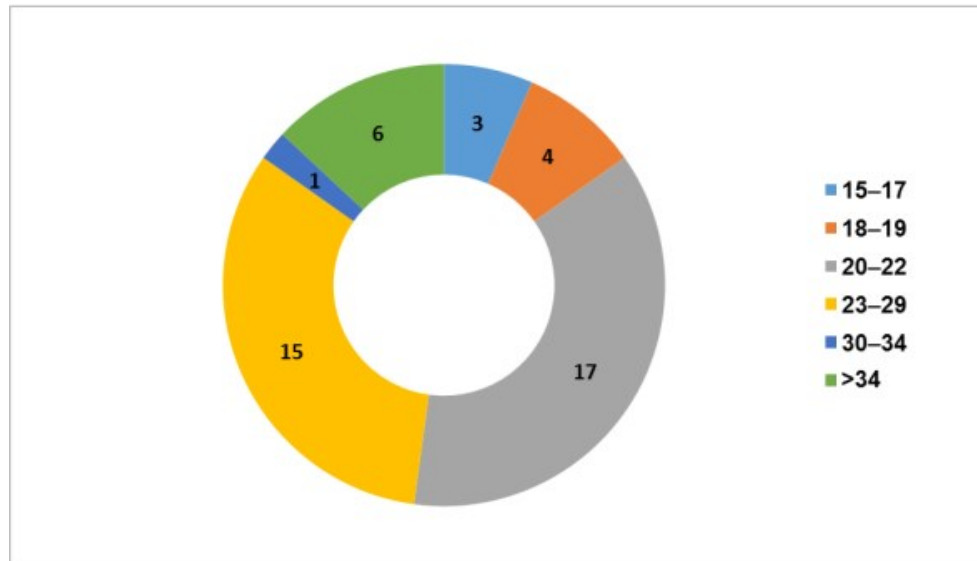


Screening Instruments

A tobacco use history instrument was administered to the 46 pregnant participants who stated in the screening

prompt that they had ever smoked. It is important to note that this instrument was temporarily discontinued after March 2020 due to the pandemic, so these numbers reflect only 8 months of interventions.

Figure 8 - Age distribution of ever-smokers



The next table reflects the responses of the women who were ever-smokers and responded to the tobacco use history instrument.

Table 5 - Responses of ever-smokers to the tobacco use history instrument

Item	# of respondents	%
Current smoking status	45	100.0%
Current smoker	0	0.0%
Stopped smoking during pregnancy	18	40.0%
Stopped smoking before pregnancy	27	60.0%
Time since stopping smoking	46	100.0%
> 4 months	45	97.8%
0-3 months	1	2.2%
Did you have any difficulty quitting smoking?	46	100.0%
No	42	91.3%
Yes	4	8.7%
What will happen after the birth?	43	100.0%
Will not smoke again	37	86.0%
Will smoke again	0	0.0%
Unsure	6	14.0%
Will you need support to remain a non-smoker after giving birth?	45	100.0%
No	41	91.1%
Yes	4	8.9%

An alcohol and drug use screening instrument based on the 4P+ screening tool^[4] was administered to 646 pregnant participants from July 2019 to March 2020. Two thirds of respondents (388, 60.5%) reported ever having used alcohol. Table 3 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 one respondent (0.3%) reported using any alcohol

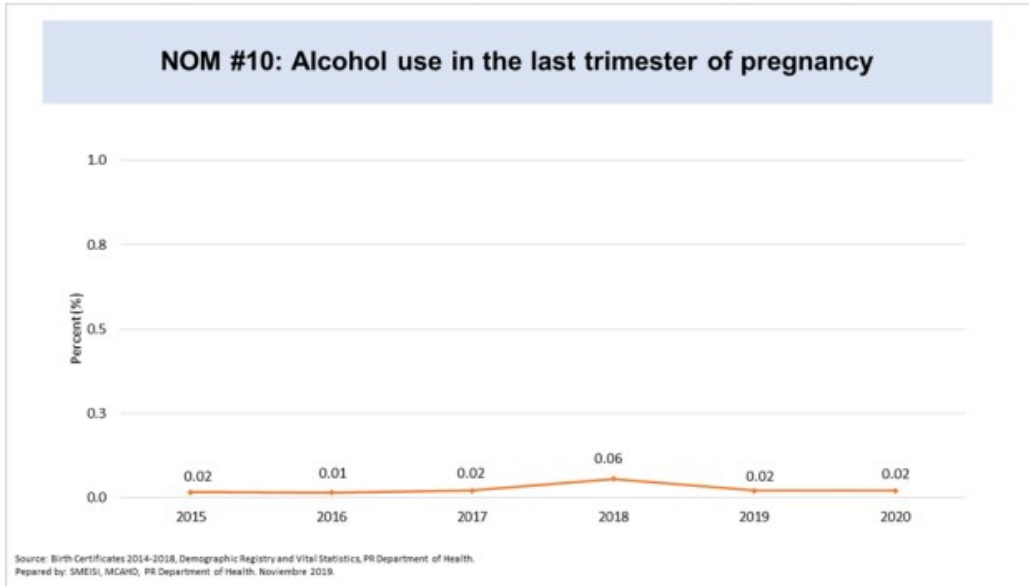
and none reported using drugs in the previous month. The information collected in the birth certificate for NOM #10, Alcohol use in the third trimester of pregnancy, reveals a similar low frequency of alcohol use in pregnancy, as shown in Figure 8.

Women 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 women, regardless of their admitted use.

Table 6 - Responses of women who were ever-drinkers and responded to the tobacco use history instrument

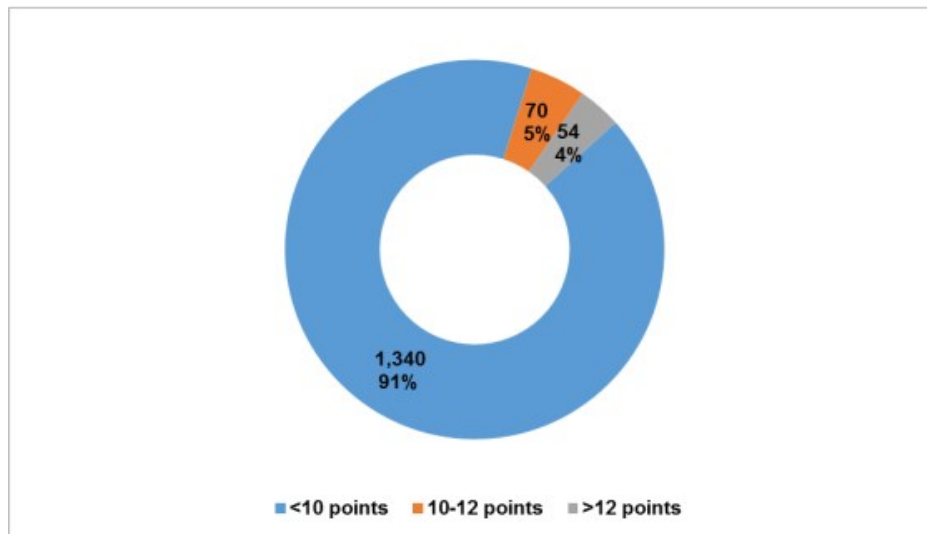
Item	# of respondents	%
Frequency of alcohol use in the month <u>before</u> pregnancy	400	100.0%
Every day	0	0.0%
3-6 days/week	3	0.8%
1-2 days/week	18	4.5%
<1 day/week	102	25.5%
Never	277	69.3%
Frequency of alcohol use in the <u>previous</u> month	395	100.0%
Every day	0	0.0%
3-6 days/week	0	0.0%
1-2 days/week	0	0.0%
<1 day/week	1	0.3%
Never	394	99.7%
Frequency of drug use in the month <u>before</u> pregnancy	635	100.0%
Every day	3	0.5%
3-6 days/week	4	0.6%
1-2 days/week	2	0.3%
<1 day/week	5	0.8%
Never	621	97.8%
Frequency of drug use in the <u>previous</u> month	631	100.0%
Every day	0	0.0%
3-6 days/week	0	0.0%
1-2 days/week	0	0.0%
<1 day/week	0	0.0%
Never	631	100.0%

Figure 9 - Alcohol use during the third trimester of pregnancy



The HVP protocol calls for all participants to be screened for maternal depression/anxiety using the 10-question Edinburgh Postnatal Depression Scale (EPDS) at least once during pregnancy and twice in the first year postpartum. During this reporting year the HVNs discontinued the administration of the EPDS from March 2020, when in-home visits were stopped, to August 2020 when they started administering the instrument by phone. Between July 2019 and February 2020, the EPDS was administered to 1,360 pregnant and interconceptional participants. A total of 1,546 screens were administered, a decrease of 226 (12.7%) from 2018-2019. Figure 10 shows the point distribution of the EPDS for the reporting period.

Figure 10 - EPDS scores



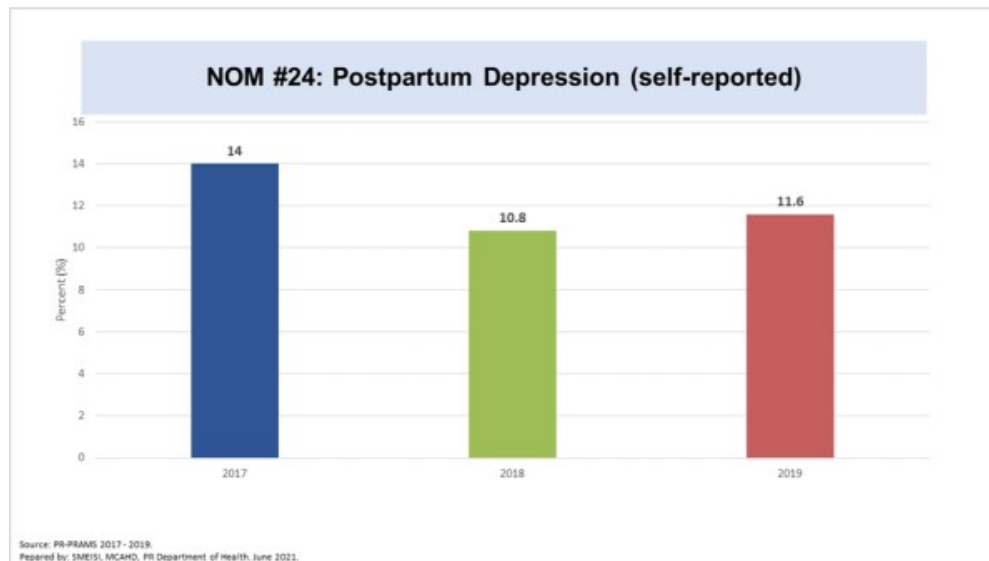
The responses ranged from 0 to 25 points, with a mean of 3.53 points and a standard deviation of 3.94. No statistically significant differences were found in risk levels over 10 points between participants up to age 21 (8.5%) and those 22 and over (8.0%) ($p=.389$). Seventeen (1%) screens had a positive response to Item 10 (suicidal ideation).

For participants who obtain >10 points on the scale or a positive answer to Item 10, the HVP protocol requires the HVN to offer education and 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. Of the 118 participants who obtained >10 points, 16% were already receiving mental health services, 38% were issued a referral for services, and 10% were offered a referral but refused it. Among the 17 women with a positive response to Item 10 (suicidal ideation), 18% were currently receiving services, 59% received a referral for services, and all were given support and information. The number of referrals for service was lower than in 2018-19 because services were severely limited during the pandemic.

PRAMS data for NOM #24, Postpartum depression, reveal that 11.6% of respondents in 2019 self-reported having postpartum depression. The proportion for HVP participants, is slightly lower at 8.7%. The comparison of the two groups is not direct, since PRAMS does not use a screening instrument to assess for depression. The support and education regarding symptoms of depression that the participants receive from the HVNs beginning in pregnancy may be a contributing factor for a more positive state of mental wellbeing.

Figure 11 - Postpartum depression



Participants are screened for the presence of violence using the Women’s Experience with Battering (WEB) scale. The scale consists of 12 questions that inquire about psychological and physical manifestations of violence in the woman’s relationship. 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 scale is administered in the second or third trimester of pregnancy and again three months postpartum. A total of 1,046 screens were administered from July 2019 to February 2020. Of these, 1,017 (97.8%) scored low (<20 points) and 23 (2.2%) scored high (≥20 points). The scores ranged from 12 to 50, with a median of 12 points. There were three questions where over 1% of respondents answered, “slightly agree” to “totally agree,” (numbers correspond to the item number in the instrument):

- (1) He makes me feel unsafe even in my own home.
- (2) I feel ashamed of the things he does to me.
- (4) I feel like I am programmed to react a certain way to him.

For all other questions, between 0.2% and 0.8% respondents answered in those categories.

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, women may be hesitant to reveal they are living in a violent environment. Therefore, HVNs offer education and support on this topic to all women, regardless of the score. For those women who score high, the HVNs have several options for intervention, including a brief form that the woman

can fill out to ask for further help if she is not able to verbalize it due to the presence of the aggressor or other family members. HVNs have a complete directory of services for women who live with violence, ranging from hotlines to shelters and legal assistance if the woman decides to leave home. The HVN can help the woman develop an escape plan, steer her to organizations that can help her press charges, as needed. In the reporting period, HVNs referred 17 participants to services and advised 2 on how to develop an escape plan.

HVP – Activities at the Community Level

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. In the reporting year, these interventions took on a more important role for many women who were not able to access their usual sources of care. Normally HVNs can offer a limited number of interventions to assist non-participant women with a specific situation. However, during the lockdown period the rules were relaxed to enable the HVNs to assist women for a longer period if needed. Although the total number of interventions with non-participants decreased from 7,731 in 2018-19 to 6,290 in 2019-20, the number of telephone interventions increased 128%.

Table 7 - HVN interventions with non-HVP participants, 2019-20

Category	Interventions 2019-20				
	Home visit	Phone call	HVN's office	Other	Total
Pregnant	852	581	174	479	2,086
Non-pregnant	1,605	753	239	690	3,287
Infants (<12 m)	116	196	47	63	422
Children (12 – 24 m)	82	301	53	59	495
TOTAL	2,655	1,831	513	1,291	6,290

A total of 901 referrals were given to non-participants of the HVP, which represents a decrease of 663 (42.4%) from the 1,564 referrals made in 2018-19. Again, this is due to the closing of public and private services beginning in March 2020. Referrals were made to the services detailed below:

Table 8 - Referrals made for non-HVP participants

Service or agency	Number of referrals
Government Health Plan	64
Prenatal care	32
Medical care (adults)	45
WIC	261
Department of the Family	8
Housing Department	21
Municipal services	13
Department of Education	6
Mental health services	35
Oral health	58
Breastfeeding support groups	23
Early Intervention	30
Pediatrician	51
Home Visiting Program	51
Others	203
Total	901

Training for HVP Staff

HVNs are offered 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. Beginning in March 2020, all training sessions have been done via Zoom or Microsoft Teams. Please see Workforce Development for details of the trainings offered during the reporting year.

As previously discussed, the regional HVP supervisors and MCAHD 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.

Community Health Workers and Health Educators

Community Health Workers (CHW) and Health Educators (HE) 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 reproductive age women, pregnant and parenting women and their companions, and the general public.

During 2019-2020, the educational efforts of CHWs and HEs were affected by the COVID-19 pandemic measures. From mid-March to June 2020 the CHWs devoted their time to making phone calls to government agencies and private providers to verify what services were being offered during the lockdown and how they could be accessed. They also assisted in coordinating services for community participants.

Table 9 - Distribution of Health Educators and Community Health Workers

Region	Health Educators	Community Health Workers
Arecibo	1	5
Bayamón	0*	8
Caguas	1	4
Fajardo	1	3
Mayagüez	1	8
Metro	0**	0
Ponce	1	4
Total	5	32

*The regional HE is Acting MCH Regional Director

**The Fajardo HE offers support to the Metro region

Due to the aforementioned circumstances, the data reported in this section pertains to the period of July 2019 to the second week of March 2020. The main interventions directed to WRA and maternal health are the Prenatal Course and group orientations on various aspects of women's health, pregnancy and reproductive health.

The Prenatal Course consists of four educational sessions that include information and educational activities divided into 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. Information on the transmission of Zika and preventive measures, its effect on the fetus and the need to test during pregnancy for infection has been added to this course. As part of the course, the participants complete a socio-demographic profile and a pre-and post-test.

In the reporting period, the Prenatal Course was offered 121 times by CHWs and 15 times by HEs throughout the Island. A total of 514 pregnant persons and companions (partners or other significant support person) participated in the course; of these, 482 (93.8%) completed all four sessions of the course.

One of the steps taken in response to the prohibition on group activities was to adapt the prenatal course "A Baby on the Way" to an on-demand video presentation. It covers all the topics in an abbreviated fashion and refers viewers to the "Encounter of my Life" website (encuentrodemivida.com) where they can access more complete information. The same strategy will be applied to the parenting courses in the coming months.

Health education topics on 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; intrafamily and intimate partner violence; physical activity and nutrition for a healthy weight; seasonal diseases (influenza, Chikungunya, dengue and others); and community services related to depression, addiction, violence, child care, among others. Topics related to Zika virus transmission include signs and symptoms, effects on the fetus, prevention of mosquito bites and mosquito control inside and outdoors, and the use of condoms for protection from sexual transmission. All educational presentations and materials are revised and updated by the Health Educators as needed.

Community Health Workers reached a total of 16,724 persons aged 10 and up through a variety of activities covering these topics, including individual orientations, prenatal and parenting courses, and group activities in the community, health care provider offices and health fairs. This number included 2,408 pregnant women, 17,719 non-pregnant women, and 3,297 males.

The next two tables refer specifically to individual and group interventions of the CHWs with WRA, both pregnant and non-pregnant, by age group. The first table reports individual orientations and the second refers to group activities according to location of the intervention, age group and pregnancy status.

Table 10 - CHW individual orientations to women

Age group	Status	Number
10-21	Pregnant	217
	Non-pregnant	187
22-54	Pregnant	384
	Non-pregnant	1,141
Total		1,929

Table 11 - CHW group orientations to women

Age group	Status	Location of educational intervention				Total
		School	Community	Health care setting	Health fairs	
10-14	Pregnant	0	2	0	0	2
	Non-pregnant	530	41	133	198	902
15-17	Pregnant	0	15	32	5	52
	Non-pregnant	548	47	127	94	816
18-19	Pregnant	0	40	71	16	127
	Non-pregnant	19	47	163	58	287
20-21	Pregnant	0	44	129	24	197
	Non-pregnant	6	78	289	80	453
22-34	Pregnant	2	239	688	90	1,019
	Non-pregnant	76	527	1,825	595	3,023
35-54	Pregnant	0	33	91	8	132
	Non-pregnant	138	352	1,644	562	2,696
Total participants		1,319	1,465	5,192	1,730	9,706

For their part, in the period of July 2019 to March 2020 the Health Educators reached a total of 4,930 persons aged 10 and over in group and individual orientations. Of these, 2,557 (51.8%) were 21 years of age or under, and 2,373 (48.1%) were 22 or over.

The next two tables reflect the Health Educators' individual and group interventions with WRA, pregnant and non-pregnant, by age group. The first table reports the individual orientations and the second the group interventions according to location of the intervention, age group and pregnancy status.

Table 12 - HE individual orientations to women

Age group	Status	Number
10-21	Pregnant	0
	Non-pregnant	2
22-54	Pregnant	3
	Non-pregnant	31
Total participants		36

Table 13 - HE group orientations to women

Age group	Status	Location of educational intervention				Total
		School	Community	Health care setting	Health fairs	
10-14	Pregnant	35	1	0	0	36
	Non-pregnant	583	93	5	172	853
15-17	Pregnant	8	6	2	0	16
	Non-pregnant	183	59	20	30	292
18-19	Pregnant	2	6	10	0	18
	Non-pregnant	8	39	34	31	112
20-21	Pregnant	0	8	12	0	20
	Non-pregnant	1	26	29	21	77
22-34	Pregnant	3	54	86	3	146
	Non-pregnant	48	182	131	90	451
35-54	Pregnant	0	6	19	2	27
	Non-pregnant	70	324	305	164	863
Total participants		941	804	653	513	2,911

Oral Health in Pregnant Women

During 2019-2020, the PR MCAH continued promoting oral health in pregnant women. Prenatal preventive oral health is a determinant that may have impact on the pregnancy outcome. Furthermore, poor maternal preventive oral health also is a risk factor for early childhood caries in their offspring.

Data from the Puerto Rico PRAMS reported 53.1% of pregnant women in 2019 and 48.7% in 2018 had a dental cleaning done by a dentist or dental hygienist in a preventive oral visit. In 2019, 19.6% stated they did not believe a dental visit during pregnancy was safe. These findings support the need to promote the oral health preventive visit and access to oral care for pregnant women.

The government-imposed shutdown (beginning in March 2020) and the practices implemented to prevent, and control COVID-19 infection affected access to dental services for the whole population during 2020-2021. Fear of contagion was added to the fear of receiving services during pregnancy, further influencing patient delays of preventive dental services.

During 2019 and 2020, despite the pandemic, the PR MCAH continued its efforts on strengthening collaborations with MCH stakeholders that provide services to pregnant women and implemented strategies to promote preventive oral health care visits. The Pediatric Consultant collaborated with the PR Territorial Dental Officer from the Health Promotion Division and other oral care stakeholders on improving oral health outcomes. PR MCAH contributed in promoting improvement in access to preventive oral health services for all pregnant women. Strategies implemented to attain the goals included:

October 2019 – The Oral Health Program, with collaboration of the MCAHD staff, developed a fact sheet entitled “Oral Health in Pregnant Women in PR, 2018” using 2018 PR-PRAMS data. The fact sheet is available from www.salud.gov.pr/Sobre-tu-Salud/Documents/Salud%20Oral%20Embarazo.pdf.

Figure 12 - Oral health fact sheet



To increase awareness on the topic, key points on the data were also developed and projected during breaks in the February 2020 CME Dental Convention.

December 2019 – The MCAH Pediatric Consultant and President of the PR AAP Chapter coordinated and led a meeting with the presidents of the PR Pediatric Society (PPS) and the PR Pediatric Dental Society (PRPDS), a representative of the PR Dental Surgeons College (PRDC) and a member of the executive committee of the PR AAP Chapter to present data relevant to early childhood caries and oral health during pregnancy in PR. The data were also shared with the PR ACOG district president. The purpose was to promote collaboration in proposing and implementing strategies to improve oral health in pregnancy and early childhood. As a result, these partners developed a strategic plan led by the MCAH Pediatric Consultant.

Among the strategies focused on pregnant women’s oral care are:

- December 2019 – A promotional campaign via social media and email blast was directed to all OB/GYN members of the PR ACOG district and pediatricians who are members of the PR AAP Chapter. The campaign included a holiday card which proposed promoting oral health care visits in pregnancy and prevention of early childhood caries (ECC) in the population they serve as a resolution for 2020. This strategy was initiated in a Title V needs assessment meeting.
- January 15, 2020 – A workshop on oral health of pregnant women and infants and on how to adopt the infant ECC risk screening was offered by the MCAH Pediatric Consultant to 78 nurses, health technicians and staff of Head Start (HS) and Early Head Start (EHS) of 11 municipalities. The MCAH regional offices continue to provide educational activities in the community to promote the prevention of ECC and the establishment of a dental home for all the pediatric population.
- February 12, 2020 – Newspaper article entitled “Take care of baby teeth” was published to promote the benefits of preventive oral health care visits in pregnant women and family members, early establishment of

dental home for infants at higher risk for caries, and recommendations for families to adopt habits that prevent ECC. The article was written by the MCAH Pediatric Consultant and the President of PPS and was published in a special supplement on pediatric health care topics in “El Nuevo Día” newspaper, which has the largest circulation in PR. It emphasized the importance of caring for deciduous teeth and of having a dental visit during pregnancy.

- February 15, 2020 – Press conference *Prevención de caries en infantes y salud oral de la mujer embarazada* promoting the benefits of preventive oral health care visits in pregnant women, infants, and family members, with the participation of all oral health stakeholders.
- February 2020 – Two continuing medical education (CME) lectures on the topics of preventive oral care of pregnant women and the identification of risks and prevention of ECC were offered during the PR Dental Annual CME Congress, which was attended by more than 300 oral health professionals.
- March 5-11, 2020 – Newspaper article titled “United for Oral Health” featuring the pediatric consultant, AAP-PR Chapter, ACOG-PR, PPS, and PRPDS was published in El Expresso newspaper, promoting best practices for early cavity prevention and oral health for pregnant women.
- July 13, 2020 – A webinar on oral health entitled “Oral Health of Pregnant Women and Children” was provided to 170 MCAH Home Visiting Nurses (HVN) and HS personnel to increase their skill in delivering information and evaluating cases by the pediatric consultant.

Prior to the pandemic, the MCAH staff provided 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 and how preventive oral hygiene, healthy oral habits, and preventive dental visits contribute to better health. The Prenatal Courses also provided education and promotion of oral care during pregnancy and encouraged a dental visit during pregnancy as part of every woman’s prenatal care plan. The HVNs provided education to participants about the importance of dental care and referred them to visit the dentist as part of their prenatal care.

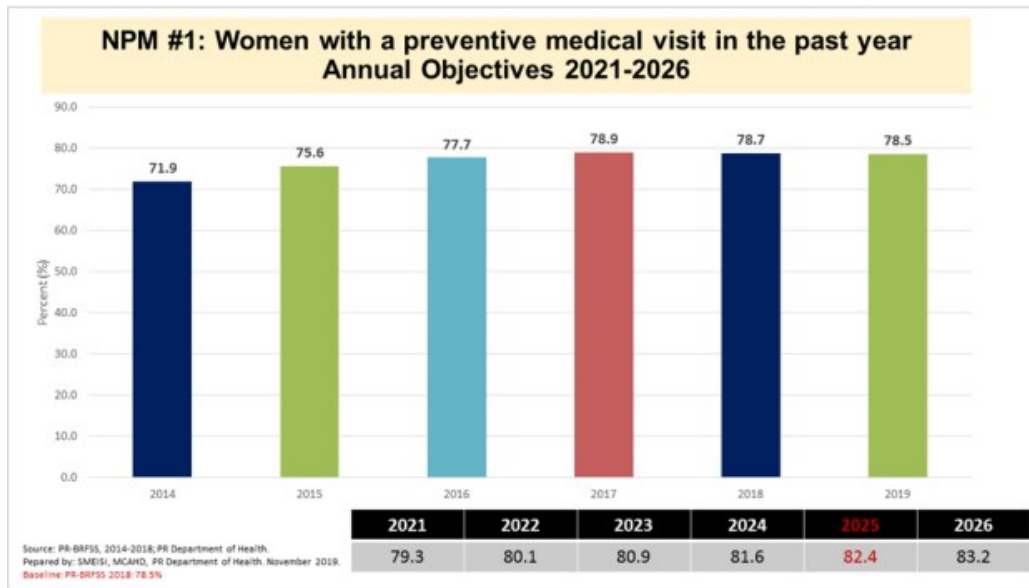
The shutdown in March 2020 caused the postponement of in-person educational promotional efforts, but adjustments were adopted, and the efforts continued through telephone interactions, as in the HVP, or by delivering education and promoting oral care of pregnant persons through webinars.

Promoting Preventing 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 2019 BRFSS data, around three-quarters of respondents had a preventive medical visit (NPM #1) in the year before the survey (see Figure 9), with very little change over the last 5 years. 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 2019-20, 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.

Figure 13 - Women who had a preventive medical visit in the past year



A pocket guide to women’s health, “Mi agenda de salud” (“My Health Planner”) is one component of the strategy designed to increase this indicator. It was not possible to develop the proposed pocket guide during the reporting year due to the efforts devoted to responding to the COVID-19 pandemic. “Mi agenda de salud” was developed in the first half of 2021 and will be distributed in the second half of 2021. Please see the Women/Maternal Health Application Year narrative for full details.

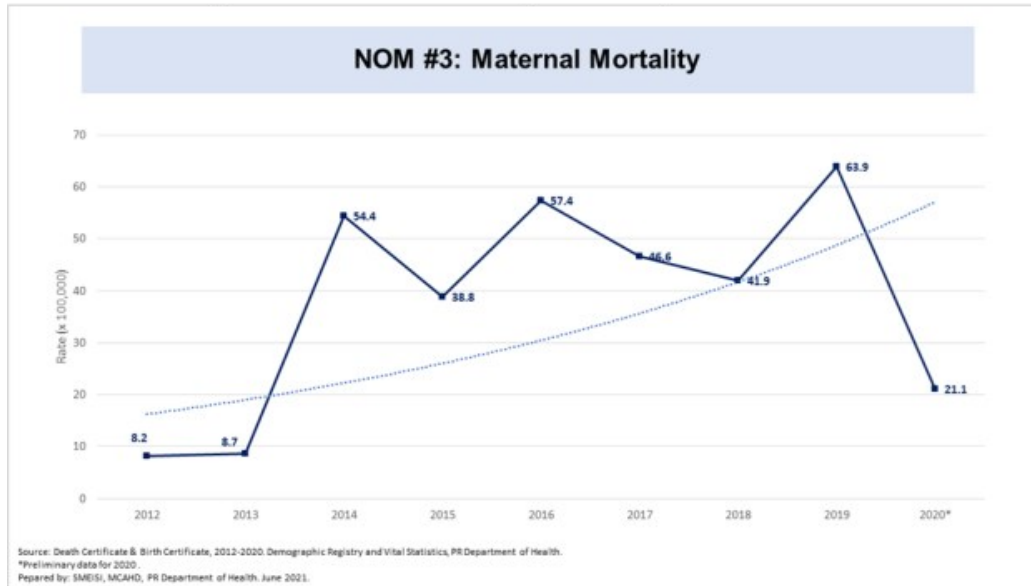
Maternal Mortality

The review of maternal mortality continues to be a priority for the MCAHD. The Maternal Mortality Epidemiological Surveillance System (MMESS) Act (Act #186-2016) was enacted in 2016 and the implementation protocol was registered in 2017. This legislation protects the information collected, the members of the Maternal Mortality Review Committee (MMRC) and the review process in general.

A letter from the Secretary of Health requesting access to the medical records was sent to 8 hospitals where possible maternal deaths were identified. The Title V OB/GYN Consultant and the TV evaluator who works with the MM review system started visiting hospitals and gathering available information regarding the deaths with the intention of preparing the cases to be presented to the MMRC. However, the COVID-19 pandemic restrictions put a temporary stop to those efforts.

The TV Evaluator has continued to link and evaluate the Vital Statistics birth and death data to identify maternal deaths. To date, 202 cases dating from 2009 to 2019 have been identified. The initial review of cases identified pregnancy-related hypertension (22%) as the major cause of pregnancy-related death between 2015 and 2019 in Puerto Rico. During this time period a maternal death was 12.1 times more likely to occur to women age 35 or older as compared with younger women (Confidence Interval: 7.1 to 20.7).

Figure 14 - Maternal Mortality Rate in PR, 2012-2019



^[1] Cortés Chico, R. (April 26, 2021). "Censo 2020: Puerto Rico pierde el 11.8% de su población en la última década."

<https://www.elnuevodia.com/noticias/locales/notas/censo-2020-puerto-rico-pierde-el-118-de-su-poblacion-en-la-ultima-decada/>

^[2] Martin, J. A., Hamilton, B. E., Osterman, M. J. K., & Driscoll, A. K. (2021). Births: Final Data for 2019. *National Vital Statistics Reports*, 70(2). DOI: <https://dx.doi.org/10.15620/cdc:100472>.

^[3] Alvarado León, G. E. (May 14, 2021). "Sigue 'activa y vigente' la secuencia sísmica que inició el 28 de diciembre de 2019."

<https://www.elnuevodia.com/noticias/locales/notas/sigue-activa-y-vigente-la-secuencia-sismica-que-inicio-el-28-de-diciembre-de-2019/>

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

Women/Maternal Health - Application Year

The MCAHD continues to hold Maternal Health (MH) and Women's Reproductive Health (WRH) among its top priorities. The focus in this domain is directed to two main concerns: promoting health and well-being among WRA and improving birth outcomes. The Title V Home Visiting Program (HVP), Prenatal Care Courses, and Community Outreach and Education will continue to be the main vehicles to work towards these areas of interest.

Promoting healthy lifestyles decreases the incidence of health risks and chronic diseases that affect women's health, complicate pregnancy and adversely affect birth outcomes. The adoption of healthful behaviors by women starting long before they think of pregnancy increases the likelihood of positive birth outcomes. Physical and mental health factors are intertwined and must be given equal attention. Social, cultural and environmental factors that can have a positive or negative 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, the response to the COVID-19 public health emergency required the Home Visiting Program (HVP) to make drastic adaptations to its protocols. When the government-mandated lockdown started in March 2020, home visits were brought to a halt. A modified protocol was designed to guide the Home Visiting Nurses' (HVN) interventions with their participants via telephone and text messaging. It includes a pared-down version of the participant interview, which is easier to administer and document in a phone call. Mobile phones with unlimited data plans were supplied to all HVNs in January 2021 to improve communications capabilities with their participants.

Administration of some screening tools was discontinued temporarily, particularly those that ask sensitive questions such as the depression, Adverse Childhood Experiences (ACE), tobacco, alcohol, and domestic violence screens. The HVNs were alert to any signs of depression or other risk factors. Recognizing the importance of identifying mental health issues, the HVNs received training to administer the Edinburgh Postnatal Depression Scale (EPDS), which is validated for telephone administration, starting in August 2020.

Many public and private services were curtailed during the lockdown period and, even after lifting prevention measures, are not running up to par. The HVNs are instrumental in assisting participants to complete necessary processes such as enrolling in WIC, finding a prenatal or pediatric care provider, and registering newborns in the Demographic Registry. As the situation continues to evolve, the HVNs ensure the participants are able to navigate the processes needed to obtain services.

In January 2021, HVNs were allowed to do a drop-off of educational materials and incentives without coming into close contact with the participants, following the guidelines in the "Protocolo para entrega de materiales educativos e incentivos a participantes durante la pandemia COVID-19" ("Protocol for delivery of educational materials and incentives to participants during the COVID-19 pandemic"). This marked the first time since March 2020 that they were able to interact face-to-face with their participants, albeit in a limited manner, and the first time meeting participants who had been admitted to the HVP during the lockdown. According to the reports of the regional supervisors, both nurses and participants were grateful for the opportunity to meet.

All HVNs and MCAHD staff received the COVID-19 vaccines by February 2021. Home visits resumed in March 2021 following a strict protocol to reduce risk for both HVNs and participants. The protocol for virtual visits remains in effect for participants who are not willing to receive home visits at this time and for those who have COVID-19 or a possible exposure in their home. The supplemental protocol "Retorno a las visitas presenciales a los hogares de participantes" ("Return to in-person home visits") was distributed on March 9, 2021. The protocol specifies risk mitigation measures and instructions for specific in-home interventions.

A home visit consent form (See Figure 1) was developed to ensure that both the HVN and the participant are committed to following protective measures, such as compulsory use of face masks (at this writing still mandated by

local government), maintaining social distance, informing the HVN of any symptoms suggestive of COVID-19 or exposure to someone with the condition, etc. Participants are free to refuse to receive in-person visits for any reason, and they are assured this will not have any consequence in the services they receive.

As of this writing, the majority of HVP participants are actively receiving in-person services. As HVNs started carrying out home visits, they began catching up on the participant forms and screening instruments that had been discontinued due to the pandemic.

Figure 1: Consent form for return to in-person home visits

MS10-rev02/2021

Departamento de Salud
División Madres, Niños y Adolescentes
Programa de Visitas al Hogar

CONSENTIMIENTO PARA RECIBIR VISITAS EN EL HOGAR DURANTE LA PANDEMIA DE COVID-19

Nombre de la participante: _____ # exp: _____
Fecha de orientación por teléfono: _____
Resultado de la orientación: desea visita, fecha y hora programada: _____
 no desea visita, razones: _____

Yo, _____ autorizo al personal del Programa de Visitas al Hogar (PVH) del Departamento de Salud a visitar mi hogar tomando las precauciones y medidas de prevención necesarias para evitar el contagio con COVID-19.
Nombre de la participante

La Enfermera o Enfermero Visitante (EV) se compromete a:

1. Utilizar mascarilla en todo momento.
2. Desinfectar sus manos con sanitizante antes de entrar a mi hogar y al salir de él.
3. Mantener una distancia de seis pies (6') entre las personas.
4. No tener contacto físico con los miembros de mi hogar.
5. No visitarme si tiene COVID-19 o se siente enferma(o).

Tanto yo como las demás personas en mi casa nos comprometemos a:

1. Utilizar mascarilla en todo momento (mayores de 2 años).
2. Lavarnos las manos con agua y jabón o desinfectarlas con sanitizante antes y después de la visita.
3. Mantener una distancia de seis pies (6') de mi EV.
4. No tener contacto físico con mi EV.
5. Evitar que haya aglomeración de personas en el hogar el día de la visita.
6. Avisar a EV si yo tengo o alguien en mi hogar tiene un diagnóstico de COVID-19 o síntomas tales como estos para cambiar la visita para otro día:
 - Fiebre o escalofríos
 - Tos
 - Dificultad para respirar (sentir que le falta el aire)
 - Fatiga o cansancio
 - Dolores musculares y corporales
 - Dolor de cabeza
 - Pérdida reciente del olfato o el gusto
 - Dolor de garganta
 - Congestión o moqueo
 - Náuseas o vómitos
 - Diarrea

Esta autorización me ha sido debidamente explicada. Certifico que entiendo y acepto su contenido.

Firma de la participante

Fecha

Firma de Enfermero/a Visitante

Fecha

Since the beginning of the COVID-19 crisis, the HVNs have offered accurate and updated information to participants. Concerns regarding COVID-19 in pregnancy and in children were addressed using official sources of information. When the COVID-19 vaccines were made available, the HVNs provided orientation regarding the benefits of vaccination and the process to be vaccinated according to the groups defined by the government.

The plan for the coming year must take into account measures taken to ensure the health and safety of our HVNs and the participant families. Central level staff will continue to work with the Regional Directors, Supervisors and HVNs to ensure they can provide the best possible service to their participants, in accordance with local and federal public health and emergency response guidelines.

The sources of referral of candidates for admission to the HVP were curtailed during the period of the COVID-19 restrictions. As prevention measures become more flexible, HVNs and Community Health Workers (CHWs) will once again be able to use varied strategies to identify women in the community who can benefit from participating in the

HVP.

Maternal health care will continue to be a main feature of the Home Visiting Program (HVP). The Home Visiting Nurses (HVN) will continue to 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, as well as on effective interventions with participants. This double-pronged approach improves both the content and the delivery of their interventions.

Due to the efforts required by the response to the COVID-19 pandemic and the accompanying restrictions, the plans to identify a validated community mental health intervention model and train the HVP staff on its implementation were not carried out. However, cognizant of the impact this activity will have on the quality of the services offered to the participants in the area of mental health and well-being, this plan is being rolled over to the coming year. The Title V Mental Health Consultant will collaborate in studying available models and selecting one that is a good fit with the HVP intervention model and staffing.

In terms of screening instruments, the HVP will continue to use the Edinburgh Postnatal Depression Scale to screen for maternal depression; the Cambridge Worry Scale to assess sources of worry or stress related to pregnancy and childbirth; Adverse Childhood Exposure (ACEs) to identify women who have a history of traumatic experiences and enable HVNs to take a trauma-informed approach to their interventions; and the Women's Experience with Battering (WEB) scale to identify women 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 ever-smokers. Other instruments may be considered for inclusion as the need arises. The information garnered from these screening instruments, taken together with the participant's Biopsychosocial Profile (the core participant record) and the HVN's observations, is used to develop the care plan for each participant.

The HVN interventions will continue to feature health education and support, as well as 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 women; however, the HVNs personalize their actions according to the participant's identified strengths and needs and the resources available in the community.

MCAHD staff remains on the alert for emerging health threats or changes to the environment that require modifications to the programs, protocols, instruments or educational materials to respond accordingly. In addition, the HVP is agile in reacting and responding to any required changes. The COVID-19 crisis put this capability to the test. The HVP staff demonstrated their capacity to react effectively and in a timely fashion to emerging threats and needs and to incorporate the response into the protocol.

In the coming year HVNs will continue to offer education, support, care coordination and case management to pregnant and parenting women, their children up to age 2, and their families. 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. As the COVID-19 situation evolves, the program will continue to review and adapt the home visit protocols to ensure safety for HVNs and participant families as well as the highest quality of interventions.

Community Health Workers, Health Educators and Educational Campaigns

As was the case with the HVP, beginning in March 2020 the COVID-19 pandemic made it impossible to continue offering educational activities in the community. However, in March 2021 permission was granted to gradually resume activities following prevailing government orders and all necessary precautions to minimize risk of transmission. The plan for the coming year will take into account the evolution of the pandemic and changes to the government guidelines.

In response to the prohibition of group activities, one of the steps taken was to adapt the prenatal course "A Baby on

the Way” to an on-demand video presentation available on cuidadoprenatalpr.com. It covers all the topics in an abbreviated fashion and refers viewers to the “Encounter of my Life” (encuentrodemivida.com) website where they can access more complete information. The same strategy will be applied to the parenting courses in the coming months.

Figure 2 - Virtual Prenatal Course main screen



The video adaptations of the course continues to provide participants with information leading to a healthier pregnancy and delivery, awareness of premature labor, risk behaviors, oral care in pregnancy, appropriate care for the baby including safe sleep, breastfeeding, laws and regulations that promote quality birthing services and support for breastfeeding initiation in the hospital. The target populations are pregnant women and their companions.

The “Encounter of my life” (“Encuentro de mi vida”) prenatal education campaign that started in 2018 acquired even more pertinence during the pandemic, as it allows pregnant and parenting persons to obtain information in a safe manner. The HVNs refer women to the website for information that complements their verbal communication. The campaign emphasizes the importance of completing 40 weeks of pregnancy, attending prenatal care regularly, adopting healthy behaviors and avoiding risks during pregnancy. It covers also the postpartum period and the importance of breastfeeding and having the father and other relatives support mom and baby.

Figure 3 - "Encuentro de mi vida" main screen



As the situation evolves, the Health Education Component (HE) will explore alternate methods to deliver important health messages to the community. The traditional group orientations in schools and universities, health care provider offices, human services offices and other locations where the MCH population can be reached will be reinitiated as allowed according to regulations.

The HEs will continue to revise and update the educational materials and curricula used by the CHWs and HVNs, as is the case with the prenatal and parenting courses, in order to adapt them to new methods of dissemination, to include emerging conditions and incorporate the latest evidence-based information. As the situation allows, the HEs and CHWs will continue to offer the topics of 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, premature birth signs and symptoms, 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 will continue to 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.

The Perinatal Nurses (PN) will continue to visit birthing hospitals throughout the island to provide education and referrals to pregnant women and new mothers. They offer these one-on-one educational interventions to all women, regardless of risk level.

Promoting Oral Health in Pregnant Women

During 2020-2021, the shutdown and the practices implemented to prevent, and control COVID-19 infection affected

access to dental services for the whole population. Dental offices adopted protocols to ensure patient and staff safety, which resulted in decreased capacity to accommodate patients daily. Fear of contagion also influenced patients delaying preventive dental services. Therefore, once the pandemic subsides, promotion of oral care will continue to be a priority.

The MCAHD acknowledges the importance of increasing the availability and quality of services to improve oral health for pregnant women, the beneficial impact on pregnancy outcome and in reduction of caries risk for the infant. Therefore, it proposes to continue to concentrate its efforts on strengthening collaborations with MCH stakeholders that provide services to pregnant women and to develop strategies that promote preventive oral health care visits. To achieve this objective, the MCAHD will monitor and guide public policies to promote and improve access to preventive oral health services for all pregnant women. Strategies to attain the goals include increasing obstetricians' knowledge on the importance of oral care during pregnancy and referral of pregnant women for preventive dental visits; facilitating access for pregnant women to preventive dental and oral health services by identifying dental providers who serve this population; updating a directory with the collaboration of the Dental Surgeons College of Puerto Rico; promoting CMEs for general dentists on the topic of oral health care for pregnant women; providing information on the benefits and safety of dental care in the preventive dental visits during pregnancy; and evaluating and improving methods of monitoring preventive dental visits by pregnant women. The PR MCAH has also integrated dental health in the Preventive Health Services Guidelines (PHSG) for WRA promoting optimal oral health prior to pregnancy.

In terms of education and awareness activities directed at pregnant women and the public, the Prenatal Course will continue to emphasize the importance of preventive dental visits during pregnancy. As well, the HVP will also continue to emphasize the importance of preventive dental visits during pregnancy and refer all its participants for dental visits.

Promoting Preventive Health Services among Women

The MCAHD has taken a two-pronged approach to work with NPM 1 "Percent of women, ages 18 through 44, with a preventive medical visit in the past year." One is directed to WRA and the second addresses the health care system.

The women's health pocket guide, entitled "Mi agenda de salud" ("My health planner") 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 guide will be printed on cardstock for durability and to allow writing in pencil or ink. 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.

"Mi agenda de salud" was developed by a committee composed of the following MCAHD staff: Title V Director, Adolescent Health Program Associate Director, Pediatric consultant, OB/GYN consultant, Mental Health Consultant, SSDI Coordinator, Pediatric epidemiologist, two Title V evaluators, HVP Coordinator, Positive Youth Development Coordinator, and Health Education Component Coordinator. Starting in January 2021, the committee held weekly meetings over Microsoft Teams to work out the overall concept, design, and content of "Mi agenda de salud." Since the guide was directed at a wide age range, two subcommittees were charged with ensuring appropriateness of content for ages 10-21 and 22-49 respectively.

Once the basic elements of the guide were established, a third subcommittee worked on the design features of the guide. Their main concern was to ensure the information could be presented concisely yet clearly, easily understandable and readable. The guide will be printed on legal-sized cardstock for durability and folded over several times to make an approximately 2.75" x 4.25" booklet for ease of carrying in a wallet, bag or pocket.

The following images show the current draft model of "Mi agenda de salud."

Figure 4: Front and back covers



Figure 5: Page 1a - Introduction

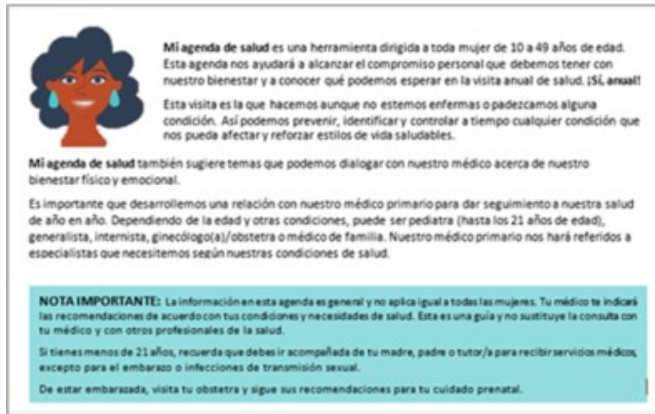


Figure 6: Page 1b – Health protective behaviors



Figure 7: Page 2

Left panel – What to expect during the annual health visit
 Right panel – Information on vaccinations and common procedures and tests

¿Qué podría ocurrir en mi visita anual de salud? Fecha de la visita

Antes de entrar a ver a mi doctor(a): **Notas y preguntas:**

Padre contestar varias preguntas:

- Haga con mi informador y de mi salud personal y familiar (síntomas, enfermedades del corazón, diabetes y otras).
- Haga con preguntas sobre temas que luego podrá conversar con mi doctor(a), incluyendo el uso de alcohol, drogas, tabaco (cigarillos o vaping) y estado de ánimo, ansiedad y depresión.

Me tocarán los signos vitales:

- Incluye la presión, pulso, respiración, temperatura. Fecha de mi última menstruación, peso, estatura, calcular mi índice de masa corporal (BMI) y medir mi cintura.
- Ella puede hacerle mi doctor(a) sobre personal de su oficina.

Durante el tiempo con mi doctor(a):

Tendrá mi historial de salud y realizará un examen físico:

- Puede hacer preguntas y compartir preocupaciones sobre mi salud física y emocional.
- De los 13 a los 21 años me realizará una prueba de audición y una prueba de visión cada tres años o me referirá para hacerme las pruebas.
- Le consultará cualquier preocupación relacionada con mi audición o visión.

Hablaremos sobre mi salud sexual y reproductiva:

- Si he tenido relaciones sexuales:
 - Embarazo, parto o pérdidas que he tenido.
 - Mis planes de quedar embarazada en el próximo año:
 - Si **quiero** quedar embarazada, hablemos sobre mi estado de salud antes del embarazo.
 - Si **no quiero** quedar embarazada, hablemos sobre métodos anticonceptivos.
 - Las infecciones de transmisión sexual y cómo prevenirlas.
 - La ansiedad, depresión y otras preocupaciones relacionadas a mi salud emocional.
 - Alguna experiencia de violencia en mi vida, ya sea en la escuela, el trabajo, o cualquier otro ambiente.
 - Me recomendará cualquier vacuna que necesite según mi edad, historial de vacunación y estado de salud.
- Si **no quiero** quedar embarazada, hablemos sobre métodos anticonceptivos.
- Las infecciones de transmisión sexual y cómo prevenirlas.
- La ansiedad, depresión y otras preocupaciones relacionadas a mi salud emocional.
- Alguna experiencia de violencia en mi vida, ya sea en la escuela, el trabajo, o cualquier otro ambiente.
- Me recomendará cualquier vacuna que necesite según mi edad, historial de vacunación y estado de salud.

Preguntará sobre mi bienestar emocional:

- Si he tenido relaciones sexuales:
 - Embarazo, parto o pérdidas que he tenido.
 - Mis planes de quedar embarazada en el próximo año:
 - Si **quiero** quedar embarazada, hablemos sobre mi estado de salud antes del embarazo.
 - Si **no quiero** quedar embarazada, hablemos sobre métodos anticonceptivos.
 - Las infecciones de transmisión sexual y cómo prevenirlas.
 - La ansiedad, depresión y otras preocupaciones relacionadas a mi salud emocional.
 - Alguna experiencia de violencia en mi vida, ya sea en la escuela, el trabajo, o cualquier otro ambiente.
 - Me recomendará cualquier vacuna que necesite según mi edad, historial de vacunación y estado de salud.
- Si **no quiero** quedar embarazada, hablemos sobre métodos anticonceptivos.
- Las infecciones de transmisión sexual y cómo prevenirlas.
- La ansiedad, depresión y otras preocupaciones relacionadas a mi salud emocional.
- Alguna experiencia de violencia en mi vida, ya sea en la escuela, el trabajo, o cualquier otro ambiente.
- Me recomendará cualquier vacuna que necesite según mi edad, historial de vacunación y estado de salud.

Verificará mis vacunas:

- Recibiré información sobre alimentación y actividad física.
- Me explicará sobre los cambios físicos y emocionales en las etapas de mi desarrollo.
- Me recomendará el uso diario de la vitamina ácido fólico.
- Hablemos sobre los efectos del uso de alcohol, tabaco (cigarillos o vaping) y drogas.
- Si tengo escapes de orina (incontinencia urinaria) que afectan mi calidad de vida.
- Cualquier otro tema de salud que me preocupe.

Me ofrecerá orientación sobre estilos de vida saludables:

- Recibiré información sobre alimentación y actividad física.
- Me explicará sobre los cambios físicos y emocionales en las etapas de mi desarrollo.
- Me recomendará el uso diario de la vitamina ácido fólico.
- Hablemos sobre los efectos del uso de alcohol, tabaco (cigarillos o vaping) y drogas.
- Si tengo escapes de orina (incontinencia urinaria) que afectan mi calidad de vida.
- Cualquier otro tema de salud que me preocupe.

Podremos hablar de otros temas:

- Recibiré información sobre alimentación y actividad física.
- Me explicará sobre los cambios físicos y emocionales en las etapas de mi desarrollo.
- Me recomendará el uso diario de la vitamina ácido fólico.
- Hablemos sobre los efectos del uso de alcohol, tabaco (cigarillos o vaping) y drogas.
- Si tengo escapes de orina (incontinencia urinaria) que afectan mi calidad de vida.
- Cualquier otro tema de salud que me preocupe.

Haremos un resumen de la visita y recomendaciones:

- Recibiré información sobre alimentación y actividad física.
- Me explicará sobre los cambios físicos y emocionales en las etapas de mi desarrollo.
- Me recomendará el uso diario de la vitamina ácido fólico.
- Hablemos sobre los efectos del uso de alcohol, tabaco (cigarillos o vaping) y drogas.
- Si tengo escapes de orina (incontinencia urinaria) que afectan mi calidad de vida.
- Cualquier otro tema de salud que me preocupe.

Recordar que puedes comunicar tus dudas y preguntas durante la visita

La importancia de las vacunas

Las vacunas nos ayudan a protegernos contra muchas enfermedades durante toda nuestra vida. Hay vacunas, como la de influenza, que se administran todos los años. Otras se pueden recomendar según la edad y el historial de salud de cada persona.

El Departamento de Salud tiene la información más actualizada sobre las vacunas en vaccinatepr.com.

La vacuna contra el Virus de Papiloma Humano (HPV) se recomienda para todas las mujeres, ya que previene el cáncer del cuello del útero. Se puede administrar desde los 12 años en adelante.

Consultar con mi doctor(a) sobre la vacuna contra el COVID-19 y cualquier otra que pueda recomendar.

Exámenes y pruebas de laboratorio

Hay algunos exámenes y pruebas de laboratorio que se recomiendan para todas las personas a una edad específica. Otros dependen de las condiciones de salud o factores de riesgo.

Preguntar a mi doctor(a) qué pruebas me recomendará y anotará la fecha en que me las hiciera.

DESCRIPCIÓN	MI EDAD ES:			
	10 a 14 AÑOS	15 a 17 AÑOS	18 a 21 AÑOS	22 a 49 AÑOS
Niveles de glucosa en sangre (colesterol): muestra de sangre en ayunas	1 vez entre 9-11 años Fecha: _____		1 vez entre 17-21 años Fecha: _____	Desde 40 años cada 5 años Fecha: _____
VIIH (virus de inmunodeficiencia humana): muestra de sangre (o de saliva) muestra una vez cada 3 años desde los 13 años	A los 13 años Fecha: _____		A los 18 años Fecha: _____	Cada 5 años Fecha: _____
Citología y ginecología: muestra de orina		1 vez entre 15-17 años Fecha: _____	1 vez entre 18-21 años Fecha: _____	Según mi riesgo Fecha: _____
SÍHIS: muestra de sangre			1 vez entre 18-21 años Fecha: _____	Según mi riesgo Fecha: _____
Hepatitis C: muestra de sangre				Al menos una vez después de los 18 años Fecha: _____
PAP / Papanicolaou: muestra del cuello del útero			A los 21 años Fecha: _____	Cada 3-5 años según los resultados Fecha: _____
Cáncer de seno: mamografía				De 40 años en adelante una mamografía anual Fecha: _____
Otros pruebas que recomendará mi doctor(a):				

A pilot study was conducted to test the usability of the pocket guide and evaluate whether it met the needs of the intended audience. This evaluation strategy was chosen to identify the positive aspects of the pocket guide’s design, as well as to detect challenges women could face understanding its content. The document was assessed using two usability testing techniques: paraphrase testing and task-based testing. Paraphrase testing explored whether participants understood the messages the pocket guide aims to convey, while task-based testing was used to gather whether participants were able to find specific information in the document.

An interview guide was developed by Title V evaluators to structure the order of the questions to be made during the interview process. The interview guide was tested with five participants who were recruited by central level staff prior to beginning the pilot study. Thirty-five women (5 per region) were recruited through purposive sampling by MCH regional staff, each representing one of the following age groups: 10-14, 15-19, 20-29, 30-39, and 40-49. The women recruited had no previous knowledge of the pocket guide. Each participant was individually interviewed by a Title V evaluator via the MS Teams platform. The evaluation results show a general satisfaction with the pocket guide. The testing process allowed issues to be identified and rectified. The current version incorporates the recommendations that emerged from the evaluation, creating a more accessible and refined end product.

The guide will be disseminated through diverse channels to ensure it reaches as many WRA as possible. Potential outlets include offices of OB/GYNs, pediatricians, family medicine, IPAs, FQHCs and other health care providers; Demographic Registry, WIC and Medicaid offices; HVNs, PNs, CHWs and HES; MCAHD Regional Boards; MCAHD Youth Advisory Committee; PRAMS survey respondents, among others. In addition, it will be available to download from the MCAHD webpage.

The Health Education component is designing an educational activity and short video that will explain the importance of the annual health visit and how to use “Mi agenda de salud” to guide the visits. The CHWs will offer these activities in the community. The QR Code on the guide will lead users to the MCAHD webpage, where supplementary educational materials will also be available for reference.

In order to assess distribution of the guide and usage by the intended audience, four questions have been incorporated in the BRFS questionaire in PR, but responses to the questions are not expected until after the guide

has been disseminated in fall 2021. These questions will be asked of women ages 18-44 following the questions regarding the preventive health care visit.

*Figure 8: BRFSS questions regarding
"Mi agenda de salud"*

1. "Mi agenda de salud" ("My health planner" in English) is a guide for women 10 to 49 years old, developed by the PR Department of Health. Its purpose is to recommend the schedule of health care visits and services to promote good health among women. "Mi agenda de salud" has printed on the cover the Seal of the Government of PR, the logo of the PR Department of Health and it may also be accompanied by the logo of a health insurance company [of a health care plan].

Had you heard before about "My Health Planner"?

(1) Yes
(2) No
(77) Don't know/ Not sure
(99) Refused

INTERVIEWER INSTRUCTION: If the respondent has never heard of "My Health Planner", or does not know about it, is not sure or refused to answer, skip the following questions.

2. Do you have or have you ever had "My Health Planner"?

(1) Yes
(2) No
(77) Don't know/ Not sure
(99) Refused

INTERVIEWER INSTRUCTION: If the respondent has never heard of "My Health Planner", or does not know about it, is not sure or refused to answer, skip the following questions.

3. During the past 12 months, have you used "My Health Planner"?

(1) Yes
(2) No
(77) Don't know/ Not sure
(99) Refused

INTERVIEWER INSTRUCTION: If the respondent has never heard of "My Health Planner", or does not know about it, is not sure or refused to answer, skip the following question.

4. During your visit to the doctor, what have you used "My Health Planner" for?

a.to make specific questions to the physician regarding your health.

(1) Yes
(2) No
(77) Don't know/ Not sure
(99) Refused

b.to request specific routine screening tests or labs according to your age.

(1) Yes
(2) No
(77) Don't know/ Not sure
(99) Refused

c. ...to make an appointment for the preventive visit.

(1) Yes
(2) No
(77) Don't know/ Not sure
(99) Refused

The counterpart of this strategy is directed at health care providers, who must be made aware of "Mi agenda de salud" and of the recommendations it includes. To this end, several professional education activities are being planned for the application year. The Health Education component is developing a continuing education activity consisting of an article and accompanying short video regarding the health rights of WRA. It will be made available on the Government Ethics Office platform, which will give it a wide reach since all government employees must complete contact hours on ethics. It will also be made available through professional organizations for physicians and other health care providers who are not government employees.

The updated "Preventive Care Guidelines for Women of Reproductive Age," directed to health care providers, have been thoroughly revised according to current best practices and reviewed by experts in preventive health care and women's health. To disseminate the guidelines, educational activities will be offered to the members of the PR College of Physicians and Surgeons as well as to HVNs, MCAHD staff, health insurance companies and other interested parties beginning in July 2021.

Maternal Mortality Review

The work of the Maternal Mortality Review Surveillance System (MMRSS) has been affected by efforts to deal with the COVID-19 pandemic; however, in the coming year the MCAHD will resume work on this important public health tool. New members were incorporated to the Maternal Mortality Review Committee (MMRC) after the change in administration in January 2021 and have received program documentation, including laws and bylaws. A committee meeting is planned for July 2021 to give continuity to MMRC plans.

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

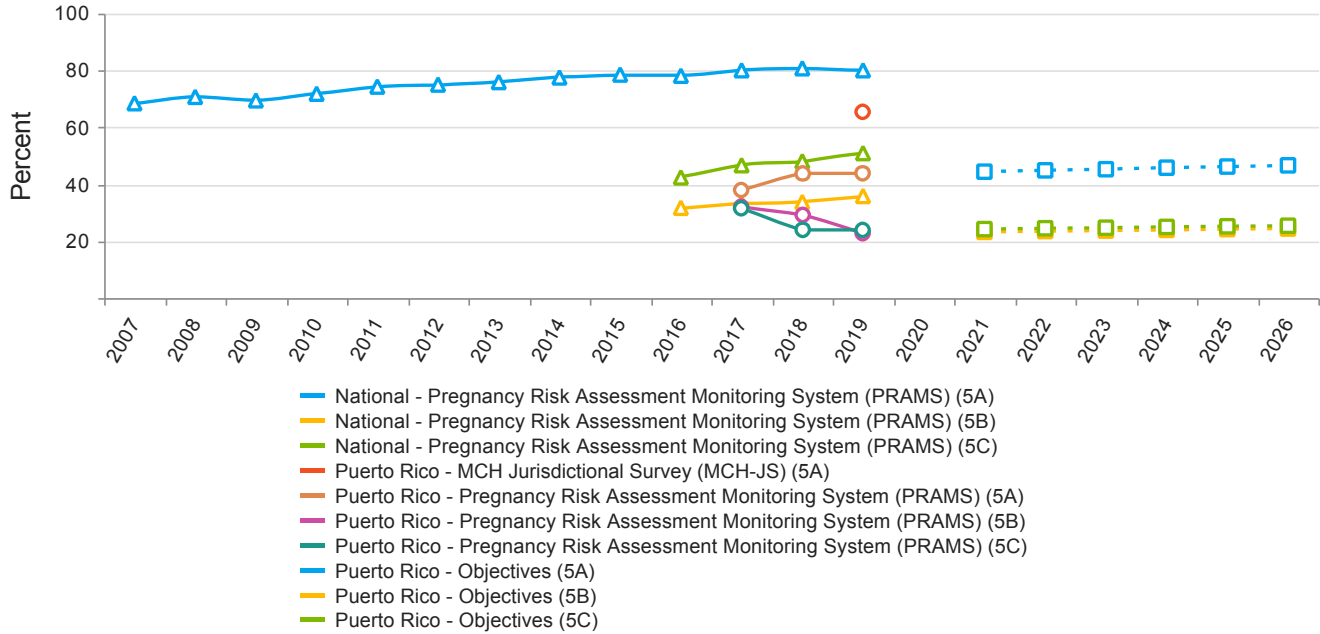
Perinatal/Infant Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2019	6.8	NPM 3
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2019	6.5	NPM 3 NPM 4 NPM 5
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2019	3.8	NPM 3
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2019	2.7	NPM 4 NPM 5
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2017	271.5	NPM 3
NOM 9.5 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2019	98.3	NPM 4 NPM 5

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
Annual Objective		
Annual Indicator	43.6	44.0
Numerator	9,056	8,759
Denominator	20,766	19,897
Data Source	PRAMS	PRAMS
Data Source Year	2018	2019

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

	2019	2020
Annual Objective		
Annual Indicator	65.3	65.3
Numerator	8,468	8,468
Denominator	12,960	12,960
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

Annual Objectives

	2021	2022	2023	2024	2025	2026
Annual Objective	44.4	44.9	45.3	45.8	46.2	46.6

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
Annual Objective		
Annual Indicator	29.1	23.1
Numerator	6,018	4,562
Denominator	20,645	19,765
Data Source	PRAMS	PRAMS
Data Source Year	2018	2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	23.3	23.6	23.8	24.0	24.3	24.5

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
Annual Objective		
Annual Indicator	24.3	24.1
Numerator	5,062	4,772
Denominator	20,809	19,808
Data Source	PRAMS	PRAMS
Data Source Year	2018	2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	24.3	24.6	24.8	25.1	25.3	25.5

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
------------------------	---------------

Baseline data was not available/provided.

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	0.0	0.0	0.0	0.0	0.0

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 5% 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 46% the percentage of infants up to 6 months of age placed to sleep on their backs (Baseline PRAMS 2019: 44%)

By 2025, increase to 24% 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 25% the percentage of infants up to 6 months of age placed to sleep without soft objects or loose bedding (Baseline PRAMS 2019: 24%)

Strategies

Collaborate with MCAH Program stakeholders to train hospital staff on infant safe sleep practices.

Provide safe sleep education and counseling to PR Title V Home Visiting Program participants.

Promote infant safe sleep practices and unintentional injury prevention among PR Title V Home Visiting Program, Prenatal and Parenting course participants and in the "Why do babies cry?" workshop.

Implement educational activities focused on the prevention of Zika virus infection during pregnancy, promote prenatal screening for the presence of Zika Virus and advocate for support services for pregnant women with positive results.

Educate the population and HVP participants on signs and symptoms of premature births.

Promote the implementation of Hard Stop Policy in hospitals.

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

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 improve maternal and infant care.

Disseminate among pregnant women, their families and the general population the recommendations proven to help achieve successful breastfeeding initiation and exclusively breastfeeding until 6 months in the Prenatal and Parenting Course and in the community outreach educational initiatives delivered by the MCAH staff.

Collaborate with the Puerto Rico Hospitals Association to promote the 10 Baby Friendly Hospitals steps, to increase successful breastfeeding initiation.

Develop and disseminate an Emergency Preparedness and Response guide that takes into account 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

2016-2020: National Performance Measures

**2016-2020: NPM 3 - Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)
Indicators and Annual Objectives**

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

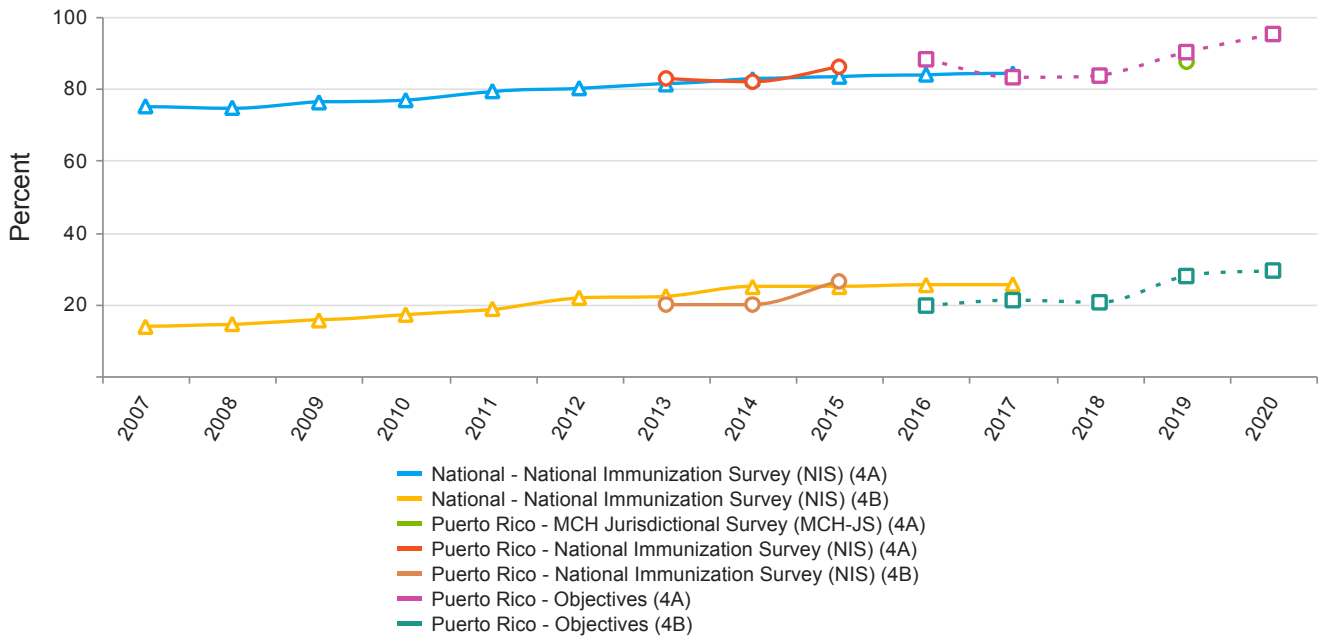
State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective	70.8	74.8	29.5	51.6	51.7
Annual Indicator	74.4	57.9	51.5	55.1	48.9
Numerator	285	205	157	134	132
Denominator	383	354	305	243	270
Data Source	Vital Statistics	Vital Statistics	Vital Statistics	Vital Statistics	Vital Statistics
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

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

2016-2020: ESM 3.7 - The use of LOCATe as an instrument to promote quality improvement in Neonatal and Maternal Care services by September 2020.

Measure Status:		Active		
State Provided Data				
	2017	2018	2019	2020
Annual Objective			96	96
Annual Indicator			96.3	96.3
Numerator			26	26
Denominator			27	27
Data Source			LOCATe	LOCATe
Data Source Year			2018-19	2018-19
Provisional or Final ?			Final	Final

**2016-2020: NPM 4 - A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months
Indicators and Annual Objectives**



2016-2020: NPM 4A - Percent of infants who are ever breastfed

Federally Available Data					
Data Source: National Immunization Survey (NIS)					
	2016	2017	2018	2019	2020
Annual Objective	88	83	83.5	90	95
Annual Indicator	82.7	81.9	85.9	85.9	85.9
Numerator	25,467	25,075	21,344	21,344	21,344
Denominator	30,787	30,611	24,861	24,861	24,861
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2015	2015

Federally Available Data		
Data Source: MCH Jurisdictional Survey (MCH-JS)		
	2019	2020
Annual Objective	90	95
Annual Indicator	87.4	87.4
Numerator	130,477	130,477
Denominator	149,303	149,303
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective	88	83	83.5	90	95
Annual Indicator	94.8	96.6	96.3	97	96.5
Numerator	26,807	23,509	20,631	19,736	18,369
Denominator	28,266	24,328	21,418	20,344	19,026
Data Source	Vital Statistics	Vital Statistics	Vital Statistics	Vital Statistics	Vital Statistics
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

2016-2020: NPM 4B - Percent of infants breastfed exclusively through 6 months

Federally Available Data					
Data Source: National Immunization Survey (NIS)					
	2016	2017	2018	2019	2020
Annual Objective	19.7	21.2	20.6	27.9	29.4
Annual Indicator	20.1	20.1	26.5	26.5	26.5
Numerator	6,133	6,093	6,531	6,531	6,531
Denominator	30,551	30,260	24,618	24,618	24,618
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2015	2015

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

2016-2020: ESM 4.1 - The percent of Puerto Rico Home Visiting Program (HVP) participants who ever breastfed by September 2017-2021 (ongoing)

Measure Status:		Active			
State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		67	73.1	76	76.1
Annual Indicator	66.6	73.1	75.9	90.7	87.7
Numerator	341	578	626	769	412
Denominator	512	791	825	848	470
Data Source	HVP Participants Records	HVP Participants Records	HVP Participants Records	HVP Participants Records	HVP Participants Records
Data Source Year	2015-16	2016-17	2017-18	2018-19	2019-20
Provisional or Final ?	Final	Final	Final	Final	Final

Perinatal/Infant Health - Annual Report

During 2019-20 the MCAHD implemented various strategies and collaborated in promoting evidence-based practices that contribute to decreased infant mortality, such as safe sleep practices, delivery of high risk infants at facilities that fulfill the requirements for the recommended level of care, promoting protective behaviors in pregnant women to avoid Zika and other teratogenic infections, promotion on how to avoid high risk behaviors during pregnancy, promoting early prenatal care, promoting breastfeeding until infants reach at least 6 months of age, educating parents on unintentional injury prevention, and strengthening parenting skills.

Besides decreasing Infant Mortality, identifying and mitigating risk factors that threatened maternal and infant health and well-being during the emerging challenges of 2019-2020 were also considered a top priority for PR MCAHD.

Earthquake

The year 2019 continued to be a time for recovery from the effects of hurricane Maria, but 2020 presented emerging challenges requiring further adaptations for the MCAH Programs and staff. The series of earthquakes in December 2019-january 2020 with the strongest shake causing damage to homes and infrastructure, with major damage in the southwestern region of the Island and consequent displacement of families to shelters. The strongest shake also caused the electrical grid to shut down, causing a blackout in the entire island. It took days for power to be restored, leaving the whole island, including hospitals and community health care services, dependent on emergency generators. One hospital in the south region had to close its facilities due to structural damage and restrict its services to emergency evaluations performed in improvised facilities inside temporary tents. The population relived the difficult days after the recent hurricane disaster of 2017. Despite no major structural damage in the rest of the Island, the aftershocks of the earthquakes presented a continued threat and uncertainty of a major earthquake, increasing the emotional trauma of the whole population.

The MCAHD staff had an immediate response assessing the needs of displaced families and pregnant women and providing support to protect their health in the community and in government-run shelters. The displaced pregnant women in shelters identified by the HVNs and CHW received support and orientation to continue prenatal care. Displaced families with infants received support to promote breastfeeding, safe infant feeding and safe sleep practices.



Displaced family living in a tent 2 months after the January 7 earthquake, Guanica, PR .



Earthquake destroyed home, Yauco, Puerto Rico, January 2020

The MCAH division collaborated with the emergency response initiatives of the PR DOH, visiting communities, identifying emerging needs and alternatives to address them. The Pediatric Consultant, who is also the president of the PR AAP Chapter (2019-2021), organized virtual meetings and a chat group with health care providers to identify priorities affecting the population after the quakes, and to promote the collaboration in initiatives and strategies implemented for mitigation and support efforts. Numerous groups developed initiatives such as promoting safe infant feeding in the communities by members of the BFPCG, services for pregnant women by PROGyn (ACOG), a close collaborator of MCAHD, immunization in mobile units by The Immunization and Health Promotion Coalition (VOCES), and clinical evaluation of families and children by volunteer physicians. Guidelines for the identification and management of common conditions after a disaster and preventive measures to support well-being, including safe sleep, safe infant feeding, oral care, the use of sunblock and mosquito repellent in children, were updated and shared with MCAHD staff, community leaders and groups providing assistance to affected communities.

COVID-19

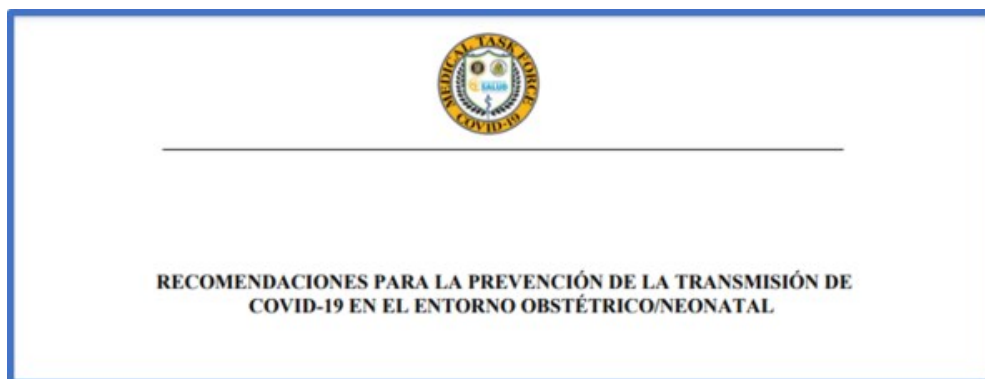
Not having fully recovered from the earthquake, the COVID-19 pandemic superimposed further challenges. Since the first cases of COVID-19 were announced in the US, the MCAHD was attentive to recommendations and instructions provided by the PR DOH and the CDC, sharing this information with the staff in an effort to protect the workforce and to initiate strategies to help guide the population for an effective public health response. Upon the identification of the presence of COVID-19 cases in the Island on March 16, 2020, the PR Governor ordered a shutdown of all unessential services and business and created an advisory PR COVID-19 Medical Task Force. In response to the threat of COVID-19 and the shutdown, the MCAHD modified the implementation of all its programs, and its staff became collaborators in addressing the needs of the population that emerged in response to this threat. The staff that was able to continue to work from home was assigned tasks. Hand sanitizers and facemasks were obtained and distributed to the staff along with instructions on how to protect themselves during the pandemic. Due to the restrictions imposed to help prevent and control the spread of COVID-19, all personal interventions were stopped and converted to telephone or virtual interventions. The interventions by the HVP, HE and CHW were redesigned to allow the continued support of the MCAH population.

The HVP modified its protocol to phone calls and text messaging. The HVNs continued to communicate with their participants and provide education and support following an amended procedures manual. These efforts are described in the Women/Maternal Health narrative. Although telephone services were continued, many participants had limited access to phones. Recruiting participants was also affected, as collaborating partners that identify and refer candidates, such as WIC and Medicaid, also had to modify their interventions from in-person to telephone

services.

Perinatal nurses provide orientation to postpartum women and their families during their hospital stay on different topics relating to newborn care, postpartum care, and safe sleep, among other topics. During the COVID-19 crisis many hospitals adopted stricter protocols for entrance to the facilities, limiting family members and access to the perinatal nurses. Both factors curtailed their interventions with postpartum women.

Another emerging challenge during the COVID-19 pandemic was hospital management of women in labor, postpartum and breastfeeding, due to concerns regarding the prevention and control of infection in suspected or positive cases and the unknown risk of transmission through breastmilk. In the initial phase of the COVID-19 pandemic there was limited knowledge and scientific data related to the way the disease spread, its presenting signs and symptoms, effects on health, and treatment. Throughout the pandemic, the recommendations from the CDC and other professional organizations to prevent and control infection continuously evolved as information and knowledge were accumulated by experience dealing with the disease. The Pediatric Consultant participated in a collaborative multidisciplinary Task Force created to develop recommendations for the management of postpartum women, newborns and breastfeeding in hospitals during the COVID-19 crisis, protecting rooming-in, skin to skin and breastfeeding when maternal and newborn condition made it possible. The recommendations were adopted by the PR COVID-19 Medical Task Force and the PR DOH as public policy during the pandemic. The document can be accessed at [Recomendaciones para la prevención de la transmisión del COVID-19 en el entorno obstétrico/neonatal](#)



In collaboration with leaders from all the pediatric medical organizations in PR, short educational videos were developed and published via social media to encourage the population to continue with their pediatric preventive care, scheduled immunizations, newborn well care, breastfeeding, and protective measures to prevent contagion and spread of the disease during the crisis. All educational materials were shared virtually. Multiple webinars related to pediatric health care during the crisis, newborn care and feeding during the pandemic were organized and presented with the collaboration of academic and primary care pediatricians.

Safe Sleep

Infant Sleep Practices reported in the PR PRAMS 2017-2019			
Infants placed to sleep:	% Positive Response on PR PRAMS 2017	% Positive Response on PR PRAMS 2018	% Positive Response on PR PRAMS 2019
A. On their backs (supine)	38.1	43.6	44
B. On a separate approved sleep surface	32.1	29.1	23.1
C. Without soft objects or loose bedding	31.6	24.3	24.1
In a safe environment that includes A, B and C	5.5	4.1	4.5

**Causes of Mortality in Infants from 1 to 12 months old
2020**

2020*	N	%	Rate x 100,000 live births
SUIDS ¹	8	15.7	42.3
Congenital malformations	6	11.8	31.8
Certain conditions originating in the perinatal period	4	7.8	21.2
Septicemia	3	5.9	15.9
All other forms of heart disease	2	3.9	10.6
Total deaths in infants between 1 to 12 months of age in 2020	33	--	--

*Preliminary VS Data

¹ Codes that defines SUIDS; R95 (Sudden Infant Death Syndrome), R99 (Other ill-defined and unspecified causes of mortality), W75 (Accidental suffocation and strangulation in bed).

Promoting safe sleep to decrease infant mortality was identified as a priority in the MCAHD needs assessment for 2020-21. In Puerto Rico, sleep-related Sudden Unexpected Infant Deaths (SUIDs) was the first cause of infant death between the ages of 1 and 11 months from 2017 to 2020. The definition of death due to sleep-related SUIDs includes Sudden Infant Death Syndrome (SIDS), unknown cause, and 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 reaching at least 6 months of age without bed sharing), and without soft objects and loose bedding. Further 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®.

The PR PRAMS 2019 survey revealed that 44% of participants reported placing their babies to sleep on their backs and only 4.1% complied with all three criteria of a safe environment (on their backs, on a separate approved sleep surface, without soft objects or loose bedding). The PR PRAMS results raised concerns regarding the knowledge and practices of safe sleep in PR; therefore, it was necessary to continue to educate on safe sleep

recommendations.

The PR MCAH 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 of hospital staff. Among collaborators in the implementation of these strategies were PROGyn and ACOG, PR Hospital Association, and PRAAP Chapter.

Safe Sleep Educational Interventions 2019-2020	
<p>April 28, 2020</p> <p>Webinar: Safe Sleep, Feeding and Development During the First year</p> <p>In collaboration: MCAHD PR DOH, PRAAP</p> <p>Presenter and coordinator of activity: MCAHD Pediatric Consultant and President of PRAAP Chapter</p>	<p>604 HS and EHS staff, day care staff, families</p> <p>1617 views on recording published</p> <p>https://youtu.be/xFLiViSlosM</p>
<p>September 24, 2020</p> <p>Webinar on Safe sleep to decrease infant mortality.</p> <p>In collaboration: MCAHD PR DOH, PRAAP and Hospital Association,</p> <p>Presenter and coordinator of activity: MCAHD Pediatric Consultant and President of PRAAP Chapter</p>	<p>281 nurses, administrators, physicians</p>
<p>September 24, 2020</p> <p>Facebook Live panel discussion of recommendations for Safe Sleep.</p> <p>In collaboration: MCAHD PR DOH, PR ACOG, PR AAP</p> <p>Panelists:</p> <p>President, Puerto Rican Pediatric Society</p> <p>Pediatric Consultant, MCAHD and President of PR AAP Chapter</p> <p>President, PR ACOG District</p>	<p>27,000 views on recording</p>
<p>October 2020</p> <p>Development of short video promoting safe sleep for dissemination through social media.</p>	<p>284 likes, 43 comments, 204 shares, 63,000 views</p>



Perinatal Nurses and HVNs also participated in the safe sleep webinar, and the promotion of safe sleep practices continued among PR Title V Home Visiting Program participants.

The HVNs offered prenatal and post-partum orientation and evaluated the families' safe sleep practices prior to the pandemic.

During the COVID-19 pandemic safe sleep practices continued to be emphasized during the virtual interventions. Families received guidance on how to evaluate and modify the sleeping environment of their babies.

Infant safe sleep practices are also included as a topic in the Prenatal and Parenting courses and in the "Why do babies cry?" workshops that were delivered prior to the shutdown.

Promoting infant safe sleep practices in social media and using "*Encuentro de mi Vida*" to share recommendations has also provided the opportunity to disseminate messages on safe sleep practices.

It has been very important to emphasize safe sleep practices among displaced families affected by disasters, when many parents may be inclined to sleep with their babies to protect them in case of an earthquake.

Infant mortality

Vital Statistics (VS) data for 2020 reported an IM rate of 7.1 per 1,000 live births (preliminary results) and the preterm-related mortality rate was 284.4 per 100,000 live births. Prematurity-associated conditions and low birth weight continue to be 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 11.6% (preliminary 2020 VS). 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 2020, 11.5% of live births had low or very low birth weight for gestational age. Changes in birth weight, infant, neonatal and postneonatal mortality are summarized in the following tables.

Distribution of Births by Weight and Gestational Age in PR								
	2017		2018		2019		2020*	
	n	%	n	%	n	%	n	%
Very Low Birth Weight (<1,500 grams)	354	1.5	305	1.4	244	1.5	269	1.4
Low Birth Weight	2,220	9.1	1,319	8.9	1814	8.9	1,917	10.1
Normal Weight	21,821	89.5	19,263	89.7	18,351	89.9	16,974	89.9
< 37 wks. gestational Age								
	2,796	11.5	2,558	11.9	2,400	11.8	2,184	11.6
37-38 wks. gestational Age								
	8,470	34.7	7,543	35.1	7,009	34.3	6,353	33.6
> Or = 39 wks. gestational Age								
	13,116	53.8	11,377	53	11,000	53.9	16,652	88.1

Source: Vital, Statistics, Demographic Registry, PR Department of Health
*Preliminary Data 2020

Mortality Rate Comparison (x 1000 births)									
	2005	2017	2018	2019	2020	Percent Change			
						2019 vs. 2005	2019 vs. 2017	2019 vs. 2018	2020 vs 2019
Infant	9.3	7.1	6.7	6.6	7.1	-29%	- 7.0%	- 1.5%	7.6%
Neonatal	6.7	5.0	4.2	3.9	5.4	-42%	- 22%	- 7.1%	38.5%
Post neonatal	2.6	2.1	2.4	2.9	1.7	-8%	33%	17%	-41.4%
Perinatal	8.5	7.5	6.9	6.6	7.4	-22%	-12%	-4%	12.1%

Year	Infant Mortality		Total births
	n	Rate*	
2017	174	7.1	24,395
2018	143	6.7	21,485
2019	135	6.6	20,409
2020	136	7.1	19,026
*infant deaths/1000 live births			

The impact of the COVID-19 crisis on the outcome of pregnancies is to be observed in further evaluation of data during 2021. Although strategies to carry out interventions were modified during the pandemic, the MCAHD staff continued to educate, increase awareness, and promote strategies to decrease prevalence of premature birth by;

1. HVNs' routine evaluation of the HVP participants to identify the presence of risks related to premature and LBW deliveries, to 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' education to pregnant women on signs and symptoms of premature labor.
3. The Prenatal Course providing information on the warning signs and symptoms of preterm labor and the steps women should take if they suspect they are experiencing preterm labor.
4. The MCAH Program promotion of the use of the prenatal card by pregnant women in obstetric offices, to

record and document pertinent obstetric history and information, and the benefit of carrying it at all times in case of any complication requiring urgent care.

5. The “Encuentro de mi Vida” prenatal campaign offered through various media outlets.

The MCAH staff continued to provide support to the PR PRAMS staff in sharing the results from the 2017-2018 survey with stakeholders and encouraging collaboration to propose and implement strategies to improve pregnancy outcome and decrease IM by addressing the identified needs. Promoting oral care in pregnant women and changes in hospitals to improve support for breastfeeding initiation are among the needs that were identified and addressed.

The MCAH Program continued to promote preconceptional/interconceptional health, prevention of preterm and early term births, and perinatal regionalization in an effort to decrease infant mortality. The Perinatal Health Care Services Guidelines (PNHCSG) along with the Preventive Health Services Guidelines for women in reproductive age continued to be developed and updated. The PNHCSG helps in the identification of high-risk pregnancies for adequate referral, such as women with a history of a previous premature birth to whom home administration of 17HP (hydroxyprogesterone) may be offered.

The MCAH staff also continued to promote compliance with Administrative Order 366 (2017) in collaboration with the Hospital Association. 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 has been integrated as part of the recently updated and approved Hospital Regulations Policy #9184 (July 2021).

The MCAH director and the maternal infant epidemiologist are members of the March of Dimes (MOD) Prematurity Prevention Committee, in collaboration with a representative of the Hospital Association, maternal fetal specialists and other stakeholders. Priorities of this committee continued to focus on the proposal and implementation of strategies to promote prevention of preterm births and the importance of completing at least 39 weeks of pregnancy.

Protection from arboviral infection during pregnancy (Zika and Dengue)

During 2015-2016 the threat of the Zika epidemic, due to its teratogenicity and its threat on fetal and infant survival, became an emerging priority for the MCAH program. Transmission of Zika virus occurs via sexual contact and through the mosquito bite of *Aedes* species, abundant in Puerto Rico all year round due to its tropical climate. This represents an additional threat to pregnant women, who are at higher risk of complications and mortality when they contract dengue. The Zika virus surveillance data demonstrates a decrease in the overall population prevalence from an epidemic to an endemic status in 2017, but remaining as a concern for pregnant women. Therefore MCAHD has continued providing education and encouraging pregnant women to adopt preventive measures to avoid mosquito bites, comply with prenatal screening for the presence of Zika virus, and advocate for support services for pregnant women with positive results.

The HVNs and Community Health Workers (CHWs) continued promoting early prenatal care and compliance with testing for Zika in pregnancy as well as referral to the PRDOH surveillance system to follow up babies from Zika positive mothers.

Education on Zika prevention was included in the Prenatal and Parenting courses and other educational activities provided in the community. The educational intervention focuses on how women can protect themselves and their families from the vector that transmits the Zika virus, from sexual transmission, and how to eliminate mosquitoes in their surroundings.

Promote Improved Access to Adequate Maternal and Neonatal Levels of Care

The first stage of the MCAHD effort to improve access to adequate level of maternal and neonatal care was a collaboration with the CDC to classify the Maternal and Neonatal Levels of Care services available in the hospitals that offer services in Puerto Rico. The Maternal and Neonatal Levels of Care Assessment Tool (LOCATe) was created with the objective of producing a standardized assessment of level of maternal and neonatal care in hospitals within states and jurisdictions, facilitate stakeholder conversations, and minimize burden for respondents.

The assessment is based on compliance with the requirements delineated in the Maternal and Neonatal Levels of Care Guidelines by the American College of Obstetricians and Gynecologists (ACOG), the Society for Maternal Fetal Medicine (SMFM) and the American Academy of Pediatrics (AAP).

Puerto Rico implemented LOCATe during 2017-2019 using an innovative approach. After completing a face-to-face interview, MCAH staff provided a report of LOCATe findings to each hospital’s administrative and medical staff, offering feedback specific to the institution. The report included the classification of maternal and neonate level of care as assessed by the PR LOCATe analysis, results of analysis of infant and maternal outcome data for their institution, and aggregate analysis of all the hospitals in PR. With the information provided during the visits, combined with the Maternal and Neonatal Care Guidelines, hospitals had the necessary tools to re-evaluate their performance, improve their services and obtain a reclassification of the level of care according to the service provided.

The aggregated information obtained will allow the identification of changes required to promote perinatal regionalization to ensure adequate access to the levels of maternal and neonate services. It will also serve to optimize the use of the existing resources and facilitate the creation of inter-hospital agreements for high-risk patient referral. In 2020 48.9% of very low birth weight (VLBW) infants were born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU). The following tables summarize the results of the LOCATe assessments.

Classification in Levels of Maternal Care & Neonatal Care				
	Maternal Care		Neonatal Care	
Level	LOCATe Assessment*		LOCATe Assessment**	
	n	%	n	%
Birth Center	1	3.8	N/A	N/A
Level I	10	38.5	3	11.5
Level II	14	53.8	13	50
Level III	1	3.8	8	30.8
Level IV	0	0	2	7.7

*** LOCATe classification of levels based on Maternal Care Recommendations by the American College of Obstetrics and Gynecology and Society of Maternal-Fetal Medicine**

****LOCATe classification of levels based on Perinatal Care Guidelines by American Academy of Pediatrics and American College of Obstetrics and Gynecology Levels of care for maternal and neonatal care do not necessarily correspond to a same hospital.**

Many hospitals demonstrated improvement in their level of maternal care classification by taking one or more of the following actions: recruiting a maternal-fetal medicine specialist and/or an obstetrician on site 24/7; having an anesthesiologist with experience in obstetric anesthesia in charge of the maternal anesthesia services; adding 24/7 MRI services. Hospitals were able to improve their level of neonatal care classification by recruiting a neonatologist or a specific pediatric sub-specialist as recommended in the guidelines. The findings will be disseminated to support decision-making in the public and private health systems.

The visits were completed after Hurricane Maria, providing the opportunity to identify the challenges faced during and after the storms. Hospitals were asked to share their revised protocols for disaster preparedness and management. These would be used to develop general recommendations for hospitals to evaluate their individual plans and modify them according to their needs. Hospitals also received advice and educational materials developed by the MCAHD

on safe sleep and breastfeeding support.

Infant preventive medical services begin in the hospital when metabolic, oxygen saturation, hearing and bilirubin level screening are performed and continue in the outpatient setting with the initial visit to the pediatrician recommended in the first week of life. This message, along with breastfeeding promotion, has been shared through multiple media campaigns. The PR PRAMS reported 99.6% of mothers participating in the PR PRAMS surveys of 2019 and 2018 responded in the affirmative when asked if their baby had “any health care visits with a doctor, nurse, or other health care worker since you left the hospital when your baby was born.”

Promote healthier behavior and prenatal care with Prenatal Multimedia Educational Campaign

During 2019-2020 the multimedia campaign “*El Encuentro de mi Vida*” (“The Encounter of My Life”) continued with the purpose of spreading the message to pregnant women and the community at large that pregnancy lasts 40 weeks, encouraging adequate care of the pregnant woman and the avoidance of risk behaviors that can affect the fetus, as a strategy to decrease infant prematurity, morbidity, and mortality.

ENCUENTRO DE MI VIDA CAMPAIGN AND WEB PAGE 2019-2020		
Media	Spots	Estimated audience
6 radio stations	610	1,283,800
4 local television stations	658	2,150,570
4 pay television stations	305	n/a
11 newspaper venues	56	1,067,535
11 movie theatre		746,380
4 domains/web advertisement	4,969,150	5,939 clicks
web page visits		12,703

The multimedia campaign consists of linguistically and culturally appropriate messages aimed mainly at Spanish-speaking pregnant women and their partners. The key message appeals to the emotions and expectations expressed during pregnancy. Core messages and intended audience were determined by MCAHD staff and an advertising agency was contracted to produce the campaign. Production details, selection of actors, vetting message delivery and ensuring correct breastfeeding position were overseen by the MCAHD team.

This innovative campaign is aimed at strengthening families by helping parents make informed choices. Videos were aired on TV, movie theaters & online during 2018-2020. Banner ads for the website were featured on social media and news outlet pages and continue on the PRDOH webpage. The website www.encuentrodemivida.com provides access to the videos and shorter clips of the couple giving advice regarding optimum prenatal care. The website also features fact sheets related to various aspects of prenatal care, infant care, safe sleep, and breastfeeding, among others. All educational materials available on the website were developed by MCAHD staff in accordance with ACOG and AAP recommendations and overseen by the pediatric and OB/GYN consultants.

Title V Home Visiting Program

The Title V Home Visiting Program (HVP) provides case management and care coordination services, health education and counseling to women with complex 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. Women are admitted during pregnancy and followed until the child is 2 years old. In the outreach activities carried out by the HEs, CHWs and Perinatal Nurses, they have the opportunity to identify and recruit pregnant women for the HVP. High-risk pregnant women are also referred from WIC and other collaborators in the community. A total 2,785 pregnant women participated in the HVP during 2019-2020. The 81 HVNs active during 2019-2020 visited families in 70 of the 78 municipalities in PR; another 4 municipalities are covered by the MIECHV program, Familias Saludables Puerto Rico. During the pandemic the intervention strategies were modified to offer screening, education and support to the participants via telephone calls and text messages, as discussed in the Women/Maternal Health narrative.

The HVP has 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.

COMPARISON OF BIRTHING MOTHER AGE RANGE HVP PARTICIPANTS VERSUS PR BIRTHING POPULATION		
Birthing mother age range	% of population in age range HPV 2019 to 2020*	% of population in age range PR births 2019 to 2020**
<20 years old	46.3	8.5
20 to 25 years old	36.4	37.3
26 a 35 years	14.6	43.9
36 years or >	2.7	10.3

Source of data: *HVP data; **Vital Statistics, Demographic Registry, PR Department of Health. 2020 data is preliminary

Despite the HVP serving a high-risk population, similar birth outcomes are observed when compared to the whole island, suggesting its positive impact on birth outcomes. Further evaluations are being carried out in an effort to measure the impact of the HVP.

COMPARISON OF BIRTH OUTCOMES HVP PARTICIPANTS VERSUS PR BIRTHS		
Gestational age at birth	Percent of all live births in HVP (7/2018 to 6/2019)*	Percent of all live births in PR (7/2019to 6/2020)**
Early preterm <34 weeks	6.0	3.0
Late preterm 34 a 36 weeks	9.3	8.7
Early term 37 a 38 weeks	29.8	34.3
Late term 39 weeks or more	54.9	53.9
Birth weight		
Very Low Birth Weight (<1,500 grams.)	0.4	1.3
Low Birth Weight (1,500 a 2,499 grams.)	12.3	9.9
Normal weight (2,500grams or more)	87.1	90.1

Source: *HVP Data; **Vital Statistics, Demographic Registry, PR Department of Health. 2020 data is preliminary

The Home Visiting Program nurses (HVNs) also delivered orientation and referrals to non-participants of the HVP as reported in the following table.

Referrals by HVNs to non -participants of HVP in 2019-2020 upon HVNs evaluation and orientation	
Medicaid	64
Prenatal Care	32
Health Care Services	45
WIC Program	261
Department of the Family	8
Department of Housing	21
County Office	13
Department of Education	6
Mental Health Services	35
Oral Health Services	58
BF Support Group	23
Early Stimulation	30
Pediatric Health Care Services	51
Home Visiting Program	51
Others	203
Total Referrals	901

The HVNs educate families on Safe Sleep practices beginning in the second trimester of pregnancy. Between July 2019 and February 2020, HVNs offered CPR Anytime trainings to 521 families. However, trainings to participants were discontinued due to the precautions related to infection control and prevention during the COVID-19 pandemic.

Community Education Interventions Implemented by MCAH Staff

The MCAH Program staff continued offering educational orientation to increase awareness of strategies to decrease IM to participants, providers and the general population in direct person contact previous to the COVID-19 shutdown and via telephone after.

The MCAH staff, 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, and family planning. 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 2,718 pregnant women received educational interventions from HEs and CHWs during fiscal year 2019-2020.

HVNs ensure that all HVP participants are evaluated in the WIC Program. The WIC Program also contributes toward reducing IM rates by focusing on women with nutritional risk factors.

During 2019-2020 the 8 regional perinatal nurses (PNs) of the MCAHD reached 32 birthing hospitals throughout the island where they provided breastfeeding support and orientation to postpartum women and their families. These services were temporarily interrupted when hospitals implemented stricter protocols to access the hospital in their effort to control and prevent COVID-19 infection. The PNs provided educational services to 341 pregnant women, 36% of whom were referred to services such as GHP, MCAH HVP, WIC, Prenatal or Parenting course, and prenatal care clinic. A total of 3,155 post-partum women also received their services, of whom 10% were referred to GHP, MCAH HVP, Parenting course, pediatrician, pediatric dentist, breastfeeding consultant, and the pediatric center. Besides referring participants to the agencies, PNs follow up via phone calls when needs are identified.

The MCAH targets pregnant women and WRA, but their companions, including partners and relatives, also benefit from the educational initiatives. This has an impact on the health and wellbeing of the family and strengthens the role and responsibilities of the father figure. These contacts were also limited due to hospital protocols during the COVID-19 crisis. Among other populations that received orientation by PNs there were 542 men and 757 accompanying non-pregnant women. The Perinatal Nurses also completed 1,046 visits to hospitals, reaching a total

of 5,706 persons. Population reached by the PNs with topics relevant to interconceptional, postpartum, WRA, pregnant women and neonatal care are reported in the following tables.

Orientation Topics Delivered by Perinatal Nurses 2019-2020					
Health topics addressed	Pregnant Women	Post-Partum	Accompanying Males	Accompanying Others	total
Women Health Care	18	566	108	382	1074
Prenatal Health Care	157	6	9	12	184
Avoidance Of Risk Behaviors During Pregnancy	159	3	17	11	190
Process Of Labor	160	5	9	1	175
Post-Partum Care	38	1091	227	250	1606
Breastfeeding	110	1891	192	213	2406
Newborn Screening	8	1555	300	404	2267
Care Of Premature Baby	2	10	1	2	15
Newborn Care	75	2229	443	467	3214
Pediatric Preventive Health Care (EPSDT)	9	1135	190	280	1614
Correct Car Seat Placement And Use	29	1412	176	128	1745
Violence Prevention	0	0	0	0	0
Family Planning	19	777	124	169	1089

REFERRALS BY PERINATAL NURSES 2019-2020					
Agency or Service	Pregnant Women	Post-Partum Women	Accompanying Male	Accompanying Other	total
GIP	3	38	6	9	56
Prenatal Course	12	1	0	6	19
Parenting Course	5	143	12	19	179
Early Stimulation	0	20	5	0	25
HVP	93	42	40	0	175
WIC	2	0	0	0	2
MCAH regional program	8	27	34	0	69
Prenatal care	1	0	0	0	1
Breastfeeding Consultant	0	14	0	0	14
ZIKA clinic	0	1	0	0	1
Pediatrician	0	4	0	0	4
Dentist	0	12	0	0	12
Pediatric Dentist	0	1	0	0	1
Total	124	303	97	34	558

Before the shutdown, the MCAH HEs and CHWs offered the prenatal course “A Baby on the Way” discussing important health issues related to the prenatal, postpartum and interconceptional stages. The main purpose of this course is building knowledge and providing participants with tools to maintain a healthy pregnancy, preventing risk behaviors, increasing the chances for a healthy delivery and appropriate care for the baby. The target population is pregnant women and their companions. This course consists of four educational sessions that include accurate

information and educational activities divided into the following topics: healthy lifestyles, prenatal care, risk behaviors, pregnancy stages and changes in pregnancy, conditions affecting pregnancy, delivery planning, delivery process, premature birth, caesarean birth, postpartum care, baby care, safe sleep, oral care of pregnant women and infant, breastfeeding, birth spacing and family planning. Information on the transmission of Zika and preventive measures, its possible effect on the fetus and the need to test during pregnancy for infection were added to this course. A total of 495 participants completed the 4 sessions of the prenatal course. Another 23 participated partially in the prenatal course, but did not complete the 4 sessions. As in other courses offered by MCAH staff, paternal figures (males) also participate.

PARTICIPANTS COMPLETED 4 of 4 SESSIONS OF PRENATAL COURSE 2019-2020		
	n	%
Pregnant women	289	58%
Males	104	21%
Other women	75	15%
unknown	27	5%
Total	495	

An achievement of the course is a statistically significant improvement in knowledge in each session as revealed by the evaluation of scores on the pre- and post-tests. During the crisis, a virtual prenatal course was developed and will be offered to pregnant women and their families. The content is presented in short videos with pre- and post-tests to evaluate its impact on knowledge and attitudes.

Pre and Post -Test Scoring in Prenatal Course "Baby on the Way"						
Participants in 2019-2020						
Sessions	Pregnant Women			Others (Male and others)		
	Average pretest score %	Average post test score %	Significance P value	Average pretest score	Average post test score	Significance P value
1	70	98	<0.0001	65	98	<0.0001
2	66	96	<0.0001	66	94	<0.0001
3	98	99.8	<0.0001	98.9	99.6	<0.085
4	68	96	<0.0001	68	98	<0.0001

The CHWs and HEs delivered other community outreach educational activities on newborn and infant care and other important topics relating to prenatal and post-partum care that impact birth outcomes, as reported in the following tables. These orientations were offered to individuals or in groups.

PARTICIPANTS OF EDUCATIONAL ACTIVITIES BY TOPICS DELIVERED BY MCAH STAFF (2019-2020)			
Topic	By HE	By CHW	Total
BF/ benefits	2	214	216
BF general	996	1509	2505
BF/ laws that protect and support	10	82	92
BF/ correct latching	5	76	81
Care of the premature baby	24	0	24
Newborn Care	124	390	514
Premature birth	3	60	63
CPR Anytime	23		23
Prenatal Care	92	852	944
Family Planning	64	1649	1713
Healthy pregnancy	71	623	694
Support and protective laws for women in labor	2	45	47
Labor plan	2	36	38
Preparing for birth	68	297	365
Post-partum care	36	1506	1542
emotional wellbeing	2	72	74
Bonding and care of infant 0 to 1 y/o	267	621	888
Development 0 to 1 y/o	11	116	127
Unintentional injury prevention 0 to 1 y/o	86	1317	1403
Safe sleep	3	65	68
Shaken Baby Syndrome Prevention	342	110	452
Crying Baby, strategies to cope	2	31	33
Unintentional injury prevention	127	1	128
Safe Toys	2	43	45
Car seat	2	417	419

NUMBER OF ACTIVITIES BY LOCATION* 2019-2020			
Location	HE	CHW	total
Schools	106	102	208
Communities	94	260	354
Health Care Facilities	56	892	948
Community Health Activities/information tables	21	79	100
total	277	1333	1610

* Total population reached, non duplicated: by HE 5533 and by CHW 13,716

Agency or Services Referred to by CHW 2019-2020	
Medicaid	201
Prenatal care	263
Health Care	214
WIC Program	500
Department of Family Affairs	98
Public Housing Agency	103
County Administrative Office	64
Department of Education	302
Mental Health Services	11
Oral Health services	86
BF Support Group	41
Early Stimulation	15
Preventive Pediatric Care (EPSDT)	141
HVP	171
Others	477
Total	2687

AGENCY CONTACTED BY CHW AND HE TO COORDINATE SERVICES OR ACTIVITIES		
2019-2020		
Agency or Service	By CHW	By HE
Medicaid	182	8
Prenatal care	88	35
Health Care	62	17
WIC Program	244	33
Department of Family Affairs	4	29
Public Housing Agency	9	30
County Administrative Office	4	22
Department of Education	2	50
Mental Health Services	10	4
Oral Health services	147	6
BF Support Group	31	6
Early Stimulation	16	5
Preventive Pediatric Care (EPSDT)	68	8
HVP	658	16
Others	362	278
Total	1887	547

Fetal and Infant Mortality Review (FIMR)

MCAH 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 system-related risk factors for fetal and infant mortality and to generate recommendations to address them. To this end, the Review Team examines de-identified comprehensive information regarding infant and fetal deaths.

The PR FIMR concentrates on deaths occurring to families participating in the HVP, all of whom are considered at increased risk for IM. When a fetal or infant death occurs in the HVP, priority is given to providing the mother bereavement support. If the mother consents, the HVP nurse supervisor or MCAH perinatal nurse conduct the FIMR interview to obtain information that helps identify social determinants of health that have an impact on maternal health and the circumstances surrounding the death. Relevant information from the hospital record is abstracted by the MCAH regional perinatal nurse or MCAH director. A copy of the HVP participant record is sent to the FIMR coordinator for additional data abstraction. The HVP record contains demographic and social data, besides a chronological description of the participant's strengths, challenges and interventions during pregnancy as documented by the HVP nurses. The MCAH Pediatric Consultant prepares the case summaries that are reviewed and discussed by the Committee.

The PR FIMR helps identify community strengths and weaknesses such as prenatal care access, community support services, barriers for optimal care etc.

The following table details pregnancy outcomes (deaths or losses) of the HVP for 2019-2020 and compares the results to the general PR population.

Comparison of Pregnancy Outcomes (Deaths and Losses) between HVP and General PR Population 2019-2020						
Death or loss due to	HVP*			PR Vital Statistics *		
	n	HVP	% or rate	n	PR	% or rate
Abortion (<20 weeks gestational age)	33	1,040 (998 infants born alive + 33 abortions + 9 fetal deaths)	3.17%	n/a**	26,154 (22,210 infants born alive + 3,754 abortions** + 193 fetal deaths)	14.3%
Fetal death (20 weeks or > gestational age)	9	1,040 (998 infants born alive + 33 abortions + 9 fetal deaths)	0.87%	193	26,154 (22,210 infants born alive + 3,754 abortions** + 193 fetal deaths)	0.74%
Fetal death (20 weeks or > gestational age)	9	1,007 (998 infants born alive + 9 fetal deaths)	Fetal death rate 8.94 /1,000 births and fetal deaths	193	22,403 (22,210 infants born alive + 193 fetal deaths)	8.6 per 1,000 live births and fetal deaths
Maternal death	0	998 infants born alive	0 maternal loss	7	22,210 infants born alive	31.5 per 100,000 live births
Infant death (less than 1 y/o)	1	998 infants born alive	IM 1.0 /1,000 births	138	22,210 infants born alive	IM 6.2 per 1,000 live births
Pediatric death 1 to 2 y/o	0	1,235 children	0 pediatric deaths	15	49,482 children	30.3 per 100,000 children

*HVP and PR Vital Statistics from July 2019 to June 2020

**Statistical Information of Women's Abortion Clinics (4 of 5 clinics), Assistant Secretariat for Planning and Development, PR Department of Health, Fiscal Year 2019-2020. Data available for abortions in PR general population.

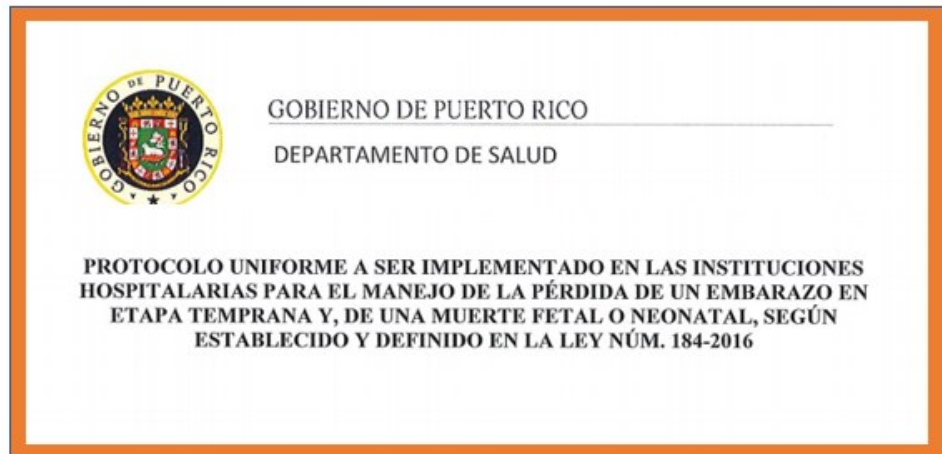
Due to the staff's risk for compassion fatigue in the management of families that have perinatal losses, the MCAH Mental Health Consultant is available for consultation and support and participates in the HVP coordination monthly meetings.

The FIMR Committee recommends the continued proposal and implementation of strategies that promote pre-conceptive Health in WRA, providing education and information to tutors or caregivers of pregnant teens of the symptoms and signs of premature birth and where to go for services if they present them, providing information to women of reproductive age of the risk of contracting sexually transmitted diseases when using contraceptive methods that do not provide adequate barrier against sexually transmitted diseases. All the recommendations applicable to HVP are incorporated as priorities to address and take action.

After hurricane Maria in 2017, the PR FIMR developed a series of recommendations to improve neonatal care in hospitals after a disaster. Neonatologists from different regions of the island participated in this FIMR meeting, in a focal group discussion, sharing the challenges they confronted managing the NICUs after the storm due to the prolonged crisis. They provided recommendations based on their experience. From this meeting recommendations to improve preparedness and recovery for future disasters that place infants and pregnant women at risk were

developed and shared with the Hospital Association and the Department of Health Emergency Preparedness Team to incorporate in the disaster preparedness and response plan.

The PR Department of Health established a committee to develop a protocol to be implemented in hospitals to support families grieving the loss of an early pregnancy or a fetal or neonatal death, as mandated by Law No. 184 of 2016. The MCAH FIMR coordinator was designated coordinator of the committee, with the collaboration of the MCAH Mental Health Consultant. The committee completed a protocol for the evaluation of the needs of families after a loss, support for the bereaved parents during their stay in the hospital, and referral to resources in the community, according to the provisions of the law. This protocol was approved by the Secretary of Health as a public policy of the PR DOH (March 2020) and disseminated to all hospitals for its implementation with the collaboration of the Hospital Association.



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.

For many years BF practices have been promoted regularly by the PRDOH. The MCAHD provided support to the Breastfeeding Promotion Collaborative Group (BFPCG) by coordinating meetings and fostering collaborative efforts between its members. As a result of the efforts of the MCAH Division with the backing of the BFPCG, the PRDOH has established public policies and hospital regulations that encourage the initiation of breastfeeding. These efforts have also supported laws that protect and assist breastfeeding mothers.

The BFPCG is composed of representatives of WIC, Women's Advocate Office, Patients' Advocate Office, Department of the Family, PR AAP, lactation experts, community-based breastfeeding support groups (Proyecto Lacta, La Leche League, Breastfeeding Coalition) and mothers from the community. The inclusion of community-based partners (United Way of PR and Alimentación Segura Infantil - Safe Infant Feeding) in the collaborative work of this group has been instrumental in developing strategies to bolster breastfeeding in the community.

The BFPCG has focused its work on promoting and providing education to the general public on the numerous benefits of breastfeeding for infants, mothers, their families, the impact on their economy, and of supporting breastfeeding mothers. Other areas of advocacy and orientation focus on the PR laws that protect BF.

The members of the BFPCG share the goals of Healthy People 2030 to increase the prevalence of successful breastfeeding initiation in the hospital and exclusive BF upon discharge, and to continue breastfeeding beyond 6 months. The group takes into account data on prevalence and rates of BF provided by WIC, the results of the PR PRAMS, Vital Statistics and mPINC (CDC Maternity Practices in Infant Nutrition and Care Survey) scores to propose priorities and strategies. Most strategies are implemented collaboratively so as to have a collective impact on BF rates, promoting the adoption of this practice by mothers on the island. Some strategies are implemented

individually by members of the group with support from other members.

Other efforts by the BFPCG focused on working collaboratively to promote the implementation of evidence-based or best practice strategies, such as the adoption of the Baby Friendly steps in hospitals, community support for breastfeeding moms in the postpartum period, and educating BF mothers regarding laws that protect breast milk extraction at work.

Efforts have continued to raise awareness among birthing hospitals in PR of the opportunity to participate in national data collection surveys, such as the mPINC. The 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 hospital that participate in the survey, and an improvement in scores reflecting positive changes in maternal infant practices. The mPINC score in 2011 was 60, in 2013 it was 61, in 2015 it increased to 69, and in the latest mPINC version of 2018 PR achieved the score of 72.

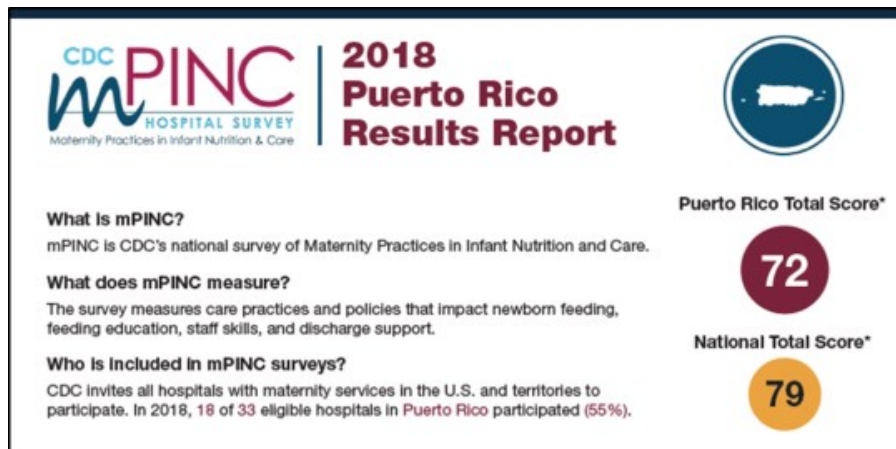
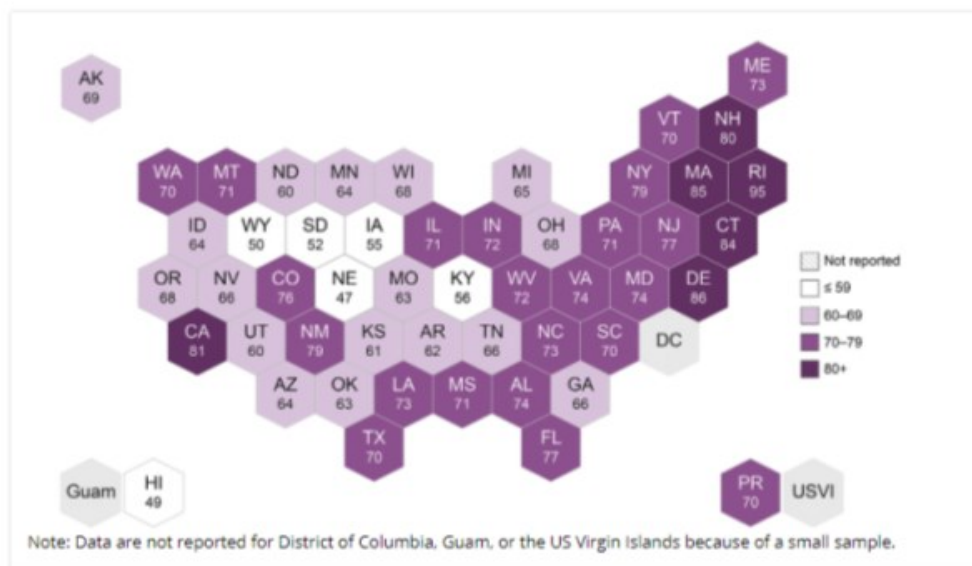


Figure 2. Institutional Management subdomain scores for Maternity Practices in Infant Nutrition and Care (mPINC) by state, mPINC 2018.



women may have a companion through labor and the postpartum period, rooming-in option, and BF rights, among others), and Law 79 of 2004 (banning hospital staff from giving breast milk substitutes to newborns without a doctor's order and the mother's informed consent).

Among lessons learned after hurricane Maria is the importance to continue promoting breastfeeding as the best and safest way to feed infants, even more after a disaster. Puerto Rico is an island and in case of a major disaster, there is the risk that aid to the island may be delayed if seaports and airports are damaged. Therefore, it is important to continue to convey to pregnant women and mothers with newborns the protection provided by breastfeeding and the advantages in case of a major disaster.

On August 4, 2020, the PRDOH, in collaboration with PRAAP and PR ACOG Chapter, presented a webinar on the topic of Breastfeeding during Crisis in celebration of Breastfeeding week. The focus was to advocate for breastfeeding following the CDC and AAP safety recommendations. The webinar had an introduction by the sub secretary of health on the role of the PR DOH in supporting and promoting BF, the achievements in the ever-breastfed prevalence and positive changes in hospitals. Two mothers presented their testimonies on the challenges they faced to BF during COVID-19 and how they were able to overcome them; PR ACOG District presented the continued efforts to support BF in the hospital; and a pediatrician presented updated recommendations supporting breastfeeding during the COVID-19 pandemic.

A second webinar on the topic of Breastfeeding in the labor room was presented on August 6 to hospital staff in collaboration with the PRAAP Chapter and the PR Hospital Association. A third webinar on the topic of Breastfeeding and wellbeing was delivered on August 27 (pm) in collaboration with PRAAP Chapter and the Perinatal Mental Health Center of the University of Puerto Rico School of Medicine.

A virtual meeting was held on August 27, 2020 (am) with the objective of creating a BF emergency network, a collaboration of several BF-promoting organizations. A group chat was established to share resources and improve communication. All the activities were coordinated by the MCAHD Pediatric Consultant, who is also the PRAAP Chapter President (2019-2021).

Webinar topic	date	# participants
Breastfeeding during crisis	August 4, 2020	342
Breastfeeding in the labor room	August 6, 2020	232
Breastfeeding and emotional wellbeing	August 27, 2020	54
Emergency Breastfeeding network	August 27, 2020	27

A digital poster was developed by an interdisciplinary team of MCAHD staff and published in the “*Encuentro de mi Vida*” website (www.encuentrodemivida.com). The poster features diverse mothers wearing facemasks while breastfeeding.

Amamantar durante una crisis Yo puedo superar los retos



Madre caso sospechoso de COVID-19 o con prueba positiva debe informarse y seguir las precauciones actualizadas y recomendadas para amamantar a su bebé de manera segura.

Para más información:

- Lactancia materna durante la pandemia del COVID-19 | Visita www.healthychildren.org/covid-19
- Si está embarazada, amamantando o al cuidado de niños pequeños | Visita www.cdc.gov/coronavirus
- Lactancia materna segura durante la pandemia de la COVID-19 | Visita www.usiaf.org/covid-19
- Encuentro de mí vida | Visita www.encuentrosmbidm.com

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**DIVISIÓN MADRES,
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Sumatoria CEE-SA-2020-8777

During 2018-2019 the MCAH Staff collaborated with the WIC program to update and revise the Safe Infant Feeding Protocols for the PRDOH, in an effort to promote support for breastfeeding as the safest way to feed infants after a disaster and improve safe infant formula handling. The final document was approved in July 2019 by the Secretary of Health as a public policy and incorporated in the PR Public Health Emergency and Disaster Guide (available from:

<http://www.salud.gov.pr/>

[Documents/guia%20de%20salud%20publica%20ante%20emergencias%20y%20desastres%202019.pdf](http://www.salud.gov.pr/Documents/guia%20de%20salud%20publica%20ante%20emergencias%20y%20desastres%202019.pdf)).

A pediatrician who collaborates with the BFPCG received a grant from Save the Children to train community leaders and hospital staff in promoting safe infant feeding after a disaster. She incorporated the Safe Infant Feeding Protocols of the PRDOH among the training topics. The training was delivered throughout the island and the MCAH HVP staff participated.

The BFPCG also developed recommendations for hospitals to include BF support strategies as part of their preparedness and disaster plans. This was shared through the Hospital Association with all hospitals in Puerto Rico.

The revised 2030 Healthy People goals include two objectives related to lactation: Increase the number of infants who are exclusively breastfed at 6 months and increase the number of infants who are nursing at 12 months.

HP 2030 BF goals	Baseline in US 2015	Baseline PR 2015	HP 2030 Target
Increase the proportion of infants who are breastfed exclusively through 6 months of age	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: National Immunization Survey - Child (NIS-Child), CDC/NCIRD

The following table reports BF prevalence in 2017, 2018, 2019 and preliminary results for 2020.

Year	2016	2017	2018	2019	2020
Ever BF*	94.80%	96.60%	96.30%	96.5%	96.6%
Ever BF Exclusively*	47.40%	49.60%	50.20%	47.5%	49.0%
BF at discharge**	90.30%	91.80%	91.70%	91.7%	91.6%
Exclusively BF at discharge**	33.30%	35.40%	36.80%	34.0%	35.0%
BF 1 st hour after birth (cesarean section)§	36.30%	40.20%	39.50%	33.5%	34.9%
BF 1 st hour after birth (vaginal delivery)§	65.60%	69.00%	68.70%	66.4%	68.7%
BF 1 st hour after birth all deliveries§	52.10%	55.50%	55.20%	56.4%	52.1%

*Everbreastfed data is obtained by the combination of breastfeeding the 1st hour after birth, at the time of discharge and at the registration in the Demographic Center of their region.

** Data reported by hospital.

§ Data is reported by mother/father at inscription

Source: Vital Statistics (2020 is preliminary), Demographic Registry, PR Department of Health, Prepared by: SMEISI, MCAH Program, PR Department of Health,

Puerto Rico Vital Statistics (VS) preliminary data obtained from the birth certificate revealed that 96.6% of mothers ever breastfed prior to registering their babies in 2020, a sustained increase in prevalence above 95% since 2017. Of the women who reported ever breastfeeding, in 2020 49% reported exclusive BF prior to registration. In the first hour post-partum, 68.7% of mothers who delivered vaginally and 34.9% 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.

Other data pertaining to BF, obtained from the 2017 and 2018 PR PRAMS, are reported in the following tables.

Year	% Exclusive BF at 3 months of age
2017	13.4
2018	22.8
2019	19.8

**BF STATUS WHEN PR PRAMS SURVEY WAS ANSWERED
2017-2019**

Year	BF status when survey was answered	Baby's Age in months when survey was answered				
		2	3	4	5	6
2017	% BF when survey was answered	87.5	60.8	57.2	45.7	40.8
	Never BF	0.8	8.1	5.0	4.1	11.0
2018	% BF when survey was answered	61.3	66.5	48.0	46.2	51.5
	Never BF	5.8	1.1	7.9	3.0	6.4
2019	% BF when survey was answered	64.5	59.8	50.9	47.0	47.9
	Never BF	3.4	5.9	4.7	6.9	4.7

BF Promotion and Support in the Hospital Post partum PR PRAMS 2017-2019			
PRAMS statement	2017*	2018*	2019*
	% yes	% yes	% yes
Received information on BF from hospital staff	86	86	85
Received orientation from a health care professional on the benefits of BF	88	88	88
Had rooming-in	72	78	79
Breastfed in the first hour post-partum	55	55	55
Received support on how to BF	76	73	73
Was taught to BF whenever the infant demanded	71	75	76
Received a telephone contact number for BF support	45	51.5	50
Received free formula upon discharge	44	47	47
Baby fed in mother's hospital room	89	88.2	90
Had Skin to skin contact in the first hour post-partum	75	74	76
Sedation of mother as a reason for not being able to BF in the first hour	27.5	23	25
Breastfed in the hospital	89	88	90
*Results from 2017 PR PRAMS ZPER, 2018 and 2019 PR PRAMS			

Breastfeeding Support After Baby's Birth			
Response from mothers who ever breastfed	2017%*	2018%*	2019%*
Someone to respond a question	74.0	77.7	80.0
Help to place the baby in proper latching position	82.9	79.4	77.6
Help to evaluate if baby was feeding enough breastmilk	73.1	73.2	74.6
Help to treat bleeding or painful nipples	59.6	53.0	55.1
Information on where to obtain a breast pump	65.0	65.1	62.9
Help in using a breast pump	54.4	51.3	50.6
Information about BF support groups	71.1	76.1	73.8
Expecting to Breastfeed	85	86	88.9
*Results from 2017 PR PRAMSZPER, 2018 and 2019 PR PRAMS			

All the data obtained and analyzed was shared with the PR BFPCG, providing awareness of areas for the development of strategies to promote BF.

Collaborators of the BFPCG held various activities throughout the island promoting BF and support for BF mothers, during Lactation month (August 2019), for which the regional and central MCAH staff provided support.

The LLL held diverse activities promoting BF throughout the Island. The PR BF Coalition had a week of lectures for the general public, culminating in their annual march through a shopping mall with the purpose of empowering BF mothers and promoting support for BF moms. Other BF promotion activities at the regional level had collaboration from the MCAH staff in an effort to increase knowledge of the benefits of breastfeeding and the acceptance of this practice by the public.

Another strategy used to promote BF was the Prenatal Course, offered by regional HEs and CHWs to pregnant women and their relatives (refer to the table: Participants that completed 4 sessions of the Prenatal Course 2019-2020). The benefits of BF, BF preparation in the prenatal period, BF 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.

A total of 1,110 infants (less than 12 months of age) participated in the HVP during 2019-2020. Home Visiting Nurses provide breastfeeding support by scheduling a visit in the first week postpartum to the HVP participants. In this and subsequent visits, 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, 87.7% of participants reported ever breastfeeding, a sustained improvement when compared to 67% ever breastfed in 2016, and 34.9% continued to BF until 6 months (compared to 25% in 2016). The HVP targets high-risk pregnant women, therefore it has a high proportion of participants between the ages of 11 and 19 (46.3%). Most of these adolescents continue to attend school after giving birth, requiring additional support to sustain BF beyond the first month.

	HVP 2019-2020*
Ever breastfed	87.7%
BF until baby is 6 months old	34.9%

***Percent of participants with a live birth**

The WIC program uses an evidence-based BF peer counselor support program which connects experienced BF WIC participants and new mothers. The WIC breastfeeding coordinator is an active member of the PR BFPCG and receives support of other members to present and implement the peer counselor BF program in hospitals and communities.

The MCAH Program Perinatal Nurses continued to distribute posters and brochures to birthing hospitals on current laws about women's and infants' BF rights in these settings, particularly Law 156 amended in 2016, and Law 79 of 2004. The Perinatal Nurses also visit moms postpartum to promote breastfeeding in the hospital and offer orientation on resources that provide breastfeeding support in their community.

As part of the hospital visit for LOCATe during 2018-2019, the MCAHD staff also provided hospitals with their performance statistics on ever breastfed and exclusive breastfeeding upon hospital discharge compared to the overall rates of the other hospitals in the Island. This provided the opportunity to share recommendations to improve their performance and strategies to promote safe sleep, education on the risk associated with the use of informally donated breast milk, the benefits of providing human milk to premature babies, and the use of the educational materials developed by the MCAHD, including the www.encuentrodemivida.com website, with their patients.

Another strategy to help promote breastfeeding has been the approval by the Secretary of Health of the recommendations for feeding from 0 to 24 months. These recommendations promote exclusive breastfeeding and the delay in the introduction of solids until 6 months of age and were created by a collaborative work between MCAHD Pediatric Consultant, PR WIC, an infant nutrition specialist from the School of Public Health at Yale University, a representative of the World Health Organization (WHO) and the Pan American Health Organization (PAHO), a nutritionist from PAHO, a neonatologist, and a nutritionist from the Human Development Department of the University of Puerto Rico Graduate School of Public Health. These recommendations have been shared with pediatricians and nutritionists in multiple forums.

The PR PRAMS survey in 2017-19 queried mothers regarding the introduction of solid foods in their babies' diets. The following table shows the percentage of infants who had not started eating solids at 2, 3, 4 and 5 months of age.

Percent of babies by age, who did not have a history of introducing solids when the survey was answered.				
PR PRAMS 2017-2019				
	Baby's Age in months when survey was answered			
Year	2	3	4	5
2017	98.0%	93.2%	79.3%	52.5%
2018	94.7%	94.3%	73.8%	57.8%
2019	95.9%	91.1%	80.6%	63.2%

Other Strategies Implemented by the MCAHD to Decrease IM

Prevention of unintentional injury

Various strategies were continued in an effort to promote the 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 Prenatal and Parenting courses continued to promote injury prevention, providing education and

recommendations on safety strategies, including 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. The PNs also include orientations on safe sleep and prevention of unintentional injury in their orientation on newborn care to postpartum families.

Prevention of Shaken Baby Syndrome

The HEs and MCAH 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 course. This intervention was offered to a total of 485 persons during 2019-2020.

Prevention of Forgotten Baby Syndrome

The Forgotten Baby Syndrome continues to be a threat that may occur to any family. A child left in a hot vehicle can die of heat stroke (extreme heat) in a very short time. A child's body heats up to three to five times faster than that of adults, and in a hot car a child can quickly become dehydrated. The major organs begin to collapse when the temperature reaches 104 degrees Fahrenheit (40 degrees Celsius). David Diamond, PhD, professor of psychology at the University of South Florida says, "Forgetting a child is not a problem of neglect but a memory problem. It is a matter of circumstances. It can happen to anyone."^[1] Any parent or caregiver can forget that a child is in the back seat. The risk of this happening increases when parents are very busy, distracted or if there is a change in routine. In the USA, 52 children (between the ages of 7 weeks and 11 years) died from being left in hot cars in 2018. According to Dr. Elizabeth Thomas, "Among the caregivers related to these deaths are dentists, social workers, nurses, military, religious, so this tragedy can affect anyone regardless of their socioeconomic status or educational level."^[2] 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. The most recent death of a forgotten infant in the car occurred in September 2019. This is a recurrent situation in PR despite Law 173, which requires day care centers to call parents if a baby 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. During 2019-2020 the MCAHD shared the poster with other agencies and organizations.



**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.
- 

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.
- 

3 Coloca el butlo de tu bebé en el asiento delantero del carro en un sitio visible.
- 

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.

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Infant CPR

During 2019-2020 the HVP continued training participating families on Infant CPR Anytime, a strategy proven to save lives. However, once the COVID-19 threat was identified, the course was discontinued and will be retaken once it is safe to continue. The Infant CPR Anytime training is combined with the delivery of safe sleep recommendations, complementing strategies aimed at decreasing infant mortality. The HVNs use an infant manikin 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. A grandmother of a participant of the HVP in the south region of the island shared her story on how she was able to dislocate a foreign object causing asphyxia in her grandchild thanks to the training she had received by the HVN.

The MCAH Program staff continues to offer educational activities to participants, providers, and the general population in an effort to make them aware of preventable causes of infant mortality, such as prevention of unintentional injury, and early recognition of signs and symptoms of premature labor.

Opioids

The MCAHD has remained vigilant to the prevalence of withdrawal syndrome in newborns, which requires hospitals to report cases to the PR Family Welfare Agency. During 2019 neonatal abstinence was reported in 1.7/1000 live births among mothers with medical insurance in PR. Although in the lower range when compared to the prevalence in the USA (1.5 to 8/1000 live births in the USA), the MCAHD promotes healthy lifestyles and habits including abstinence from the use of drugs and alcohol during pregnancy. The holistic management of infants with withdrawal

syndrome and their families is shared between the primary physicians and PR Family Welfare Agency.

[¹] Thomas, E. A. (2021, April 30). *Research shows that anyone could forget kids in hot cars*. Consumer Reports. www.consumerreports.org/car-safety/anyone-could-forget-kids-in-hot-car-forgotten-baby-syndrome/

[²] Thomas, E. A. (2021, April 30). *Research shows that anyone could forget kids in hot cars*. Consumer Reports. www.consumerreports.org/car-safety/anyone-could-forget-kids-in-hot-car-forgotten-baby-syndrome/

Perinatal/Infant Health - Application Year

The MCAHD will continue to address emerging needs of the population during and after the COVID-19 pandemic and will continue to focus its efforts to decrease infant mortality. Among the strategies that will be continued are: promoting the adoption of safe sleep practices, promoting improved birth outcomes and decreased preterm births, increased percent of very low birth weight infants delivered at facilities with the specialty level required for the care of high-risk neonates, educating women on how to prevent Zika infection and high risk behaviors during pregnancy, promoting and supporting breastfeeding and exclusive breastfeeding until infants reach at least 6 months of age, evaluation of fetal and infant death in the FIMR to identify strategies to improve pregnancy outcomes, and promote adequate protection for the control and prevention of COVID-19 infection.

Due to the vulnerability of the pediatric and pregnant women during disasters the MCAHD will continue to collaborate in family disaster preparedness, relevant to perinatal and infant care. The MCAH staff will also continue to collaborate with the development of an Emergency Preparedness and Response guide that takes into account the needs of infants to incorporate in the state EPR plans, including safe infant feeding, safe sleep practices, among others.

COVID-19

The MCAHD will continue attentive to updated recommendations and instructions provided by the PR DOH and the CDC relating to COVID-19 and any other emerging public health emergency, sharing this information with all the staff in an effort to protect the workforce and to initiate strategies to help guide the population for an effective public health response. Most of the staff has received the COVID-19 vaccine, but will continue to use face mask, hand washing and surface disinfection to prevent the spread of infection for as long as the Department of Health and the CDC recommend it. MCAHD will also continue to promote best practices in the hospital management of women in labor, post partum and breastfeeding, in suspected or positive cases of COVID-19 infected women. The MCAH staff will continue to collaborate with stakeholders in the update of preventive guidelines in Spanish for the primary care offices and general population based on the recommendations of the CDC, AAP and the PR DOH.

Safe Sleep

Due that sleep-related Sudden Unexpected Infant Deaths (SUIDs), continues among the leading causes for infant death, between 1 to 12 months of age in Puerto Rico. The MCAHD will continue in its efforts to educate and promote Safe Sleep Practices through all its programs and educational interventions.

The PR MCAH will continue to implement the following strategies to improve the safe sleep practices and decrease the infant mortality due to SUIDS:

- Continue collaborating with MCAH Program stakeholders (PROGyn and ACOG, PR Hospital Association, MOD, among others) to promote the inclusion of infant safe sleep practices in CME and training of hospital staff. On April 7, 2021 a webinar on Breastfeeding during COVID-19 pandemic and transition to home for newborns in NICU was delivered in a collaboration between the MNAD and the PRAAP. The webinar had the participation of Dr. Larry Noble, neonatologist and BF advocate, who shared the strategies adopted in the hotspot of New York City during the pandemic to continue to support BF mothers and a summary of evidence supporting these actions. Dr. Cindy Calderon, pediatric consultant, presented recommendations for safe sleep practices in the transition home of the NICU baby. Participants include neonatologist, pediatricians, nurses, BF support groups, and obstetricians among others.
- Continue to promote infant safe sleep practices among PR Title V Home Visiting Program participants, by offering prenatal and post-partum orientation and evaluating safe sleep practices. Participants in the HVP receive orientation on Safe Sleep practices beginning in the second trimester of pregnancy and continued in the post-partum period.
- Continue to promote infant safe sleep practices in the Prenatal and Parenting courses and in the "Why do

babies cry?” workshop. An article recommending safe sleep practices was also written by Dr. Cindy Calderon and published in a local parenting magazine in May 2021.

- Continue to promote infant safe sleep practices in social media, using “*Encuentro de mi Vida*” webpage and in the virtual prenatal course.
- Continue to emphasize safe sleep practices in displaced families affected by disasters.

Prevent Zika and Other Arbovirus Infections

During 2015-2016 the threat of the Zika epidemic, due to its teratogenicity and its threat on fetal and infant survival, became an emerging priority for the MCAH program. Transmission of Zika virus has been identified via sexual contact and through the mosquito bite of *Aedes* species (also the vector for Dengue and Chikungunya), abundant in Puerto Rico all year round due to its tropical climate. The Zika virus surveillance data demonstrates a decrease in the overall population prevalence of Zika virus from an epidemic to an endemic status in 2017, but it remains a risk for pregnant women in PR. Puerto Rico remains identified as a territory where travelers are recommended to take precautions to prevent Zika transmission by the CDC as follows “If you travel, you should strictly follow steps to minimize exposure to and prevent mosquito bites.” (<https://wwwnc.cdc.gov/travel/page/zika-information>, page last reviewed by CDC December 2020). Therefore the MCAH program will continue to offer educational activities focused on the prevention of Zika virus infection during pregnancy, promote prenatal screening for the presence of Zika Virus and advocate for support services for pregnant women with positive results. The HVP will continue to deliver support and education to participants with high risk pregnancies and refer them to early prenatal care and support services in an effort to improve prenatal care and decrease infant mortality. Cases with positive Zika results are registered in the PRDOH. The fetus is closely monitored during pregnancy, and newborns are referred to the Pediatric Centers for close monitoring and screening. The Community Health Workers (CHW) will also continue including education on Zika virus prevention in the community.

MCAH will continue including Zika prevention education in all the courses (Prenatal and Parenting) and educational activities provided in the community. The educational intervention will continue to focus on how women can protect themselves and their families from the vector that transmits the Zika virus, from the sexual transmission of the virus, and how to eliminate mosquitoes in their surroundings. Dengue is also transmitted by the same vector and also represents a threat to pregnant women due to increased morbidity and mortality.

Due to the emergent COVID-19 crisis and its unknown risk for further complications in pregnant women, the fetus, or the newborn, MCAHD will continue to educate on the need of pregnant women and post-partum women to adopt recommended measure to prevent contagion.

Prevention of Premature Births

The Puerto Rico Collaborative Improvement and Innovation Network (CollIN) for Infant Mortality reduction will continue to focus on the prevention of preterm and early term births. Prenatal Health Care Services Guidelines (PNHCSG) along with the Preventive Health Services Guidelines for women in reproductive age have been developed and will be presented to the Puerto Rico Health Secretary for his approval as a Public Policy of the Health Department. The PNHCSG includes emphasis on early identification of high risk pregnancies for adequate referral, such as women with a history of a previous premature birth to whom the service of home administration of the 17P (hydroxyprogesterone) may be offered. During 2021-2022 the PNHCSG will also be disseminated among the general public to promote early prenatal care.

The MCAHD will also continue to encourage the implementation of the Hard Stop policy in all birthing hospitals in order to decrease elective labor induction prior to 39 weeks gestation in non-medically indicated cases. We will continue to promote the 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 Hospitals Association and MOD.

The MCAH Program will continue to educate and increase awareness regarding premature birth with the distribution of a magnetic pad featuring warning signs and symptoms of preterm labor and the steps women should take if they suspect they are experiencing preterm labor. HVNs will continue to routinely evaluate their participants in an effort to identify the presence of risks related to premature and LBW deliveries and to provide education and individual orientations about the signs and symptoms associated with premature labor as well as information concerning the birthing facility with Level III perinatal services near to their residence. The Perinatal Nurses will continue offering education to pregnant women on signs and symptoms of premature labor. The MCAH Program will continue to promote the use of a prenatal card that records pertinent obstetric history and information, and the benefit of carrying it at all times.

Promotion of Healthy Lifestyles During Pregnancy By Social Media

A multimedia campaign, *El Encuentro De Mi Vida (The Encounter of my Life)* was relaunched launched in 2018 with the purpose to deliver the message that pregnancy lasts 40 weeks; good prenatal care improves outcomes and breastfeeding initiates in the hospital. Due to the success of the previous campaign a new version of the campaign will be developed and launched in 2021-22. It will follow a similar strategy, with increased exposure in social media. The campaign will have 30 second videos in commercial time through mayor tv channels of the island targeted to 18 to 49 age group. Radio messages will also be broadcast in the local radio stations, and local newspapers will publish adds with messages of the campaign. Thirty second videos will also be projected in the prelude to movies in movie theatres throughout the island. Banners will be published in multiple digital media directing traffic to the campaign website.

Births at Facilities with the Specialty Level Required for The Care of High-Risk Neonates

The MCAH joined the CDC LOCATE initiative, with the aim to evaluate the levels of hospital specialty service for maternal-infant care. In 2021-2022 the CDC will continue state and jurisdictional analysis of data, linking vital statistics and insurance data with LOCATE data to evaluate birth outcomes and maternal complications according to levels of care. The results will 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)

The Puerto Rico Fetal Infant Mortality Review (PR FIMR) Committee will continue evaluating cases, identifying barriers to optimum maternal and newborn care, and sharing the findings and recommendations with stakeholders (leaders of the Hospital Association, professional groups such as the local ACOG and AAP Chapter, March of Dimes, other government agencies, and MCAH Regional Boards). The FIMR will continue to focus on evaluating infant deaths in the high-risk families served by the MCAH Home Visiting Program (HVP) in an effort to identify risk factors of this vulnerable population and to propose strategies to improve their outcomes. The Committee will also continue to focus on fetal deaths in HVP participants to attempt to identify risk factors contributing to the high prevalence in Puerto Rico of 11.2 fetal deaths/1,000 births (VS 2018), and strategies to address them.

Breastfeeding

The PR MCAH staff will continue to support the initiation of BF and continuance of exclusive BF beyond 6 months of age by diverse means. The MCAHD will continue to promote BF as a lifesaving measure in a disaster, and disseminate the Safe Infant Feeding Guidelines developed and adopted by the Secretary of Health in 2019 as a public policy to be implemented in disasters and emergencies. This will require for PR MCAH and collaborators to continue to disseminate the guidelines and provide orientation to administrators of shelters, community leaders, and first responders.

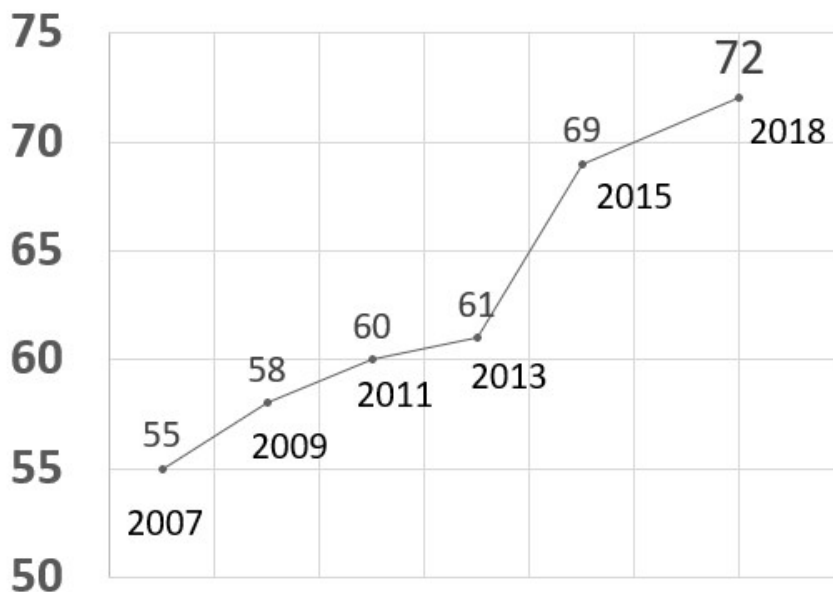
The data obtained by WIC, the Demographic Registry, PR PRAMS, Immunization Survey and mPINC report prevalence and trends of BF in PR and contribute for the evaluation and the implementation of achievable strategies

aimed at increasing initiation and exclusive BF continuation up to the minimum age of 6 months old. The MCAHD will continue to share 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 will continue to share data with hospitals across the island of the opportunity to participate in national data collection surveys, such as the mPINC, that provide information pinpointing areas in need of improvement to support successful initiation of breastfeeding in the hospital.

The MCAH Division will continue to provide training to its staff (HVNs, CHWs, and Perinatal nurses) with the skills and knowledge to help achieve successful initiation and of exclusive BF up to at least 6 months of age in the population they serve. They will receive training on the skills required to reinforce one-on-one orientations on BF related issues to HVP participants starting in pregnancy, and continued with BF support post-partum with special emphasis in exclusive BF for their offspring's first 6 months of life as a minimum. During 2021-2022, the PR HVP will re-evaluate and adopt new strategies in an effort to improve its effort and impact in supporting BF among its participants. The MCAH staff will continue to promote knowledge of existing laws that protect the rights of BF mothers in public and in the workplace at the community level and distribute posters promoting laws that protect the right of mothers to breastfeed in public places.

The MCAH staff will also continue to promote changes in the hospitals to provide support to mothers so as to successfully initiate BF in the postpartum period. Therefore, it will continue to promote hospital compliance with PR Hospital Regulations Policy #9184 (July 2020), which also includes requirements for hospitals to establish BF support policies. The recent mPINC report (2018) supports the positive impact the strategies implemented by the MCAHD has had in fostering changes in hospitals to support breastfeeding. The results will guide the proposal and implementation of further strategies.

mPINC Scores for Puerto Rico*



*CDC Hospital Survey on Maternity Practices in Infant Nutrition and Care

Figure 2. Institutional Management subdomain scores for Maternity Practices in Infant Nutrition and Care (mPINC) by state, mPINC 2018.



Extracte from the cdc site <https://www.cdc.gov/breastfeeding/data/reportcard.htm>

The MCAHD staff will continue to work in collaboration with the Pan-American Health Organization (PAHO) representative in PR in the implementation of a National Plan for Obesity Prevention in Puerto Rico, promoting the successful initiation of BF and exclusive BF upon discharge from hospitals, and sustained exclusive breastfeeding for at least the first 6 months of life. The MCAHD staff and PAHO will continue to collaborate with the Puerto Rico Hospital Association to promote the Baby Friendly Hospitals Initiative, implement the steps proven to achieve a successful BF process, self-assess their performance, and improve the quality of their maternal infant services. In collaboration with the PAHO, “Infant feeding Recommendations for 0 to 24 months old” will continued to be promoted. These guidelines strongly recommend supporting exclusive BF for the first 6 months of life.

The MCAH will continue to provide support to all collaborators such as: the WIC, Peer Counselors Program in Hospitals, *La Leche League* community support programs, Puerto Rico Breastfeeding Coalition, Movement of Breastfeeding Mothers, Proyecto Lacta, initiatives of the PR AAP Chapter, among others. For Breastfeeding Week in August 2021, PR MCAH will support collaborators in activities developed to celebrate BF week that continue to promote the value of BF in the population. Breast milk is especially beneficial to premature babies. It plays an important role in protecting them from necrotizing enterocolitis, among other benefits. There are no milk banks in Puerto Rico, but due to the fiscal crisis in the island and the cost involved in setting up a milk bank, it is not feasible at this moment. Priority will be placed on promoting strategies that increase BF prevalence and support for mothers of premature babies. The MCAH staff in collaboration with stakeholders will encourage hospitals to adopt policies that support mothers of premature babies and provide the opportunity to express and store breast milk to feed their preemies during their hospital stay.

During the month of August 2021, the MCAH division will organize a virtual activity to support breastfeeding mothers in collaboration with stakeholders of the PR AAP, PR ACOG District and the Hospital Association. The Facebook Live will focus on prenatal preparation to BF, and the father and hospital role in supporting BF. The target population for this facebook live will be WRA, pregnant women and their family, members of the PR Hospital Association. Safe sleep practices will also be promoted in this activity.

The Home Visiting Program will continue to strengthen the nurse interventions with families to promote infant and maternal well-being. They will provide orientation and support promoting BF, oral health care, developmental stimulation, parental guidance, preventive health visits, prevention of unintentional injury, physical activities and prevention of Zika among many other topics.

These interventions begin in the prenatal period and extend until the infant 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.

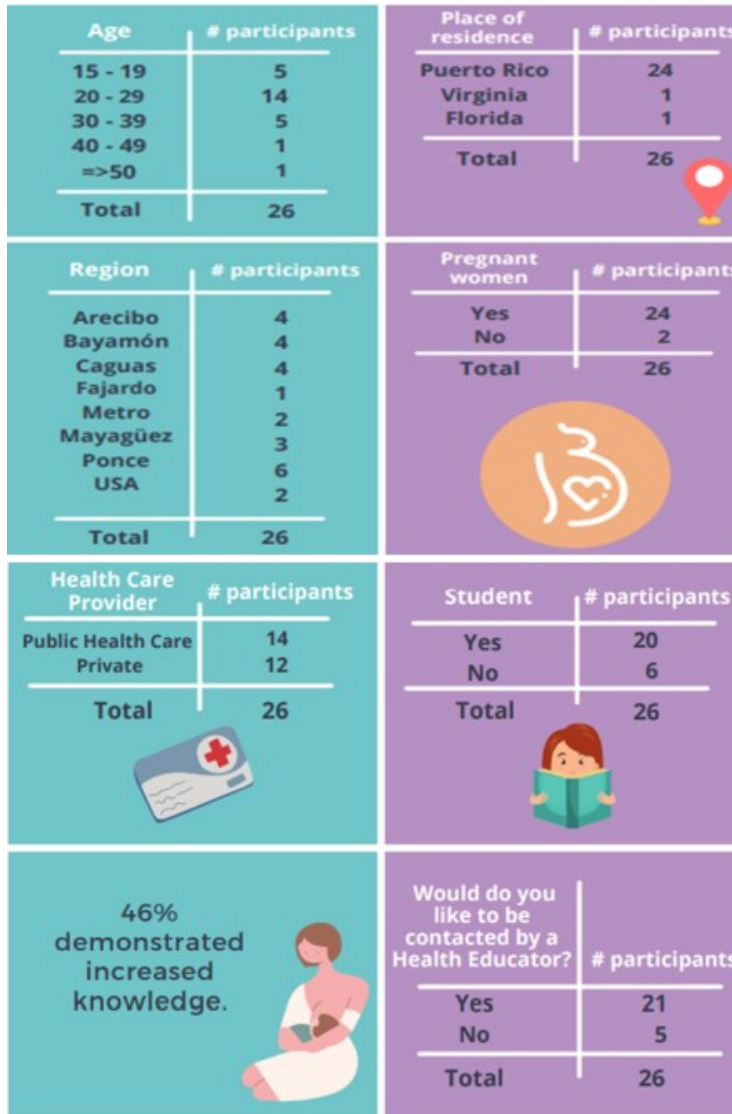
Virtual On Demand Prenatal Course

The prenatal course will continue to encourage BF by including information relevant to pregnant women 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.

Due to the limitations imposed by the precautionary measures taken to prevent and control the spread of COVID-19 a virtual prenatal course on demand was developed. The course provides a 30 minute video with information and recommendations regarding the following topics: health care during pregnancy, emotional well-being, preparing a birth plan, warning signs of preterm birth, childbirth process, postpartum planning, caring for the newborn baby (including safe sleep practices), breastfeeding, postpartum medical visit, and family planning. All participants complete a pre and a post test, and obtain a certificate of participation upon completion. Integration of sign language into educational video was an innovative approach to make it accessible to the deaf population. The course was tested with 26 participants, 21 from the HVP.

VIRTUAL PRENATAL COURSE Pilot Phase

21 participants of Home Visiting Program, 2 pregnant women USA resident, and 3 unknown participants completed the virtual course (total 26).



Maternal, Child, and Adolescent Health Division
Puerto Rico Department of Health
March 2021

A web page was created promoting the course and as portal of entry to the course, www.cuidadoprenatalpr.com.



This virtual prenatal course was launched in May 2021.

Forgotten Baby Syndrome

The Forgotten Baby Syndrome continues to be a threat that may occur to any family. A child left in a hot vehicle can die of heat stroke (extreme heat) in a very short time. A child's body heats up to three to five times faster than that of adults, and in a hot car a child can quickly become dehydrated and the major organs begin to collapse when the temperature reaches 104 degrees Fahrenheit (40 degrees Celsius). Dr. David Diamond, Ph.D, professor of psychology at the University of South Florida says, "Forgetting a child is not a problem of neglect but a memory problem. It is a matter of circumstances. It can happen to anyone." (Emily A. Thomas, Consumer Report, updated July 2019). Any parent or caregiver can forget that a child is in the back seat. The risk of this happening increases when parents are very busy, distracted or if there is a change in routine. In the USA, 52 children (between the ages of 7 weeks and 11 years) died from being in hot cars in 2018. Among the caregivers related to these deaths are dentists, social workers, nurses, military, religious, so this tragedy can affect anyone regardless of their socioeconomic status or educational level. " (Emily A. Thomas, Consumer Report, updated July 2019).

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 as support and reminder for the families. The most recent death of a forgotten infant in the car occurred September 2019, to an engineer. This is a recurrent situation in PR despite law 173 that requires all day care centers to call parents if baby is absent or delayed without previous notification to the center. This prompted the development of a poster by the interdisciplinary team of consultants of MCAHD with the purpose to disseminate and strengthen the message of how parents need to develop a strategy to protect their infants. During 2021-2022 the MCAHD will continue to disseminate the message sharing the poster with other agencies and organizations.

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:



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 | DIVISIÓN MADRES,
NIÑOS y ADOLESCENTES
GOBIERNO DE PUERTO RICO

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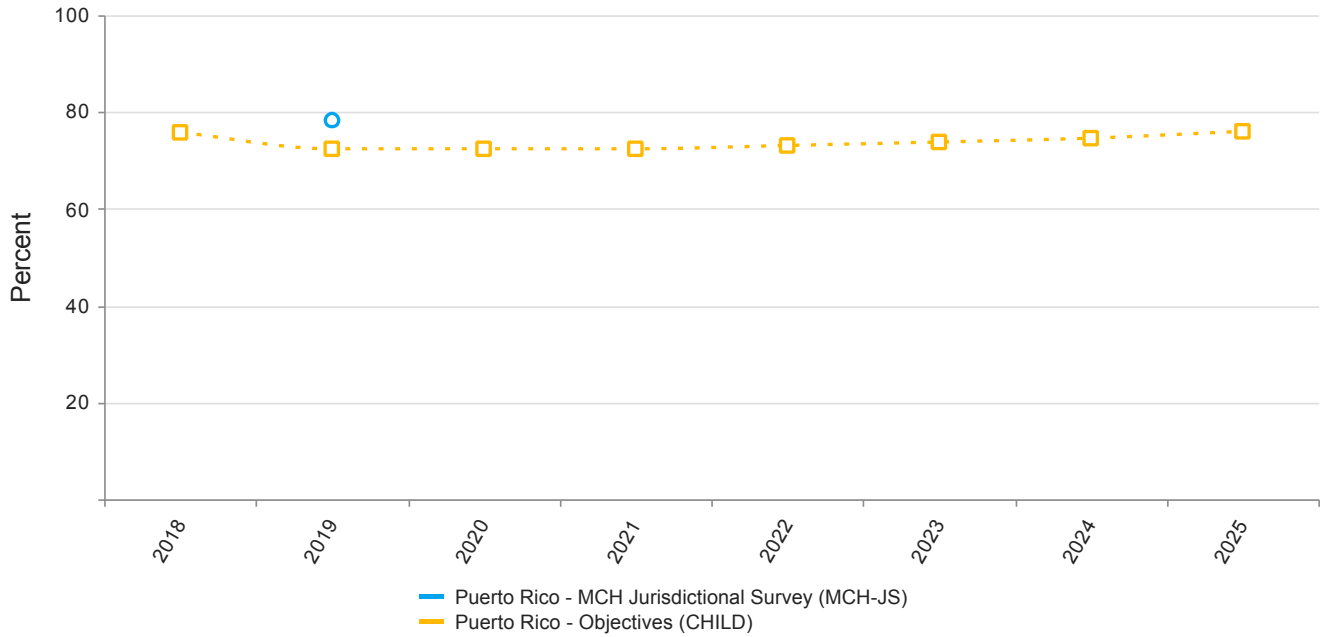
Child Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	MCH-JS-2019	22.0 %	NPM 13.2
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	NSCH	Data Not Available or Not Reportable	NPM 13.2
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	MCH-JS-2019	13.1 %	NPM 13.2
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH	Data Not Available or Not Reportable	NPM 13.2
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	MCH-JS-2019	72.8 %	NPM 13.2
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH	Data Not Available or Not Reportable	NPM 13.2

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
Annual Objective	72.3	72.3
Annual Indicator	78.1	78.1
Numerator	453,736	453,736
Denominator	581,051	581,051
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective			75.7	72.3	72.3
Annual Indicator	75.7	75.7	72.3	72.3	72.3
Numerator	519,746	519,746	433,883	433,883	433,883
Denominator	686,290	686,290	600,429	600,429	600,429
Data Source	BRFSS	BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year	2016	2016	2017	2017	2017
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	72.3	73.0	73.7	74.5	75.9	76.6

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
Annual Objective			39.3
Annual Indicator		39.3	34
Numerator		210	127
Denominator		534	373
Data Source		HVP Participants Records	HVP Participants Records
Data Source Year		2018-2019	2019-2020
Provisional or Final ?		Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	34.1	34.2	34.3	34.4	34.5	34.6

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 76% the percentage of children with a preventive dental visit in the past year, participants of the Government Health Insurance Plan. (PR-BRFSS: 72.3%)

Strategies

Collaboration with PR MCAH Program stakeholders to promote the early identification of infants at higher risk for caries, early referral to establish a dental home and preventive dental visits for all children.

Promote the use of the infant at high risk for caries screening tool among primary care providers for an early referral to establish a dental home.

Promote the preventive dental visits among Parenting Course participants.

Promote Pediatric Preventive Health Care Guidelines among general public, academia, health professionals and health insurance companies through various public education approaches.

Promote healthy lifestyles among families that participate in the parenting courses, HVP, and community educational initiatives

Develop and disseminate an Emergency Preparedness and Response guide that takes into account 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 19 - Percent of children, ages 0 through 17, in excellent or very good health

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

Child Health - Annual Report

Recovering from the devastation caused by the hurricanes that hit Puerto Rico in 2017 was a main priority during 2019 but it quickly changed when facing the emergent 2020 challenges. On January 7, 2020 Puerto Rico had a mayor 6.4 earthquake in the southwest region causing structural damages and displacing families from their homes. There was a switch from a recovery phase to a relief and support phase, interrupted by the changes required upon the worldwide menace of the COVID-19 Pandemia. Protective measures to prevent and control infection caused disruption in the daily routines of life for everyone, requiring adaptation to deliver services and continue to achieve our goals.

Earthquake crisis

Due to PR's geographical localization in a highly seismic area, recurring earthquakes began in December 2019 and continued at a lower magnitude and frequency throughout 2020. In the south region, epicenter of earthquakes, homes were destroyed forcing families to live in shelters. The MCAHD promptly responded identifying the needs of families with children in government and community shelters and referral for services in the community. The MCAHD Pediatric Consultant also had multiple visits in collaboration with MCAH stakeholders, visiting families in shelters and providing orientation on management and preventive measures for contagious disease for those living in overcrowded conditions.

The 2019-2020 challenges added additional stress to the PR population with a negative impact on mental health. The displaced families suffered emotional trauma, but the general population was also affected with the uncertainty and fear of a stronger quake affecting the whole island. The effect of the quake on displaced children was emotional instability due to improvised dwellings, interruption in their schedules, loss of contact with playmates due to the need to relocate, the interruption in school semester, and emotional devastated parents and caretakers among other causes. The recovery from this event was complicated with a slow recovery from the damage caused by the 2017 hurricanes.

MCAH collaborated with stakeholders in initiatives that were implemented with the purpose to mitigate the emotional distress and promote the health and wellbeing of the affected pediatric population. On February 14, 2020, an activity was delivered outside a structurally damaged Head Start (HS) facility with the participation of more than 30 families and over 40 HS and Early Head Start staff of the surrounding towns of Guánica (epicenter of earthquakes). Most of the HS and EHS of the south region were non-operational due to damage to structures by the earthquakes. This activity was done in collaboration with the PR AAP Chapter, United Way of Puerto Rico, ASSMCA (PR Mental Health Services Agency, Adolescent and Children Division), Puerto Rico Family Department mobile library and VOCES (mobile immunization clinic). Participants received basic hygiene kits, mosquito repellents, and sunscreen. Educational material on the correct use of mosquito repellents and sunscreen protection in children, safe sleep practices, and oral care in dislocated families was provided. Vaccination against the flu was also provided.

The coloring book "Trinka y Juan, cuando la tierra se movió" (Trinka and Sam, when the earth moved), as an instrument to help families mitigate the stress caused by the earthquakes in their children was distributed. Gratitude for the support was expressed by all the participants. Similar activities were also done in Ponce and Yauco, providing support.

The MCAH staff also suffered additional stress as the rest of the population, and work was interrupted when seismic movements was felt all over the island. From December to February most of the population lived in a constant state of alertness and readiness to protect life in case of a mayor earthquake.

COVID-19

The earthquake challenge was further complicated with the emergence of COVID-19. The pediatric consultant organized and moderated a virtual meeting on March 4, where a compilation of information and recommendations from CDC, AAP and the PR DOH were presented to pediatric leaders from all over the island followed by a

discussion and proposals on how to contribute to the preparedness and management of COVID-19 in the community. From this collaboration, materials for patient education and protocols for office staff in Spanish were developed and shared. Primary care doctors are the first line of contact for most patients and adequate protection of staff and physicians is vital importance. Strategies to implement telephone triage were also developed by this group anticipating the arrival of COVID-19 to the island.

On March 16, 2020, in response to the identification of COVID-19 cases in the Island, the PR government declared a state of emergency and ordered a shutdown of non-essential business, schools, and workplaces to deter the spread of infection. Working from home to comply with the governor's order, the pediatric consultant continued in communication and collaboration with pediatric organization identifying the gaps for the identification and management of this new challenge and as a member of a Pediatrician Task Force to develop a toolkit with guidelines for the diagnosis and management of COVID-19 in the pediatric population (March 2020).

Due to the emerging concerns of how to implement protective protocols in the day care and HS and EHS settings the Pediatric Consultant in collaboration with the PR AAP Chapter developed and delivered a virtual meeting on March 16 on the spread of COVID-19 and infection control measures in public settings promoting the adoption of personal protective behaviors. The virtual conference had a total of 170 participants: day care and HS/EHS staff and community leaders. The content was based on the most recent recommendations by the CDC, AAP, and the PR DOH. During the continued shutdown multiple webinars were coordinated and delivered by the Pediatric consultant with the collaboration of Pediatric colleagues and other stakeholders. These webinars had participants from all over the island; families and staff of HS, EHS and day care centers. Pre and post-test were administered with the purpose to evaluate participant's beliefs and knowledge, and topics for future educational webinars.

A chat with the participation of pediatricians from all over the island was created with the purpose to serve as a forum to share updated information on the diagnosis and management of Pediatric COVID-19, implementation of changes in practices to continue pediatric preventive services during the crisis while protecting their staff and themselves.

Another chat with the participation of multiple MCAH stakeholders was created with a similar purpose, to share updated information on COVID-19 and initiatives to support the MCAH population. Among participants in this chat are representatives of United Way of PR, ACOG, Breastfeeding support groups, psychologist, pediatricians, MCAH advocates, Voces (vaccine advocate NPO), PR AAP leaders, presidents of all the Pediatric Organization on the Island and the pediatric representative of the PR COVID-19 Task Force.

Webinars relevant to best practices in pediatric care during the COVID-19 crisis have also been coordinated by the pediatric consultant, with participation of pediatricians from all over the island, United States and Latin America.

With the COVID-19 crisis many aspects of family life faced emerging challenges related to the prevention and infection control measures imposed. Children remained at home with closed schools and day cares, receiving virtual education under the direct supervision of their parents. Some parents were also working virtually while taking care of their children. Poverty stricken families had even further economic challenges without opportunities to find work, as most businesses remained closed until partial opening in late June 2021. Restoration of homes damaged by the earthquake were also stalled. Families faced increased stress with an emotional burden as they found themselves isolated in their homes.

Dr. Chandra Ghosh Ippen, Associate Director and Dissemination Director at the Child Trauma Research Program at the University of California, San Francisco, and author of the *Trinka and Juan* series collaborated as a presenter in the May 19, 2020 webinar teaching participants how to use the new publication, *Trinka and Juan* against the virus, *Trinka y Juan luchando contra el gran virus*, to help families and children deal with the stress caused by the COVID-19 crisis.

Multiple short video clips were produced by the pediatric consultant with the collaboration of colleagues and published in the PR AAP Chapter you tube channel, social media and chats with messages targeted to parents, promoting continued preventive pediatric care, immunization, and breastfeeding during the crisis and protective

measures to prevent contagion and transmission of COVID-19. All the webinars and videos are published in the PR AAP YouTube channel, accessible to the public, and have been shared through social media.

www.youtube.com/channel/UCy8fBS9CNsgjXdIHW5TJRdw

Date	Topic	Participants
March 16, 2020	COVID19 Preparing for the Prevention of Community Transmission	170
April 28, 2020	Safe sleep, Feeding and Development During the First year	604
May 19, 2020	Tools to prepare for reopening day care and preschool during COVID19	637
May 27, 2020	Feeding and Development from 1 to 3 years old	706
June 3, 2020	Preparedness for the 2020 challenges: COVID, Hurricane and Flu Season	702
July 13, 2020	Oral Care in Pregnant Women and Caries Prevention in Early Childhood	170

During 2019-2020 the MCAH staff continued their efforts to provide support and guidance to families of the available resources in their community and how to access them with the purpose to sustain and improve the health and wellbeing of their families. One to one, small groups and larger community educational initiatives were delivered by the MCAHD staff until the shutdown was ordered and interventions were modified to deliver services by telephone. Social media venues were also used for the same purpose. Many community services were also interrupted until alternate methods to deliver were established, such as WIC, Demographic registration of newborns, SNAP program etc.

During the COVID-19 crisis the HVP implemented changes and continued to provide support for participants, establishing a protocol for weekly or biweekly telephone evaluations and orientations, including how to access services and information virtually.

The caveat to all these efforts was the limited access to telephones and internet in portions of the population and staff, who became more isolated during the pandemic. All the initiatives and efforts were aimed at informing and educating families and the public about the unique needs of the pediatric population, foster lifestyle changes to benefit them, and promote COVID-19 infection control and prevention measures.

The MCAHD continued to advocate for high quality health care access and the establishment of pediatric best practices in the delivery of health care services, but with the emergent COVID-19 pandemic services were interrupted with the shutdown. Prior to the arrival of the COVID-19 crisis collaboration with diverse partners, including families, community-based organizations, private sector, and other government agencies, was continued by the MCAHD staff with the purpose to share the vision for leveraging resources, integrating, and improving systems of care, promoting quality health services, and developing supportive policies. The Pediatric Consultant as the elected president of the PR Chapter of the AAP (2019-2021), strengthened the collaboration with this organization that pursues similar goals.

During 2019-2020 the MCAHD continued to develop and implement varied strategies to achieve the national and state performance goals relevant to the Child Domain and contributing in the recovery phase, preparedness for future events, and the prevention and control of COVID-19 infection.

Control measures imposed on the population by the government demonstrated to be effective in controlling the spread of COVID-19 in Puerto Rico, and the prevalence of positive PCR testing in children younger than 10 years was less than 0.1% (Data from billing and PRDOH COVID-19 vigilance, June 2019 to July 2020) .

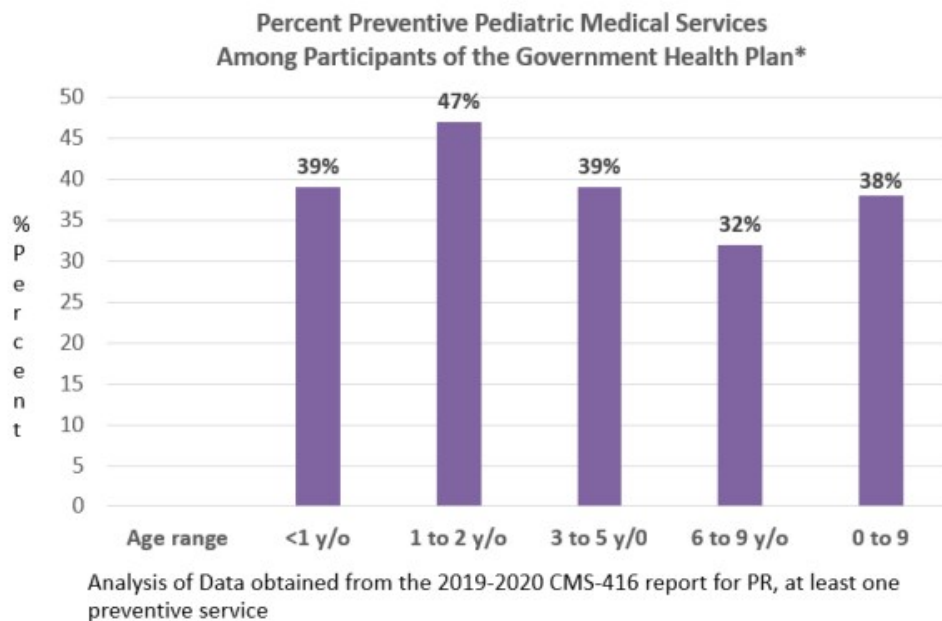
Promoting preventive health visits

The impact of the storms increased the fiscal challenges the pediatric health care workforce has been confronting the recent years. 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. After the hurricane disaster, the National Health Service Corps (NHSC) loan repayment assistance was offered to qualified health care providers willing to work on the island as a strategy to motivate physicians to remain in Puerto Rico. With the pandemic modifications to deliver services in a safe manner decreasing the risk of contagion, increased the cost of delivering care because of the need to adopt personal protective equipment. The financial burden required to deliver services and the risk of contracting COVID-19 convinced many aging pediatricians to retire, limiting even more the availability of pediatricians on the Island. Since March 2020, there has been the death of 7 pediatricians related to COVID-19 infection.

During the COVID-19 crisis the in person preventive services were initially stalled, and priority was provided for urgent care via telemedicine, which was authorized for all physicians with a PR medical license, due to the lockdown. Visit to emergency rooms, hospitals and primary care physicians decreased markedly due to fear of contagion. Families with newborns and infants were recommended to continue the in-person visits to their pediatricians, calling ahead and following the office protocols, established to protect both staff and families.

Despite these effort in 2020, 38% of children between the ages of 0 to 9 years old with the GHP were reported having at least one preventive screening in the data provided in the CMS-416 report a decrease compared to 2019 report of 58%. This reflects the impact of the shutdown and stay home order due to COVID-19 on outpatient clinical services.



As the crisis became prolonged, physicians and dentist adopted the COVID-19 prevention and control measures, physical barriers, social distancing between patients and staff, PPE for staff, and disinfecting protocols in their offices. They also modified the protocols to receive in person visits, providing a lower risk experience for the families and the staff. Annual preventive visits require a physical exam which cannot be replaced by a telemedicine visit, therefore the MCAHD staff continued to promote that families contact their medical and dental home for their children’s preventive visits, reassuring them of the safety measures adopted for the control and prevention of infection.

**Percent of New Patient Preventive Visits by Age Range
Based on Billing Data Classified by ICD-10 Code and Insurance Type 2019-2020**

CPT Code	ICD-10-CM Code	% PHI *	% GHI**	% All Insured***
99381 <1 year/old	Z00.110 Health supervision for newborn under 8 days old	0.7	0.7	0.7
	Z00.111 Health supervision for newborn 8 to 28 days old	0.7	1.4	1.2
	Z00.121 Routine child health exam with abnormal findings	0.9	2.5	1.9
	Z00.129 Routine child health exam without abnormal findings	2.1	5.9	4.5
99382 1-4 years/old	Z00.121 Routine child health exam with abnormal findings	0.3	0.6	0.5
	Z00.129 Routine child health exam without abnormal findings	0.4	1.2	0.9
99383 5-11 years/old	Z00.121 Routine child health exam with abnormal findings	0.2	0.6	0.4
	Z00.129 Routine child health exam without abnormal findings	0.3	0.9	0.6

**Percent of Established Patient Preventive Visits by Age Range
Based on Billing Data Classified by ICD-10 Code and Insurance Type 2019-2020**

CPT Code	ICD-10-CM Code	% PHI *	% GHI**	% All Insured***
99391 <1 year/old	Z00.110 Health supervision for newborn under 8 days old	0.1	0.1	0.1
	Z00.111 Health supervision for newborn 8 to 28 days old	0.3	0.7	0.6
	Z00.121 Routine child health exam with abnormal findings	2.9	9.0	6.8
	Z00.129 Routine child health exam without abnormal findings	12.5	15.9	14.6
99392 1-4 years/old	Z00.121 Routine child health exam with abnormal findings	1.0	5.0	3.6
	Z00.129 Routine child health exam without abnormal findings	3.1	7.6	6.0
99393 5-11 years/old	Z00.121 Routine child health exam with abnormal findings	0.7	3.9	2.6
	Z00.129 Routine child health exam without abnormal findings	1.6	4.8	3.5

*Percent of visits calculated using the number of billing for services divided by the number of insured participants eligible for services with a private health insurance.

**Percent of visits calculated using the number of billing for services divided by the number of insured participants eligible for services with the government health insurance.

*** Average percent of visits using the number of billing for services divided by the number of insured participants eligible for services with a private health insurance or government health insurance.

Licensed Physicians Registered in the PR Medical Licensing and Disciplinary Board from July 2019 to June 2020			
Category	Total number of providers registered*	Reported Active in Practice in PR	Reported out of PR
Family Physician	550	437	77
General Physician	4549	2859	587
Child Psychiatrist	128	104	12
Adult Psychiatrist	393	310	59
General Pediatrician	945	758	72
Pediatric Neurologist	23	22	1
Pediatric Endocrinologist	14	13	0
Pediatric Pneumologist	22	19	1
Pediatric Rheumatologist	7	6	1
Pediatric Gastroenterologist	18	17	0
Pediatric Nephrologist	17	11	2
Pediatric Cardiologist	13	10	1
Pediatric Surgeon	12	10	0
Pediatric Hemato-oncologist	16	15	0
Pediatric Intensive care Specialist	3	3	0
Pediatric Dentist	89	80	2
General Practice Dentist	898	795	74
Dentist no specialty	263	151	14
Psychologist/ Clinical	3891/ 783	2610/ 773	130/ 0

The PR Health Insurance Administration (PRHIA) underwent an administrative change expanding participants' choice of election of primary care physicians and hospitals, which was previously constrained to specific regions. The PR HIA reported that for 2019-2020 there were 560 Pediatricians (including subspecialist), 215 Family Physicians, 1,626 General Physicians and 301 Internal medicine specialists contracted and available to provide services to the pediatric population from 0 to 21 y/o insured with the GHP (Government Health Plan). The total pediatric population between the ages of 1 to 9 years old enrolled in GHP and eligible for EPSDT as of June 2020 was 309,047.

The Puerto Rico Preventive Pediatric Health Care Service Guidelines (PR PPHCSG) steer primary health care providers to deliver high-quality preventive health care that have 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 Early and Periodic Screening, Diagnostic and Treatment (EPSDT) requirements for the Medicaid-served population, established as a public policy by the PR DOH. EPSDT also serves as a guideline for preventive medical services for the rest of the pediatric population who receive medical services by other private insurance companies. These guidelines are revised and updated by the MCAHD staff with the collaboration of a group of experts on pediatric health care and epidemiology. The latest version was revised, updated, and published as public policy by the PR DOH in October 2018.

During 2019-2020, the contracted health insurance companies 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.

NOM 19: Percent of children in excellent or very good health (0-17 years)	
Annual indicator	72.8
Numerator	432,454
Denominator	594,011
Data Source	MCH-JS
Data Source Year	2019

In 2017, 71% of parents with children between the ages of 1 and 11 y/o stated that their child was in excellent or good health and 86% reported their child had a preventive service visit in the last year (PR Behavioral Risk Factor Surveillance System).

MCAH staff strives to increase the prevalence of preventive visits, therefore we continue to advocate the dissemination and implementation of PR PPHCSG. Participants of various initiatives received information promoting the recommended Preventive Pediatric Visit schedules by age.

The Parenting course and the Prenatal course promote compliance with pediatric preventive visits and provide orientation on the purpose of these visits. The HVNs provided information regarding the pediatric preventive visits to the 2,785 families reached during 2019-2020.

Promoting physical activity and preventing risk for obesity

Obesity continues to be a concern due to its high prevalence in the population with 20.2% overweight or obese youth, between 10 to 17 years old, as reported in the 2019 JS and 22.4% of children between the ages of 2 to 5y/o participants in the PR WIC program (2019-2020). During the pandemic, the methodology used in the WIC Program to calculate BMI and identify overweight or obese children depended on telephone interviews with parents providing the estimated weight and height numbers, therefore these numbers may not reflect a correct estimate. The shutdown further limited involvement in sports or physically active recreation and may be a factor increasing the risk of childhood obesity. Obesity is a risk factor for many of the common chronic diseases related to mortality and morbidity.

During 2019-2020 the MCAH staff continued initiatives to encourage increased physical activity and healthier nutritional choices to decrease the risk of obesity. Participants of the HVP and 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. 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 continued to encourage the exchange of water instead of high-calorie sweetened beverages in purchased meals as provided by Law 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.

Brochures with culturally appropriate simple language reinforce the messages delivered during orientations to

families in the community, in the Parenting courses, the Prenatal courses, and in the HVP.

During 2019-2020 and before the shutdown 61 courses consisting of 4 sessions on Responsible Parenting 0 to 5 y/o were provided throughout the Island by HE and CHW. A total of 376 (92%) of 410 participants completed all 4 sessions, 78% females and 22% males. The following tables summarize the comparison and outcome of the average pre and post test scores, by session.

Average Pre and Post -Test Scoring in Sessions of the “Responsible Parenting Course 0 to 5 y/o”			
2019-2020			
Sessions	Average pretest score	Average post test score	Significance
	%	%	P value
1	79	96	<0.0001
2	80	96	<0.0001
3	80	96	<0.0001
4	70	94	<0.0001

An achievement of the courses is a statistically significant improvement in knowledge in each session, (a similar finding in last year’s evaluation).

Another parenting course delivered by HE and CHW prior to the shutdown, Responsible Parenting 6 to 11 y/o, had 921 participants, 86% females and 14% males. A total of 255 courses on this topic were delivered. This course also presented a significant improvement when comparing the average pre and post test session scores (a similar finding in last year’s evaluation).

Average Pre and Post -Test Scoring in Sessions of the “Responsible Parenting Course 6 to 11 y/o”			
2019-2020			
Sessions	Average pretest score %	Average post test score %	Significance P value
1	81	96	<0.0001

OTHER PARENTING ORIENTATION PROVIDED BY HE AND CHW		
2019-2020		
Orientation topic	Number of participants in activity by HE	Number of participants in activity by CHW
Care of young child, 1 to 2 y/o	17	600
Development, 1 to 2 y/o	10	58
Injury prevention and discipline with love 1 to 2 y/o	58	1331
Care of child, 2 to 3 y/o	235	1375
Development and stimulation, 2 to 3 y/o	8	70
Self-esteem and discipline with love, 2 to 3 y/o	10	695
Care of child, 3 to 5 y/o	65	2027
Development and stimulation, 3 to 5 y/o	8	106
Injury prevention and discipline with love, 3 to 5 y/o	200	1628
Toilet Training	2	62
Nutrition and physical activity	769	0
Healthy eating and physical activity	3	175
Introduction of solid foods	2	51

Additional orientations related to nutrition and physical activity were delivered to 947 participants by the CHWs and HEs in educational activities in the community during 2019-2020. Short and simple physical activity breaks (*Pausas Activas*) are offered in all courses promoting active lifestyles and the adoption of physical activities in daily routines.

As previously stated, the PR PPHCSG emphasizes calculating BMI and its percentile, history of physical activity and nutritional habits of children during their preventive visits, reminding primary care providers of the importance of including nutritional and physical activity advice when delivering anticipatory guidance, therefore promoting the prevention of obesity in the pediatric population.

The MCAH continued collaborating in the implementation of the Puerto Rico National Obesity Prevention Plan (PRNOPP) with other PRDOH Programs, government agencies and the Pan American Health Organization. During 2019-2020 the group reevaluated objectives and strategies, implementing modifications to achieve the prevention of obesity in the pediatric population. The PRNOPP is a Public Policy implementation plan of the PR Government promoted since 2016 which includes promoting BF, following the My Plate recommendations, increasing access to areas that promote physical activity and proposing policies and laws that support the prevention of obesity.

The data related to behaviors that increase the risk of obesity points toward the need to continue educational interventions. New research reviews have focused on the need to implement strategies to prevent obesity at early ages, beginning with the promotion of exclusive breastfeeding and the delay in the introduction of solids until 6 months of age.

The development of recommendations for introduction of solid food in infants requires knowledge and understanding of the cultural values and rituals, food resources and nutritional knowledge of the population. Considering the previous factors and the latest recommendations of the AAP and the World Health Organization (WHO) on infant nutrition, a committee of specialists in infant nutrition, convened and coordinated by the MCAHD, developed recommendations for best practices in the introduction of solid food for infants adapted to the Puerto Rican culture and in compliance with WIC guidelines. These recommendations also included orientation on implementing perceptive feeding. Perceptive infant feeding is a parental skill to observe hunger and satiety signals prior to feeding baby, versus feeding a previously determined volume on a set schedule. Members of the committee included the MCAH Pediatric consultant (coordinator of the group), a nutritionist from the PR WIC program, infant nutrition specialist Dr. Rafael Escamilla from the School of Public Health at Yale University, representative of the World Health Organization (WHO) and the Pan American Health Organization (PAHO) in Puerto Rico Dr. Raul Castellano, nutritionist Sofía Pérez from PAHO, neonatologist Dr. Maribel Campos, and nutritionist Dr. Cristina Palacios from the Human Development Department of the University of Puerto Rico Graduate School of Public Health.

Infant feeding recommendations from 0 to 24 months of age was approved and adopted as public policy by the Secretary of Health in 2018 after a review of literature, data pertaining to infant feeding practices in PR and a compilation of recommendations from a group of early childhood feeding stakeholders experts. In the ninth edition of the Dietary Guidelines for Americans 2020 – 2025 a chapter was dedicated on Infant and toddler nutrition recommendations that coincide with the recommendations included in the PR DOH adopted policy of feeding in the first 24 months.

www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf

Promoting On-schedule Immunizations

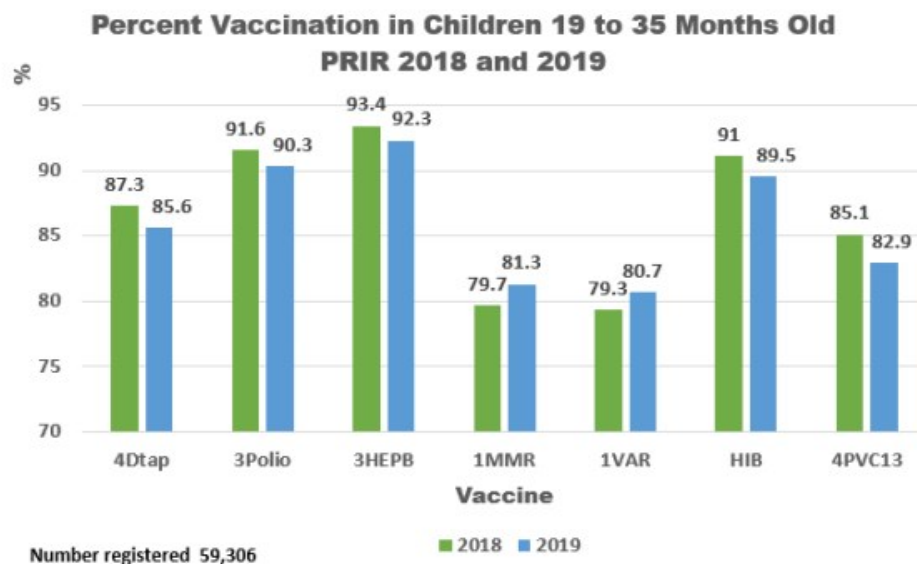
In an article published by Santoli JM, et al. (Santoli JM, Lindley MC, DeSilva MB, et al. Effects of the COVID-19 Pandemic on Routine Pediatric Vaccine Ordering and Administration — United States, 2020. *MMWR Morb Mortal Wkly Rep* 2020; 69:591–593. DOI: <http://dx.doi.org/10.15585/mmwr.mm6919e2external> icon *MMWR*. 69(19):591-3) “CDC reported a steep decline in immunization rates during the COVID-19 pandemic, as observed in the Vaccines for Children Program (VFC) provider order data from CDC’s Vaccine Tracking System and Vaccine Safety Datalink (VSD) vaccine administration data. The identified declines in routine pediatric vaccine ordering and doses administered might indicate that U.S. children and their communities face increased risks for outbreaks of vaccine-preventable diseases. To the extent that this is the case, reminding parents of the vital need to protect their children against serious vaccine-preventable diseases, even as the COVID-19 pandemic continues, is critical. As social distancing requirements are relaxed, children who are not protected by vaccines will be more vulnerable to diseases

such as measles. In response, continued coordinated efforts between health care providers and public health officials at the local, state, and federal levels will be necessary to achieve rapid catch-up vaccination.”

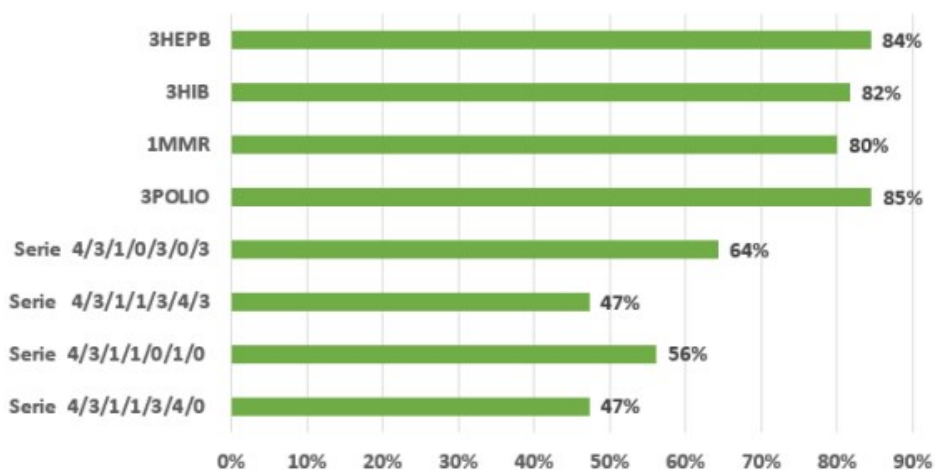
In December 2019, PR law 169 was approved making it mandatory for all immunizations administered to be reported to the PR Immunization Registry (PRIR) by providers and insurance companies. Puerto Rico laws grant immunization exemptions to children for medical reasons, children with a justified medical condition for which immunization is contraindicated as certified by a doctor, and religious exemptions for children from families who belong to religions with a dogma that objects to immunizations requiring evidence by a sworn statement of their religious affiliation. These exemptions may be declared null by the Secretary of Health in case an epidemic is declared. The PRIR ceased function in early 2020 due to technical problems which required the system to be replaced. The immunization data that was collected in the PRIR is in the process of recovery for what immunization data for 2019-2020 is not yet available to evaluate trends or prevalence.

In Puerto Rico with the shutdown, in person medical office visits were converted to telemedicine health services and progressively have returned to in-person visits with the adoption of protocols to help in the control and prevention of COVID-19 infection, but parents continued to avoid the well child visit due to fear of exposure to COVID-19. PR immunization services were also impacted, as reflected in a decrease in orders for vaccines during March to June 2020, despite the modification in service protocols of the immunization centers to ensure a safe and controlled environment. Parents refused to continue vaccination schedules due to fear of COVID-19 contagion and the perception that vaccinations are not necessary because students remained at home, with virtual learning and low risk of exposure.

Spread of misinformation and myths through social media were intensified by anti-vaxxers during the COVID-19 pandemic and in response to the mass COVID-19 Vaccination. This messages further influenced many parents to postpone immunization of their children. Prior to the pandemic a report by the CDC (National Center for Immunization and Respiratory Diseases, NIS, ChildVax View Interactive, 2014-2016) described a decrease in the on-schedule vaccination of infants before 24 months of age, with a catch up by 24 months. This reflects the trend among parents to postpone vaccination until children reach school or day care, where vaccination is mandatory. This trend is not unique to PR and is observed in other states such as Florida and California. During the COVID-19 pandemic shutdown and stay home orders, many parents postponed vaccination further, increasing the gap of children vaccinated following the recommended schedule. The MCAH staff continued to emphasize the importance of vaccinating their children in compliance with the recommended schedule providing protection against preventable infectious conditions which could further complicate clinical management during the pandemic.



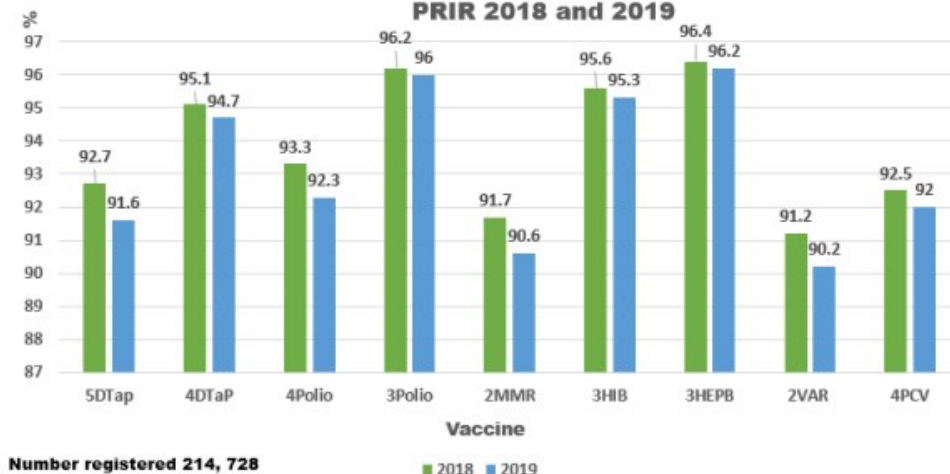
Percent Vaccination in Toddlers from 19 to 35 Months Old PRIR 2018-2019



The PR MCAH staff (HVNs, HEs and CHWs) continued to promote on-schedule immunization, with emphasis on the protective effect of immunizations in the vulnerable period between birth and 2 years old, in the Responsible Parenting Courses, Prenatal Course and in the HVP. Upon discharge from the HVP 95.6% of children had up-to-date immunization coverage (data for 2019-2020).

The Secretary of Health implemented a public policy to make Human Papilloma Virus (HPV) immunization mandatory for all 11-year-olds of both sexes, as a requirement for registration in school since 2017. PR law 25 of 1983 requires all children registered for school or day care to have evidence of up to date completed immunization against diseases which may interfere with their maximum development of their physical and intellectual capacity. The required immunization by age is dictated by the DOH and are actualized every year based on recommendations of the CDC and Advisory Committee on Immunization Practices (ACIP). Despite schools remaining closed in 2020, families are required to present evidence upon registration for the 21-22 school year. The requirement has helped maintain high immunization rates in school aged children in the previous years.

Percent Vaccination in School Aged Children (6 to 10 y/o) PRIR 2018 and 2019



Influenza vaccination is not mandatory for school and day care registration in Puerto Rico, and its prevalence has been much lower, a 7% prevalence of influenza immunization for 2018-2019 for population registered in the 6 months to 17 years old age range (total registered in this age range was 735, 260). MCAHD will continue to promote yearly flu vaccine and to collaborate with the PR Immunization program in the yearly influenza campaigns with other

collaborators such as PR AAP Chapter and VOCES (PR Immunization coalition).

Preventing Unintentional Injuries

The MCAHD has continued collaborating with the PR AAP Chapter. Pediatric Emergency Program 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.

PR Pediatric Mortality Rate for 2020 was 10.7 per 100,000 children ages 1 to 11 years and 10.3 for the ages from 1 to 14y/o. Lower in comparison with 2019 and the US Pediatric Mortality Rate of 16 per 100,00 children ages 1 to 14 in 2019 (Data Provided by National KIDS COUNT). The unintentional injury death rate was 2.1 per 100,000 (1-11 y/o), and it continues to be the first cause of death in this population.

Mortality Rate in Children by Age Range PR 2018-2020						
	2020		2019		2018	
	# of Deaths	Rate per 100,000	# of Deaths	Rate per 100,000	# of Deaths	Rate per 100,000
1 to 4 y/o	22	22.1	20	18.9	22	21.2
1 to 11 y/o	34	10.7	40	11.8	36	10.6
1 to 14 y/o	44	10.3	54	11.9	54	11.9

Death Rates by Unintentional Injury PR 2019-2020				
Age group	2020*		2019	
	# of Deaths	Rate per 100,000	# of Deaths	Rate per 100,000
1 to 4 y/o	2	2.0	4	4.2
1 to 11 y/o	4	1.3	7	2.2
1 to 14 y/o	9	2.1	10	2.3

*Preliminary Data

Causes of Death in Children between 1 to 14 y/o PR 2019 and 2020		
Cause of Death	# of Deaths in 2020	# of Deaths in 2019
Unintentional Injury	9	10
Motor vehicle accident	4	5
Asphyxiation	1	1
Foreign body asphyxiation	2	1
Drowning and submersion	0	2
Struck by falling object	0	1
Fall from a height	1	0
Trauma to body	1	0
Neoplasm	5	10
Congenital conditions or anomalies	6	8
Sepsis	4	8
Assault (homicide)	5	4
Congenital Heart Conditions	1	3
Uncontrollable seizures	0	1
Paralytic Syndrome	0	1
Suicide	0	1
Undetermined cause	8	1
Post surgical procedure	0	1
Influenza	1	0
COVID	1	0
Other causes	4	6

The Prenatal and Parenting courses continued to promote injury prevention providing orientation and recommendations on safety strategies, including safe toy selection, the Poison Control phone number and support they provide, and the proper use of car seats, among others. The Puerto Rico Poison Control Call Center reported they received 1330 calls for children between the ages of 0 to 9 y/o and 177 in infants less than 1 y/o during 2019-2020. These findings support the need to continue to orient parents and caretakers in adopting the preventive measures at home.

Puerto Rico Poison Control Call Center Report 2019-2020		
Distribution of Substance Exposure by Age Group		
Substance	< 1 y/o	1 to 9 y/o
Medication		
Analgesics (Acetaminophen, Tramadol, Ibuprofen, etc.)	10	60
Hormones (levothyroxine etc.)	6	71
Anticonvulsant (Levetiracetam, Oxcarbazepine)	2	11
Antidepressant (Fluoxetine/Paroxetine)	2	19
Antihistamine (Cimetidine/Hydroxyzine)	5	61
Antimicrobial	4	29
Diuretics	0	4
Gastric prep solution	5	15
Cardiovascular medication (Beta Blocker, Clonidine, others)	11	75
ASMA medication (Albuterol)	3	47
Sedative/ hypnotic, antipsychotic medication	4	59
Muscle Relaxant	0	10
Over the counter cough medicine	8	52
Others		
Stimulants, Street Drugs	0	24
"Foreign Body " (Desiccant silica gel y feces /urine))	8	46
Hydrocarbon substances	2	1
Pesticides	14	64
Topical products (Diaper Care/Rash cream , Camphor cream)	12	25
Household cleaning products (hypochlorite)	22	152
Chemical Substances	0	6
Rubbing Alcohol	0	7
Aromatic oils, essential oils	3	13
Alcohol beverages	0	4

The MCAH personnel continued disseminating 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. MCAH staff also continued to promote compliance with local laws that require children be restrained while riding in a car, and the use of approved safety helmets correctly when riding a bicycle, motorcycle, or other open motorized vehicles. In 2019-20, two fatalities and 313 non-fatal injuries related to incorrect use of car seats or seat belts were reported in minors of 10 years old.

Non-fatal lesions to passengers in motor vehicle accidents	
2019-2020	
Passenger age	Number of injured 2019-2020
<1 year old	56
1 to 9 y/o	257
Total 0 to 9 y/o	313
ages 0 to 21 y/o	1337

Besides the parenting courses the CHW and HE delivered orientations on parenting skills and injury prevention specific for different age ranges. The HVNs also deliver age specific orientation on unintentional injury prevention in their home visits.

The MCAH staff continued to collaborate with the Emergency Medical Services for Children (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 latest recommendations of the National Pediatric Readiness Project (NPRP). In 2019-2020, emphasis continued to be the pre-hospital management of pediatric emergencies, the use of the Broselow System to deliver pediatric emergency care, and improved patient transfer for critical care. MCAH staff also collaborated in the revision and update of the PRDOH hospital regulations and requirements, incorporating the AAP guidelines as a mandate for all hospitals that provide pediatric emergency care.

Promoting developmental screening, early developmental stimulation, and emotional wellbeing

Stress and other social determinants have an impact on wellbeing of children. In response to the challenges faced in 2019-2020 many efforts were continued to mitigate the effects of the stress. As previously stated, these initiatives were coordinated with the collaboration of stakeholders. During 2019-20, PRHIA data reported 18,031 (5,4%) children between the ages of 0 to 9 years old received treatment due to mental and behavioral disorders, with diagnosis that included, major depressive disorder, recurrent post-traumatic syndrome, anxiety disorders, attention deficit, among others.

The early identification of developmental delay provides the opportunity for a timely diagnosis and early intervention. The earlier a needed intervention is instituted, the better the outcome, with an optimum developmental progression attained. 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. MCAH staff continued to 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.

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.

Analysis of billing data revealed that <2% of the insured population between the ages of 0 to 48 months were billed with CPT code 096110 in 2019-2020, 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. Yet with the decreased prevalence of preventive visits, there is an expected decrease in developmental screening which are difficult to perform optimally through telemedicine.

Participants in the parenting courses receive information on the expected development milestones of children and availability of screening test to evaluate development attainment. 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 Questionnaires (ASQ-3) and the Ages and Stages Social Emotional Questionnaire (ASQ:SE-2) in the home setting.

HVP ASQ-3 and ASQ3: SE-2 Pediatric Developmental Screening Schedule		
Age	ASQ-3	ASQ:SE-2
8 weeks old	X	
10 weeks old		X
14 weeks old	X	
22 weeks old		X
26 weeks old	X	
9 months old	X	
14 months old		X
15 months old	X	
18 months old	X	
19 months old		X
23 months old	X	X

During 2019-2020, a total of 1,110 (<12 months old) and 1,235 toddlers (12 to 24 months old) participated in the HVP, each completing ASQ-3 or ASQ: SE-2 screenings as indicated in the HVP screening schedule. The test administered to these children are not billed and do not appear in the GHP data. One hundred and fifty-one (151), which represents a 7.1% of participants tested had positive screening results or were identified with some concern requiring a referral. The following table specifies to what services they were referred to and how many were completed.

HPV Pediatric Participants Screening Results of ASQ-3 y ASQ:SE-2 in 2019-2020		
	n	%
Total pediatric population screened	2114*	100.0%
Participants with low-risk screening	1963	92.9%
Participants with high- risk screening	151	7.1%
Total referrals for services due to a high risk screening result	151	100.0%
Referred to:		
Early Intervention	139	92.1%
Regional Pediatric Centers for children with special medical needs	10	6.6%
Speech Pathologist	1	0.7%
Community organization	1	0.7%
Referrals	151	100.0%
Completion of Referrals		
Completed	119	78.8%
Not Completed	30	19.9%
Refused by parents	2	1.3%

The total number of screened represents multiple screening of children following the HPV schedule.

**HPV REFERRALS FOR SERVICES DUE TO POSITIVE ASQ
SCREENINGS NOT COMPLETED
2019-2020**

Service referred to and not completed:	number
Early Intervention	26
Regional Pediatric Centers for children with special medical needs	4

Referral age for HPV participants with a high-risk result on ASQ and ASQ-E screening in 2019-2020 (total 151)	
Age when referred	Number of participants referred
0-9 months old	24
10-12 months old	8
13-15 months old	26
16-24 months old	93

32 were identified prior to their 13-month birthday allowing for a very early referral.

Distribution of ASQ and ASQ-E with a high-risk results in HVP participants Screening in 2019-2020 (total 151)	
Screening	Number of tests with high-risk results
ASQ-3	72
ASQ:SE-2	79

Of 151 screenings with a high-risk result, 52% were in the social emotional screening test, not commonly used in primary pediatric medical care.

HVNs besides screening for developmental delays, teach parenting skills in their interventions, including strategies parents can use in their day-to-day interactions to stimulate development. Evidence supports the importance of brain stimulation in early childhood to attain optimum brain development, which can lead to higher education, better jobs, and better quality of life. The educational materials of *Crianza Justo a Tiempo* (Spanish version of Just in Time Parenting) from eXtensions were adopted after authorization by Anne Mims Adrian, PhD, eXtension Director of Programs at Auburn University (www.articles.extension.org/pages/70394/crianza-justo-a-tiempo) as an additional tool to prepare the HVNs to teach parenting skills. The HVN also use the CDC Learn the Signs, Act Early in Spanish materials with their participants. A guide for HVNs that specifies topics and screenings for each home visit was developed (*Guía de temas educativos e intervenciones postparto*). Culturally adapted brochures at a basic reading level on socio-emotional development, parenting skills and other topics were developed to help strengthen the interventions. Incentives related to the topics are used to reinforce the information.

The Parenting courses also presents information to participants on typical patterns of development as well as signs of delays, so they can identify any deviations early and reach out for help. The course also promoted the use of nurturing and positive parenting skills to stimulate optimum child development.

Day care centers are an important resource for families with young children, providing significant support, therefore promoting quality childcare improves the impact on the wellbeing of young children. The MCAH staff continued supporting the implementation of regulations for day care centers, which include providing supportive settings for breastfeeding mothers, adequate physical activity for child age, optimal nutritional selection, activities that stimulate development, and safety, among others, by providing orientation and education to directors and staff of the centers. MCAH staff continued to collaborate 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 Puerto Rico. This provided the opportunity to offer resources developed by MCAH, such as the Parenting and Prenatal courses, among others, to the population they serve, and to collaborate in the development of their policies.

Promoting oral care

The main strategies used by the MCAHD to promote oral health were to provide information and education on the importance of preventing early childhood caries, identify children at higher risk for early childhood caries for referral to the dentist, educate on nutritional habits and behaviors that decrease the risks for dental caries, promote visits to the dentist at early ages, and educate on the protective effect of sealants in young children and promote their use.

Data relevant to Oral Health Care in Pediatric Population of Puerto Rico			
Age range	Dental visit description	PR MCH Jurisdictional Survey 2019	PR EPSDT (CMS-416) 2019-2020 Report
1 to 17 y/o	Preventive	78.1%	
1 to 17 y/o	Dental decay	22%	
1 to 9 y/o	Eligible Receiving Preventive Dental Services		39%
1 to 9 y/o	Eligible Receiving Any Preventive Dental or Oral Health Service		42%
6 to 14 y/o	Eligible Receiving a Sealant on a Permanent Molar Tooth		6%
1 to 18 y/o	Eligible Receiving Any Preventive Dental or Oral Health Service		45%
1 to 18 y/o	Eligible Receiving Preventive Dental Services		46%

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 law 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 have a dentist evaluation in the last 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 members of the Oral Health Coalition for evaluation and proposal of strategies to continue to promote oral health. The MCAH staff continued as collaborator in the Oral Health Coalition. Despite these improvements dental decay continues to be highly prevalent in the PR pediatric population.

Poor oral health can have adverse effects on school performance and quality of life. Positive oral health enables children and adolescents to speak, eat and socialize without experiencing pain, discomfort, or embarrassment, improving their learning and school attendance. Reaching and educating children and adolescents helps them to gain knowledge about oral health, develop positive attitudes toward oral hygiene, healthy eating habits, and regular dental visits.

A mother with history of dental caries and inadequate oral care increases the risk of development of caries in their offspring by transmitting *Streptococcus mutans* to them, even before their teeth erupt. Pregnant women and caretakers of infants need to be educated about the transmission of *Streptococcus mutans* and its relation to an increased risk of developing dental caries in infants, as well as the role of proper hygiene in decreasing the transmission. The fact that during in the 2019- 2020 PR Health Insurance Commissioner Office (HICO) reported that 26.9% of pregnant women had a preventive dental visit signals the existing need to educate pregnant women and caretakers of infants. During 2019-20 the CHW delivered orientation on prenatal oral care to 1,233 persons.

Oral health education and promotion of preventive measures were delivered to participants through the Prenatal and Parenting courses. MCAH staff promoted messages directed at increasing the number of parents and children that adopt healthy oral habits. They continued to increase awareness among parents with elementary school children that dental sealants are covered by the GHP and encouraging them to request this service. During 2019-20 the HE's

delivered oral care education in multiple activities reaching 571 participants, among them 279 children between the ages of 3 to 9 y/o.

The HEs and CHWs distributed educational materials concerning the importance of protective sealants to reinforce their orientations. Promoting dental sealants, particularly among low-income parents, is important since they are the group less likely to have a dental sealant application and are at a higher risk for dental decay, as reported in the medical literature. The CMS 416 GHP report stated 6% (6 to 14 y/o age range) and the PR HICO reported 5.8% of billing for sealants (5 to 14 y/o range) during 2019-2020.

The PR PPHCSG includes recommendations for preventive dental visits twice a year since early infancy and throughout childhood and adolescence. They also emphasize the need of caries risk assessment in early infancy, with first teething, for an effective preventive intervention and referral to a dental home. The HS and EHS also promote oral health since infancy and have adopted the Caries risk assessment.

Billing data provided by PRHIA shows that during 2019-2020 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.

The MCAH Program has maintained collaboration with the Pediatric Dentist Society of Puerto Rico (PDSPR) promoting access and availability of services in PR and enhancing the public awareness of evidence-based preventive strategies to improve oral health. The MCAHD continued to advocate for the inclusion of oral health care in early childhood and pregnancy in professional training and CME activities. In regard to 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 professionals certified as active pediatric dentists is 80. There continues to be reluctance of general dentists to provide services to children between 0 and 8 years old, because of their lack of skills to manage this population, and a lack of equipment to monitor sedated children when required, a safety measure for optimum delivery of services. This reflects the crisis that PR is facing with the migration of professionals to the mainland due to economic deterioration on the Island.

The concern raised by a report published online by the Kaiser Family Foundation, Health Care in Puerto Rico and the U.S. Virgin Islands: A Six-Month Check-Up after the Storms (www.files.kff.org/attachment/Issue-Brief-Health-Care-in-Puerto-Rico-and-the-US-Virgin-Islands-A-Six-Month-Check-Up-After-the-Storms; April 2018, S Artiga, C Hall, R Rudowitz, and B Lyons) on the decreased workforce in the dental and medical profession due to young professionals and health care providers continuing to migrate away from the islands after the storm has increased with the additional challenges presented by the pandemic. This has prompted the need to advocate and increase awareness of the inclusion of pediatric oral health care in the training of general dental health care providers and in the CME activities for dentists in the School of Dental Medicine at the University of Puerto Rico and in the College of Dental Surgeons.

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 dentist. Since 2017 an Early Childhood Caries (ECC) risk screening for infants at 6 and 12 months was established in the HVP. HVNs are trained on oral care of pregnant women and children, use of the screening instrument to identify infants at high risk for caries, and appropriate referrals as needed. In the HVP interventions they share strategies on how to decrease the risk of dental decay in their infants. Infants less than 12 months, identified at high risk but without teeth yet, are not referred to the dentist until reaching 12 months. All participants receive orientation on how to reduce the risk for caries by the HVNs.

2019-2020 HVP Infant Caries Risk Screening Results and Outcomes			
Age Caries Risk Screening administered	6 mo. old	6 to 12 mo. old	12 mo. old
Number of participants screened	383	94	441
Number of positive high-risk screening and percent	282 (73.6%)	65 (69.1%)	333 (75.5%)
Already had a dentist	1.1%	26.2%	12.9%
Delayed referral (infant without teeth)	81.9%	20.0%	--
Referred to a dentist	17.0%	53.8%	87.1%
Completed referral	25%	42.9%	34.5%
Referral pending for completion*	56.3%	42.9%	48.3%
Referral not completed	18.8%	14.2%	17.2%
With at least 1 dental visit	3.1%	16.0%	22.7%

*** Due to Shutdown in March 2020, most of dental referral completion were delayed**

Of the 918 screenings for high early childhood caries risk done in 2019-2020 to participants of the HVP between the ages of 6 to 12 months old, 74% had a high-risk result. Of the cases referred for a dental home appointment 49% were in process that was delayed due to the March 2020 shutdown and 34% had completed and received services in a dental home. All infants are referred for a dental home when they are 12 months old, but infants identified at high risk are urgently referred besides providing all parents with an orientation on how to decrease the risk and the importance of caring for their baby's teeth. The modified infant caries risk assessment was also adopted by the PR MIECHV program, *Familias Saludables*. A Pediatric Dentist Directory that includes office hours and medical insurance plan accepted by dentists (pediatric and general) that offer services to infants and children was completed but will require updating by region and identification of gaps in services provided by these providers to the early childhood population. The purpose of improving the directory is to ease the referral process for this population and improve dental care access. During the COVID-19 pandemic dental services have been interrupted and less accessible due to the adjustment in the offices to decrease the risk of infection, which includes decreasing the number of patients that may receive services in a day due to protocols of disinfection that take time to complete between patients.

Child Health - Application Year

The MCAH Program has identified improving preventive health in children as a top priority, for which it will continue to focus its efforts on promoting: preventive dental and pediatric visits, healthy lifestyles to reduce the risk for childhood obesity, increased on-schedule immunization compliance, decreased unintentional injury, prevention of child abuse and neglect, increased early childhood developmental screening and early developmental stimulation, quality child care, child emotional wellbeing and prevention of COVID-19 infection. PR MCAH will also continue to collaborate in the development of recommendations to improve preparedness and recovery plans of the PRDOH and other emergency response agencies with emphasis in advocating for the needs of children.

In the presence of the COVID-19 pandemia, MCAHD will continue to deliver some of its programs and initiatives with modifications to provide infection control and prevention, including virtual meetings, digital chats, telephone communications, and modification of courses and orientation into virtual formats. Other MCAHD programs have begun in person interactions in small groups adopting social distancing, face mask, hand washing and avoiding the inclusion of persons at risk of exposure or suspected with COVID-19.

The MCAHD will continue attentive to updated recommendations and instructions provided by the PR DOH and the CDC relating to COVID-19 and any other emerging public health emergency, sharing this information with all the staff to protect the workforce and to initiate strategies to help guide the population for an effective public health response. Most of the staff has received the COVID-19 vaccine, but will continue to use face mask, hand washing and surface disinfection to prevent the spread of infection for as long as the Department of Health and the CDC recommend it.

The PR MCAH staff will continue working in close collaboration with all MCAH stakeholders that share similar aims. Most of the meetings for collaboration will continue via digital telecommunication and will be restituted after the threat of COVID-19 is under control.

COVID-19

During the shutdown ordered to prevent and control COVID- 19 spread schools and day care centers were closed. Children remained at home with virtual education under the direct supervision of their parents. The families faced changes in their routines with additional stress due to the social isolation imposed by the shutdown and quarantine. Return to in person schools is beneficial for the emotional wellbeing and developmental process of children, but it requires school preparation and outweighing the benefits versus risk for COVID-19 infection and transmission. The guidelines for reopening schools developed in July 2020 with the contribution of the Pediatric Consultant, were reevaluated and shared with the incoming administration in January 2021. These guidelines were considered to evaluate school's readiness to reopen along with the daily epidemiology data compiled of COVID-19 cases in PR. Despite relaxation of restrictions to business and incoming tourism since January 2021, schools have remained virtual until May 2021. This decision considered the fact that in April 2021 Puerto Rico had a surge in positive COVID-19 cases and hospitalizations, with a concerning increase in pediatric patients hospitalized and requiring Pediatric intensive care. Schools are preparing and adopting recommendations to be able to open in August 2021 and hoping vaccination for younger than 16 y/o is soon approved.

Day care centers have opened, implementing COVID-19 prevention protocols. In PR HS and EHS have also remained virtual, although they are in the process of adopting all the PRDOH COVID-19 infection and control prevention protocols to open once authorized.

Due that COVID-19 is a novel virus, much about its signs, symptoms, diagnosis, and treatment was initially unknown. Experience and collected data have helped define it better and treatments have evolved. The vaccine efforts, which in PR began in December have helped create a population at lower risk, elderly and first responders and in April 2021 vaccination was extended to all the population at higher risk due to chronic disease until 16 years old. The MCAH staff will continue to collaborate with stakeholders in the promotion of COVID-19 vaccine for the pediatric population when the vaccine is available.

We will also continue to collaborate with stakeholders in providing updated infection and prevention control guidelines in Spanish for the primary care offices and general population based on the recommendations of the CDC, AAP, and the PR DOH.

Promoting Preventive Pediatric Health and Dental Visits

During the COVID-19 crisis the in person preventive services were initially stalled, and priority was provided for urgent care via telemedicine, which was authorized for all physicians with a PR medical license, due to the lockdown. Families with newborns were recommended to visit their pediatricians in person, following the office protocols established to protect both staff and families. As physicians and dentists realized that the crisis was becoming extended, they made physical modifications in their offices and adopted modified protocols to provide in person visits, in a safe in-person experience for the families and the staff. Annual preventive visits require a physical exam which cannot be replaced by a telemedicine visit. MCAHD staff will continue to promote that families continue contacting their medical and dental home for their children's preventive visits, reassuring them of the safety measures adopted for the control and prevention of infection.

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 will continue collaborating with MCAH stakeholders to advocate for dental services be provided at very early ages, since eruption of first tooth and continued dental coverage in the PR GHP. The MCAHD will strengthen work in oral health with existing partners to better coordinate educational and oral care services and referrals. A webinar on Evaluation and promotion of children's oral health in the primary care office was cosponsored by the PRAAP Chapter and the MCAHD with 248 participants. The use of the Infant Caries Risk assessment and early referral to a dental home to prevent early childhood caries was promoted.

Evaluation and promotion of children's oral health in the primary care office

Total Participants: 248

- Pediatricians
- Family Physicians
- Pediatric Training Residents
- General Physicians
- Staff of Health Promotion Division of the PR DOH



<https://youtu.be/QqB5LCy9cbE>



Webinar November 10, 2020

Protege su sonrisa, protege sus dientes



Los dientes de leche son importantes para el crecimiento y desarrollo. Con su cuidado desde antes de que salgan al mundo, protegerás a tu hijo/a de sufrir caries tempranas y promoverás su salud.

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Created a page in the praap.org website dedicated to promoting oral health in families with links for further information.

PROTEGE SU SONRISA, PROTEGE SUS DIENTES. SALUD ORAL

203 hits since published in December



Puerto Rico Chapter

INCORPORATED IN PUERTO RICO

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN



The Pediatric Consultant is a collaborator 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. In 2017 Law 63 was approved, stating the requirement of an oral exam certificate for minors prior to being enrolled or admitted in private or public school to kinder garden, second, fourth, sixth, eighth or tenth grade. The group will continue to promote its implementation and monitor the response.

During 2018 the PR Pediatric Preventive Health Care Services Guidelines (PR PPHCG) were updated, adding the most recent Bright Future recommendations of Early Childhood Caries Risk Screening of infants at 6 and 9 months and early referral. During 2021 these guidelines will be revised and updated in a collaborative effort with pediatric care experts. The MCAH Program will continue disseminating the PR PPHCG, and preventive dental visits twice a year (after the eruption of the first tooth) for infants, children and adolescents. The Program will advocate 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 MCAH pediatric consultant will also continue promoting and collaborating with EHS and HS in the implementation of the infant at high risk for caries screening tool and referral for the early establishment of a dental home. The MCAH regional staff will also continue to deliver educational activities, following all the protective protocols, in the community promoting prevention of ECC and the establishment of a dental home for all the pediatric population.

The MCAH staff will continue to implement multiple strategies to promote good oral hygiene and regular preventive dental check-ups. The Program will continue to deliver orientation on dental decay and oral disease to families, children, adolescents, pregnant women and the general public in an effort to increase awareness of the risks to overall health and wellbeing and how preventive oral hygiene, healthy oral habits, and preventive dental visits contribute to a better overall health.

All educational activities will continue to be delivered through modified workshops, presentations, work groups, and one-on one education. The HVP will continue to administer the caries risk assessment to infants and refer participants to preventive dental visits.

The Positive Parenting Courses (for parents of children 0 to 5 years old and 6 to 11 years old) will also continue to include education on the risk for dental caries. Participating parents will 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, and how to request this service. More importantly, it will encourage the involvement of families in promoting healthy oral habits, establishing a dental home, and oral health literacy in communities. The Metropolitan Region MCAH Regional Board will continue to focus their collaborative efforts on promoting strategies for oral health in infants, children, adolescents, pregnant women, and women in reproductive age.

The HVP, HCW and HE staff will continue to receive training to update knowledge on oral care in pregnant women, WRA, infants and children to increase their skill in delivering information and evaluating risks.

Preventive Health Visits

The promotion of the 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 PPHCSG to the public empowers parents on what to expect in preventive visits. Promotion will include orientation of modifications adopted by primary care offices to ensure patient safety during the COVID-19 crisis and to boost the trust of the population in returning for preventive care.

The content of the guides also needs to be known by academia, health care professionals, and the insurance companies, so each can do their part to support their implementation and improve the quality of preventive services. The MCAH staff will continue to encourage including the use of the PR PPHCSG in the continuing medical education of providers, especially by pediatricians' professional associations in PR.

In their interventions, the HVNs, CHWs, PNs and HEs will continue to educate parents and promote scheduled preventive visits and screenings as recommended in the guides. The importance of preventive health care services for the wellbeing of children will continue to be emphasized in the Positive Parenting Courses (0 to 5 years old and 6 to 11 years old).

The MCAH Program will continue to evaluate the use of clinical preventive services by the population to identify gaps

and strategies to overcome them in collaboration with other stakeholders: agencies and professional organizations.

Promoting Physical Activity and Reducing the Risk for Childhood Obesity

MCAH staff will continue to encourage the inclusion of strategies that help improve nutritional habits and increase the time dedicated to physical activity of children according to ages, to reduce the risk of obesity. The MCAH staff will continue to educate 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 Positive Parenting Course for ages 0 to 5 and 6 to 11 years old will continue to stress healthy nutritional choices and daily physical activity for children and their families. The Positive Parenting Courses include AAP recommendations for children ages 6 and older, to place consistent limits on the time spent using media, the types of media, and to make sure media use does not take the place of adequate sleep time, physical activity and other behaviors essential to health. Parents will also receive orientation on the obesogenic effect of consuming high calorie snacks with low nutritional value and 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. The MCAH staff will also continue to promote the exchange of water instead of high-calorie sweetened beverages in purchased meals as mandated by Law 256 of 2015. Brochures developed with culturally adapted simple language will reinforce the messages delivered during orientations to families in the community, in the Positive Parenting courses, the prenatal courses, and in the Home Visiting Program.

The Secretary of Health approved the final recommendations developed for Infant and Young Child Nutrition (0 to 24 months), and they have been adopted as public policy by the DOH. In 2021-22 these recommendations will continue to be disseminated among health care providers for use in anticipatory guidance to families with infants. These recommendations will also be used to stimulate families to adopt better eating habits, develop skills in perceiving infant satiety and hunger cues, and learn the proper introduction of solid foods in infancy. MCAHD will collaborate in the development of educational materials at an appropriate literary level and culturally sensitive for the population served and in the dissemination of the material.

Promoting On-Schedule Immunization

Basic hygiene habits that deter the spread of respiratory viral infections was reinforced by all MCAH staff in their interventions in the communities with the emergence of COVID-19 as a public health emergency. In addition, the PR MCAHD will continue to provide accurate and reliable information to families on contagious diseases and promoting immunization as recommended in the CDC itinerary through educational initiatives in the community. The staff is vigilant for the identification of any cases of measles, influenza, or corona virus in the population they serve, and informed on what actions to implement in order to protect themselves and the health of the most vulnerable and recommend strategies to deter further spread of the disease.

During 2021-2022 HVNs, HEs, PNs and CHWs will continue to promote immunization on schedule, with emphasis on updated schedules for children under 24 months of age. The HVN's have continuous access to vulnerable families, allowing identification of barriers to immunization, such as those related to the vaccination system in the health care centers. This information will continue to be shared with the Puerto Rico Immunization Program (PRIP), enabling them to propose strategies to overcome them. The topic of immunization is also included in the Positive Parenting Course. VOCES is a nonprofit organization that offers education about immunizations to health care workers and the general population. The MCAH staff will continue to collaborate with them in their annual conference and providing advice for the development of strategies to promote immunization and educational interventions.

In May 2021, a Facebook live event was coordinated by the MCAH staff in collaboration with the PRAAP Chapter, the Puertorican Pediatric Society, and the Vaccination program of the DOH, on the topic of early childhood vaccination. Two videos promoting vaccination produced by the MCAHD staff were presented and a panel of pediatric experts on immunization answered common concerns and questions parents have relating to vaccines. The

purpose was for parents to understand how vaccinating their children is a wise decision and how important it is for them to have correct information to make an informed decision.

Preventing Unintentional Injury

The HVNs will continue with one on one education and provide written materials to participants directed at reducing unintentional injuries. The HEs will continue to deliver a course on unintentional injury focused on promoting prevention of in-home injuries, firearm safety, car seat placement and use, safe sleep, protective play gear, safe toys, prevention of forgotten baby syndrome, and drowning prevention, among others.

The Prenatal Course and the Positive Parenting Course will continue to educate on the topics of unintentional injury prevention and safety, including preventing shaken baby syndrome, safe sleep, safe toys, and the proper use of car seats, among others. The MCAH personnel will continue providing and disseminating the latest NHSTA and AAP revised car seat guidelines and recommendations for adequate protective car seat selection and use according to the age and weight of the child through educational activities for parents and communities. In addition, staff will continue to promote compliance with local laws that require children be restrained while riding in a car and the use of safety approved helmets when riding a bicycle, motorcycle or any other moving vehicle. These efforts will be directed at decreasing the rate of deaths to children caused by motor vehicle crashes.

The MCAH staff will continue to collaborate 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 PR DOH Hospital Operating Regulations Policy #9184 and requirements has incorporated the AAP guidelines for hospitals that provide pediatric emergency care (July 2020). The MCAH staff will continue to promote hospitals adopt the requirements improving emergency services to the pediatric population.

The MCAH staff, in collaboration with the Hospital Association and the EMSC Project, will continue to promote that hospitals adopt strategies to encourage pre-hospital management of pediatric emergencies and preparedness to manage mass casualties in case of a disaster, promote the use of the Broselow System to deliver pediatric care in emergency situations, the use of proper pediatric equipment in rescue and emergency interventions, improve patient transfer for critical care, and hospital preparedness to manage pediatric cases after a disaster or a mayor emergency.

Child Abuse and Neglect

Child abuse and neglect is a priority identified. The rate of child maltreatment in Puerto Rico is 7.4 /1000 for 2018 (birth to 17 y/o) a decrease compared to 8.8 in 2017 and lower than the national average of 9.2/1000(data source Child Maltreatment 2018 Report of the US Department of Human Health Services Administration for Children and families <https://www.acf.hhs.gov/cb/resource/child-maltreatment-2018>).

The HVP, the Positive Parenting Course, and the Interactive Intervention on Management of Crying Babies are strategies in the MCAHD aimed at teaching parents' skills that contribute to decreasing child abuse and neglect. The Pediatric Consultant has been appointed to the PR Children's Justice Act (CJA) Committee. In this capacity, she contributes to attain the goal to improve the system that provides the investigative, administrative, and judicial handling of cases of child abuse and neglect in a manner which reduces the additional trauma to the child victim and the victim's family, which also ensures procedural fairness to the accused, and in compliance with the recently enacted Federal Family First Act.

The HEs and MCAH staff will continue to deliver the interactive intervention on the management of crying babies to teach parents and caretakers skills to prevent Shaken Baby Syndrome (SBS). The SBS simulation doll will be used to help convey the message. The recommendations for Safe Sleep are included in this course, which will continue to be offered to caretakers and families in the community. The HEs will continue to collaborate with the Biopsychosocial

Program (provides treatment and support to abused children) by delivering the Parenting course to assigned caretakers of abused children.

Promoting Developmental Screening and Early Developmental Stimulation

The HVP provides the opportunity to have an impact on the health and wellbeing of young children and their families. The HVN's deliver relevant topics to educate and council families in the different stages from prenatal until child reaches 2 years, therefore contribute to the health and well-being of infants and young children. The HVP staff will continue to receive updated training on all topics pertaining to the Title V objectives chosen in Puerto Rico to strengthen their skills for working with families.

A parenting best practice is for parents and caregivers to learn the typical and atypical patterns of development so they can help identify at-risk children who can benefit from early intervention. To follow this recommendation, HVNs will continue administering the Ages and Stages Questionnaires (ASQ-2) and ASQ: Social Emotional (ASQ:SE-2) in the home setting in an effort to identify delays, teach parents how to stimulate maximum development, and refer for further evaluation and early intervention, if needed. HVNs teach parents the importance of early stimulation and strategies to apply in their day-to-day interactions. The HVNs also have the *Justo a Tiempo* educational materials that specifies what to expect for each age and parenting recommendations to guide them in teaching parenting skills. HVNs and other MCAH staff will continue to offer educational activities and distribute educational materials on socio-emotional development, parenting skills, and related topics. The Positive Parenting course will continue to deliver and disseminate nurturing and positive parenting skills, including how to identify typical developmental milestones.

Adverse Childhood Experiences (ACE) studies have demonstrated the relationship between having been exposed to adverse events in childhood, such as physical or psychological abuse, neglect, witnessing violence, and the development of chronic health conditions in adulthood. In contrast, resilience has been proven to have a protective effect on ACE. The ACE questionnaire has been included in the revised Home Visiting Program Manual.

The HVN's are trained on mental health and emotional wellbeing, on how to administer and interpret several related scales, including the ACE, the Cambridge Worry Scale, the Edinburgh Postnatal Depression Scale and other screening instruments. The HVNs acquired skills on Psychological First Aid tools to provide support to individuals and families after a traumatic event, will continued to be used as the population recovers from the recent earthquakes and the additional stress caused by the COVID-19 crisis. Additional training will reinforce the negative effects of ACEs on health, and offer strategies to promote resilience among participants and their families.

MCAH staff will continue to endorse the use of screening tests by primary care physicians and 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. This test is among those recommended by the AAP, does not require a license for use, and is available in Spanish. The SWYC has been added as alternative screening test in the PR PPHCSG update.

In 2021-22 the MCAHD will collaborate with the PRAAP Chapter and United Way of PR promoting the development of a reach out and read initiative in pediatric offices and day care centers. The goal is to identify funds that enable donations for baby books that cover topics such as oral health and safe sleep to parents with infants, at the earliest age possible, with the purpose to promote parent infant interaction and reading. Possible venues to donate the books could be in pediatric offices and day care centers.

Promoting Quality Child Care

Quality childcare also has an impact in the wellbeing of young children. The MCAH staff will continue to collaborate and advocate for the development of public policies and regulations that call for the improvement of child care services, such as: supportive settings for breastfeeding mothers, adequate physical activity according to age, optimal nutritional selection, activities that stimulate development, and safety, among others.

During 2021-2022 the MCAH staff will continue to work in partnership with United Way, Association of Child Care Centers and Head Start/Early Head Start on strategies that empower community leaders and child care center staff to deal with the effects of natural disasters on the population. This includes preparedness for disasters, developing plans for an adequate response during a disaster, and mitigating the effects of trauma after a disaster strike. They will also continue to receive orientation on how to prepare their centers to reopen during the COVID-19 crisis adopting protective measure to decrease the risk of virus transmission.

During 2020-2021 the MCAH staff has taken part in another collaborative project to address early childhood wellbeing and development in the Puerto Rico Preschool Development Grant Birth through Five. This collaboration is led by the Administration for Integral Child Care Development (ACUDEN) of the Department of Family. The main goal is to update early childhood planning efforts in Puerto Rico and contribute to the strengthening and implementation of an integrated and coordinated system that will facilitate the access of children and families to high quality services for their development and the improvement of their quality of life. The project aims to develop a statewide strategic plan, informed by a needs assessment to guide systemic efforts. The work engages partners and stakeholders, including families, throughout the Project. It also aims to improve the quality of services for children with special needs and living in the most disadvantaged low-income communities in Puerto Rico.

The United Way of PR has instituted the Children Friendly Cities Award in 2019, 3 top municipalities in PR were selected after evaluating over 25 that participated. The competition is based on services and investments that the municipality directs to early childhood. The MCAHD supported the initiative by participating in the awards ceremony in 2019 and will participate in the evaluation process for 2021-2022.

Child Emotional Wellbeing

Due to the impact on emotional wellbeing on children and families by the earthquakes the MCAH program collaborated in the dissemination of the coloring book *Trinka y Juan el día que la tierra se movió* as an instrument to help families understand behavioral responses and strategies to mitigate it. The recently published coloring book *Trinka y Juan luchando contra el gran virus* will be adopted as a similar instrument to help families with young children deal with the uncertainty and stress of COVID-19.

MCAH staff and the HVN will continue to foster the development of resilience in the participant families, awareness of the effects of adverse childhood events and how to prevent them in their children. The HVN will also continue to administer the Ages and Stages Questionnaires: Social Emotional (ASQ:SE-2) at to participating children of the HVP at scheduled intervals, teach parents how to promote healthy emotional development, and refer children that require further interventions based on the results of the screenings.

Emergency Preparedness and Response

With each emerging disaster, the importance of advocating for children's need has been identified as a priority. Therefore, the MCAH staff will continue to collaborate to develop an Emergency Preparedness and Response guide that considers the needs of children to incorporate in the state EPR plans.

Education to childcare and HS/EHS staff will continue to be offered via virtual presentations during the quarantine on topics of safe sleep, ECC prevention, immunization myths, breastfeeding, child development, disaster preparedness, oral care, and unintentional injury prevention.

Adolescent Health

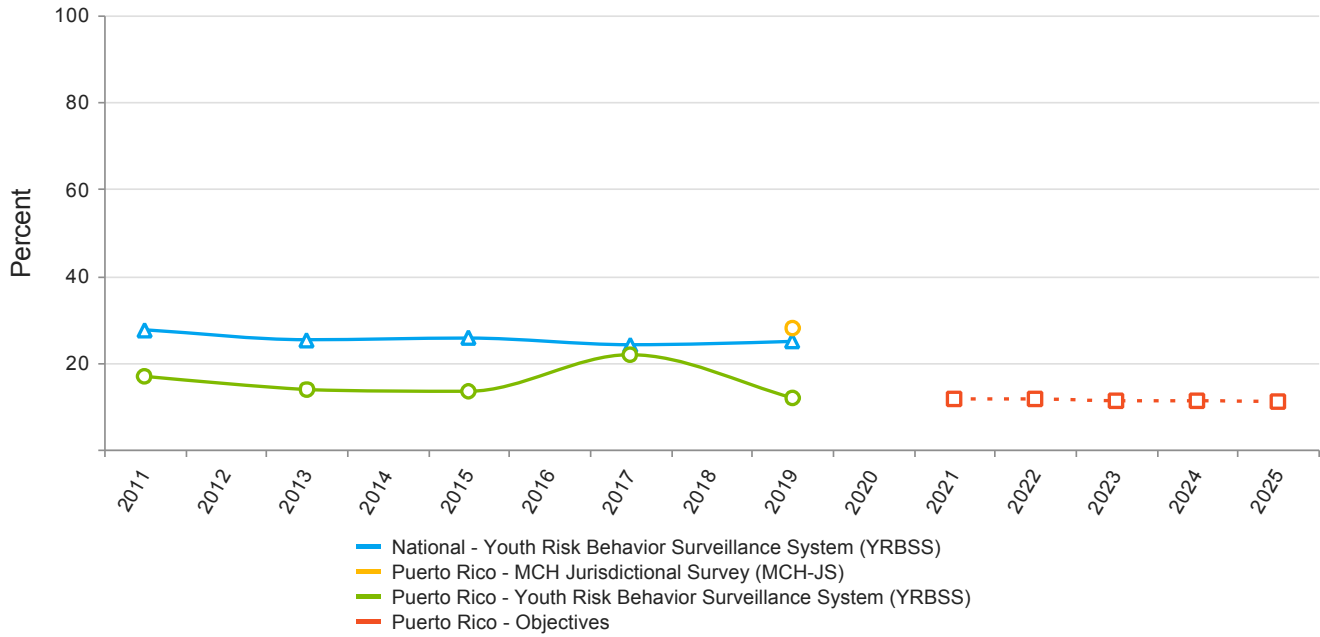
Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000	NVSS-2019	23.6	NPM 9 NPM 10
NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000	NVSS-2017_2019	6.4	NPM 10
NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000	NVSS-2017_2019	2.0	NPM 9 NPM 10
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	MCH-JS-2019	13.1 %	NPM 10
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH	Data Not Available or Not Reportable	NPM 10
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	MCH-JS-2019	46.4 %	NPM 10
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	NSCH	Data Not Available or Not Reportable	NPM 10
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	MCH-JS-2019	72.8 %	NPM 10
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH	Data Not Available or Not Reportable	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	MCH-JS-Age 0-2	Data Not Available or Not Reportable	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	MCH-JS-Age 10-17-2019	20.2 %	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	NSCH	Data Not Available or Not Reportable	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	WIC-2018	12.6 %	NPM 10

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	YRBSS-2019	14.4 %	NPM 10
NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza	NIS-2016_2017	40.3 %	NPM 10
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NIS-2019	75.7 %	NPM 10
NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine	NIS-2019	86.9 %	NPM 10
NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine	NIS-2019	93.5 %	NPM 10
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females	NVSS-2019	18.9	NPM 10

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
Annual Objective		
Annual Indicator	21.8	12.0
Numerator	22,875	10,721
Denominator	104,752	89,358
Data Source	YRBSS	YRBSS
Data Source Year	2017	2019

Federally Available Data

Data Source: MCH Jurisdictional Survey (MCH-JS)

	2019	2020
Annual Objective		
Annual Indicator	27.9	27.9
Numerator	58,635	58,635
Denominator	209,819	209,819
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

Annual Objectives

	2021	2022	2023	2024	2025	2026
Annual Objective	11.7	11.7	11.3	11.3	11.1	11.1

Evidence-Based or –Informed Strategy Measures

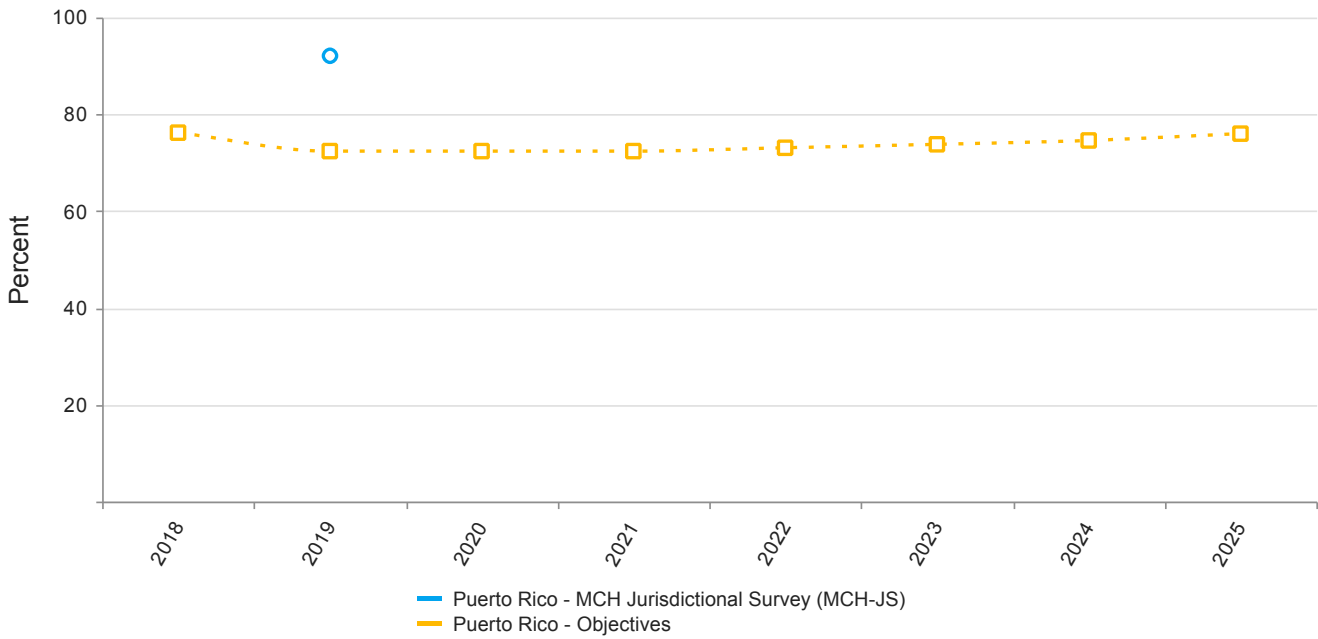
ESM 9.1 - Percent of Youth Health Promoters (YHP) who report not being bullied in Puerto Rico by September 2021-2025

Measure Status:	Active
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Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	0.0	0.0	0.0	0.0	0.0	0.0

**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
Annual Objective	72.3	72.3
Annual Indicator	92.0	92.0
Numerator	192,972	192,972
Denominator	209,819	209,819
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective			76.1	72.3	72.3
Annual Indicator	76	76	72.3	72.3	72.3
Numerator	179,519	179,519	174,840	174,840	174,840
Denominator	236,100	236,100	241,976	241,976	241,976
Data Source	BRFSS	BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year	2016	2016	2017	2017	2017
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	72.3	73.0	73.7	74.5	75.9	76.6

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				
	2017	2018	2019	2020
Annual Objective	50	60	84.8	84.9
Annual Indicator	59.9	59.3	84.7	68.3
Numerator	85	64	72	28
Denominator	142	108	85	41
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
Data Source Year	2016-17	2017-18	2018-19	2019-2020
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	85.0	85.1	85.2	85.3	85.4	85.5

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 11% the percentage of adolescents who report being bullied in school (Baseline PR-YRBSS 2019: 12%).

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 takes into account the needs of adolescents and young adults.

ESMs

Status

ESM 9.1 - Percent of Youth Health Promoters (YHP) 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 76% the percentage of adolescents with a preventive medical visit in the past year (Baseline PR-BRFSS 2017: 72.3%)

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 campaign.

Implement the Puerto Rico Youth Friendly Healthcare Services Guidelines in a pilot project in FHQC.

Collaborate with CSHN Transition to Adult Healthcare Services Committee to assist all youths as they transition from pediatric to adult centered care services in Puerto Rico.

Develop and disseminate an Emergency Preparedness and Response guide that takes into account the needs of adolescents and young adults.

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 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling

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

NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)

NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza

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

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

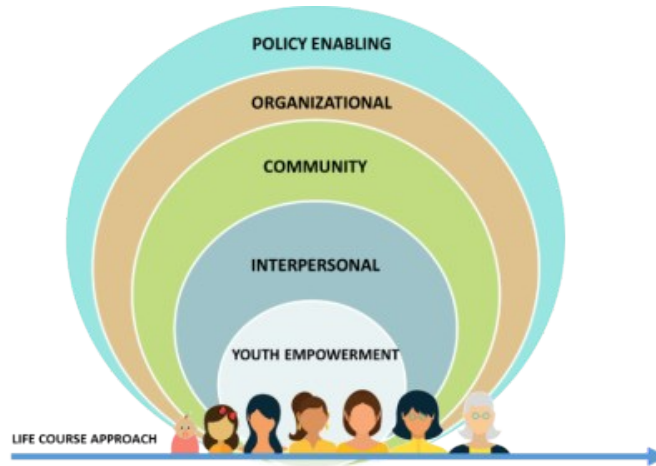
NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine

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

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

Adolescent Health - Annual Report

Adolescence is a critical transitional period in life course's journey that includes the biological changes of puberty and the need to negotiate key developmental tasks. It is a period of major physical, psychological, and social development with bursting energy and an increasing surge to try new roles and behaviors. MCAH continued to view adolescence within the life course approach and use the Socio Ecological Model (SEM) as its framework for understanding the multiple levels of the social system and the interactions between adolescents and environment in program planning, partnerships and capacity strengthening. The priority to improve adolescent health and wellbeing in PR is approached through a combination of strategies at all levels of SEM's five hierarchical levels while embracing youth as valuable assets and nurturing them in their journey towards adulthood.



PR experienced a series of events during 2019-2020 that affected all populations, especially youth. On December 2019, PR south geologic faults became active and on Jan 7, 2020, a 6.4 Magnitude earthquake with epicenter in the south rattled the island and a general power failure occurred. This was the beginning of a series of thousands of aftershock movements that have continued until this day. Structural damages by the earthquakes and continued aftershocks displaced youth and families from their homes and schools reviving feelings of fear, anxiety, and insecurity only two years after hurricanes Irma and Maria struck the Island. Then on March 2020, the emergent of a silent and invisible COVID-19 threat, the measures to stop its spread, physical distancing, closing of schools and other gathering places, challenged youth social and emotional development. MCAHD/SISA worked to address the emergent challenges to continue offering youth needed services. Adolescent domain's 2019-20 plans were adapted with each new circumstance and continued to address **NPM# 10: Percent of adolescents' ages 12 through 17, with a preventive medical visit in the past year**

National Survey of Children's Health (NSCH), used to measure NPM#10 is not available in USA territories. In 2015, MCAHD contracted PR Behavioral Risk Factor Survey (PR BRFSS) to include the variables to assess it. 2016 PR BRFSS revealed 76% parents/guardians reported their 12-17 y/o had an annual preventive visit in the past year and 66.5% indicated they were in very good or excellent health (NOM#19). In 2017, parents informed 72.3% had the preventive visit and 61.9% were in good or excellent health. The 5% decrease in annual visit and 7% decrease in parents' perception of 12-17 y/o's health could have been related to post hurricane's effects.

In 2018, MCHB selected NORC at University of Chicago to do MCH Jurisdictional Survey (MCH-JS) to provide territories data for NPMs. NORC's 2020 PR MCH-JS pollsters interviewed 200 families in February 2020 of which 91.97% answered their adolescents, 12 through 17, have had a preventive medical visit in the past year. MCAHD concluded this result doesn't reflect the reality of adolescents' preventive visits in PR. Therefore, this indicator was included again as a state added question to PRBRFSS in 2021. PR Annual Objectives for NPM 10 were estimated with PR BRFSS 2017 data (72.3%), until PR BFRSS 2021 is reported.

This 2019-2020 narrative report details MCAHD efforts directed to improve adolescent health and wellbeing with

NPM#10 Percent of adolescents, 12 through 17 with a preventive visit through ESM 10.2: *The percent of youths in schools and communities reached with the PR Youth Health Literacy Toolkit that increase their awareness regarding how to use the health care system (pre-post survey) by September 2017-2021 (ongoing) with the following five (5) strategies:*

1. Empower youth through Positive Youth Development (PYD)

Positive Youth Development (PYD) is MCAHD’s leading approach towards youth health and wellbeing. PYD is an intentional process of providing all youths 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. Addressing young people’s positive development facilitates their adoption of healthy behaviors and helps to ensure a healthy and productive adult life. On October 6, 2016, PR Secretary of Health issued Administrative Order #359 to promote PYD as a standard to promote youth health and wellbeing in DOH and all other public and private entities.

MCAHD’s Comprehensive Adolescent Health Program or Servicios Integrales de Salud al Adolescente (SISA, in Spanish) addresses adolescent health since 1992 and adopted PYD since 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 Program develop and implement PYD initiatives and includes one Regional Coordinator (SISA RC) for each DOH’s seven (7) regions and the Central Level Staff with PYD Coordinator/YAC Facilitator, YHPP Central Level Coordinator (YHPP CLC) and SISA Associate Director.



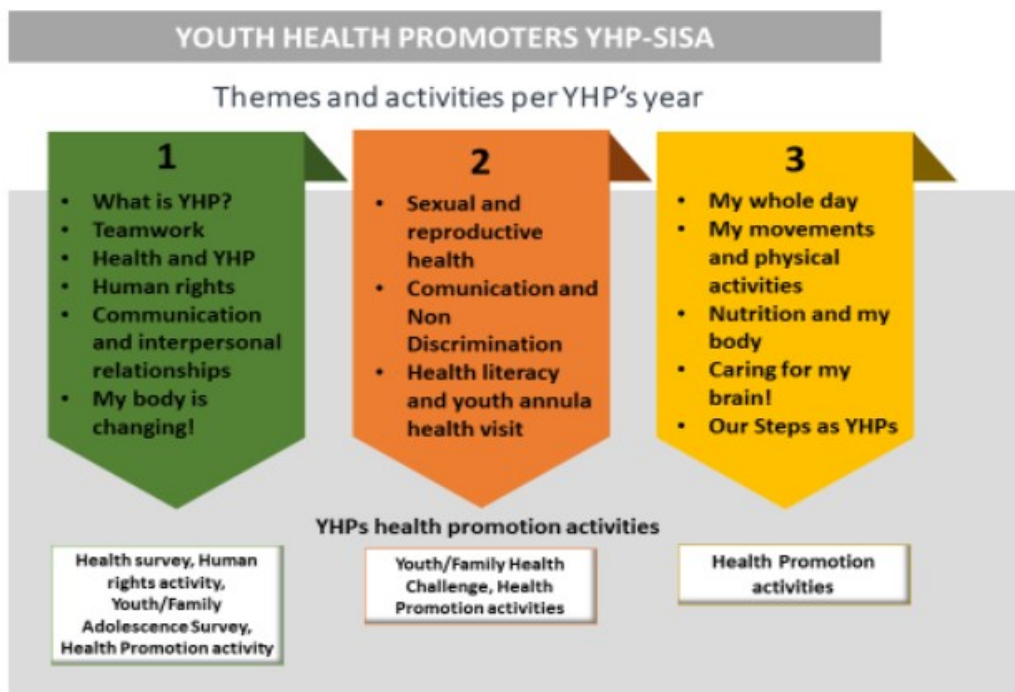
In July 2019, MCAHD hired two new SISA personnel: Ponce RC and YHPP CLC. The YHPP CLC monitors YHPP implementation and SISA’s RCs. In 2019-20 YHPP CLC provided a total amount of 204 technical assistance calls and individual meetings with SISA’s RCs. SISA meets monthly to report regional and central work with youth, schools, and families, share experiences and ideas to improve work with youth, review YHPPs curriculum, discuss youth surveys and studies, design workshops and increase workforce capacity through continued education (CE). Due to the 2019-20 unique events, SISA offered CE about psychological first aid after disasters, crisis intervention, management of emotions, earthquakes preparedness, and COVID-19. SISA personnel took additional virtual workshops individually or in group about: self-care and psycho-corporal health, domestic violence and sexual abuse, resiliency, suicide prevention, addictions and the brain, management of mental health in family situations, LGBTT nondiscrimination, gender related violence, healing traumatic events, adolescent brain, management of stress related to social isolation, technological tools use, social media and cyberbullying, racism, teen consent, TEAMS platform trainings, back to work after COVID-19, creating online webinars and presentations, among others.

SISA implements two (2) distinct PYD initiatives: **Youth Health Promoters Project (YHPP)** in public schools since 1995 and **Youth Advisory Council (YAC)** since 2016.

Youth Health Promoters Project (YHPP) is a PYD initiative in collaboration with PR DOE that is implemented by SISA RCs in 10 schools per DOH region. Each school’s YHPP group have 15 to 25 voluntary students that meet twice a month for 3 consecutive years from 6th to 8th grade. The group meets with SISA RC and school liaison to learn about health, human rights, healthy relationships, puberty, sexual health, brain development, among others. They create health promotion activities and use peer helping peer strategies to share them with other students and adults at school, family, and community. Youth from diverse socioeconomic backgrounds and capabilities are encouraged to participate, including YSHCN. “Healthy Youth in Action” (“Jóvenes Saludables en Acción”, in Spanish) is YHPP’s curriculum and includes at least 15 meetings per each school year.

By August 2019 YHPP had registered a total amount of 949 10 to 14 y/o in 51 elementary public schools of 49 municipalities around the island. From August to December. 2019, 24 groups were in Year 1 and completed meetings “What is YHP, Teamwork, Health and human rights”, 21 were in YHP’s 2nd year with “Sexual & reproductive health, and Communication nondiscrimination”, and 6 groups in Year 3 completed “My whole day, physical activity and nutrition”.

During September through December 2019, YHPs created 63 health promotion activities in 51 schools reaching 2,135 peers and 253 adults. Activity topics varied due to youth interest and included: sexual health, STDs, human rights, communication and non-discrimination, health survey, drugs and the brain, pediatric preventive services, stress management and annual health visit.



Earthquakes: The south and western part of the island received the worst impact since January 7, 2019, earthquake and aftershocks, with schools, homes and buildings collapsed or severely damaged. The earthquake happened during the night, so students and personnel were not at schools, but were impacted while sleeping at their homes.

One of YHPP schools, Agripina Seda School in Guánica collapsed and most schools in the south and west were

considered too dangerous to be used.

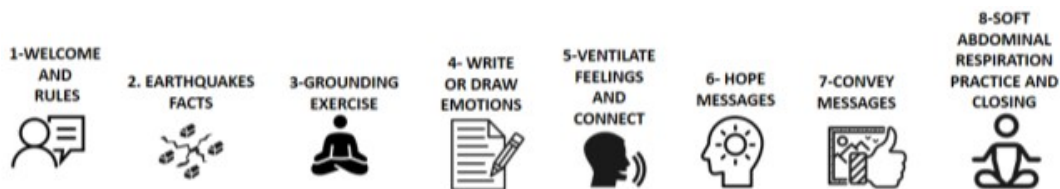


Agripina Seda School in Guánica
After 6.4 earthquake
Jan 7, 2019

But schools in the north or central part of PR were also affected so DOE closed all schools until government-hired engineers certified they were safe. Thousands of children and youth were displaced with their families to tents or shelters organized by communities or the government. The rest of the island’s population, including many youths, traveled to the south to provide supplies while offering emotional support, solidarity, and hope. Nevertheless, people in shelters organized classrooms under tents with voluntary teachers while DOE habilitated buildings to be used as schools and prepared online virtual classes. By February, certified schools opened using short periods or interlocking schedules but with low attendance due to parents’ fears.

Keeping attuned with the understanding that children and youth are especially vulnerable to the long-term negative outcomes of natural disasters, given the disruption to their primary systems of social support, SISA staff moved quickly to adapt YHPP’s *Hope after Hurricanes Intervention (HAH)* to the earthquakes’ event and received Psychological First Aid and Mindfulness workshops by MCAHD Mental Health Consultant and two United Way sponsored virtual trainings. related to earthquakes’ trauma: Psychological First Aid (PFA) after a Natural Disaster and Mindfulness workshops.

Different from hurricanes, earthquakes’ aftershocks continue giving a sense of constant insecurity and fear with any minor movement. The adapted “*Hope After Earthquakes*” (HAE) Guide, was completed by SISA Central Staff and MCAHD Mental Health Consultant and included soft abdominal breathing and mindfulness exercises as tools to handle stress, anxiety, and attain calmness during and after a seismic event: The following image depicts HAE Guide’s: 1. Welcome and group agreements; 2. Earthquake’s information: epicenter and expansion waves map; 3. Grounding exercise 4. Handout to write or draw experiences and emotions; 5. Group discussion to ventilate feelings and connect; 6. Create positive messages to others 7. Convey messages through different activities, 8. Practice soft abdominal respiration exercises to relax, and attain calmness during or after an event and closing.



The intervention was offered as soon as classes began in February in one or two sessions to a total amount of 528 YHPs in 43 schools. Severely affected schools in the south/west closed for the remaining of the semester. Approved

schools opened using short period schedules but with low attendance due to parents' fears. Some YHP's groups decided to write letters with messages and drawings of hope and solidarity to be sent to YHPs in SW, prepared mural collages with messages of hope, shared information about the emergency backpack, what to do if an earthquake happens, and performed school earthquake drills. YHPs responses to handout questions were gathered to be analyzed.

COVID-19 Pandemic: On March 16, 2020, PR Governor issued an Administrative Order (AO) to have a 15-day lockdown of schools and non-essential workplaces due to COVID-19 pandemic. Next AOs extended it for the next four months. SISA Central level and RCs worked from home and met virtually to look up alternatives to continue the project. Designed to use face to face and to provide in person teamwork activities, YHPP needed to be adapted to distance learning. SISA RCs took the challenge to learn new technological skills and "virtualize" the three years (45 sessions) curriculum even though their equipment needed to be updated or provided. SISA staff also attended youth health related virtual webinars, revisited adolescent development books, and contacted YHPP school liaisons to stay connected and share updated COVID-19 information. The YHPP paused for the semester until a virtual mode could be completed. In the meantime, YHPs were sent a letter of gratitude and a participation certificate by mail to keep them engaged.

Youth Advisory Council (YAC) is the other PYD initiative created through DOH's Administrative Order #359 on October 6, 2016. Ascribed to the MCAHD, YAC is a two-year term advisory entity directed to provide youth voice and participation in the development and implementation of policies and projects to promote health and wellbeing of Puerto Rico's youth. The 2nd DOH YAC 2018-2020 was constituted by 25 advisors: 19 new and 6 from previous YAC. New advisors were selected from a total of 56 applicants 14-19 years old from different PR regions. By 2019, 18 advisors were active. Their participation was crucial to provide SISA & MCAHD input into earthquakes and COVID-19 effects on youth.



YAC 2018-2020 members

YAC continued its next two (2) year cycle monthly meetings in July 2019 to review the work done, assess collaborations, report committees, and provide insights on issues that affect youth health/wellbeing. Also, safety measures were reviewed, and crisis intervention was shared and discussed. Crisis information included poison control, police, and suicide phone lines. To increase the sense of security and connection, a directory with advisors and facilitators' contact information was shared to be used in an emergency.

In August 2019, Title V grant information was shared to increase their knowledge on MCAH projects and goals. A

discussion about summer 2019 global natural events (wildfires, hurricanes, etc.) prompted them to adopt measures to promote respect and protect Planet Earth, and to ameliorate climate change. They agreed to create videos or images about their decision to use only reusable utensils, cloth grocery bags, and non-paper digital forms for agenda, presentations, and evaluations. YAC posted them in their social media to motivate other youth to take similar actions.

Due to an increased concern in advisors and their parents regarding cyberbullying, a Cybersecurity workshop was provided by Immigration and Customs Enforcement (ICE) agent in September 2019. YAC families were included to enhance connection and competence of the group and their families.



ICE Cybersecurity workshop, Sept 2019

On September 20, 2019, one advisor participated in Title V Region 2 site visit to explain YAC's work through a power point presentation, answered MCHB project officer questions, and provided an excellent overview of their work.



Title V Region 2 Site Visit, Sept 2019

A special "ROPES -like" all day meeting was held on November 2019 with the purpose to foster teamwork, increase personal and group confidence, and develop skills to manage group situations. YAC members assessed the experience as a positive one which increased their bonding as a group.



YAC Guajataca "ROPES like" meeting

Then 2020 arrived! January 2020 meeting was postponed due to earthquakes', but the YAC facilitator contacted each advisor to assess their status, review emergency phone lines and share information about CBOs helping communities. YAC members decided to contribute individually to the Earthquake Response to PR South Area Survivors with essential items through CBOs efforts. They also answered MCAH HV request to provide ideas for youth materials to be sent to shelters. Some of their ideas include family games, mandalas for coloring (mandalas are geometric configuration of symbols that may be employed for focusing attention and as an aid to meditation), comic books, jigsaw puzzles and balls. The list of ideas was shared with other stakeholders.

YAC received the YHPP "Hope After an Earthquake Intervention" on February 2020. As it was carried out, some advisors shared their first-hand experiences and feelings during the earthquakes, others talked about their feelings while taking supplies and sharing hope and support with affected families. Fear, insecurity, uncertainty and concern were amid the most frequently mentioned feelings. The Intervention also provided relaxation and breathing exercises they can use when feeling stressed, anxious or with fear during any type of event. Then, each one selected a breathing exercise to demonstrate and practice with the whole group as a tool to manage stress. Ideas to modify its implementation with YHPs were offered. An earthquake drill was performed, and all agreed to practice preparedness measures in every in-person YAC meeting.



Deep breathing exercises, Feb 2020

In March 2020, the virtual modality was adopted to continue meeting, connect, share experiences, provide motivation, support, and continue work during the lockdown. YAC members showed their commitment as they adapted and consistently attended virtual meetings during lockdown in the following months. In person meetings lasted 6 hours but virtual ones were adapted to 3-4 hours to give them less screen time and prevent virtual use burnout.



YAC's Zoom Virtual meeting

The constant changes of COVID-19 information and the lockdown effect on youth brought the need to work with their mental health and use tools to manage all those changes. During virtual monthly meetings they had the opportunity to express their experiences and feelings such as: distress due to the uncertainty, being bored, overburden with new responsibilities of taking care of their siblings virtual learning while doing their college work because their parents work, running errands for their eldest to protect them, and fear that their loved ones could get the virus. Others viewed the event as challenging but learning experience or productive because they had time to work with themselves, their families and to reflect about the world and global changes. They decided to produce messages and videos about COVID-19 protective measures as well as ways to handle time and stress and shared them in YAC's social media pages.

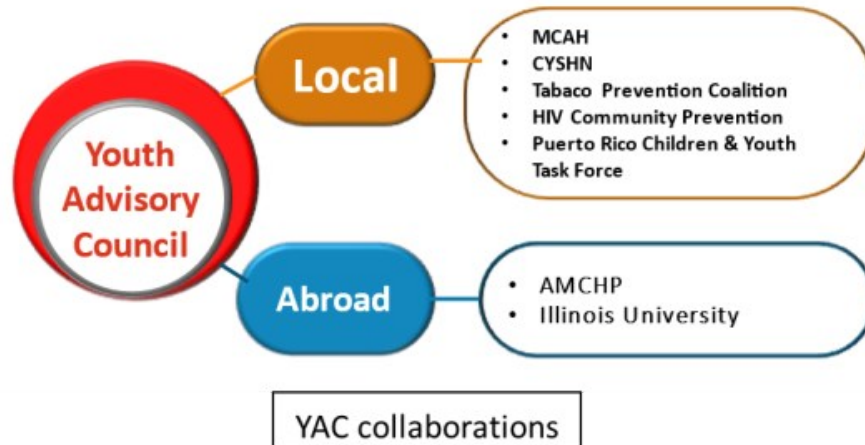
The selection of YAC 2020-22 new advisors was postponed until 2021. The decision was made because the selection process involved in person and group interviews. YAC 2018-2020 advisors decided to continue their participation until new members were going to be selected in 2021.

The event which resulted in George Floyd's death and the response against racism impacted youth in PR. A PR created video "Déjame respirar" ("Let me breathe") was shown to discuss and reflect upon. They understood racism is a public health issue that affect youth mental health/wellbeing and identified the need to receive more information about racism in PR and what can be done about it.

The YAC made important contributions to initiatives of the DOH, other agencies and programs, AMCHP and one university.

YAC CONTRIBUTIONS TO INITIATIVES IN PR AND US

1. PR Title V 5YR HNA: a) revised and made recommendations on the survey questionnaire; b) Had representation in the HNA Advisory Committee; c) Gave ideas for the adolescent health domain's strategies, activities and 5YR state action plan.
2. Participated in CYSHCND Transition to Adult Healthcare Committee (TAC) and helped to facilitate YSN focus group.
3. Assisted the PR Children & Youth Task Force to develop a youth advisory group using YAC as a model to be replicated.
4. Provided feedback to the "Time Capsule COVID-19 Workbook" to be used with YHPs experiences during COVID-19 pandemic
5. Collaborated with the youth voice in the PR Tobacco-Free Coalition and DOH Community Mobilization for HIV Prevention Committee
6. AMCHP Conference: a) provided input to AMCHP 2020 Conference Planning Committee to increase youth participation; b) evaluated submitted abstracts to the conference; participated in AMCHP 2020 virtual conference.
7. Provided technical assistance to the University of Illinois SAHC on how to create and maintain a youth group.



YAC focused their efforts in three internal committees:

Youth Friendly Health Visit Committee During July 2019 a new updated Friendly Visit Review Workshop was provided, with role playing included. The exercise provided advisors a different perspective of adolescent health visit scenarios and gave them the opportunity to express their own experiences. By September 2019 the committee members worked to clarify the definition and reviewed their objectives. They focused on PR legal aspects about adolescent health rights and a consultation was forwarded to DOH legal advisors office. During 2020, their work had a slowdown due to new responsibilities with lockdown studies. In May 2020, they began to meet again bi-weekly using Goggle Meet, to work with the Guide's draft. Two Committee advisors collaborated with CBO Proyecto

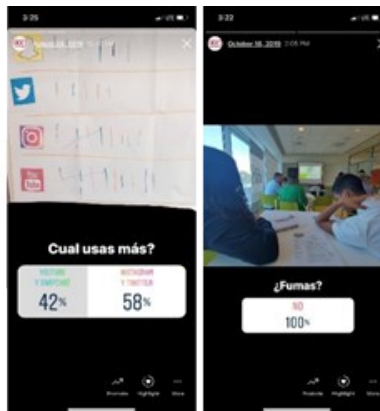
Nacer's mobile health unit project providing their input for a potentially teen friendly clinic.



Media Campaign Committee oversaw and designed contents of Nivel Maximo's website education materials. During the last semester of 2019, they brought the topics identified to YAC meetings to gather their input before adding them to the webpage. One advisor was part of a meeting with YAC Facilitator, MCAHD's Curriculum Advisor and Web Page Designer to reach agreements about how the page should look, including transition topics and images. The web page title was approved by YAC and www.minivelmaximo.com went on-line on December 2019. From January 1 to June 30, 2020, the web page received 75 site sessions (site session is a visit to the site) and 39 unique visitors (are the number of people that visited your website, can have more than one site session, is considered unique when they connect from a different browser or device/IP address).

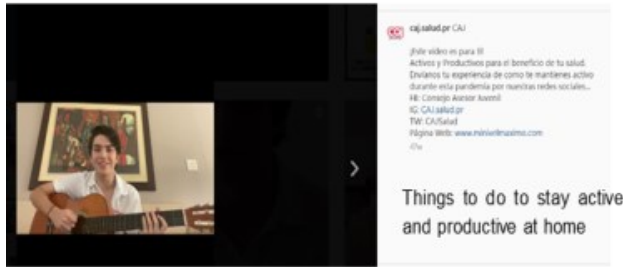
Social Media Committee decided to include the webpage title in every posted caption to promote it. During July to December of 2019, they agreed to post information about YAC's work. Instagram's stories were created in every meeting with a summary of the work done. If YAC participated in collaboration meetings, one advisor oversaw the recovery of photos to share on WhatsApp's and create the post.

Social Media survey use by YAC and results August 2019



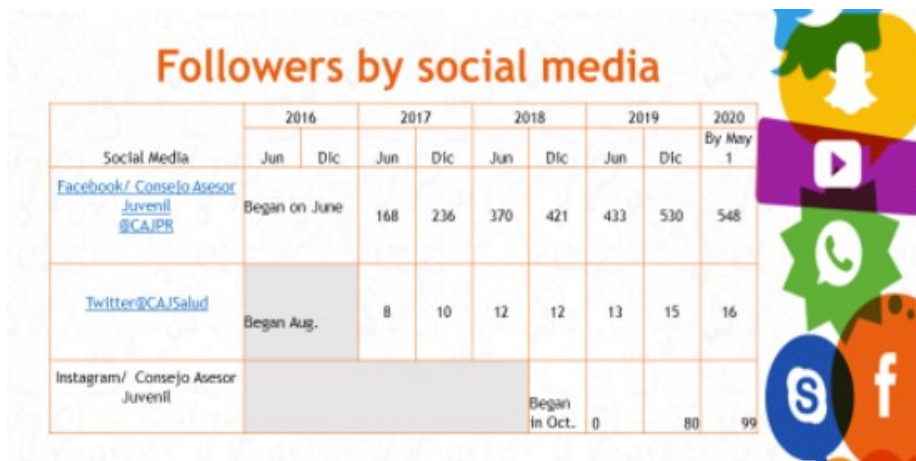
Engaging audience as they participated in PR Tabaco Free Coalition Meeting, October 2019

Been informed about emerging issues to create educational materials is something YAC has done since Zika virus emergency. MCAHD ensured they receive updated health information. YAC Social media committee oversaw the creation of education materials to post them during COVID-19 lockdown. Based on the group experiences and feelings they created videos about: how to be active and productive during lockdown, why to stay at home and safe, how to wash your hands correctly and where to seek help if you feel alone. Videos can be seen at <https://fb.watch/4H9FIgb3rz/>



"Youth, during this difficult time we are having as a country, YAC invites you to stay home with mom" (Happy Mother's Day message)

By May 2020, YAC Social Media Committee had 548 Facebook and 99 Instagram followers. A discussion was brought to decide if Twitter account should continue based on the small number of followers.



2. Develop PR Youth Health Literacy Toolkit (HLT) to increase youth capacity to make informed and appropriate decisions relating to health care

Health literacy is acquired in a life-long learning process. Hence, targeting children and young people with health literacy interventions can help them to develop and promote healthy behaviors across the lifespan and ameliorate possible risks.

PR Youth Health Literacy Toolkit was adapted from New Mexico's YHLT and SISA RCs continue empowering youth in health literacy through YHPP 2nd Year (7th grade) meetings #8 to 12 to increase their knowledge about health and the healthcare system. It comprises: 1. Seven areas of health include physical, mental, emotional, social, economic, academic, and environmental, 2. Wheel of Health portrays the interrelation of all health areas; 3. HEADSSS Model with themes health professionals address in the annual visit 4. Finger on the pulse (Why do youth go or don't go to

the visit?) helps them identify doubts and fears about the health visit 5. What to do before, during and after a health visit, empower them to attend a visit; 6. Youth Preventive Healthcare Guidelines and Get to know your Insurance Plan activities encourage youth and parents to learn about their insurance plan and how to use it. 7. Design a youth friendly clinic makes them think about how their health clinic should look like. A pre and post survey is answered.

During 2019-20, only one SISA RC was able to provide those meetings due to earthquakes and COVID-19 pandemic events in which PR schools were closed. A total amount of 41 students in five (5) schools' groups participated. Their answers to pre and post survey were gathered and analyzed in the ESM 10.2 *The percent of youth in schools and communities reached with the PR Youth Health Literacy Toolkit that increase their awareness regarding how to use the healthcare system (per and post surveys)*. MCAHD evaluator used gathered data from previous reports to compare with 2019-20. The report *"Awareness of Youth Health Promoters with respect to utilization of healthcare services system in 2019-20* had 28 out of 41 or 68.3% students with an increase in post survey awareness of preventive health and annual preventive visit.

Three SISA RCs offered Youth Health Literacy Toolkit Workshop's, with YAC's added suggestions, to non YHPs in summer camps during June and July 2019. The results were gathered and analyzed by MCAH evaluator to determine its effectiveness. SISA staff will consider modifications and a virtual version will be created to implement it online.

3. Increase awareness of Annual Preventive Health Care Visit importance:

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 their healthcare provider.

Nivel Máximo Multimedia campaign:

In August 2018 DOH's Advertising Agency (AA) presented MCAH a new design to continue "Alcanza tu Nivel Máximo" ("Reach your Maximum Level") adolescent annual health visit and healthy lifestyles promotion campaign. It included a 30 second video to be aired in local/cable television and movie theaters; and four (4) posters, with images from the video, to be placed in public spaces. Nivel Maximo's video and posters were published from November to December 2018.

The second media campaign period was scheduled for 2019-20 and in March 2019, YAC was addressed to assess results of Nov to Dec 2018 campaign in theaters, local/cable TV, and bus/train stops. They proposed to increase campaign' scope using theaters near the universities and adding spots in local and cable TV instead of bus and train stops to be viewed only in Metro area. Nivel Máximo's video was shown in TV and movie theaters from April 2019 until December 2019 in localities YAC Media Campaign Committee suggested. YAC and YHP ideas were used to select movies youth preferred: Avengers End Game, Godzilla 2, Men in Black, Spiderman, The New Mutants, Angry Birds, It, Adams Family, Maleficent, Zombiland, Last Christmas, Charlie's Angels, Frozen 2, Jumanji, Star Wars, Little Woman & Spice in Disguise. The video was shown in local (83 spots) and cable TV (1,604,664 Impressions).

The development of Nivel Máximo's web page has been a YAC, MCAHD Curriculum Education Consultant, and SISA staff collaboration project since 2018-19. In a November 2018 meeting, YAC members reviewed the posters and made a list of topics or information needed to be included in the web page. The Campaign Committee used them as framework for the web page. They organized the topics by priority, searched information and wrote drafts that MCAH Curriculum Education Consultant checked for accuracy. Each topic's draft also received YAC suggestions before being approved to be posted. In August 2019, "Mi Nivel Maximo.com" web page's name was chosen by YAC and it was published in December 2019 with MCAH and DOH approval. It can be reached at www.minivelmaximo.com. Themes included: annual healthcare visit, physical activity, hydration, healthy nutrition, safe driving, bullying, mental health, and sexuality.

During 2020, Nivel Maximo Campaign (Video and web page) was submitted to the State Election Commission for

its approval during election year. The web page received approval in March 2020. The video was continually submitted for approval to be published with no response. Nevertheless, web page received 75 site sessions and 39 unique visitors from January 1 to June 30, 2020.

Educational activities about annual healthcare visit and adolescent health

Educational activities directed to youth: In addition to YHPP groups, SISA RCs offer educational activities to youth in other schools and entities. During 2020 those activities were affected by school’s lockdown after the earthquakes and COVID-19. Nevertheless, SISA RCs offered 12 educational activities to 450 10-19 y/o (not YHPs) at schools and other locations about a variety of themes: teen pregnancy prevention, sexual violence prevention, youth growth and development, stress management and, health literacy tool.

Regional MCAH personnel, CHW and HEs, offered educational activities island wide to 2,404 10-19 y/o about youth health and wellbeing themes before the COVID-19 lockdown:

MCAH Educational Activities in groups to 10-19 years old, PR 2019-20	
Themes	10-19 y/o
Unintended injuries prevention	7
Nutrition and Physical Activity	470
Teen Sexual /Reproductive Health	670
STI Sexual Transmitted Infections	45
Healthy Life skills for adolescents	104
Teen Growth and development	307
Healthy Personal Relationships	150
Women Health	76
Oral Health	77
Childbearing, labor, postpartum	97
Breastfeeding	182
Baby and Childcare	26
Violence prevention	54
Family planning	23
Other themes	116
TOTAL	2,404

Educational activities directed to adults about teen health/wellbeing by SISA RCs were offered before schools’ lockdown to 67adults gathered in 5 groups about: SISA Program, PYD initiatives, stress management, youth health literacy tools and earthquakes intervention guide.

Understanding Adolescence (UA) workshop provides adults an opportunity to acknowledge changes in adolescence through a dynamic activity of life events/ages and a power point presentation about the developmental tasks of adolescents, teen brain development and PYD. During 2019-20 SISA RCs offered four (4) UA to 75 adults (parents, youth workers, nurses and social workers) in CBOs, schools and agencies.

Immunizations and adolescent health and wellbeing: In December 2019, PR law 169 was approved making it mandatory for all immunizations administered to be reported to the PR Immunization Registry (PRIR) by providers and insurance companies. The PRIR ceased function in early 2020 due to technical problems which required the system to be replaced. The immunization data that was collected is in the process of recovery for what 2019-2020 is not yet available to evaluate trends or prevalence at the present time. See 2018-19 adolescent domain report for PRIR vaccine coverage from 2015-19.

Messages about the importance of immunizations are included in YHPP’s Year 2 adolescent health visits meetings and at Nivel Máximo’s webpage to dispel myths and empower youth and parents. MCAHD personnel participated in

CE trainings offered by DOH immunization Office and VOCES, a non-for-profit organization that promotes child and adolescent immunizations to update knowledge which included COVID-19 vaccines.

During COVID-19 lockdown immunization services were affected, as reflected in a decrease order for vaccines during March to June 2020, despite the modification in service protocols of immunization centers to ensure a safe and controlled environment. Parents refused to continue vaccination schedules due to fear of COVID-19 contagion and the perception the vaccinations were not necessary because students remained at home, with virtual learning and low risk of exposure. MCAHD staff continued to emphasize the importance of vaccinating children and youth in compliance with the recommended schedule providing protection against preventable infections.

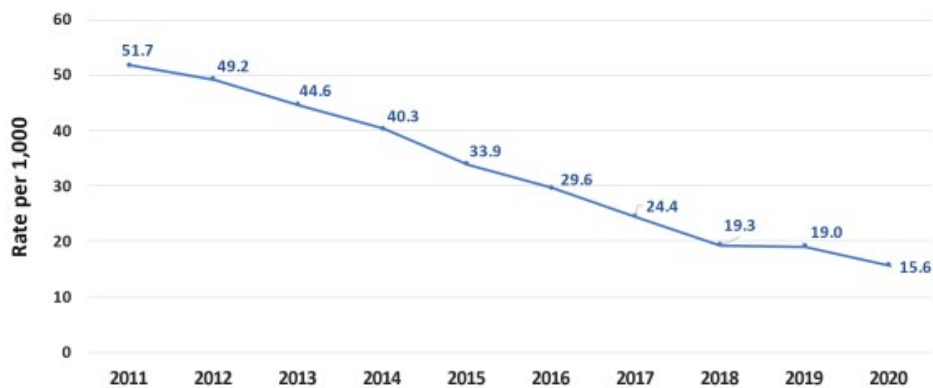
Regarding adolescents' immunization, DOH Secretary signed in 2017, a public policy to make HPV immunization mandatory for all 11 y/o beginning in 2018-19 school year, providing one year to educate parents and youth about this new requisite for school registry. Even though required to be admitted to schools, 2018-19 PRIR reported 59% females and 59% males had at least 1 HPV in the range of 13-17 years.

Immunization schedule for adolescents is part of Pediatric Preventive Healthcare Guidelines for Puerto Rico directed to healthcare professionals signed by Secretary of Health in October 2018. This Guide was revised in 2021 by MCAHD and healthcare professionals stakeholders and was remitted to the Secretary of Health for its approval.

Childbearing during adolescence is a challenging event that affects adolescent females, males and their families in a stage when they are undergoing multiple changes. Annual youth health visit can provide an adequate space to answer teen's questions and receive counseling about healthy sexuality and reproductive health to avoid unintentional pregnancies or STIs as they journey to adulthood.

Teen Birth Rates: The PR 2020 15-19 y/o TBR graph shows a continuous decrease since 2011. The 2020 TBR of 15.6/1,000 represents a 70% decrease from 2011 (51.7/1,000) that was the highest in the past 10 years, and a 18% decrease from 2019 (19.0/1,000).

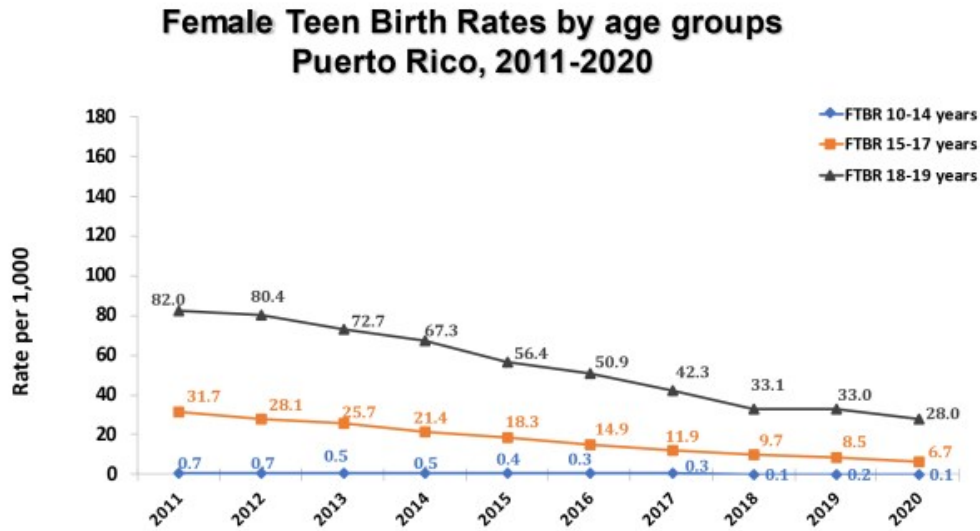
Female Teen Birth Rates among adolescents 15 to 19 years, Puerto Rico, 2011 -2020



Source: Vital Statistics, Demographic Registry, P.R. Department of Health, 2011-2020
Population Estimates, American Community Survey, 2011-2019; US Census, 2020- International Database, US Census.

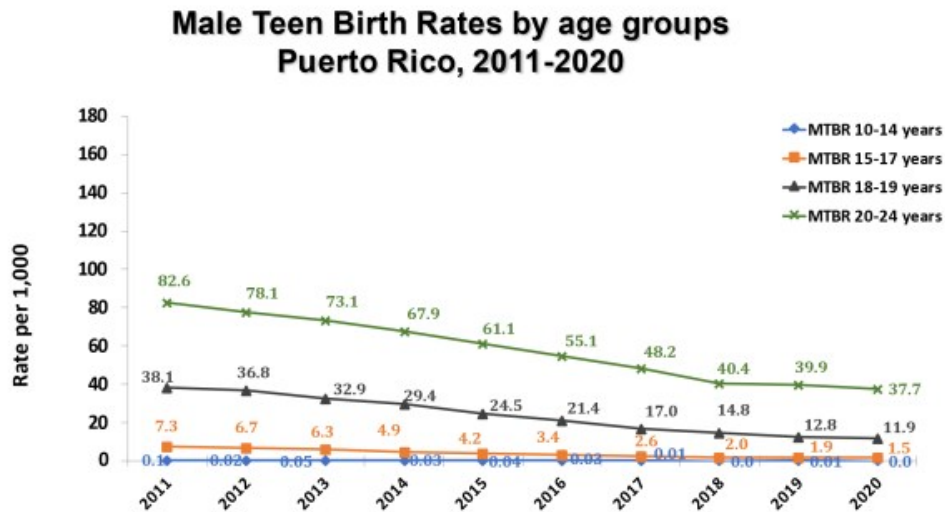
Besides 15-19 y/o TBRs, MEU provides data and graphs for each teenage group: 10-14, 15-17, and 18-19 for each PR's 78 municipalities. This information provides useful insight to address sexual and reproductive health with youth at schools and other scenarios according to their age, growth, and development. SISA RCs share the data with MCAH HVN and CHW in Regional Staff meetings to better understand youth participants and address them accordingly. This information is also useful to parents, school personnel and other caring adults. There has been a

continued decrease in each age group's TBR as is evident in the following graph.



Source: Vital Statistics, Demographic Registry, P.R. Department of Health, 2011-2020
Population Estimates, American Community Survey, 2011-2019, US Census. 2020- International Database, US Census.

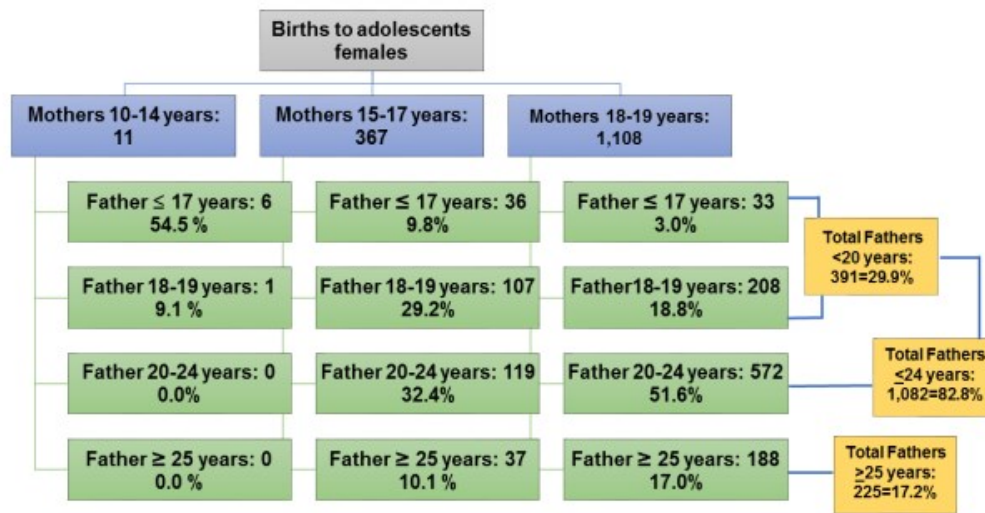
Male TBR differ from females of the same age ranges. Usually, males become fathers at a latter age range, from 20-24 years up. The following graph depicts the decrease in male TBRs by age group in the past ten years. YHPP work with 10-14 years male and female students through the 3 years curriculum includes information to make healthy sexual and reproductive decisions.



Source: Vital Statistics, Demographic Registry, P.R. Department of Health, 2011-2020
Population Estimates, American Community Survey, 2011-2019, US Census. 2020- International Database, US Census.

Information from Birth Certificates (BC) reveals that a higher percent of births to adolescent females had an adolescent or young adult father compared to ≥ 25 year olds. In 2020, 82.8% of fathers to adolescent females were adolescents (29.9% <20 y/o) or young adults (52.8% 20-24 y/o) and 17.2% had more than 24 y/o. The father's age was missing in 179 birth certificates to teen mom's babies in 2020.

Births by mother and father age, Puerto Rico, 2020



Source: Vital Statistics, Demographic Registry Office, PR Department of Health, 2020
 Note: Included reported age of mother and father, 179 missing values of fathers age.

MCAH 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 activities. YAC's contribute through "Mi Nivel Maximo" web page that 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 2019-20 two ACYF programs continued their EBPs: 1. Sexual Risk Avoidance Education (**PR-SRAE**), and 2. Personal Responsibility Education Program (**PR-PREP**). Although both programs' implementation was affected by the earthquakes and COVID-19 pandemic measures, they continued their EBPs as soon as their virtual curriculums were available.

PR-SRAE grant continued providing participants tools to voluntarily refrain from sexual activity and decrease teen birth rates/STIs among adolescents. EBP Relationship Smarts Plus 4.0 (RSP) is used to help teens 11 to 15 years old make healthy relationships and develop life skills for their future. It incorporates a PYD approach that helps build assets and strengthen protective factors. It appeals to youth aspirations to make wise sexual choices, discuss relationship and sexual topics with parents or trusted adults, use nonviolent alternatives during conflicts and work towards their goals. Two CBOs, implement SRAE: Center Sor Isolina Ferré and PECES, Inc.

RSP lessons transitioned into an online learning experience with the approval of RSP developer to ensure consistency and fidelity of contents. A Project Manager was hired to create it using Moodle platform. CBOs assigned facilitators new job functions focused in communication with participants and working schedule was adjusted, to enable them to contact youth at flexible hours.

In 2019-20: 1,814 students had at least one RSP lesson, 572 completed at least 6 lessons and 974 completed the 13 lessons required for graduation. In general, they were from 6th to 11th grade from public and private schools in 12 different municipalities.

A total of 97% and 94.5% of two cohorts completed at least 10 out of 13 lessons required for RSP graduation. In general, 95.6% completed 75% or more of the entire EBP. From these, the total sample eligible for inclusion of knowledge, understanding, capacity, comprehension, and self-efficacy variables was calculated. Results from both cohorts found statistically significant differences (p value < 0.001) between intake and follow-up scores at all the domains (understanding, capacity, and self-efficacy).

PR-PREP aims to decrease teen pregnancy rates and teen STIs rates. During 2019-20 the program continued

using culturally adapted EBP ¡Cúdate! for its 7th year (FY7) with youth from high need geographic areas. Implementation sites included public schools (middle and high schools), and community-based organizations (CBOs) that provide alternative education. A total of 274 youth (12–16) in six (6) PREP municipalities (Naguabo, Humacao, Yabucoa, Maunabo, Vieques & Loíza) completed with a retention rate of 85.0%. Mean age was 13 years old, and 55.3% were females. Another 129-youth initiated but not completed due to COVID-19 emergency.

Among those that completed ¡Cúdate! 100% identified themselves as Hispanic. In relation with race, 39.7% considered themselves as White/Caucasian and 37% as Black/African American. Approximately 40.4% reported being in 7th grade, 32.2% in 8th grade and 14.1% 11th graders. At entry survey, 91.8% reported being straight, 4.5% as something else/not decided, 1.6% bisexual, and 0.5% gay or lesbian.

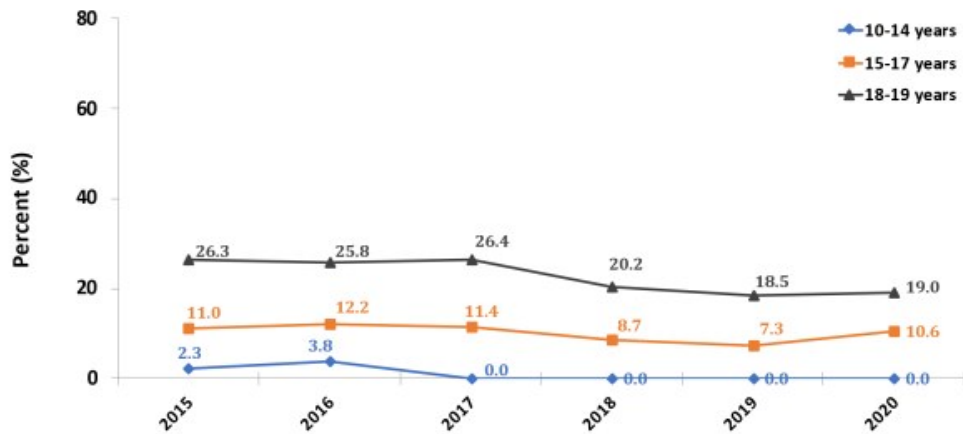
PRPREP Entry & Final Survey results (2017-18 to 2019-20)							
Entry	2017-18	2018-19	2019-20	Final	2017-18	2018-19	2019-20
	%	%	%		%	%	%
Ever had intercourse	9.5	12.9	3.5	Less likely to have sex in next 6 mo.	77.1	76.3	80
Had sex in past 3 mo./1 partner	46.9	33.7	76.9	Prefer to abstain	60.8	62.4	67.5
Had sex in past 3 mo. /2 partners	18.7	20.2	-				
Used condom	69.6	91.7	80.0	Will use condom	48.4	44.6	39.6
Used oral contraceptive	42.9	66.7	40.0	Will use oral contraceptive	35.0	35.2	27.7
Secondary abstinence	34.4	46.1	-				

As a result of ¡Cúdate! intervention, participants were more likely to: 1. Care about doing well in school (94.1%), 2. Make plans to reach their goals (93.7%), 3. Be respectful toward others (92.9%) 4. Be the best that they can be (92.6%), 5. Get more education after high school (92.2%), 6. Make healthy decisions about drugs and alcohol (91.4%), 7. Get a steady job after finish school (89.1%), 8. Manage money carefully, such as making a budget, saving, or investing (87.9%) and, 9. Form friendships that keep them out of trouble (86.7%).

The program also offered ¡Cúdalos! parents' intervention, with a 100% retention rate of 62 parents/caregivers in 4 out of 6 municipalities. Mean age was 42 years old and 88.7% were females. As result of ¡Cúdalos!, adults were more likely to: 1. Support their child to achieve their goals (96.3%), 2. Approach their child to speak about important topics (96.3%), 3. Support your child in the healthy decision making process (92.5%) 4. Interest to know their child friends (92.3%), 5. Manage conflicts with their child (90.7%), 6. Know how to manage themselves in case you speak about sexual topics with their child (90.6%), and 7. Keep a healthy communication with their child (87.0%).

MCAH Secondary TPP efforts include **MIECHV and HV Program** that offer services to 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 even though the following graph illustrate a decreasing trend in the past 5 years.

Repeat Births among teens by age group, Puerto Rico, 2015-2020



Source: Vital Statistics, Demographic Registry, P.R. Department of Health, 2015-2020

Maternal, Infant and Early Childhood Home Visiting (MIECHV) offers services to high-risk pregnant women including adolescents and their child until he/she is 36 months old using a strength-based, family centered partnership and relationship-based interactions. It uses Healthy Families America model and Growing Great Kids, both evidence-based curriculums. 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 needs. During 2019-20, a total amount of 141 families (30 were <20 y/o, 67 were 20-24 y/o) received a total amount of 2,517 home visits in five (5) PR municipalities (Orocovis, Barranquitas, Maunabo, Patillas and Jayuya).

MCAH Home Visiting Program (HVP) uses a coordinated management care model to serve pregnant women with complex medical and social risk factor 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. HVP visit each participant using a specific schedule until the baby is born and afterwards offer inter-conceptional visits until the baby is 24 months of age to space future births.

During 2019-20 81 HVNs offered services in 70 PR municipalities to a total of 2,785 pregnant women of which 1,152 (41.4%) were 19 years or less, and 1,773 (63.7%) were less than 22 y/o. HVP visits provide support and empowerment to pregnant and parenting teens and young adults. HVP registered a total of 18,659 visits to pregnant and post-partum women of which 11,879 were to teens and young adults less than 22 y/o. During the pandemic, the intervention strategies were modified to offer screening, education and support to the participants via telephone calls and text messages, as discussed in the Women/Maternal Health domain.

HVP Participants and Visits monthly reports – selected results 2019-2020				
HVP participants	2019-2020		HVP visits	2019-2020
	n	%		
< 15	47	1.7	< 15	315
15 – 17	509	18.3	15 – 17	3410
18 – 19	596	21.4	18 – 19	3,993
Subtotal < 20	1,152	41.4	Subtotal < 20	7,718
20 – 21	621	22.3	20 – 21	4161
Subtotal < 22	1,773	63.7	Subtotal < 22	11,879
> 21	1,012	36.3	> 21	6,780
Total	2,785	100.0	Total	18,659

Male partners are an important support to teen mom and baby. Teen males less than 20 y/o are included in HV and in 2019-20 were 23% of all fathers.

Pregnant adolescents (<15 to 19 y/o) have more social, emotional, and general health/wellbeing challenges that affects them and their babies. HVP data from discharged participants revealed 94% of adolescents <20 y/o had GIP, 57% had late term births (>38 weeks), and 89% had babies that weighted 2,500g or more at birth.

HVP Pregnancy Outcomes by maternal age group 2019-2020 Selected Results														
Age groups	Gestational Age								Birth Weight					
	Early preterm <34 wk		Late preterm 34-36 wk		Early term 37-38 wk		Late term >38 wk		Very low BW <1,500		LBW 1,500-2,499 g		NW 2,500+g	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<15	0	0	1	16.7	2	33.3	3	50.0	0	0	0	0	6	100.0
15 – 17	3	2.8	11	10.3	33	30.8	60	56.1	0	0	11	10.7	92	89.3
18 – 19	5	4.4	13	11.4	32	28.1	64	56.1	0	0	13	12.1	94	87.9
Total <20	8	3.5	25	11.0	67	29.5	127	55.9	0	0	24	11.1	192	88.9

Source: Family Coordination Discharge Report 2019-2020

MCAH perinatal nurses (PNN) visit hospitals to reach pregnant and post-partum women and their families. During 2019-20, a total of 8 PNN, at least one in each DOH region, offered 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 during individual visits or group orientations in 32 birthing hospitals. Their work is especially important to support teens and young adults during pregnancy and postpartum care including breastfeeding, childcare, illnesses, losses, among others. They also make referrals to services and programs as deemed necessary. These services were temporarily interrupted when hospitals implemented protocols for COVID-19 prevention. PNNs provided educational services to 297 women 10-19 y/o. Thirty-eight (38) pregnant, 242 post-partum, 17 non pregnant companions and 14 accompanying males.

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. HVN provide BF support by scheduling a visit in the first week post-partum and subsequent visits in which they evaluate latching and BF positioning and refer mothers for professional help and support in community if needed. See perinatal domain for BF promotion, laws and data details.

MCAH Prenatal Curriculum for pregnant women and their families, not HVP participants promotes the importance of prenatal, natal, and post-natal health care while emphasizing healthy lifestyles, changes during pregnancy, alert signs, delivery plan, breastfeeding, baby care and family planning. Before COVID-19 it was offered in small groups by CHWs and HE in four (4) sessions. In 2019-20 a total of 514 participants completed the Course and 55 were <20 y/o (10.7%) of which 10 were male teens. This is an important tool to empower pregnant teens, their partners, and families. During pandemic, a virtual prenatal course was developed that will be offered to pregnant women and their families.

Responsible Parenting Curriculum (RPC) promotes parental bonding and healthy baby/childcare from 0 to 5 years of age and 6 to 11. CHWs provide it in small groups to parents and caregivers of children less than 11 y/o. 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. Like prenatal curriculum, RPC was affected due to COVID-19 measures. During the months of 2019, the 0-5 RPC had 321 participants of which 84 (3.21%) were <21 y/o. The 6-11 RPC had 739 participants of which 13 (7.39%) were <21 y/o.

Mental health is very important, and the annual health visit is an excellent opportunity for health providers to do early screening, diagnosis, treatment, and referrals regarding teen mental health to prevent suicide deaths and promote wellness especially after natural disasters like hurricanes, earthquakes, or other stressful events like COVID-19 pandemic. It is important to note that since 2018, YAC identified anxiety, stress, and depression as youth foremost concerns of health, especially LGBTTQ+ youths and they encouraged pediatricians (AAP) the use of HPQ9 and CARLOS (CRAFT) as screening tools youth in the annual health visit. Although initiatives to address those issues had been implemented, challenges to identify, treat and refer are present today.

PR 2015 YRBSS was the first year to include a question that allowed youth to identify their sexual orientation as heterosexual or lesbian/gay/bisexual (LGB). MEU and SISA staff analyzed 2015, 2017, and 2019 data and observed depression, tobacco, alcohol and other drugs use, suicide ideation & planning, percent trends. Youth that identified themselves as LGB had a higher percent of risk behaviors than their heterosexual peers. As an example, 2019 PR YRBS (15-17 y/o) revealed that during the 12 months before the survey: 1. Considered attempting suicide (12.4% hetero vs 31.7% LGB), 2. Planned about how they would attempt suicide (9.5% hetero vs 27.4% LGB), 3. Actually attempted suicide (14% hetero, 24.9% LGB), and 4. Attempts resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (5% hetero, 27.4% LGB). This data may be related to inequities, stigma and bullying received by this group of youth. Dialogues with LGBTTQ+ youth will be done to share this data, listen to their concerns, include them in developing strategies to reduce those risks, and promote their health and wellbeing.

DOH's Mental Health and Substance Prevention Administration (Administración de Servicios de Salud Mental y Contra la Adicción or ASSMCA's) have Psychological Help Line (Línea PAS, Primera Ayuda Social) toll free numbers (1-800-981-0023 or 1-888-672-7622 TDD) to call or text and <https://lineapas.assmca.pr.gov> link 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, anxiety among other. In 2019-20, Línea PAS reported a total amount of 494,191 calls, three times higher than 2018-19's total 152,509 calls. Calls increased from January to June 2020 when earthquakes and pandemic lockdown affected all populations.

Línea PAS		Events
2019-2020	Monthly call calls received	
December 2019	17,099	
January 2020	40,635	Jan 7, 6.4 earthquake and aftershocks
February 2020	40,964	
March 2020	42,591	March 16, COVID-19 lockdown starts
April 2020	54,215	
May 2020	96,751	Still in lockdown
June 2020	125, 141	Still in lockdown

From this total amount, 2,898 were calls from 10-19 y/o and those related to suicide behavior were 2,848. The total amount of 2019-2020 youth calls for **suicide ideation and threat were 1,908** (541 from 10-14, 1,150 from 15-17 and 217 from 18-19 years). The total amount of youth calls with **suicide attempts** was **940** (309 were 10-14, 545 from 15-17 and 86 were 18-19 years). Línea PAS calls and 2015 to 2019 PRYRBSS data, alongside YAC opinions were considered to add NPM#9 to adolescent health domain's 2020-2025 Plan.

The percent of children with mental/behavioral health condition who receive treatment or counseling is collected through NOM 18. BRFSS 2017 was hired to include that indicator in 2017 in which parents reported 92.1 % of their 10-14 and 81.1% of their 15-17 y/o with mental/behavioral health conditions received treatment or counseling. MCAH did not include this variable in 2021 BRFSS because the Jurisdictional survey (JS) will be used instead. 2019 MCH-JS reported 46.6% parents answered their 15-17y/o received mental health treatment or counseling.

YHPP's three-year curriculum addresses healthy life skills and mental health: interpersonal relationships, effective communication and non-discrimination, self-esteem, handling emotions and changes during teen's brain development. Besides understanding youth brain development, it includes how it is affected by substances and emotions. The YHPs are encouraged to develop peer to peer activities to celebrate life and promote healthy lifestyles including balancing all areas of health and managing stressful events such as earthquakes through various tools. See YHPP's earthquakes activities

In 2019-20 special attention was given to identify behaviors or mental health changes in YHPPs population to be referred for assessment and follow up due to earthquake's effects. In January 2020, SISA created "After the Earthquakes Guide" that was offered in February and March 2020 to YHP. groups. It provided youth a safe space to ventilate the emotions experienced during the seismic events and to learn life skills tools to use as protective barriers when facing difficult and stressful life situations that may lead them to depression and suicidal behavior.

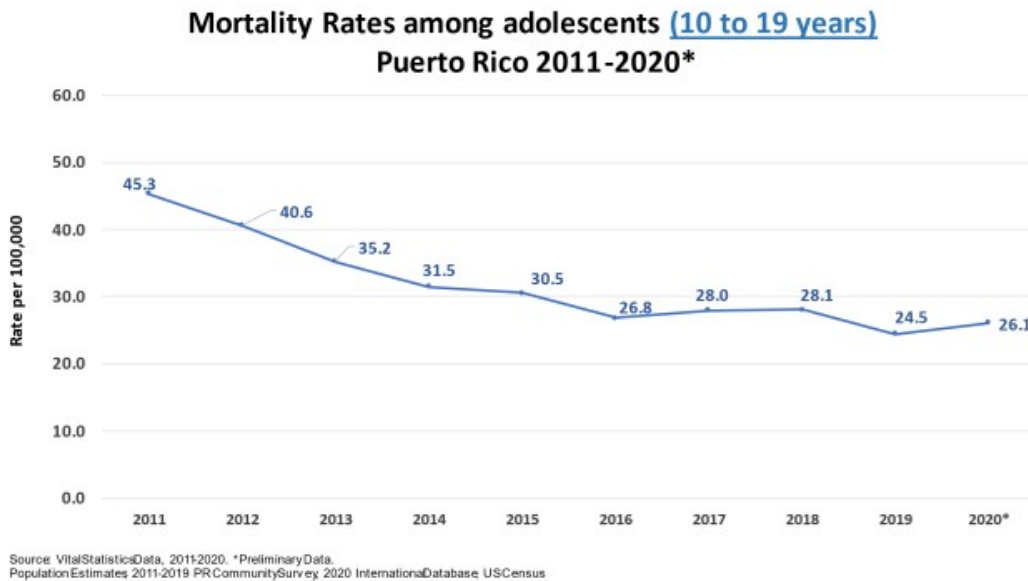
To increase SISA staff capabilities related to youth mental health, CE workshops about trauma informed, teen brain and bullying among others, continued. Mental health/ wellbeing activities are included throughout the three years of YHPP, but SISA staff added new tools to manage anxiety, stress, depression, and other MH issues in response to youths' concerns.

SISA's Associate Director was part of ASSMCA's Prevention Advisory Council (PAC) to *Strategic Prevention Framework Project: Partnership for Success* until its end in September 2020. Alcohol is the most prevalent drug used by PR youth and PAC goals were in accordance with MCAH adolescent priorities: 1. Strengthen prevention capacity and infrastructure; 2. Reduce alcohol use in 12-20 youths; 3. Reduce consequences associated with alcohol use in 12-20 y/o; and 4. Potentiate and align prevention resources. Though this collaboration SISA was able to share PYD strategies and collaborate with NGO's participants. YAC was asked by CAP to assess and provide their suggestions to a video directed to prevent youth binge drinking. The recommendations were taken into consideration and changes were made to the video.

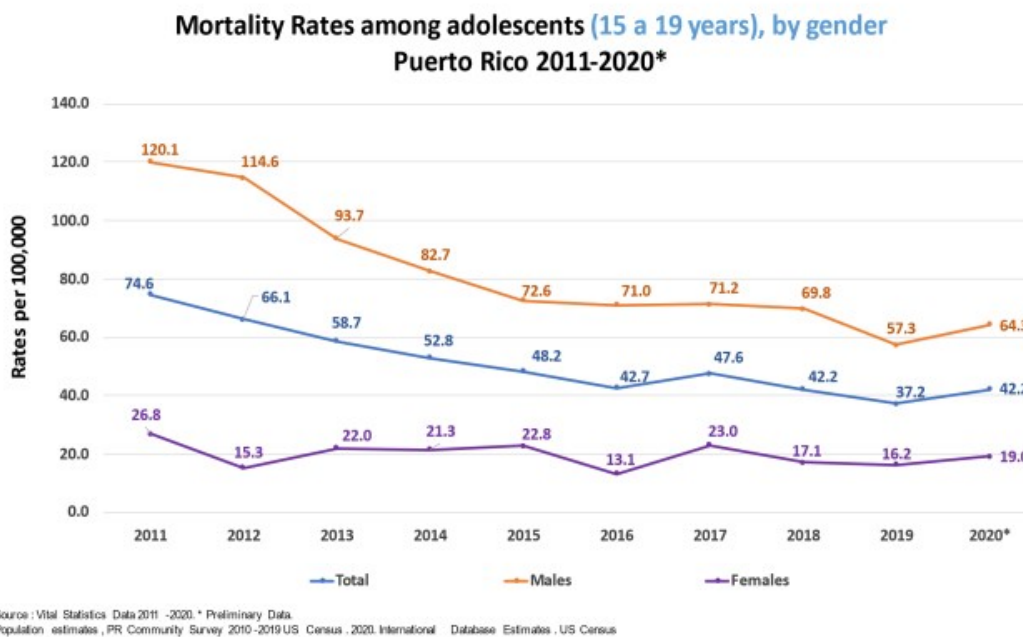
Mortality rates and morbidity in adolescents and young adults: a comprehensive adolescent health system approach is needed

The 2020 mortality rates in the following graphs are preliminary. To be final, the Institute of Forensic Medicine (IFM) needs to submit a report that is not yet available.

The 10-19 y/o mortality rates have shown a decreasing trend since 2011 which was 45.3/100,000, the highest in the past 10 years. In 2020, the 10-19 years mortality rate was 26.1/100,000 which represents a 42.4% decrease from 2011. However, there was a 6.5% increase from 2019's 24.5/100,000.

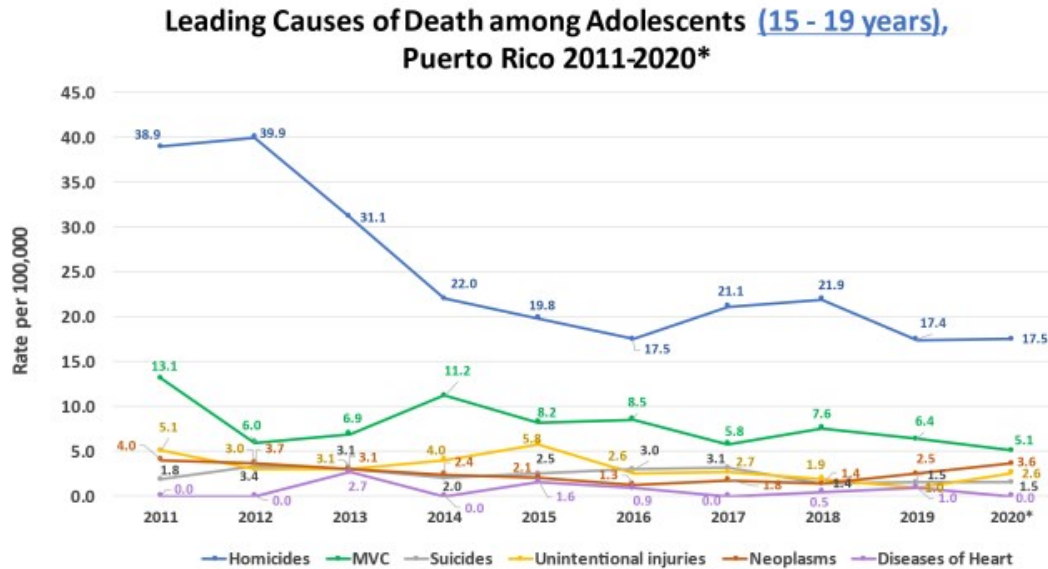


Mortality rates for 15–19-year males have been higher than females. In 2020, PR 15-19 y/o males had a mortality rate of 64.3 deaths/100,000, which triplicates the 19.0/100,000 females' same age death rate.



The mortality rate graph per leading causes of death in 15-19 y/o provides a better understanding of PR teen's most

common causes in the past ten years. Four of the first six main causes are external or violence related. The highest rate is for homicides, followed by motor vehicle crashes, then suicides and unintentional injuries. Fluctuating in the next two causes are neoplasm, heart disease and other internal causes.



Source: Vital Statistics Data 2010-2020. *Preliminary Data. Population Estimates PR Community Survey 2010-2019, 2020 International Database US Census

Regarding death by suicide, 2020 NVSS data for PR 15-19 y/o suicide death rate (NOM 16.3) shows a reduction since 3.1/100,000 in 2017. Rate for 2018 was 1.4/100,000 and the years 20

19 and 2020 reported 1.5/100,000 each, a slight 7% increase from 2018's. Only one death by suicide is too much, and more painful if it is a youth or a child. SISA staff receive trainings about teen suicide and its prevention.

To better understand PR youth mortality, MEU compiled data by common causes of death within age groups (10-14, 15-17, 18-19 and 20-24). Mortality rates for each age group per year have different causes associated to them. This data is important to identify deaths by age group and develop strategies to decrease the risks identified.

<i>Top 5 leading causes of death among adolescents and young adults by age group</i>				
<i>Rates by 100,000, Puerto Rico 2019</i>				
Rank	10-14 years	15-17 years	18-19 years	20-24 years
1	Neoplasms 1.6	Homicides 11.1	Homicides 23.9	Homicides 51.2
2	Congenital Malformations 1.6	Neoplasms 5.1	Motor Vehicle-Crashes 10.2	Motor Vehicle-Crashes 18.7
3	Motor Vehicle-Crashes 1.6	Motor Vehicle-Crashes 1.7	Anemias 1.2	Unintentional injuries 5.0
4	Homicides 1.1	Suicides 0.9	Unintentional injuries 1.1	Suicides 5.0
5	Suicides 0.5	Chronic Lower Resp. Diseases 0.9	Diseases of Heart 1.1	Neoplasms 3.2

Source: Vital Statistics Data 2019, PR Demographic Registry, PR Department of Health Population Estimates, 2019. International Database, US Census.

<i>Top 5 leading causes of death among adolescents and young adults by age group</i>				
<i>Rates by 100,000, Puerto Rico 2020*</i>				
Rank	10-14 years	15-17 years	18-19 years	20-24 years
1	Neoplasms 1.7	Homicides 7.1	Homicides 32.1	Homicides 46.0
2	Motor Vehicle-Crashes 1.7	Motor Vehicle-Crashes 5.3	Neoplasms 7.4	Motor Vehicle-Crashes 15.5
3	Cerebrovascular diseases 1.1	Anemias 1.8	Motor Vehicle-Crashes 4.9	Unintentional injuries 5.6
4	Unintentional injuries 1.1	Neoplasms 0.9	Unintentional injuries 4.9	Suicides 2.8
5	Homicides 0.6	Unintentional injuries 0.9	Suicides 3.7	Neoplasms 2.3

Source: Vital Statistics Data 2020, *Preliminary Data.

Population Estimates, International Database, US Census.

In 2019, the first cause of death for 15-17 y/o, 18-19 y/o, and 20-24 y/o was homicides. It was the 4th cause for 10-14 y/o. Neoplasms and congenital malformations were 1st and 2nd cause of death for 10-14, and neoplasms was 2nd to 15-17. Motor Vehicle Crashes (MVC) was 2nd cause for 18 to 24 and 3rd for 10-17 y/o. Unintentional injuries were the 3rd cause for 20-24 y/o and 4th to 18-19. Unintentional injuries include deaths by: drowning, burns and suffocation, among others. MVC data was separated from unintentional injuries to help delineate specific prevention strategies for each age group. Death by suicide was the fourth cause for 15-17 and 20-24, and 5th for 10-14 y/o.

In 2020, a similar pattern for the top five leading causes of death can be appreciated. Homicides continued to be 1st cause from 15 to 24 y/o. It was 5th for 10-14 y/o. MVC was 2nd for 10-17 and 20-24 y/o and 3rd to 18-19 y/o. Unintentional injuries ranged from 3rd, 4th and 5th in each age group. Death by suicide was 4th in 20-24 and 5th in 18-19 y/o.

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 to decrease youth deaths and promote health and wellness in all youth. 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. Although data is not available for PR, in the US only 39% of adolescents indicate they received any type of preventive counseling during their ambulatory visits. Although PR's 2018 Pediatric Preventive Healthcare Services Guidelines includes youth preventive counseling screening and assessment, efforts will be continued to increase its use by healthcare providers.

4. Develop PR Youth Friendly Healthcare Services Guidelines PR-YFHCSG

Youth friendly health care services are needed to effectively attract young people, meet their needs comfortably and responsively, and succeed in retaining them for continuing care especially the youth annual healthcare visit. The Guide is geared to promote friendly and respectful health services to all youth, including LGBTTQ & YSHCN.

YAC Friendly Youth Healthcare Committee continued working with SISA to provide youth insights in the development of the friendly healthcare guide. They worked to study friendly healthcare information and gathered YAC input identifying possible strategies and ideas for a healthcare provider to include in his/her office to make it youth friendlier like to paint mandalas on walls, use youth appealing colors, soothing music and provide capacity building to all office personnel about youth needs, privacy and confidentiality. They also reviewed literature and identified the need to study PR laws about youth rights and responsibilities in the healthcare visit to facilitate the access of youth to health services and identify gaps. Themes identified were confidentiality, parents consent among others. In the meantime they continued developing a questionnaire to assess youth friendly services to pilot in a youth clinic. Proyecto Nacer, a CBO that provide services to teen families, asked YAC to provide suggestions in the development

of a Youth Healthcare Mobile Unit in Bayamon. Two YAC committee advisors provided their input in the project facilities .

5. Create the PR Youth Guide for transitioning to adult health care services

Adolescents and young adults' annual preventive health care visit can be maximized if all youths are empowered with skills and information to advocate for quality health care services as they move towards adulthood. MCAH is addressing annual health visit and youth friendly healthcare services before developing the Transitioning Guide for All Youth since both will be intertwined in the Guide.

Meanwhile, communication with CSHCN personnel continued as they worked Got Transition pilot to guide YSHCN and their families in their journey towards adult health care in Pediatric Centers. Youth with special health care needs face the same kind of challenges as all youth, but they are more intense and therefore unique. Targeted supports and services must be in place to help them successfully transition into adulthood.

Since 2018, SISA Associate Director was integrated to the CYSHCN Transition to Adult Health Care Sub-Committee to continue her collaboration to enhance transition processes. YAC was invited to participate in CSHCN Transitioning to Adult Care Committee (TAC) in September 2019 meeting by CSHCN Family Representative and YAC agreed their voice and participation was important. During 2019-2020 two (2) YAC representatives participated in TAC meetings and collaborated with CSHCN personnel in performing a focus group with diverse capabilities in SER, Inc. a non-profit CBO, to assess educational material included in TAC Transitioning Guide.

Adolescent Health - Application Year

MCAHD maintained adolescent priority, to improve health and wellbeing of adolescents in its 2020-2025 Plan. The **NPM # 10**: Percent of adolescents' ages 12 through 17, with a preventive medical visit in the past year's will be continued but its strategies were modified in accordance with stakeholders' suggestions, **NPM#9** Percent of adolescents, ages 12 through 17, who are bullied, or bully others was added because MCAHD's HNA identified this was an important mental health/wellbeing youth issue that needed to be addressed.

Due to COVID-19 pandemic protective measures, schools remained closed and continue in virtual mode during most of 2020-21 academic year. Earthquake's aftershocks continued to affect families in the southwest. Despite these challenges, MCAHD continued to strive towards improving adolescent health and wellbeing. Adolescent domain's plan activities have been adapted to overcome the limitations due to those events and to offer needed services to youth.

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 2020-21 YHPP PYD initiative was not available through a virtual modality and its implementation at schools was not feasible. SISA Regional Coordinators and Central staff worked remotely to study its three years curriculum and adapt it to a virtual mode using DOE's TEAMS platform. At the same time, SISA provided virtual workshops on youth sexuality and gender, vaping and 2019 PRYRBSS findings to update SISA RC's knowledge and develop new YHPP activities. They attended youth serving entities CE webinars on adolescent health themes including bullying prevention, and the book "Teen Years Explained" was revisited through virtual group discussions. All YHPP documents were reviewed to include the virtual mode as an added implementation strategy. MCAH evaluator shared YHP's 2016 to 2019 pre and post profile questionnaire analysis evaluation with SISA Central Staff. Based on these findings, the questionnaire underwent an extensive review that will be used in 2021- 2024 cycle.

Since YHPP is a 3-year continuous project, a special one-year continuation curriculum was also designed to complete important themes with groups that started in August 2019 and at the present time would have been in their 3rd year. Adolescent brain development and the annual health visit were included because those groups were not able to receive them during lockdown. To address the effects of COVID-19 measures, decrease of social interactions and burden of virtual learning, a distinct initial meeting was created for all YHPP groups. It includes a special activity for youth to identify and ventilate 2020-2021 events that affected them, the emotions elicited and to receive tools to manage them, including breathing, relaxation, and gratitude exercises.

Two licensed social workers were hired as Regional Coordinators to complete SISA's seven required positions, one for each DOH region. With this addition, new YHPP school groups will start in schools of all 7 DOH regions. As of this writing, YHPP is ready to be implemented during 2021-2022 in three modalities: virtual, in presence or combined. DOE already issued an endorsement letter to the Project, that allow the program implementation.

Youth Advisory Council (YAC) meetings continued to be held virtually through Zoom platform during 2020-21. YAC advisor's participation continue despite been affected by the stress of pandemic uncertainty, heavy load of virtual classes, and new added responsibilities. The meetings facilitator provided opportunities to ventilate feelings and identify their needs. A workshop was provided by two University of PR Counseling post graduate students to share tools to manage stress and develop personal time management skills. Advisors shared their own techniques to handle stress like exercising and yoga, created videos and posted them in YAC's social media.

As 2021 began, four YAC advisors host FEMA's Region 2 webinar entitled "Addressing Mental Health of Young Adults during COVID-19" and shared their experiences during COVID-19 pandemic. It can be seen at:

<https://fema.connectsolutions.com/pafwbt7kspw7/>

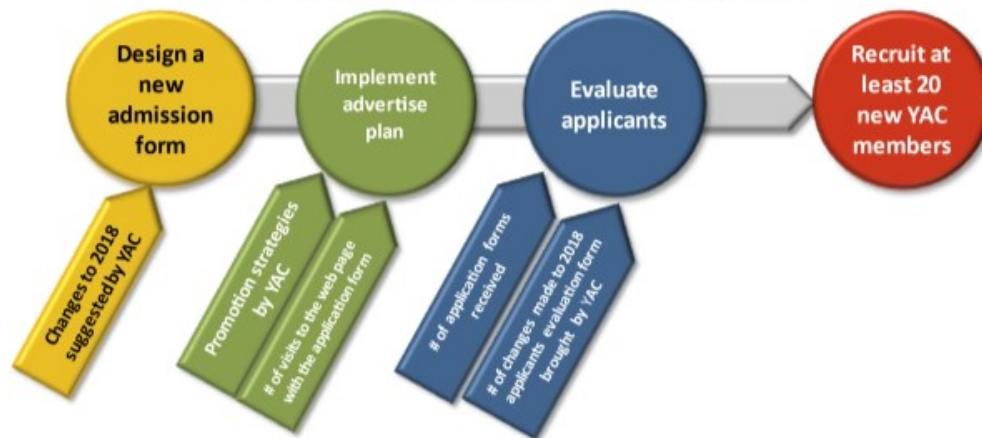
Besides COVID-19 pandemic, advisors brought their need to acquire knowledge about racism in PR and a virtual workshop was provided by CBO “Colectivo Ilé”. It acquainted them of PR history of Africans brought in slavery and the invisibility of PR’s black heritage in books and life. This led to discuss how YAC could contribute to eradicate racism.

YAC participated in two important activities in AMCHP 2021 “Global Meets Local: A Global Approach for Local Outcomes” virtual Conference: Their poster “COVID-19 and Quarantine also Affected Us Youth; Learn How We are Coping!” was presented by two advisors who shared YAC experiences, emotions and challenges during this critical time and, the mechanisms they used to cope. Two YAC advisors participated in “Sharing Global Innovations: Exploring Effective Practices from US Jurisdictions” Session panel with American Samoa and WHO Pacific Region representatives. “Changing the Perspective: The Road to have a Youth Advisory Council” highlighted YAC’s youth and adults cocreation process, the essential pieces to make it work and its accomplishments.

Puerto Rico Youth Advisory Council Activities, 2020-2021		
Received workshops about HIV/STD, Stress Management, Racism, Bullying, among others	Evaluated and offered suggestions to video about alcohol use and youth brain	Provided input to Adolescent Domain Activities: bullying prevention and annual visit
Continued participation in: 1. HIV Community Mobilization 2. AMHCP Planning Conference and 3. CSHN Transition to Adulthood committees.	Raised awareness about youth mental health and stress during Covid-lockdown (FEMA webinar and AMCHP 2021 poster)	Participated in AMCHP 2021 Virtual Conference: 1. Panel about territories innovative initiatives and 2. Poster about YAC and COVID-19 pandemic
Promoted youth annual health visit in the International Adolescent Health Week (IAHW)	Collaborated in the development of MCAH ‘s Women Preventive Health Pocket Education Guide	Created and posted videos in YAC social media: COVID-19, stress, things to do in pandemic times, gratitude, among others
Participated in YAC 2021-2023 new advisor’s selection process: review and change application form, designed convocation promotion strategies, youth and adult group assessment of youth applications, evaluation of youth performance in YAC’s Youth Encounter, design and prepare transition meeting.		

Due to COVID-19 pandemic protective measures the selection of new advisors was postponed by YAC and MCAHD in March 2020. since vaccination was not yet instituted. Advisors agreed to continue until new advisors (YAC 2021-2023) could be selected. During 2020-21, the selection process was reviewed and modified in accordance with YAC suggestions. They designed a new virtual interview to enhance an applicant’s assessment opportunity and developed a web page (<http://bit.ly/CAJPR>) to educate youth about YAC’s work with the collaboration of YAC 2016-18 advisors. A Facebook Live meeting was held to provide information about the application process and share their experiences as advisors.

**Youth voice and participation
Selection process of new YAC members, 2021**



YAC's youth/adult alliance will continue, and 2021-2022 plan will be designed once YAC 2021-2023 new advisors meet with those that stayed. Plan will include: 1. Integration of new members 2. Evaluate collaborations to be continued and, 3. Enhance activities directed to the objectives of MCAHD adolescent domain, among others.

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

PR Youth Health Literacy Toolkit was developed, piloted (YHPs, and summer camp students) and included in YHPP's 2nd year curriculum. It was designed as a face-to-face workshop with dynamic activities. During 2021-22 it will be adapted to a virtual mode as an alternative option for its implementation. A protocol for its implementation in non YHPs settings will be developed. Youth serving stakeholder entities will be reached to establish the collaborations to implement it.

3. Increase awareness of youth health and wellbeing issues including the annual healthcare visit through educational activities and multimedia campaign

Education activities directed to youth and adults about adolescent health and wellbeing that were offered in person were halted in 2020-21 due to COVID-19. Some SISA RCs were able to have virtual meetings with youths to discuss adolescent health themes through a collaboration with some DOE schools. MCAHD 2021-22 educational activities will be continued in person at schools and communities by SISA RCs, CHW and HE in each DOH region, following the protective measures to prevent COVID-19 issued by PR government and CDC. YHPs activities with their peers, school personnel/parents as well as YAC activities will be reestablished in accordance with school and community COVID-19 guidance procedures by DOE and DOH. During 2020-21 YAC continued to integrate minivelmaximo.com on their social media captions and participated in the International Adolescent Health Week promoting youth annual healthcare visit

Immunizations and adolescent health and wellbeing: Messages about the importance of immunizations are included in Year 2 YHPP's adolescent health visit meetings and at Nivel Maximo's webpage to dispel myths and educate youth and parents. MCAH personnel will continue to provide accurate and reliable information regarding youth immunization schedule including HPV's two dose requirement. Education about COVID-19 vaccines and its importance has been included in all DOH social media and health promotion. At the present time, COVID-19 youth vaccines are approved from 12 years of age and its promotion will be continued following CDC recommended youth age groups schedules. MCAHD personnel will continue participating in CE immunization updates offered by DOH Immunization Division and VOCES, a non-for-profit organization that promotes child and adolescent immunizations.

Sexual and reproductive health/wellbeing education efforts directed to youth and their parents will continue

through YHPP's health promotion education activities, Nivel Maximo's webpage and MCAHD Regional personnel. During 2020-21 MCAHD pediatric epidemiologist offered SISA's staff a workshop that included PR 2019 YRBSS findings and municipalities' teen birth rates by age groups to provide an overview of PR youth sexuality including LGB youth and better understand how to approach all youth needs. PR-Personal Responsibility Education Program (PREP) and Sexual Risk Avoidance Education (SRAE) ACYF grants adopted online modalities and will continue their EBPs implementations virtual in 2021-2022.

MCAHD secondary TPP efforts will continue the implementation of HVP, MIECHV and collaboration with CBOs that work with pregnant teen families. During 2020-21, MIECHV adapted its Healthy Families America Program to virtual modality and expanded them to another municipality but will start in presence home visits as COVID-19 measures allow.

Mental health and the annual health visit importance will continue to be addressed by SISA and MCAH personnel. To increase staff capabilities, CE workshops about adolescent health issues will be continued. Mental health/wellbeing themes are included throughout YHPP three years curriculum, and SISA personnel included additional activities and tools to manage anxiety, stress, depression, and other MH issues during YHPP virtualization process. All these themes were identified in MCAHD youth needs assessment as one of their main health concerns and will be further addressed through NPM 9 bullying prevention strategies and activities.

Mass Media Campaign: Although YAC's Media Campaign Committee worked with MCAHD's Curriculum Advisor to develop and finish www.minivelmaximo.com web page by December 2019, its promotion was postponed during 2020-2021. Government administration officials changed due to elections and DOH contracted a new Advertising Agency (AA) in June 2021. During 2021-2022, MCAHD, SISA personnel and YAC representatives will meet with AA and the DOH Communications office to continue reaching 10 to 19 y/o with media campaign to promote youth annual healthcare visit and adopt healthy lifestyles.

4. Implement PR Youth Friendly Healthcare Services Guidelines in a pilot project in a FQHC.

YAC will continue to work with SISA staff to design a pilot model of what a friendly clinic would be and pilot it in a PR FQHC. Communication with Caguas FQHC will be reestablished to determine their actual interest in the initiative and develop a Memorandum of Understanding to pilot it.

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

Collaboration with CYSHCN Transition Committee will continue with the participation of YAC advisors and SISA staff. A new Got Transition toolkit was identified to be used with all youth. It will be analyzed to determine its feasibility to PR youth, and pilot if deemed appropriate.

6. Develop and disseminate an Emergency Preparedness and Response Guide

Communication with DOH Emergency Preparedness Division will be established to develop an Emergency Preparedness and Response Guide for adolescents and young adults. The voice and participation of YAC members in this initiative will be essential

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

Bullying experiences are associated with several 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 17% of students from 9th to 12th grade in Puerto Rico reported being bullied (2019 PR-YRBSS). Every year, the YHPP recruit's 6th grade students to provide a series of

educational interventions. Recognizing bullying prevention 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 YHPs create activities each year to promote health and wellbeing with their peers and raise awareness in various topics, including bullying. The YHP complete a 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 would be able to manage events related to bullying or cyberbullying after the YHPP intervention. NPM #9 five strategies were presented during 2020-21 to YAC and MCAH Stakeholders to gather ideas for developing activities to address NPM#9. Some activities began to be implemented during 2020-21:

1. Review Youth Health Promoters Project (YHPP) curriculum to incorporate additional strategies/activities related to bullying prevention and mental health/wellbeing

- Capacitate SISA Staff with accurate information about bullying/cyberbullying and youth mental health conditions identification and prevention
- Define bullying /cyberbullying objectives to work through YHPP curriculum
- Design and validate questions about bullying and cyber bullying to incorporate in YHPP Pre and Post Profile Questionnaire
- Review YHPP Curriculum (Years 1, 2 & 3) to identify current activities directed to bullying prevention and identify areas to insert additional ones including youth to youth bullying prevention strategies
- Pilot and assess new bullying prevention activities within YHPP
- Provide the YHPP families information for early identification of bullying/cyberbullying and tools to manage them

2. Increase awareness about mental health/wellbeing and bullying/cyberbullying prevention in youth and adults, including parents and caregivers and healthcare providers

- Collect and analyze data, including PR YRBSS and ASSMCA's Consulta Juvenil, studies, laws, and initiatives related to bullying/cyberbullying in PR and abroad
- Identify government agencies, health professionals (social workers, counselors, physicians' associations, among others) NGO entities that work with youth and youth groups
- Develop an alliance or Collective Impact workgroup with identified government entities, MCAH collaborators, NGOs working with youth, YAC and other youth groups to address bullying/cyberbullying prevention and promote youth mental health & wellbeing
- Convene identified entities to: 1. Share collected data and 2. Establish a collaborative mechanism to promote the use of initiatives to prevent bullying/cyberbullying and promote youth mental health/wellness (including media campaigns) in their entities

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

- Identify initiatives to prevent bullying/cyberbullying at schools & communities and promote mental health wellbeing including youth helping youth initiatives, early identification of mental health (MH) issues as stress and anxiety, youth MH rights and access to services.
- identify culturally and linguistically competent initiatives (promising and evidenced) that could be piloted and used to prevent bullying/cyberbullying in PR through a collaboration with UPR Medical Sciences Campus's PR EBP Committee.
- Communicate with DOE to establish an MOU to develop and pilot an identified bullying/cyberbullying prevention initiative in a YHPP school

4. Develop Youth Intervention Guides to promote resilience and reduce youth trauma after stressful events

- Review “YHPP Intervention Guide after a Hurricane and Intervention after an Earthquake” to develop a Basic Intervention Guide to be used after other events such as, epidemics and emerging issues to reduce trauma and promote resilience after stressful events
- Pilot the developed guide with YAC and YHPs
- Adapt the intervention developed to virtual mode to reach youth in other settings besides schools
- Promote the Intervention to be used by youth, parents and other adults that work with youth

5. Develop and disseminate an Emergency Preparedness and Response Guide that takes into account the needs of adolescents and young adults

- Promote YAC’s participation in MCH Emergency Preparedness Toolkit work group
- Establish collaboration with PRDOH Security and Protection Division, PR Red Cross and other related agencies to work the Emergency Preparedness and Response Guide for adolescents and young adults

Children with Special Health Care Needs

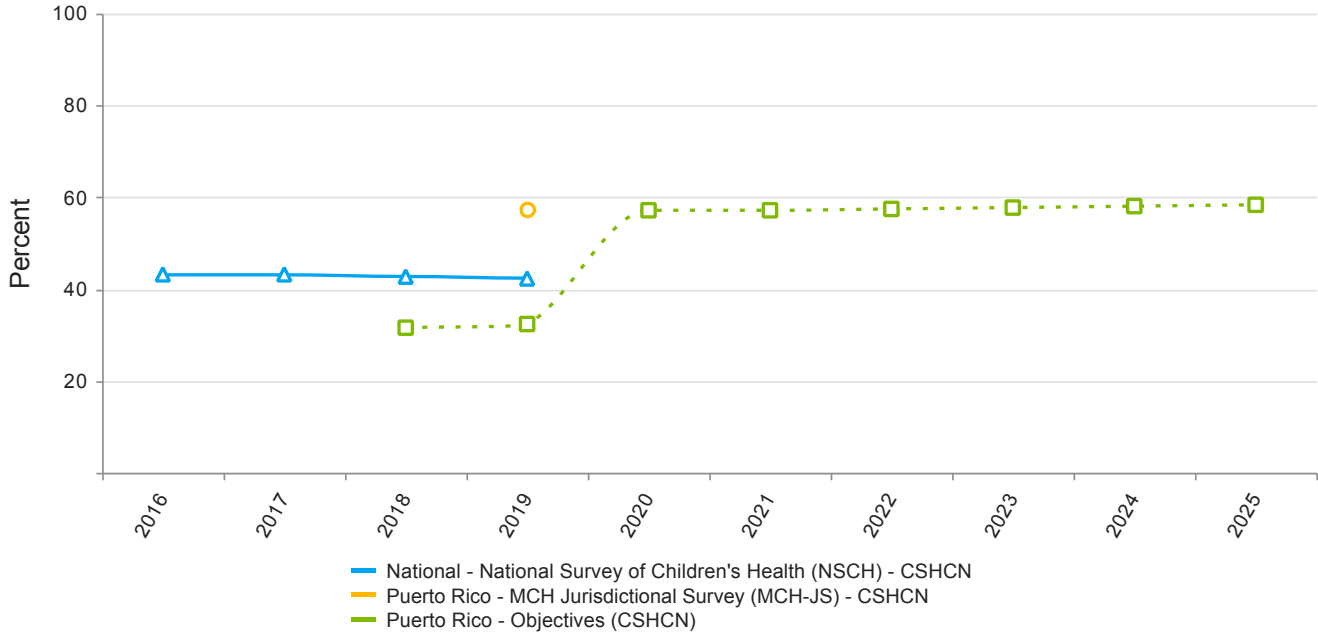
Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	MCH-JS-2019	13.1 %	NPM 11 NPM 12
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH	Data Not Available or Not Reportable	NPM 11 NPM 12
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	MCH-JS-2019	46.4 %	NPM 11
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	NSCH	Data Not Available or Not Reportable	NPM 11
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	MCH-JS-2019	72.8 %	NPM 11
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH	Data Not Available or Not Reportable	NPM 11
NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year	MCH-JS-2019	4.1 %	NPM 11
NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year	NSCH	Data Not Available or Not Reportable	NPM 11

National Performance Measures

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

Indicators and Annual Objectives



NPM 11 - Children with Special Health Care Needs

Federally Available Data		
Data Source: MCH Jurisdictional Survey (MCH-JS) - CSHCN		
	2019	2020
Annual Objective	32.4	57.1
Annual Indicator	57.1	57.1
Numerator	107,696	107,696
Denominator	188,735	188,735
Data Source	MCH-JS-CSHCN	MCH-JS-CSHCN
Data Source Year	2019	2019

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective			31.6	32.4	57.1
Annual Indicator	30.8	30.8	30.8		
Numerator	46,505	46,505	46,505		
Denominator	150,935	150,935	150,935		
Data Source	PR-CSHCN Survey	PR-CSHCN Survey	PR-CSHCN Survey		
Data Source Year	2015	2015	2015		
Provisional or Final ?	Final	Final	Final		

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	57.1	57.4	57.7	58.0	58.3	58.6

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 assigned to help them find the services they need.

Measure Status:		Active
State Provided Data		
	2020	
Annual Objective		
Annual Indicator	74.6	
Numerator	223	
Denominator	299	
Data Source	Medical Home Family Index Survey	
Data Source Year	2021	
Provisional or Final ?	Final	

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	75.3	76.0	76.7	77.4	78.0

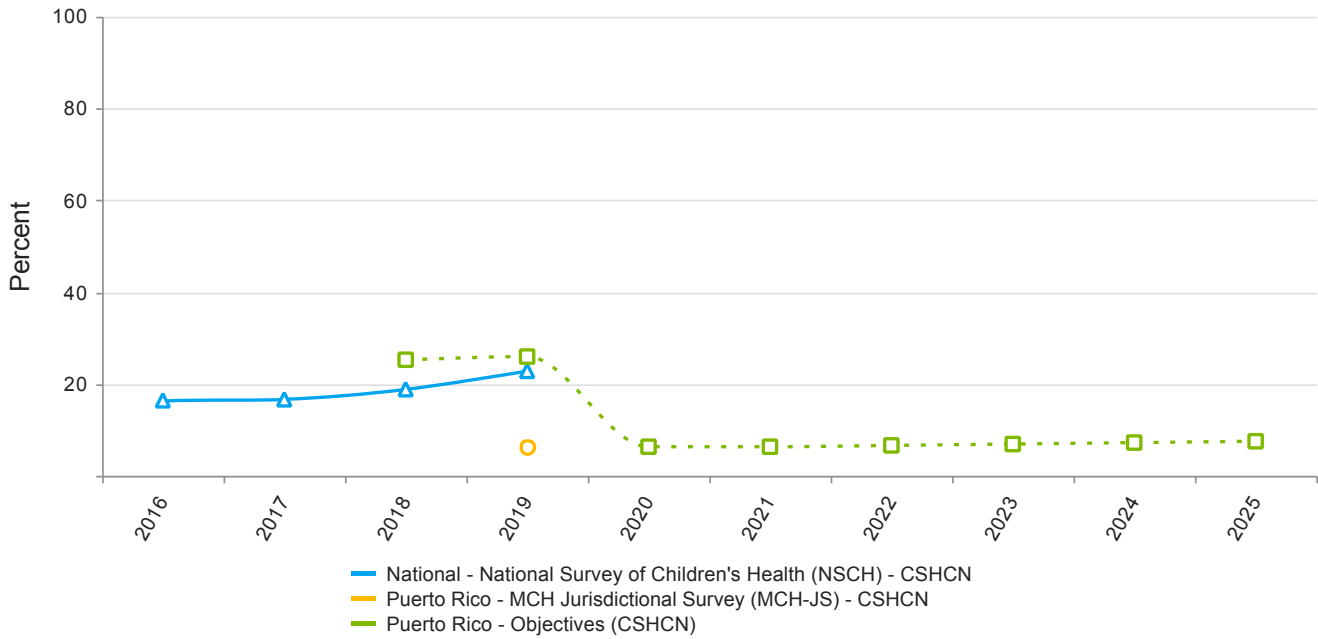
ESM 11.2 - Percent of families at the CSHCN Program who agree that their child has a better health status thanks to the efforts of the care coordinator to help them access the needed services.

Measure Status:		Active
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Baseline data was not available/provided.

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	0.0	0.0	0.0	0.0	0.0

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



NPM 12 - Children with Special Health Care Needs

Federally Available Data		
Data Source: MCH Jurisdictional Survey (MCH-JS) - CSHCN		
	2019	2020
Annual Objective	26	6.4
Annual Indicator	6.4	6.4
Numerator	5,714	5,714
Denominator	89,053	89,053
Data Source	MCH-JS-CSHCN	MCH-JS-CSHCN
Data Source Year	2019	2019

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective			25.3	26	6.4
Annual Indicator	24.7	24.7	24.7		
Numerator	16,226	16,226	16,226		
Denominator	65,560	65,560	65,560		
Data Source	PR-CSHCN Survey	PR-CSHCN Survey	PR-CSHCN Survey		
Data Source Year	2015	2015	2015		
Provisional or Final ?	Final	Final	Final		

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	6.4	6.7	7.0	7.3	7.6	7.9

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
Annual Objective		
Annual Indicator	48.5	71.8
Numerator	128	173
Denominator	264	241
Data Source	Regional Pediatric Centers	CSHCN Program database
Data Source Year	2018-19	2019-20
Provisional or Final ?	Provisional	Provisional

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	71.8	72.5	73.2	73.9	74.7	75.4

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
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Baseline data was not available/provided.

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	0.0	0.0	0.0	0.0	0.0

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					
	2016	2017	2018	2019	2020
Annual Objective		0	15.3	16	11.2
Annual Indicator	79.1	15.3	15.3	11.2	11.2
Numerator	382	3,610	3,610	1,840	1,840
Denominator	483	23,581	23,581	16,413	16,413
Data Source	Autism Registry	PRHIA	PRHIA	MCH-JS	MCH-JS
Data Source Year	2016	2017	2017	2019	2019
Provisional or Final ?	Provisional	Provisional	Provisional	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	11.2	11.3	11.4	11.5	11.6	11.7

SPM 2 - Prevalence at birth of neural tube defects.

Measure Status:				Active	
State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		9.2	8.4	6.4	6.5
Annual Indicator	9.2	8.5	5.3	5.6	9.3
Numerator	26	24	13	12	19
Denominator	28,326	28,339	24,310	21,492	20,431
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	2016	2016	2017	2018	2019
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional	Provisional

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	9.2	9.2	9.1	9.1	9.0	9.0

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 58.3% the percent of CSHCN that have a medical home. (Baseline: MCH-JS: 57.1%)

Strategies

Enhance tele-health capacity building at the CSHCN Program through workshops, meetings, procedures' updates, and technical assistance.

Promote the NCQA family-centered connected care model at the CSHCN Program to collaborate with the medical home neighborhood development.

Develop a grand system mapping of health care and community resources for families and providers.

Establish collaboration with the Oral Health Program of the DOH, and identify FQHC who offer preventive oral health services for children.

Give follow-up to results of the pilot project "Identification and Monitoring of CSHCN Families' Needs" at the Bayamon RPC for decision-making.

Continue collaboration with the PR-Neonatal Screening Lab.

Continue with the EHR system implementation and staff training at the CSHCN Program.

Continue implementing the quality improvement activities identified and monitored by the CSHCN Program's Quality Improvement Committee, integrating strategies of the "Standards for Systems of Care for Children and Youth with Special Health Care Needs" (Version 2.0).

ESMs

Status

ESM 11.1 - Percent of families at the CSHCN Program who report that they "always" have a care coordinator assigned to help them find the services they need. Active

ESM 11.2 - Percent of families at the CSHCN Program who 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 7.6% the percent of YSHCN who receive the services necessary to transition to adult health care. (Baseline: MCH-JS: 6.4%)

Strategies

Develop and implement a survey to understand the perceptions of pediatric physicians and adult physicians about the transition from pediatric to adult healthcare, and how aware they are of its importance.

Develop and distribute educational material for pediatricians and physicians for adults about transitioning to adult health care.

Provide trainings to the pertinent staff from the CSHCN Program to train and improve their skills in educating YSHCN with potential for independence.

Identify FQHCs with physicians and specialized physicians for adults who are willing to follow up YSHCN, and explore possibilities for collaboration.

Continue enhancing the six core elements of the "Got Transition" model at the Pediatric Centers.

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

Revise and disseminate Protocols for the early identification of ASD: Surveillance and Developmental Screening 0-66 months of age (Protocolo Uniforme para la Identificación Temprana: Vigilancia y Cernimiento 0 – 66 meses de edad), and the Uniformed Protocols for ASD diagnosis (Protocolos Uniformes para el Diagnóstico del Trastorno del Espectro del Autismo) through conferences, training, electronic messages and press.

Distribute the Passport to Health (Pasaporte a la Salud) at the Office of Vital Statistics (Demographic Registry) to parents of newborns.

Provide training and orientation to health care and childcare providers and programs to promote the use of the Passport to Health by parents.

Distribute printed and digital educational materials on developmental milestones and early signs of ASD to centers and providers that serve families with infants and toddlers (pediatricians, PCPs, childcare centers, Department of Education).

Distribute educational materials among health care providers to promote ASD screening at 18 and 24 months of age, as mandated in PR-EDSPT.

Provide training and orientation to health care providers that diagnose ASD to promote the use of the ASD Registry, and inform on the importance of registering patients with ASD diagnosis.

Continue updating the ASD Registry database as needed.

Provide information about 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.

Advocate for the inclusion of the 4 steps of early identification: 1- Parent-engaged developmental monitoring 2- Developmental and autism screening 3- Referral to early intervention services 4- Receipt of early intervention services for children birth to 5, across early childhood systems in the State Preschool Development Grant Birth to Five.

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

Give orientation to families affected by NTDs about prevention of recurrence.

Follow-up families affected by NTD births and link them with the services they need.

Continue the partnership with FQHCs to educate their health care providers on the importance of promoting the folic acid consumption as a preventive strategy for birth defects.

Update and publish the BDSPPS Annual Report, and distribute the report to hospitals, health care providers and stakeholders.

Update and create educational material addressed to women in reproductive age and distribute it using different means such as the PR-DOH webpage.

Increase awareness by health promotion using the PRDOH social media.

Children with Special Health Care Needs - Annual Report

NPM 11: Increase the number of CSHCN who receive regular ongoing comprehensive health care within a medical home.

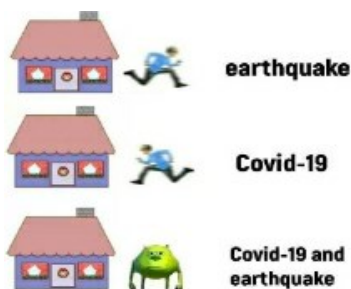
Based on the 2019 MCH-JS, 57.1% of CSHCN in PR were served in a medical home in 2019; 91.7% of CSHCN have a personal doctor; 97.4% have a usual place for preventive care; 95% have a usual place for sick care which for 92.3% was the same place; 61.2% reported they had no problem getting a referral during the last 12 months, 86.5% received family-centered care, and 83.9% received effective care coordination. These indicators should be interpreted with caution because of a CSHCN small sample and confidence interval width >20%.

Previous PR medical home data (2010 and 2015) was based on an adaptation of the National Survey of CSHCN, showing a medical home annual indicator increase from 24.7% to 30.8%. These indicators are not comparable to the MCH-JS 2019 indicators due to the difference in surveys' methodologies. Annual objective for 2020 was based on PR- CSHCN Survey, so it is not possible to determine if it was met. Medical home baseline indicator for 2020 is based on the 2019 MCH-JS (57.1). The Title V CSHCN Program continues its efforts to offer accessible, coordinated, and comprehensive health care services to CSHCN and families.

The reporting year 2019-2020 is an atypical and challenging year due to the earthquake in the Island's southwest region followed by the COVID-19 pandemic. After the 6.4 Richter scale earthquake on January 7, 2020, there were multiple daily earthquake sequences as reported by the PR Seismic Network. This imbedded fear and insecurity in the general population, especially those living in the southwest. Families in need were sent to government shelters, while many others set up tents and lived outside their homes because of fear and distress that their roofs would fall. The last situation was identified by the government as "displaced shelters".

Due to the earthquake sequences, houses and other buildings in the southern region underwent engineering structural evaluations and many were declared partially or completely damaged. On August 2020, the Ponce RPC was declared an unsafe building due to distortions in the floor slabs. Thankfully, the damage is reparable but will take time. In the meantime, staff has been moved to a smaller area in a nearby building. The staff has prepared the physical space to receive and provide services to CSHCN and their families.

In March 2020, when a general lockdown and curfew were mandated due to the COVID-19 pandemic, families in the south (especially in Guánica) were still living in displaced shelters. Municipal governments intervened to help these families live under a roof. It was difficult for people to manage earthquakes and the pandemic lockdown at the same time, and with the typical Puerto Rican sense of humor, the following caricature was posted on social media:



When the first case of COVID-19 was reported in PR in March 2020, the PR SET-NET included COVID-19 affected pregnancies in their surveillance activities. The PR SET-NET team was assigned to develop and implement a database management system and protocols to identify and de-duplicate individuals with multiple positive COVID-19 test results, increasing the accuracy of the reported number of COVID-19 cases to the general public. The team also drafted the Secretary of Health's Administrative Order No. 426, March 18, 2020, requiring the mandatory report of pregnant women with positive COVID-19 tests to the SET-NET. The PR SET-NET collaborative agreements were updated, and all partners and medical providers were informed about the inclusion of COVID-19 pregnant cases

during the visits for data abstraction.

Below is a report of main accomplishments and challenges based on medical home indicators.

Reach-out and care coordination

Due to the public health emergencies, the annual plan for year 2019-2020 was modified. The priority was reaching out to CSHCN families following the earthquakes, and during and after the lockdown to support access to care.

With the collaboration of the PR-DOH Assistant Secretary for Health Promotion and the Assistant Secretary for Environmental Health, the CSHCN Program at the central level provided support for the identification of CSHCN families in “displaced shelters” in the southwest amid the earthquake sequences. This initiative known as “Coordinated Response” took place during the first three months of year 2020. Telephone calls by the PR-HDDDT and PR-UNSHP care coordinators were made to community leaders and persons in charge of displaced shelters to ascertain if there were families of CSHCN. Orientation was offered to families on the importance of not delaying the newborn screening tests, where to go for screenings, and contact information for coordinating screenings. The TDCY Registry coordinator also collaborated with this initiative.

Regarding the CSHCN Program families, the PR-HDDDT Program coordinator in partnership with the Nutrition Clinic of the Metro RPC, contacted families of children with PKU and other metabolic disorders to ensure they had adequate supplies of their child’s medical formula and to identify families with barriers to access them. Forty-six (46) families received support from the HDDDT Program coordinator.

Follow-up to the 255 children and youth registered in the TDCY Registry at the time, including those dependent on dialysis, was continued. Thanks to the collaborations developed with public, private and community entities, this population received needed equipment and supplies. These included: 14,000 face masks, 34 electric generators, two (2) O₂ tanks, four (4) solar panels, one hundred (100) solar lamps, five (5) wheelchairs, thirty two (32) trays of intermittent urinary catheterization, and twenty (20) cysto-bladder irrigation sets. Some of the collaborators were: Direct Relief, the Red Cross, APNI, Child Foundation, Abbot, and a community physician.

During this reporting year, the PR-BDSPSS social worker contacted 308 families identified as having babies born with a birth defect. Families were offered guidance and counseling on diagnoses and available services. One hundred and thirteen (113) were referred to community services, including: the CSHCN Program, Part C Early Intervention, foundations, associations, and pediatric specialists. In addition, forty-five (45) children received care coordination.

Because of the COVID-19 pandemic restrictions and curfews, infants born during this period of time who did not pass the neonatal hearing screening confronted the following barriers: 1) many hearing clinics were closed until they were able to establish a pandemic protocol, and some reopened with a policy of not receiving babies; 2) as hearing clinics began to reopen, the number of appointments for ABR evaluation was reduced, resulting in untimely appointments; and 3) many families were hesitant to go to an appointment for fear of exposing their infant to COVID-19. As the hearing clinics began to reopen by the end of May 2020, care coordination for the hearing evaluations was reestablished.

Accessibility to CSHCN Program’s services

As a result of policy changes and regulatory waivers from the Centers for Medicare & Medicaid Services (CMS) in response to the COVID-19 pandemic, the PR Government revised the local tele-medicine regulations authorizing the tele-health modality for specific health care services. This allowed the CSHCN Program to offer services in a two-way remote modality: from provider’s home to family’s home.

A remote services protocol was developed and implemented expeditiously at the CSHCN Program in collaboration with RPCs’ directors/administrators, supervisors, health care providers and service coordination providers. Schedule forms, remote supervision forms, forms to report completed work, and remote services consent letters

were created. Trainings about private health information (PHI) management, encryption, and the HIPAA Law, among other technical assistance topics, constituted a critical and key support since most of the health care providers would be using their own technological equipment at their homes. The trainings were offered by the EHR team. Trainings on video and web conferencing applications were also provided, as well as customized technical assistance for individual providers and families as needed. A Telework Survey was carried out during the summer of 2020 to know providers' and families' perspectives and experiences on the new modality.

Starting in April 2020, CSHCN Program families received remote services via a variety of virtual communication applications depending on the availability, and on the type of service to be provided (health care, enabling, educational or care coordination). Virtual communication alternatives ranged from videoconference (Zoom, Teams or Doxy), telephone and institutional emails. SMS and WhatsApp were used with some families for coordination, educational or support purposes. An approximate total of 1,025 children and families were served remotely during this period. Services offered were pediatrics and nursing, physical and occupational therapy, speech and language pathology, nutrition, psychology, social work, and care coordination.

Data on the number of children served at the CSHCN Program, and the services they receive, has been collected manually for years and then entered to a software program, mostly in Excel. During the pandemic, the collection of this data was interrupted temporarily. For this reason, the number of children served virtually is an approximate. The Program's data capacity is being addressed by the creation of a REDCap electronic platform for each RPC, and staff training on data entry and data quality. This initiative started in October 2020. The EHR team oversees it and uses it to prepare staff for the transition to the EHR system.

On June 15, 2020, the PR Governor announced a gradual return to public workplaces in compliance with the CDC and OSHA safety guidelines. The CSMND developed a COVID-19 Exposure Control Plan for the partial reopening of the RPCs and Autism Centers. This plan addressed the monitoring and assessment of staff, number of employees at the workplace, infection control measures, disinfection and cleaning, personal protective equipment, among others. By September 2020, most of the centers were offering face-to-face services in a partial capacity, and since March 2021 all centers are providing face-to-face services on a controlled basis.

Pediatrics specialty clinics that were suspended due to the lockdown at the beginning of the pandemic were resumed in August 2020. Some were resumed virtually, others in a hybrid modality and others in a face-to-face modality. The Metro RPC specialist and sub-specialist unit offered a total of 497 face-to-face and virtual health services during August and September 2020.

Lessons learned

RPCs administrators informed that the number of families served during the pandemic increased in comparison to previous years, in part because families with failing to comply with their child's appointments could be reached virtually. There are many reasons for family's noncompliance with appointments, that the CSHCN Program was addressing with an appointment reminder protocol before lockdown. However, virtual services have seemingly shown improved results on reach-outs to families who present these difficulties, and consequently has helped increase their child's access to health care.

There are CSHCN who, because of their condition, need face-to-face services in order to achieve established goal/s. Other CSHCN may benefit more from a hybrid service modality, and still others may achieve goals through remote services. Evaluating each family individually in order to determine the best modality, may benefit both the CSHCN and family. It may also have a positive economic impact on certain families.

Families with a child with a complex condition who receive multiple services pointed out that it could be bothersome to receive multiple remote interventions in one day. A family recommended that health care providers should coordinate remote interventions using strategies where two or more disciplines services are integrated.

Through the 2020 CSHCN-Telework Survey, some families stated that clinical evaluations and developmental

screenings should be performed in the face-to-face modality, especially in cases with complex conditions. Some parents and caretakers whose children were evaluated virtually, expressed they would have preferred a face-to-face evaluation. Some expressed doubts or uncertainties about the virtual evaluations' results.

Awareness about the benefits of using electronic platforms has increased in the CSHCN Program's providers and families (CSHCNP- Telework Survey, 2020). Seventy two percent (72.2%) of staff that participated in the survey reported they prefer the hybrid modality: the combination of both face-to-face and remote services. From the perspectives of families, the preference between face-to-face modality vs the remote modality varies depending on the condition of the child, distance from the RPC, number of services to receive, and the sense of safety and security. For more details about CSHCNP remote services, please refer to the CSHCN 2021 HNA Update.

EHR implementation activities

The configuration of EHR electronic modules continued during the reporting year. To make this possible, meetings with the following stakeholders took place: Metro Autism Center, ASEM's board of directors, and the Office of Informatics and Technological Advances (OIAT, Spanish acronym) of the PR-DOH. Concurrently, the identification of templates and forms used in the RPCs medical paper records continued in order to update and digitalize them. Some EHR activities were postponed during the pandemic lockdown, and the EHR team was assigned temporarily to offer trainings and technological assistance during the telehealth system implementation. The team offered a total of twelve (12) trainings to the CSHCN Program staff on the following topics: 1) the HIPAA Law, 2) Protected Health Information (PHI), 3) safe practices during remote work, and 4) the Zooms, TEAMS and Doxy.me applications. These trainings were offered virtually and helped advance staff preparedness for the use of EHR and telehealth.

In August 2020, the PR-DOH HIPAA Legal Office requested that Office 365 accounts be created for staff providing remote telehealth services through the Microsoft Teams Apps and using MS OneDrive to store documents containing protected health information (PHI). MS Teams App is the current platform used mostly by the CSHCN Program staff to provide telehealth services and other remote services at the Division.

Although the EHR system is still not fully implemented, electronic billing processes for all RPCs have been implemented at the Central Level through Secure Claim. Currently, the EHR team continues the activities for the implementation of the system. It is expected that the EHR system will go live at the end of 2021. Afterwards, the EHR work team will continue offering technical assistance and support to the RPCs and Autism Centers on the correct use of the EHR system.

ESM 11.6: Percent of CSHCN families at the Program who report that their need of information was or is being addressed. The objective for this ESM was 90%. Target was not met (83.3%).

This ESM is from the 2016-2020 five-year cycle. The MCH Evidence Center identified this ESM as a quality of effort measure. It rates the number of different types of information needs that were provided to families by the CSHCN Program staff, as reported by 300 CSHCN Program families from March to May 2021, through an adapted Medical Home Family Index. Most needed information, as reported by families, were: 1) "health care services that will help my child and where to get them" (88%); 2) "how to access a pediatric specialist" (83.3%) and 3) "my child's condition" (80.6%). Information mostly provided to families by program's providers was: 1) "child's developmental milestones" (92.6%); 2) "child's condition" (92.1%); and 3) "health care services that will help my child, and where to get them" (90.1%). Less provided information as reported by families was: 1) "where to get services or equipment not covered by the health plan and/or financial assistance" (68%), 2) "how to access a pediatric dentist" (71.6%), and 3) "where to find support resources in the community such as family organizations and family support groups" (73.3%). Overall, 83.3% of families reported having received the needed information.

This ESM had a decrease in comparison to year 2018 (90.5%), even though an increase was expected due to efforts carried out by the QIC and the CSHCN Program to improve information provision to families. The decrease may have been due to a change of information needs during the pandemic lockdown. The ESM was inactivated last year but will continue to be monitored internally at the program.

ESM 11.7 Percent of families that report they feel more confident managing child's condition thanks to the information and support received at the CSHCNP. The objective for this ESM was 94.5%. The target was met (96.3%).

This ESM is from the 2016-2020 five-year cycle. The MCH Evidence Center identified it as a quality of effect measure, which is the strongest of the four types of measurements based in the MCH Evidence Center's quadrant. This is an important measure because it estimates the impact of the CSHCN Program on family's empowerment and confidence on the child's management. Ninety six percent (96.3%) reported feeling more confident. The ESM improved in comparison with 2018 (93.9%). In addition, 97.3% of families reported being satisfied or very satisfied with the support received from the Program's providers. Although this ESM will be inactivated for next year report, it will continue to be measured at the CSHCN 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 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. This is a significance difference between CSHCN and non-CSHCN children. Considering that transition processes may be more complex for providers treating YSHCN, these results suggest that there are gaps in the capacity and skills of health care providers who work with health care transition. However, these indicators have a confidence interval width greater than 20% and are based on a CSHCN small sample, so these results should be interpreted with caution. On the other hand, 2020 HNA participant CSHCN families and key informants did expressed about barriers for a successful transition to adult health care specially related to lack of information, support, and planning from part of the health care providers.

Over half of CSHCN served at the RPCs are in the range of 1 to 5 years of age (56.2% in year 2019-2020). During that same period, 6.7% of CSHCN served were between ages 12 to 21. Age range percentages vary across RPCs, but the Metro RPC has by far the largest number of YSHCN. Some RPCs may not have any active youth for periods of time, such as the Fajardo RPC. The Autism Centers serve children up to 36 months of age; therefore, they do not offer transition to adult health care services. The Autism Centers refer eligible children to RPCs after they turn 3 years of age. Youth with ASD who have additional medical conditions and are receiving services at RPCs may receive support for their transition to an adult health care provider.

During this reporting year, the CSHCN Program continued implementing the Got Transition model, although with limitations due to the pandemic. In general, the CSHCN Program administrators informed that the program's Transition Policy was provided to eighty-eight (88) families and a total of one hundred eight (108) YSHCN were identified and registered in the transition tracking system. Transition readiness assessment was administered to one hundred seventy-three (173) YSHCN, and one hundred seven (107) transition plans were completed. Only Metro RPC reported the completion of transitions to the adult health care provider; a total of twenty-three (23). This RPC had the highest number of YSHCN during reporting year (143). Eighteen (18) YSHCN and families completed a transition satisfaction survey.

The Health Care Transition (HCT) Committee continued its meetings in a virtual modality. The HCT Committee is comprised of at least one representative from each RPC. Members represent a range of disciplines: pediatricians, social workers, care coordinators and psychologists. Each member is responsible to share the Committee's missives and delegate activities at his/her RPC. Each RPC's care coordinators and social workers worked on expanding the adult community resources directory by identifying new resources, specifically, physicians that serve the adult population. RPCs administrators reported the addition of one hundred thirty-eight (138) physicians to the directory. This includes general practitioners, family physicians, internists, cardiologists and rheumatologists. Staff will be confirming which physicians are available and willing to serve YSHCN.

ESM 12.7: Percent of families with YSHCN at the RPCs who were successfully contacted to notify them about the importance of transition to an adult health care provider. The objective for this ESM was 10%. The target was met

(44.8%).

This ESM was identified by the MCH Evidence Center as a quality of effort measure. Even though the target was met, the 2020 result (44.8%) is not comparable with the previous result 2019 (67.3%) for two reasons: 1) data source for the first report was only the Bayamon PC as it was the only center implementing the second core element of Got Transition (tracking), while data source for the second report is the seven RPCs; and 2) data collected for the first report included the entire year, while data collected for the second report did not include the whole year due to the Covid-19 pandemic lockdown. This ESM has been inactivated but will continue to be monitored by the Program.

ESM 12.8: “Percent of YSHCN who receive care at the RPCs and has completed a transition readiness assessment”. Annual objective for this ESM was 27.7%. The target was met (71.8%).

The MCH Evidence Center identified this ESM as a quality of effect measure. Also, the RPCs showed an improvement in this ESM as compared to the previous result (48.5%). This ESM continues active for the current five-year cycle as ESM 12.1.

SPM 1: Decrease the age when children at risk for Autism Spectrum Disorders receive their first diagnostic evaluation

The Children with Special Medical Needs Division (CSMND) staff continue to integrate the priorities of the Autism Spectrum Disorders (ASD) Steering Committee with the strategies presented in the State Action Plan for October 2019 to September 2020: 1) disseminate the “*Protocolo Uniforme para el Diagnóstico del Trastornos del Espectro del Autismo*” through conferences, electronic messages and the press; 2) distribute the “*Pasaporte a la Salud*”, a booklet for parents to document their child’s health information and monitor health services and development, to parents of newborns at the Vital Statistics Office; 3) provide information about early signs of ASD in the DOH’s web page and APNI’s web page; 4) continue participating in professional activities to provide capacity building for professionals; 5) distribute educational materials in centers that serve families with infants and toddlers (pediatricians, PCPs, child care centers, Department of Education); 6) distribute educational materials among health care providers, and promote ASD screening at 18 and 24 months of age, as mandated in PR-EPST; 7) promote the use of the ASD Registry and the importance of registering patients with positive ASD diagnosis among health care providers; 8) update the ASD registry database; and 9) promote the use of the “*Screening Certification Form*” among pediatricians, PCPs and other health care providers.

The ASD Steering Committee was created by Law #220 of 2012, Law for the Well-being, Integration and Development for People with Autism (Ley BIDA, Spanish Acronym). Under the leadership of the Title V CSHCNP of the CSMND, the Committee develops yearly Action Plans for the Law’s implementation based on the following processes: development of alliances, analysis and planning, designs of evidence-based pathways, clarification and procurement, and provision of quality services. The ASD Steering Committee’s 2019-2020 work was focused on the following priorities: strengthening early identification and diagnosis of children with ASD by increasing referrals to autism centers that focus on ASD diagnosis of children under age 36 months of age, strengthening the Department of Health’s ASD Registry, establishing an integrated system of interventions for children under 3 years of age, identifying evidenced based practices for planning interventions, promoting competencies for professionals who work with children with ASD and their families, and supporting professionals to comply with their discipline’s competencies. At the same time the CSMN Division continued working toward lowering the age at which children with ASD are diagnosed. The following table aligns the strategies from the State Action Plan with priorities of the ASD Steering Committee. The efforts and activities directed toward these priorities are presented below.

Strategies from State Action Plan	Priorities of ASD Steering Committee
-Disseminate the “ <i>Protocolo Uniforme para el Diagnóstico del Trastornos del Espectro del Autismo</i> ” through conferences, electronic messages and the press	<ul style="list-style-type: none"> • Early identification (Monitoring, screening and diagnosis)
-Distribute the “ <i>Pasaporte a la Salud</i> ” at the Vital Statistics Office to parents of newborns. This is a booklet for parents to document their child’s health information and monitor health services and development	<ul style="list-style-type: none"> • Early identification
-Provide information about early signs of ASD in the DOH’s web page and APNI’s web page	<ul style="list-style-type: none"> • Early identification
-Continue participating in professional activities to provide capacity building for professionals	<ul style="list-style-type: none"> • Early identification • Professional competencies
-Distribute educational materials in centers that serve families with infants and toddlers (pediatricians, PCPs, childcare centers, Department of Education)	<ul style="list-style-type: none"> • Early identification • Professional competencies
-Distribute educational materials among health care providers, and promote ASD screening at 18 and 24 months of age, as mandated in PR-EPST	<ul style="list-style-type: none"> • Early identification • Professional competencies
-Promote the use of the ASD Registry among health care providers and the importance of registering patients with positive ASD diagnosis	<ul style="list-style-type: none"> • Autism registry
-Update the ASD registry database	<ul style="list-style-type: none"> • Autism registry
-Promote the use of the “Screening Certification Form” among pediatricians, PCPs and other health care providers	<ul style="list-style-type: none"> • Early identification • Professional competencies

These ASD Steering Committee’s priorities corresponds to the nine (9) State Action Plan strategies in the Table above. The following are descriptions of the different activities that supported the State Action Plan’s strategies.

Early identification and diagnosis of ASD

To support awareness of ASD early signs and the use of the early identification and diagnostic protocols, the ASD Early Identification Guide (*Guía para la Identificación Temprana del Trastorno del Espectro del Autismo: Vigilancia, Cernimiento y Diagnóstico*) and the Diagnostic Guide for ASD, both of which include the protocols for ASD early identification (*Protocolos Uniformes para la Identificación Temprana del TEA: Vigilancia y Cernimiento del Desarrollo 0-66 meses*) and diagnosis of ASD (*Protocolos Uniformes para el Diagnóstico del Trastorno del*

Espectro del Autismo) were published on the Parent Information Center's (APNI) web page, www.apnibr.org. These Guides were downloaded by 651 people during 2019 and 680 in 2020. APNI also published the article, written by the CSMN Division, "*Identificación temprana: Vigilancia y Cernimiento del Desarrollo*", on their web page.

CSMND staff collaborated with APNI in the preparation of the proposal to the Association of University Centers on Disabilities and the CDC for the Act Early Response to COVID-19 project to strengthen the four steps of early identification of developmental delays and disabilities; and promote the distribution of existing relevant tools, materials and programs to improve resiliency among families with young children during COVID-19 response and mitigation efforts. APNI was awarded the project. The Puerto Rico Ambassador, who is part of the CSMND staff, is the co-leader of this project.

The CSMND staff that supports the implementation of the BIDA Law carried out training and orientation activities to different stakeholders such as: health insurances' case managers, pediatricians, the planning committee of the Preschool Development Grant-Birth to 5 of the Department of the Family, social workers, Child Care staff and Early Head Start and Head Start staff.

The southwest region of the Island of Puerto Rico was affected by a series of earthquakes beginning in December of 2019. The Ponce Pediatric Center was forced to close due to structural damage. This was followed by the COVID-19 pandemic that resulted in a general lockdown beginning on March 15, 2020. This affected all services provided by the CSMND and the CSHCNP at the RPCs. As a result, the number of ASD diagnoses decreased for all ages. Centers initially offered remote services including ASD screening and diagnosis through telehealth and gradually began to receive children and their families on a limited basis following COVID-19 safety measures.

To promote the early identification of developmental delays and ASD, the PR-DOH developed the booklet called "Passport to Health" (*Pasaporte a la Salud*). The *Pasaporte a la Salud* informs families about children's growth and development and of warning signs for developmental delay and ASD from birth to five years of age. It continues to be distributed to families when they register their newborn at their local Demographic Registry Office. During the timeline of this report 19,233 booklets were distributed. The booklet includes the "Screening Certification Form" that is filled out by the providers who administer screening instruments, and also provides contact information for families that may have concerns regarding developmental delay or risk for ASD. The Head Start Collaboration Office agreed to reproduce 25,000 copies of the Passport to Health to facilitate developmental monitoring for all Early Head Start and Head Start participants.

The Puerto Rico Act Early Ambassador Liaison to the CDC's Learn the Signs: Act Early Initiative (LTSAE), who is also a staff of the CSMND, established the following goals to promote the early identification of children with developmental delays and at risk for ASD: 1- Work with the Child Care Program Regional Managers to integrate the Learn the Signs Act Early and Milestone Tracker App into training and the program's systems for families, and 2- Work with Early Head Start and Head Start Health and Special Needs Managers to integrate LTSAE materials and Milestone Tracker App into training and into the program's systems for families. To meet these goals CSMND staff provided workshops on early identification and the use of the Passport to Health and the CDC Learn the Signs: Act Early materials (including the Milestone Tracker) to Child Care and Early Head Start staff. The protocols for early identification and diagnosis of children with ASD based on recommended practices and following the AAP algorithm were also shared during these workshops.

CSMND staff wrote and published an article on Early Identification of Developmental Disorders and ASD called "*Early Identification: Surveillance and Developmental Screening*" that was distributed to 15,000 parents and professionals through the PR Parent Information Center's Newsletter. Since May 2018, the CSMND continues follow-up and support to families of infants and toddlers born to mothers with laboratory evidence of possible Zika infection during pregnancy and encourages families to participate in the CSHCNP RPCs Surveillance and Service Coordination Protocol through 27 Arbovirus Health Educators assigned to 60 WIC clinics throughout PR. These educators provide support to families on the use of the Passport to Health, the "Screening Certification Form" and

the implementation of developmental and ASD monitoring with the Act Early Materials and the Milestone Tracker.

Staff from the CSMND participated in the Central Council of Project LAUNCH (Linking Actions for Unmet Needs in Children's Health) activities. Project LAUNCH served the municipalities of Fajardo, Vieques and Culebra. One of Project LAUNCH's initiatives was the early identification of developmental delays and that children receive developmental and ASD screening as established by PR-EDSPT and the ASD (Surveillance and Screening) Protocol.

Professional competencies

In keeping with the requirements of the BIDA Law the ASD Steering Committee developed transdisciplinary and discipline specific competencies for the following professionals: audiologists, orthodontists, nutritionists, nurses, speech and language pathologists and therapists, physicians, psychologists, occupational therapists and assistants, and physical therapists. The competencies were developed to include three aspects: knowledge, skills and disposition for the following four areas: 1- general, 2- diagnosis and assessment, 3- services, intervention, support and working with the person with ASD, and 4- support and working with the family. Each competency was classified according to the level of responsibility represented by the competency.

The Health Secretary delivered the competencies of the health-related professions to the corresponding examining boards and presented them to the director of the office in charge of licensing health related professions (*Oficina de Reglamentación y Certificación de Profesionales de la Salud – ORCPS*, Spanish acronym). The CSMND prepared an Administrative Order to require that the examining boards of health-related professionals include the corresponding professional competencies as part of the mandatory continued education courses for each of the health-related professions. This Administrative Order #405 went into effect on April 8, 2019.

The competencies for teachers were presented to the DE. The DE agreed to assure that the competencies were addressed in in-service training for teachers and other personnel. Having competent professionals knowledgeable about early signs for ASD and other pertinent information and skills is a basic requirement for assuring that children with autism are identified as early as possible; and that professionals are aware of their responsibilities related to working with people with ASD and their families.

As part of continuous improvement, technical assistance regarding ASD screening and diagnosis to Regional Pediatric and Autism Centers' staff is periodically provided as requested.

In January 2020 a two-afternoon remote capacity building activity was held for health care providers who work with young children with ASD. The first afternoon covered the following topics: services provided by the CSMND, early signs of autism, the role of the family in the early identification of ASD, and the Early Identification Protocol for ASD: 0-66 months. The topics for the second afternoon were: ASD Diagnostic Protocol, differential diagnosis, comorbidities in ASD, the Autism Registry and special health coverage for ASD.

Department of Health ASD Registry

The ASD Registry was created in keeping with dispositions of the BIDA law. CSMND staff oversees the Registry. The Registry serves to have demographic data related to the population diagnosed with autism in order to facilitate planning and allocation of services and establish future policy. The Registry includes any resident of Puerto Rico with an autism diagnosis that complies with the criteria established in the PRDOH diagnostic protocol. For the purpose of the Registry, autism is defined based on the DSM-IV-TR and DSM-5 categories.

The PR-DOH office for handling data (*Oficina de Informática y Avances Tecnológicos – OIAT*) maintains the Registry's page on the PR-DOH's web site. The page includes information on the purpose of the Registry, confidentiality and the benefits to be registered as a user of the Registry, and instructions for the providers authorized to diagnose ASD and enter information to the Registry. Families can access a brochure explaining the purpose of the Registry but cannot enter the Registry. The OIAT has prepared the format that allows a monthly and aggregated report. On October 11 and November 7, 2019, CSMND staff met with OIAT staff to discuss improvements to the

Registry.

The Registry includes 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 on 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.

The CSMND continues to promote the use of the ASD Registry through a variety of activities. In collaboration with the Division, APNI distributes the Registry's brochure to the participants of their outreach and training activities, reaching hundreds of parents and professionals. The CSMND's health educator also distributed the brochure at health fairs and professional conferences.

The CSMND staff has also provided orientation and printed material on the Autism Registry requirements to the Department of Education (DE). As a result, the DE distributes material on the Registry to public schools and requires that the corporations that complete evaluations for special education eligibility must follow the PR-DOH diagnostic protocol and register in the PR-DOH Autism Registry those students that are diagnosed with autism.

SPM 2: Decrease Prevalence of Neural Tube Defects at Birth

The AAP, as well as many other health societies and associations, endorsed the recommendation that women of reproductive age consume 400 mcg of folic acid daily to prevent neural tube defects (NTDs). There is scientific evidence that folic acid supplementation before conception can prevent 50% or more of NTDs such as spina bifida and anencephaly. 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. These efforts help the PR-BDSPS to have a direct impact on families, communities, students, and health professionals. During this period, the health education promotion strategies implemented by the CSMND's health educator included: community fairs, lectures, orientation to hospitals and other health staff, educational material distribution, and other activities. The CSMND health educator worked for the division until February 2020. In the period of October 2019 to February 2020, the CSMND health educator participated in six (6) community fairs impacting three hundred seventy (370) individuals where 4,000 copies of educational material were distributed related to folic acid benefits, birth defects prevention, neural tube defects, and other educational material from other programs. The municipalities impacted were: Canóvanas, Ponce, San Juan, and Toa Baja.

The CSMND health educator also offered lectures and presentations. In these activities, the objective was to present our program to different entities and promote acid folic intake as a measure to prevent birth defects. From October 2019 to February 2020, these presentations were held at the CSHCN Program RPs, the University Carlos Albizu in San Juan, and in two birthing hospitals: Ryder Hospital in Humacao and Mayaguez Medical Center in Mayaguez. In total, six (6) presentations or lectures were given by the CSMND health educator that reached one hundred five (105) health professionals. Also, health educational material and promotion were provided to be distributed at their centers. Approximately 2,000 copies were shared.

Another main activity performed by the CSMND health educator was the participation in health professional conventions or annual meetings. In November 2019, the CSMND health educator participated in the 16th Annual Convention AMPRE. A total of one hundred fifty (150) participants, mostly pediatricians, were impacted by our educational material. Approximately 1,000 copies were distributed.

In early March 2020, Puerto Rico's first case of the COVID-19 was confirmed. As a concern of the Puerto Rico Government to protect public health and minimize contagion, an administrative order implemented the closure of governmental and private sector operations. This closure was extended until June 2020. However, the rest of the year was also affected by the pandemic situation modifying some of the main activities of the Program's work plan. Activities requiring physical interaction such as presentations, health fairs, hospital visits, and others were canceled or delayed. Some were performed virtually.

The BDSPS Coordinator and Social Worker participated in online meetings and presentations to promote the Program, the services offered to families, NTD prevention, and educational material. A total of six (6) virtual meetings were performed in the period from March 2020 to September 2020, with a total of one hundred five (105) participants impacted.

The second component of the PR-BDSPS is covered by the BDSPS social worker. One of the main goals of our program is to contact >80% of the families identified by our medical record abstractors with the objective of providing guidance and recurrence prevention counseling; offer educational material and refer the child to different services when necessary. The main referrals are to Early Intervention and to the CSHCN Program at the Regional Pediatric Centers (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 supports groups. In this reporting period, the PR-BDSPS identified eighteen (18) cases with a diagnosis of NTD. The social worker was able to contact 100% of them.

The BDSPS continued working closely with PR Maternal and Fetal Medicine (MFM) specialists. A dedicated medical records abstractor actively obtained the ultrasounds and amniocentesis results where birth defects are identified. This active case-finding strategy allows for the rapid identification of any potential case of birth defects, as well as fetal deaths and terminations.

Children with Special Health Care Needs - Application Year

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

Since 2016, MCH Title V Programs have been required to use ESMs as a strategy to ensure the use of evidence-based practices that will eventually impact the NPMs selected by states and jurisdictions. The MCH Evidence Center uses implementation science to provide a framework to translate evidence-based/informed practices into programs and policies that impact health outcomes. The MCH Evidence Center revised peer-reviewed research articles to find established evidence-based and informed strategies to develop the ESMs for the NPMs.

Established evidenced-based strategies for NPM 11 (medical home) include the “neighborhood-based approach to population health in the pediatric medical home.” Emerging evidence-based strategies include partnerships and care coordination as critical mechanisms to improve access to care within the medical home model. These strategies have the potential to increase access to the medical home model of care but require further study.

In the previous five-year cycle, medical home strategies focused on training activities directed to CSHCN Program providers, development of educational materials directed to families, outreach to families, engagement of stakeholder groups and quality improvement initiatives. For this five-year cycle we revised the medical home ESMs through the lens of the information provided by the MCH Evidence Center.

Building a Medical Neighborhood for the Medical Home

A Medical Neighborhood is an expanded patient-centered care model where primary care and specialty providers, hospitals and other clinicians work together in partnership to provide complete and coordinated care. Unlike a geographic neighborhood, a Medical Neighborhood is a set of relationships revolving around the patient and their health care needs. Collaborating “neighbors” can include the primary care and specialty providers, as well as case managers, social workers, physical therapists and visiting nurses, the pharmacist, the laboratory, and the hospital. In order to ensure that everyone knows what is happening with a patient’s care, interoperable electronic health records can be used to allow all providers to share information including diagnoses, medication lists, problem lists, lab results and care plans. To ensure that information flows beyond a particular “neighborhood’s” wall, state-wide or community-focused health information exchanges (HIEs) are quickly becoming a way for exchanging information beyond just one provider or health system.

The CSHCN Program’s QIC recommended the implementation of a family-centered connected care (FCCC) model at the RPCs and Autisms Center based on the NCQA patient-centered connected care model as a strategy to build a Medical Neighborhood for the medical home. The proposed FCCS model’s principles, adapted from the NCQA model, include: 1) connecting and sharing information with PCPs and supporting families that do not have a PCP to identify one; 2) identifying family needs and connecting families to the appropriate service providers; 3) using evidence-based decisions to support care delivery and support families to make care decisions; 4) using electronic systems to collect data and accomplish specific tasks; and 5) systematically monitor performance and carry out activities to improve CSHCN health outcomes and families’ experience.

The QIC together with the RPCs staff will identify the strategies and mechanisms to operationalize the model. Simultaneously, the QIC will identify care coordination strategies from the “Standards for Systems of Care for Children and Youth with Special Health Care Needs” (Version 2.0) to determine which strategies can be integrated into the model.

ESM 11.1: Percent of families at the CSHCN Program who report that they “always” have a care coordinator assigned to help them find the services they need.

This ESM is related to the evidence-based/informed strategy: Dedicated Care Coordinators. The purpose is to ensure an enhanced care coordination system to connect and refer families to needed services or community organizations outside the RPCs and Autism Centers.

ESM 11.2: Percent of families at the CSHCN Program who agree that their child has a better health status thanks to the efforts of the care coordinator to help them access the needed services.

This ESM is also related to the evidence-based/informed strategy: Dedicated Care Coordinators. The purpose is to understand family's perception on the impact of care coordination on their child's health status.

Designating a care coordinator to make outreach calls and identify patient needs was an effective strategy for improving connections to the medical home neighborhood (Medical Home Evidence Review, MCH-Evidence Center). Data source for both ESMs is the Medical Home Family Index Survey to be administered every two years.

Oral Health

The MCH-JS (2019) found that 87.3% of CSHCN received at least one preventive dental visit during the last 12 months, and 36.7% of CSHCN who needed dental services during the previous year did not receive them. This indicator should be interpreted with caution because of a small sample and confidence interval width >20%. However, the indicator gives an idea of the unmet dental care needs of CSHCN.

Data from the Medical Home Family Index, collected from March to May 2021, found that 21% of CSHCN Program families reported that access to a dentist is "very difficult" or "difficult". Some reasons included, besides the pandemic, "dentist do not accept the GIP", "too far from home", "appointments are too far away", "dentist do not serve CSHCN", "no idea where to find a dentist", "dental office does not answer the phones".

Following an interview in April 2021 with Altarum about CSHCN oral health services, the program started conversations with key stakeholders in PR to identify strategies to increase access to dental services for CSHCN at the RPCs. Key stakeholders include the PR College of Dental Surgeons; the MCAD, the PRDH Oral Health Program and the PR Oral Health Coalition. Altarum is a nonprofit research and consulting organization and was contracted by HRSA to have conversations with states and jurisdictions about CSHCN oral health.

The MCAD shared with the CSMND a directory of community dentists. Currently, the CSHCN Family Representative is updating the directory and identifying pediatric dentists willing to serve CSHCNs. Once updated, the directory will be published and widely distributed. In addition, the CSHCN Program made an agreement with the Oral Health Program of the PR-DOH to provide oral health preventive service visits to CSHCN at four RPCs (Arecibo, Bayamon, Caguas and Fajardo). The Ponce RPC does not have an appropriate physical space for the moment due to the damage caused by the earthquakes, and the Metro RPC has dental services available in the same building. This is a onetime activity and includes a dental evaluation, fluoride application, education to families and referrals to community dentists when necessary. The Oral Health Program has three dentists and three dental hygienists who visit children throughout the Island.

Also, the PR Oral Health Coalition invited CSHCN Program representatives to participate in their meetings and activities. These activities will be continued during application year.

Telehealth

The Telehealth Procedures Manual developed during 2018-2019 for the CSHCN Program is being revised and updated according to new tele-health regulations. RPCs administrators and health care providers are meeting to share lessons learned and to continue exploring new ideas to enhance telehealth services. In addition, a telehealth section is being added in the procedure's manual of the different health care disciplines. Our priority is to fine tune the tele-health services system implemented during the COVID-19 pandemic lockdown, based on regulations that may be established once the tele-health waivers expire. This activity is expected to be completed during application year.

CSHCN Program data capacity and EHR implementation

To enhance data capacity at the CSHCN Program, the EHR team and a CSHCN Program team met to create a two-

phase data platform to improve reliable data collection on children served at the CSHCNP, and the services they receive. The first phase collects family contact and demographic information, CSHCN diagnoses, referral source, and special family needs. The second phase collects information offered by providers about services offered and appointment compliance. Data collection was initiated through Microsoft Forms and was then transferred to a REDCap platform. Providers are being trained by the EHR team on data entry and data quality. This activity will continue during the application year and serves as preparation/training for the use of the EHR system once implemented. The electronic medical record project is expected to go live on November 30, 2021.

NPM 12 – Transition

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.

In the previous five-year cycle, transition strategies focused on the implementation of the Got Transition model through training activities directed to CSHCN Program providers, development of educational materials directed to families, family outreach, engagement of stakeholder groups and quality improvement initiatives. For this five-year cycle we revised the medical home ESMs through the lens of the information provided by the MCH Evidence Center.

Got Transition Model at the RPCs

The Six Core Elements of Health Care Transition is a structured process that encompasses transition planning, transfer of care, and integration into adult care that can be customized and applied in a variety of different pediatric and adult health care settings and programs. The Got Transition model was implemented at the RPCs in March 2018. A record audit during the present year (2021) found that, even though providers' awareness of the six core elements has increased, there is still the need to provide them with assistance in establishing a process for integrating the Six Core Elements into their practice. Record audits found that social workers are very diligent when performing the transition readiness assessment and developing the transition plan. However, some records lack evidence of proper documentation of the process. Also, tracking YSHCN transition elements continues to be a challenge. This was discussed with the EHR implementation team and alerts will be added to the EHR system. Follow-up activities and assessments for the enhancement of the Got Transition Model will continue during this year.

ESM 12.1: “Percent of YSHCN who receive care at the RPCs and has completed a transition readiness assessment”.

This ESM is based in the 3rd core element of the Got Transition Model: The purpose is to track the percent of YSHCN enrolled in the CSHCN Program who are assessed for transition readiness.

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 ESM is based in the 4th core element of the Got Transition Model. The purpose is to track the percent of YSHCN enrolled in the CSHCN Program that have a transition action plan in place after being assessed for transition readiness.

The Got Transition Model is an evidence-based/informed strategy (Health Care Transition Evidence Review, MCH-Evidence Center). Data source for both ESMs is the CSHCN program database.

Understanding physicians' perspectives on transition

It is unclear how adult health care providers are involved in caring for adolescents (ages 13–18) and young adults (ages 19–25) when leaving pediatric specialist services. A questionnaire to collect information about physicians' perspectives and knowledge about health care transition is being translated and validated. The target population are pediatricians and adult health care clinicians. The purpose is to understand their perspectives and explore if they are interested in knowing more about transition.

The transition sub-committee, which is part of the QIC, will continue identifying additional strategies for this NPM.

SPM 1: Percentage of children with ASD that are diagnosed by 36 month of age or earlier.

Studies on early brain development established that nourishing social interactions during the first three years of life are a major critical factor that contributes to children's learning and mental health. In the case of infants and toddlers, it is now well established that reliable ASD diagnoses can be determined as early as 18 months of age. It is also well established that early appropriate intervention results in improved developmental prognosis. Early diagnosis allows access to early intervention. Thus, early identification and diagnosis of ASD is a priority for services to our young children with autism and their families.

The extent to which parents and legal guardians are active and informed participants in the monitoring of their young children's health and development will contribute to early identification of those children who need additional and specialized attention, evaluations, and intervention to support their development. The "Pasaporte a la Salud" booklet combined with the Learn the Signs: Act Early materials including the Milestone Tracker App, are effective tools directed to inform and help parents in their role.

In addition to the active involvement of parents and legal guardians, effective early identification requires the participation of all programs that work with young children and their families. The CSMN Division has collaborated with Child Care, Part C and Early Head Starts programs by providing orientation, training, and materials on the early signs of ASD, the PR-DOH's Early Identification and Diagnostic Protocols, and the services provided in the CSHCN Program's RPCs and Autism Centers.

During the past program year, the CSMN Division has been actively participating in the steering committee of the Preschool Development Grant Birth to Five (PDG B-5) of the Administration of Children's Care and Development, PR Department of Family (ACUDEN, for its Spanish acronym). The focus for this year has been the preparation of the strategic plan aimed to strengthen the systems of care and services for young children and their families. The CSMN Division will continue advocating for the inclusion of the 4 steps of early identification children of children with developmental and special health care needs and ASD in the strategic plan including that programs assure that the children they serve, have been screened with the M-CHAT-R/F at 18 and 24 months of age.

As a part of our continuous improvement efforts, we have identified the need to revisit and revise the screening for autism process in the CSHCN PRPs and Autism Centers to optimize the use of the diagnostic teams and increase their diagnostic capacity. This process was initiated but has not been formalized due to the limitations imposed by the COVID-19 restrictions. We aim to complete the revision of the protocol during this program year. We have also identified the need to reinforce our workforce to be able to meet the increasing demand for diagnostic evaluations of children less than 36 months of age.

The involvement of pediatricians, other health care providers and early childhood care providers is essential in the identification of early warning signs and ASD screening to initiate timely referrals for diagnostic evaluations. Due to limitations for on-site participation in health fairs and professional conferences, and in keeping with current circumstances, we will expand our dissemination of the PR-DOH diagnostic protocol, and information on early identification and diagnosis through electronic means.

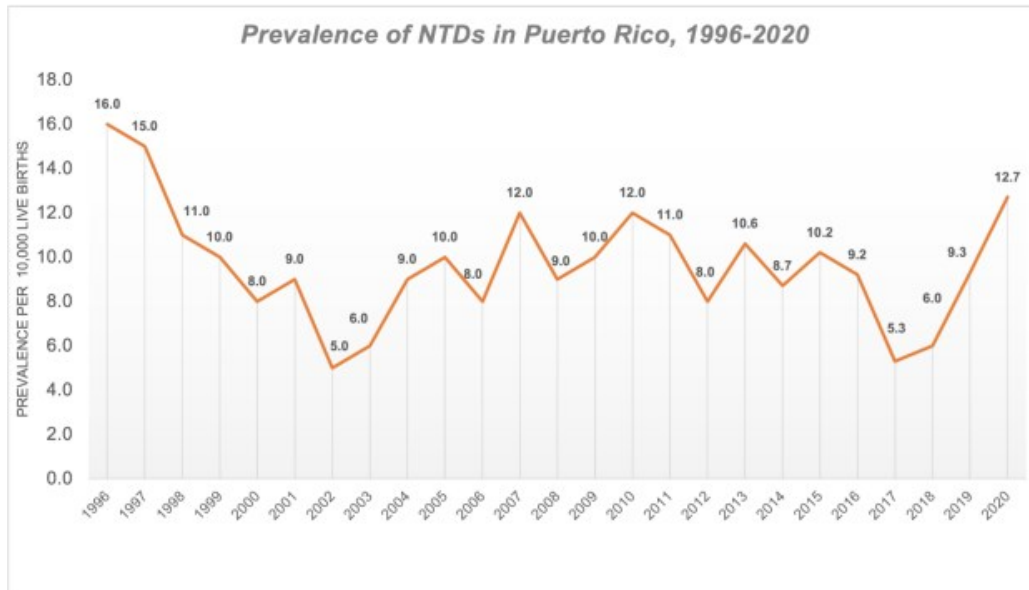
Finally, we'll continue to promote the Autism Registry among professionals who carry out diagnostic evaluations to assure that diagnoses for ASD are performed in keeping with the established protocols.

SPM 2: Prevalence of Neural Tube Defects at Birth

The PR-BDSPS continues using surveillance data to identify at risk populations. NTDs pregnancies is one of the most important populations at risk identified by the program. NTD prevalence in PR decreased from 10.4 (per 10,000 live births) in 2014 to 5.6 in 2018. However, it has increased from 5.6 in 2018 to 12.7 in 2020 (preliminary data).

Since 2004, the NTDs incidence rate at birth has fluctuated mostly around 9 ± 3 per 10,000 live births (See figure below). The lower rate in 2017 (5.3) and in 2018 (6.0) could be the result of under reporting following hurricanes Irma

and María. The higher rate in 2020 (12.7) could be associated with the COVID-19 pandemic. A 2020 survey in Puerto Rico found forty (40%) percent of those surveyed experienced food insecurity, including hunger, during the first few months of the COVID-19 pandemic. Nutritional deficiencies due to disrupted food distribution chains and lockdowns are a risk factor for NTDs. A recent article from India, published online on Jun 25, 2021, concluded that there was a definite upsurge of open NTDs seen as a collateral sequel of COVID-19 pandemic following the lockdown period. Therefore, data for 2021 will help us to establish if there is a definite increasing trend of NTDs. The PR-BDSPS will also correlate this finding with the results of the CDC/PR PRAMS Project.



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.

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 PRDOH webpage. The BDSPS also provides data for the National Birth Defects Prevention Network (NBDPN) annual 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

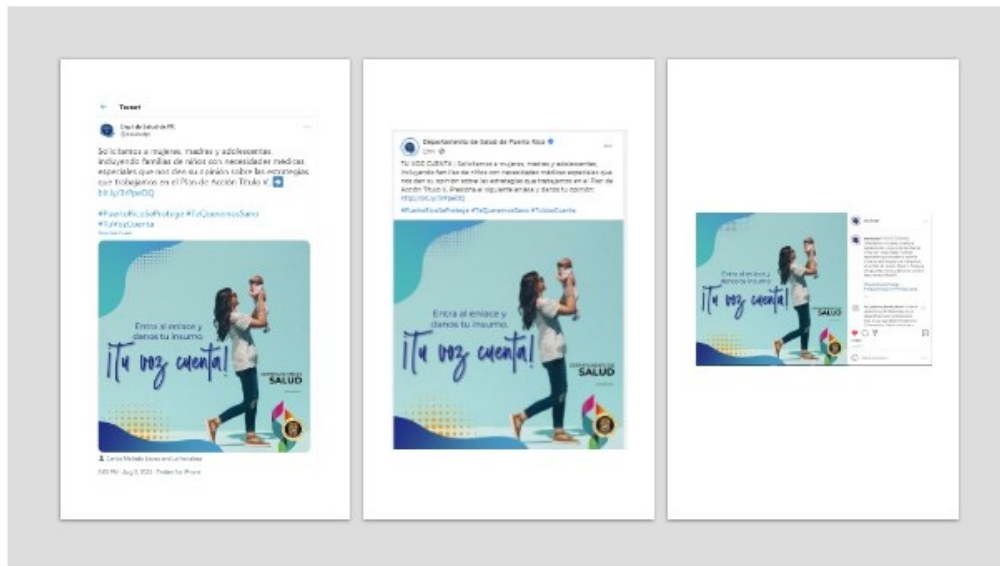
No content was entered for the Cross-Cutting/Systems Building - Application in the State Action Plan Narrative by Domain section.

III.F. Public Input

The Public Input this year focused on the reviewed 2020-2025 State Action Plan (SAP). The SAP was revised by the HNA Steering Committee whose decisions were made based on the 2021 Health Needs Assessment (2021 HNA).

PR Title V prepared a report s with the proposed SAP and distributed it by email along with the translated FY 2019-2020 State Snapshot and a URL address that would allow them to provide their input and recommendations thru Google Form. It was shared with stakeholders such as members of the HNA Advisory Committee (HNAAC) and the Regional Boards (RBs). It was also shared by the Department of Health social media, such as Facebook, Twitter and Instagram. A period of three weeks was allowed for participants to offer their input.

PR Department of Health Social Media Announcement Screen Snapshots



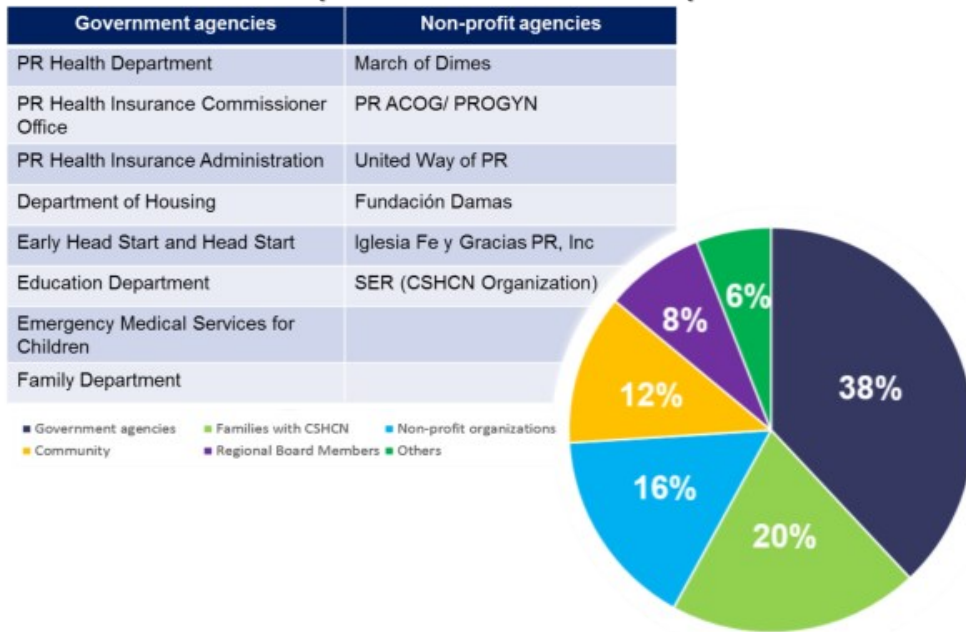
The Form allowed stakeholders to determine if the established strategies were contributing “a lot”, “quite a lot”, “somewhat”, or “nothing” for each of the priorities set in the SAP, as well as to identify unknown strategies. It also allowed stakeholders to make recommendations for each of the strategies in the proposed SAP, as well as giving suggestions for new strategies and identifying areas for collaboration.

The HNA Steering Committee, discussed the SAP input and recommended strategies, accounting for resource and staff availability to develop and implement said strategy. Those strategies that the MCAHD and the CSMND cannot carry out, PR Title V will reach with other agencies - that also serve the MCA so they can join us in our efforts.

The social media announcement reached 14,499 individuals thru Facebook (FB), 1,949 thru Twitter (TW), and 665 thru Instagram (IG). On the other hand, only 217 individuals clicked the link shared in the announcement; 198 for FB, 8 for TW, and 15 for IG.

Fifty inputs were received: 38% by government agencies, 20% families with CSHCN, 16% by non-profit organizations, 12% from the community, 8% Regional Board Members, and other participants.

**PR Five Year State Action Plan
Participants List for 2021 Public Input**



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”. Most of the recommended strategies were either activities that were considered under the proposed strategies or were strategies that were already part of the SAP. There were also some strategies that cannot be implemented because they are beyond the scope of PR Title V.

Following is a brief description of the stakeholders’ input by domain.

Women Maternal Health

This domain contains two priorities: promote health and wellbeing of WRA and improve birth outcomes. A total of 8 strategies were proposed to *promote health and wellbeing of WRA* and 9 to *improve birth outcomes*. Between 92% to 100% of the participants agreed that 16 out of 17 of the strategies contributed “a lot” or “quite a lot” to achieve these priorities. A small percentage of participants (ranging from 2% to 4%) considered that some strategies contributed “a little” to the priorities of this domain. However, 10% of the stakeholders reported that strategies the development and dissemination of the Women of Reproductive Age Preventive Care Pocket Guide contributed a “a little” or “nothing” to achieve the corresponding priority, while 12% reported that the development of a course on the health rights of women of reproductive age for government employees to submit to the Government Ethics Office contributed “a little”. The HNA Steering Committee decided to keep them in the SAP since they are promising strategies that empower WRA and pregnant women and promote preventive medical visits.

About 36% of the “new” recommended strategies aimed at promoting health and wellbeing of WRA referred to health promotion followed by education/orientation (32%). These recommendations mostly are activities considered in proposed strategies of the SAP like: disseminate the updated Preventive Care Guidelines for women of reproductive age to the target population and health care providers, develop and disseminate the Women of Reproductive Age Preventive Care Pocket Guide, develop a course on the health rights of women of reproductive age for government employees to submit to the Government Ethics Office, and promote person-centered services among health care providers and women of reproductive age.

In terms of improving birth outcomes, 43% of the recommended strategies focused on to health promotion. For

example, a media campaign and age specific health promotion. These strategies or activities considered on the SAP like in educational activities regarding prenatal care through workshops and dissemination and promotion of the Prenatal Health Care Services Guidelines to the target population and health care providers.

The strategies for these priorities remained as proposed, however some of the activities recommended in the input will be considered in order to promote health and wellbeing of WRA and improve birth outcomes.

Perinatal/Infant Health

A total of 11 strategies were proposed in order to *decrease infant mortality*. Between 94% to 100% of the participants agreed that 9 out of the 11 strategies contribute “a lot” or “quite a lot” to this priority. Yet, 20% of the stakeholders did not know about the Hard Stop Policy for which reason this information will be shared with March of Dimes and the Hospital Association that actively promote this policy among birthing hospitals in PR. Even so, 80% of the participants agree that this strategy will help “a lot” or “quite a lot” to decrease infant mortality.

About 12% of the participants agreed that continuing ZIKA-related strategies contribute “a little” or “nothing” for this priority. Since this is a small percent of stakeholders compared to those who think otherwise (88%), and because the vector for this virus is endemic in PR, the HNA Steering Committee decided to keep this strategy.

Of all the strategies recommended for this priority, 68% emphasized education/counseling, such as breastfeeding, parenting courses, Zika prevention, unintentional injuries prevention, and other educational activities related to pregnancy and infant mortality prevention. PR Title V has a very comprehensive community outreach program, including “Encuentro de mi Vida” webpage, covering each of the recommended educational topics, as well as prenatal and parenting courses that include most of the recommended topics. All of them are considered as part of the SAP.

After the strategies for this priority were revised, the SAP will remain the 11 strategies proposed by the Steering Committee to decreasing infant mortality.

Child Health

Six strategies were proposed to *improve preventive health in children*. Between 96% to 100% of the participants agreed that all strategies contribute “a lot” or “quite a lot” to achieve this priority.

Two of the six strategies proposed for this priority were identified as contributing “a little” for 2% of the participants. Given that this is a small number of participants compared to those who think otherwise, the HNA Steering Committee agreed to keep these strategies in the SAP.

In terms of the recommended strategies, 44% of them focused on education/counseling, like parenting, unintentional injuries prevention, oral health, use of electronic devices, among others. All these topics are covered in our parenting courses and educational activities.

After the revision, the SAP remained with the 6 strategies focused in improving preventive health in children as recommended by the Steering Committee.

Adolescent Health

A total of 11 strategies, divided in two NPMs (NPM 9 and NPM 10), were proposed to *improve health and wellbeing of adolescents*. Between 94% to 100% of the participants agreed that all strategies contribute “a lot” or “quite a lot” to this priority.

In general, between 2% to 4% of all participants did not know about 8 of the 11 strategies proposed by the HNA Steering Committee. About 6% of all participants agreed that establishing a collaboration with MCAH stakeholders to implement PR Youth Health Literacy Toolkit (YHLT) to provide knowledge about how to use the health care system contributes “a little” (2%) for this priority or were not familiar with it (4%). In addition, 4% of the participants were not familiar with the implementation of the Puerto Rico Youth Friendly Healthcare Services Guidelines in a pilot project in

FHQC. Because of the COVID-19 pandemic both strategies were paused during the previous FY. However, the HNA Steering Committee agreed to maintain them as part of the current SAP expecting the opportunity to start their implementation during the current FY.

About 45% of the strategies recommended were focused on education and counseling, such as training for parents on interpersonal relationship with their children, electronic devices management, bullying, mental health, reproductive health, among others. PR Title V offers parental courses that touch most topics, while the Youth Health Promoters and Youth Advisory Council offers peer to peer counseling on topics.

After the strategies for this priority were revised, the SAP now remains with 11 strategies proposed to improve the health and wellbeing of adolescents.

CSHCN Health

Nine strategies proposed for medical home (NPM 11) were reviewed by stakeholders. Between 88.2% and 96% of participants agreed that these strategies would contribute “a lot” or “quite a lot” to achieve this priority. For all medical home strategies, between 2% to 4% of participants answered “do not know”, and specifically for the strategy of identifying families’ needs and linking to proper resources, 10% answered “do not know”. Two percent (2%) to 6% of participants agreed that strategies would contribute just a “little” or “none” to medical home NPM. For NPM 12, health care transition, between 94% to 96% of participants agreed that strategies would contribute “a lot” or “quite a lot” for four of the five strategies proposed. For the Got Transition six core elements at the RPCs, 84.3% agreed that the strategy would contribute “a lot” or “quite a lot”, however, 13.7% answered “do not know”, which shows a possible lack of information about this evidence-based practice. For nine (9) of the ten (10) strategies proposed for the early ASD identification, between 92% to 98% of participants agreed that strategies would contribute “a lot” or “quite a lot”. Specifically for the strategy about ASD early signs information in the DOH webpage, 88.3% responded “a lot” or “quite a lot”. Eight percent (7.8%) of participants responded “do not know” for the strategy about the use of the Detection Certification by physicians and other health care providers. Finally, for the NTD birth prevalence, between 96% to 100% of participants agreed that the five strategies proposed would contribute “a lot” or “quite a lot”. In conclusion, the majority of the public input participants agreed on the State Action Plan strategies.

Most of the recommendations suggested by participants in an open question were already described in the strategies proposed. After the revision of strategies, only one pertaining to medical home was eliminated because it was considered more an activity than a strategy as such. The rest of the strategies remained the same.

III.G. Technical Assistance

The MCH Evidence Center recently shared with PR a report to examine the Title V 2021 MCH Block Grant Application ESMs in relation to how they were based on established evidence and measured in a way that shows impact in advancing to their related NPMs. The shared report linked PR Title V current ESMs to the evidence-based/informed strategies in the MCH Best database that either directly support or contain intervention components that align with our strategies.

For the 2021 MCH Block Grant Application, PR Title V submitted a total of nine ESMs. In terms of established evidence, only two ESMs were aligned with MCH Best strategies; while the rest had no similar strategies found in the established evidence for the related NPM or there was limited research in the evidence based to support the strategy. However, in terms of measure, 22% of the ESMs were in Quadrant 2 (Q2) of the Result-Based Accountability (RBA) being able to measure reach, satisfaction or quality of service, whereas 78% of the ESMs were in Quadrant 4 (Q4) of the RBA measuring quality of change.

Considering the MCH Evidence Center recommendations, the PRSSDI Coordinator, the Title V Evaluators, and the CSHCN Evaluator met to review each of the ESMs. During the review process the team linked some ESMs to an evidence strategy from the MCH Best dataset, while maintaining or increasing the degree of measurement recommended within the RBA (Q2 or Q4). As a result, the following modifications were applied:

-EMS 1.1 was revised in order to measure the 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. This will allow to measure changes in behavior that may have been driven by the information provided in the pocket guide.

-ESM 5.1 was changed to measure the 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. This will measure changes in infant sleeping practices after the HVP participants receives safe sleep practices education.

-EMS 10.1 was revised in order to measure the percent of **Youth Health Promoters** reached with the PR Youth Health Literacy Toolkit that increase their awareness regarding how to use the health care system.

-ESM 11.1 was changed to measure the percent of families at the CSHCN Program who report that they “always” have a care coordinator assigned to help them find the services they need. The goal is to ensure an enhanced care coordination system at the CSHCN Program.

-ESM 11.2 was changed to measure the percent of families at the CSHCN Program who agree that their child has a better health status thanks to the efforts of the care coordinator to help them access the needed services. By tracking this ESM, we pretend to understand the perceptions families have on the impact of care coordination with their child’s health status.

Despite the team’s efforts there are certain areas that need to be addressed to assure that each of the ESMs are properly based in the established evidence and measure reflected in the related NPMs. In order to strengthen the proposed ESMs and to be able to properly link them with an evidence strategy, PR Title V is in the process for a Technical Assistance (TA) request to the MCH Evidence Center. With this TA the team expects to gain the necessary skills needed to build strong ESMs, tailored to PRs’ resources that will directly impact the NPMs and therefore improve the NOMs in the following years.

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 - [Title V Matching Funds FY 2019-20.pdf](#)

Supporting Document #02 - [ABBREVIATIONS MCAH 2021.pdf](#)

Supporting Document #03 - [Integrated Index of Maternal and Infant Health Status PR 2019.pdf](#)

VI. Organizational Chart

The Organizational Chart is uploaded as a PDF file to this section - [VI Organizational Chart.pdf](#)

VII. Appendix

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Form 2
MCH Budget/Expenditure Details

State: Puerto Rico

	FY 22 Application Budgeted	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	\$ 15,856,806	
A. Preventive and Primary Care for Children	\$ 4,757,042	(30%)
B. Children with Special Health Care Needs	\$ 5,549,882	(34.9%)
C. Title V Administrative Costs	\$ 1,585,680	(10%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	\$ 11,892,604	
3. STATE MCH FUNDS (Item 18c of SF-424)	\$ 11,892,605	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	\$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	\$ 395,880	
6. PROGRAM INCOME (Item 18f of SF-424)	\$ 124,000	
7. TOTAL STATE MATCH (Lines 3 through 6)	\$ 12,412,485	
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	
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	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	\$ 44,789,427	

OTHER FEDERAL FUNDS	FY 22 Application Budgeted
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	\$ 474,955
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Birth Defects Tracking Systems	\$ 160,000
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	\$ 160,020
Department of Health and Human Services (DHHS) > 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) > State Systems Development Initiative (SSDI)	\$ 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
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Zika Surveillance Systems Grant Program	\$ 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
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
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
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Sexual Risk Avoidance Education (SRAE)	\$ 1,565,963

	FY 20 Annual Report Budgeted		FY 20 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	\$ 15,800,897		\$ 14,922,501	
A. Preventive and Primary Care for Children	\$ 4,740,270	(30%)	\$ 4,479,956	(30%)
B. Children with Special Health Care Needs	\$ 5,530,314	(35%)	\$ 5,941,274	(39.8%)
C. Title V Administrative Costs	\$ 1,580,089	(10%)	\$ 789,782	(5.3%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	\$ 11,850,673		\$ 11,211,012	
3. STATE MCH FUNDS (Item 18c of SF-424)	\$ 11,850,673		\$ 12,410,969	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	\$ 0		\$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	\$ 0		\$ 596,071	
6. PROGRAM INCOME (Item 18f of SF-424)	\$ 228,880		\$ 410,692	
7. TOTAL STATE MATCH (Lines 3 through 6)	\$ 12,079,553		\$ 13,417,732	
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)	\$ 27,880,450		\$ 28,340,233	
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)	\$ 17,325,276		\$ 9,661,573	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	\$ 45,205,726		\$ 38,001,806	

OTHER FEDERAL FUNDS	FY 20 Annual Report Budgeted	FY 20 Annual Report Expended
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	\$ 518,999	\$ 390,575
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Birth Defects Tracking Systems	\$ 170,000	\$ 107,485
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Pregnancy Risk Assessment Monitoring System (PRAMS)	\$ 179,299	\$ 157,500
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Early Hearing Detection and Intervention (EHDI) State Programs	\$ 250,000	\$ 199,630
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Zika Surveillance Systems Grant Program	\$ 127,032	\$ 149,797
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	\$ 2,279,380	\$ 2,299,246
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Zika Surveillance, Intervention and Referral to Services Program	\$ 7,000,000	\$ 506,034
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	\$ 147,373	\$ 0
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	\$ 1,266,400	\$ 1,113,706
US Department of Education > Office of Special Education Programs > Early Identification and Intervention for Infants and Toddlers with Disabilities (Part C of IDEA)	\$ 3,464,595	\$ 2,983,177
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Puerto Rico partnership to support families affected by Zika	\$ 150,000	\$ 150,000

OTHER FEDERAL FUNDS	FY 20 Annual Report Budgeted	FY 20 Annual Report Expended
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Puerto Rico Sexual Risk Avoidance Education Program (PRSRAE)	\$ 1,722,198	\$ 1,554,423

Form Notes for Form 2:

According to the implementation of Section 20601 of the 2018 Bipartisan Budget Act (BBA) through the Public Assistance Program, all funds provided for the PR Government Health Plan for the past reporting Fiscal Year were Federal. Therefore, PR Title V did not matched funds or population served for the last Fiscal Year with participants of the Government Health Plan, and instead matched with the Catastrophic Remediabile Diseases Program. This may explain variations on the funds expended from previous years.

Refer to narrative section III.D.1. Expenditures for more details.

Field Level Notes for Form 2:

1.	Field Name:	Federal Allocation, A. Preventive and Primary Care for Children
	Fiscal Year:	2022
	Column Name:	Application Budgeted
	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, B. Children with Special Health Care Needs
	Fiscal Year:	2022
	Column Name:	Application Budgeted
	Field Note:	Reflects real expenditures. Working plans were implemented to enhance services for the Children with Special Healthcare Needs.
3.	Field Name:	Federal Allocation, C. Title V Administrative Costs
	Fiscal Year:	2022
	Column Name:	Application Budgeted
	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.
4.	Field Name:	6. PROGRAM INCOME
	Fiscal Year:	2022
	Column Name:	Application Budgeted
	Field Note:	Reflects real program income. Working plans were implemented to enhance services.
5.	Field Name:	Federal Allocation, C. Title V Administrative Costs:
	Fiscal Year:	2020

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.

6. **Field Name:** 5. OTHER FUNDS

Fiscal Year: 2020

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.

7. **Field Name:** 6. PROGRAM INCOME

Fiscal Year: 2020

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 22 Application Budgeted	FY 20 Annual Report Expended
1. Pregnant Women	\$ 1,982,099	\$ 1,855,744
2. Infants < 1 year	\$ 1,982,103	\$ 1,855,745
3. Children 1 through 21 Years	\$ 4,757,042	\$ 4,479,956
4. CSHCN	\$ 5,549,882	\$ 5,941,274
5. All Others	\$ 0	\$ 0
Federal Total of Individuals Served	\$ 14,271,126	\$ 14,132,719

IB. Non-Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Pregnant Women	\$ 2,556,910	\$ 7,942,287
2. Infants < 1 year	\$ 2,556,910	\$ 431,860
3. Children 1 through 21 Years	\$ 6,778,785	\$ 4,036,822
4. CSHCN	\$ 124,000	\$ 410,292
5. All Others	\$ 0	\$ 0
Non-Federal Total of Individuals Served	\$ 12,016,605	\$ 12,821,261
Federal State MCH Block Grant Partnership Total	\$ 26,287,731	\$ 26,953,980

Form Notes for Form 3a:

According to the implementation of Section 20601 of the 2018 Bipartisan Budget Act (BBA) through the Public Assistance Program, all funds provided for the PR Government Health Plan for the past reporting Fiscal Year were Federal. Therefore, PR Title V did not matched funds or population served for the last Fiscal Year with participants of the Government Health Plan, and instead matched with the Catastrophic Remediabale Diseases Program. This may explain variations on the funds expended from previous years.

Refer to narrative section III.D.1. Expenditures for more details.

Field Level Notes for Form 3a:

1.	Field Name:	IB. Non-Federal MCH Block Grant, 1. Pregnant Women
	Fiscal Year:	2020
	Column Name:	Annual Report Expended
	Field Note:	Catastrophic Remediabale Diseases Program Funds: Women 22 to 49 years FY 2018-19 and FY 2019-20*
		*Considering Title V 2-year availability of funding.
2.	Field Name:	IB. Non-Federal MCH Block Grant, 2. Infant < 1 Year
	Fiscal Year:	2020
	Column Name:	Annual Report Expended
	Field Note:	Catastrophic Remediabale Diseases Program Funds: Infants FY 2017-18* and FY 2019-20
		*Considering Title V 2-year availability of funding.
3.	Field Name:	IB. Non-Federal MCH Block Grant, 3. Children 1 through 21 years
	Fiscal Year:	2020
	Column Name:	Annual Report Expended
	Field Note:	Catastrophic Remediabale Diseases Program Funds: Children 1 to 21 years FY 2017-18* and FY 2019-20
		*Considering Title V 2-year availability of funding.

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 22 Application Budgeted	FY 20 Annual Report Expended
1. Direct Services	\$ 481,830	\$ 479,672
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	\$ 481,830	\$ 479,672
2. Enabling Services	\$ 9,367,877	\$ 9,544,370
3. Public Health Services and Systems	\$ 6,007,099	\$ 4,898,459
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		\$ 70,388
Physician/Office Services		\$ 398,778
Hospital Charges (Includes Inpatient and Outpatient Services)		\$ 0
Dental Care (Does Not Include Orthodontic Services)		\$ 0
Durable Medical Equipment and Supplies		\$ 10,506
Laboratory Services		\$ 0
Direct Services Line 4 Expended Total		\$ 479,672
Federal Total	\$ 15,856,806	\$ 14,922,501

IIB. Non-Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Direct Services	\$ 0	\$ 12,410,969
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	\$ 0	\$ 8,374,147
B. Preventive and Primary Care Services for Children	\$ 0	\$ 0
C. Services for CSHCN	\$ 0	\$ 4,036,822
2. Enabling Services	\$ 7,135,563	\$ 410,692
3. Public Health Services and Systems	\$ 4,757,042	\$ 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)		\$ 12,410,969
Dental Care (Does Not Include Orthodontic Services)		\$ 0
Durable Medical Equipment and Supplies		\$ 0
Laboratory Services		\$ 0
Direct Services Line 4 Expended Total		\$ 12,410,969
Non-Federal Total	\$ 11,892,605	\$ 12,821,661

Form Notes for Form 3b:

According to the implementation of Section 20601 of the 2018 Bipartisan Budget Act (BBA) through the Public Assistance Program, all funds provided for the PR Government Health Plan for the past reporting Fiscal Year were Federal. Therefore, PR Title V did not matched funds or population served for the last Fiscal Year with participants of the Government Health Plan, and instead matched with the Catastrophic Remediabale Diseases Program. This may explain variations on the funds expended from previous years.

Refer to narrative section III.D.1. Expenditures for more details.

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:	2022
	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:	2022
	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:	2022
	Column Name:	Application Budgeted
	Field Note:	MCAH components A and B- direct services provided by PRHIA. Budgeted with FY 20 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:	2022
	Column Name:	Application Budgeted
	Field Note:	MCAH components A and B- direct services provided by PRHIA. Budgeted with FY 20 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:	2020
	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:	2020
	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:	2020
	Column Name:	Annual Report Expended
	Field Note:	Catastrophic Remediabale Diseases Program Funds: Women 22 to 49 years FY 2018-19 and FY 2019-20* Infants FY 2019-20 *Considering Title V 2-year availability of funding
8.	Field Name:	IIB. Non-Federal MCH Block Grant, 1. B. Preventive and Primary Services for Children
	Fiscal Year:	2020
	Column Name:	Annual Report Expended
	Field Note:	Due to the nature of diagnose, children receiving funds from the Catastrophic Remediabale Diseases Program are considered CSHCN. Please refer to Supporting Document #1 for details on the conditions.
9.	Field Name:	IIB. Non-Federal MCH Block Grant, 1. C. Services for CSHCN
	Fiscal Year:	2020
	Column Name:	Annual Report Expended

Field Note:

Catastrophic Remediabale Diseases Program Funds:
Children 1 to 21 years FY 2019-20

*Considering Title V 2-year availability of funding.

10. **Field Name:** **IIB. Non-Federal MCH Block Grant, 4. Pharmacy**

Fiscal Year: **2020**

Column Name: **Annual Report Expended**

Field Note:

The Catastrophic Remediabale Diseases Program provided the funds by gender and age for FY 2018-19* and FY 2019-20. 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.

*Considering Title V 2-year availability of funding.

11. **Field Name:** **IIB. Non-Federal MCH Block Grant, 4. Physician/Office Services**

Fiscal Year: **2020**

Column Name: **Annual Report Expended**

Field Note:

The Catastrophic Remediabale Diseases Program provided the funds by gender and age for FY 2018-19* and FY 2019-20. 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.

*Considering Title V 2-year availability of funding.

12. **Field Name:** **IIB. Non-Federal MCH Block Grant, 4. Hospital Charges (includes inpatient and outpatient services)**

Fiscal Year: **2020**

Column Name: **Annual Report Expended**

Field Note:

The Catastrophic Remediabale Diseases Program provided the funds by gender and age for FY 2018-19* and FY 2019-20. 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.

*Considering Title V 2-year availability of funding.

13.	Field Name:	IIB. Non-Federal MCH Block Grant, 4. Dental Care (does not include Orthodontic Services)
	Fiscal Year:	2020
	Column Name:	Annual Report Expended
	Field Note:	The Catastrophic Remediabale Diseases Program provided the funds by gender and age for FY 2018-19* and FY 2019-20. 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.
		*Considering Title V 2-year availability of funding.

14.	Field Name:	IIB. Non-Federal MCH Block Grant, 4. Durable Medical Equipment and Supplies
	Fiscal Year:	2020
	Column Name:	Annual Report Expended
	Field Note:	The Catastrophic Remediabale Diseases Program provided the funds by gender and age for FY 2018-19* and FY 2019-20. 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.
		*Considering Title V 2-year availability of funding.

15.	Field Name:	IIB. Non-Federal MCH Block Grant, 4. Laboratory Services
	Fiscal Year:	2020
	Column Name:	Annual Report Expended
	Field Note:	The Catastrophic Remediabale Diseases Program provided the funds by gender and age for FY 2018-19* and FY 2019-20. 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.
		*Considering Title V 2-year availability of funding.

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

State: Puerto Rico

Total Births by Occurrence: 19,053

Data Source Year: 2020

1. Core RUSP Conditions

Program Name	(A) Aggregate Total Number Receiving at Least One Valid Screen	(B) Aggregate Total Number of Out-of-Range Results	(C) Aggregate Total Number Confirmed Cases	(D) Aggregate Total Number Referred for Treatment
Core RUSP Conditions	18,711 (98.2%)	268	19	19 (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	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)	Primary Congenital Hypothyroidism	Propionic Acidemia	S, β eta-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	18,122 (95.1%)	533	7	7 (100.0%)

3. Screening Programs for Older Children & Women

None

4. Long-Term Follow-Up

The CSHCNP-HDDDTP Coordinator, in collaboration with the PR-Newborn Screening Program Genetic Counselor, monitors and follows-up families with positive confirmed newborns after they are referred for treatments. The purpose is to ensure newborns 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:	2020
	Column Name:	Total Births by Occurrence Notes
	Field Note:	Reference Data: 1. Demographic Registry Vital Statistics 2020. This includes 57 births that were registered after Birth Certificate data was submitted to NCHS and eliminates 30 duplicates.
2.	Field Name:	Core RUSP Conditions - Total Number Receiving At Least One Screen
	Fiscal Year:	2020
	Column Name:	Core RUSP Conditions
	Field Note:	Barriers that the PR-Newborn Screening Program (PRNSP) confronted at the beginning of the COVID-19 pandemic included reduced personnel, delayed follow-up due to resistance of families to come to a hospital, and lack of personal protective equipment. An operation continuity plan was implemented by the program and services were not interrupted. According to PRNSP, a total of 19,069 births were screened in 2020. However, due to the COVID-19 pandemic, the Demographic Registry Office has reported delays in the newborn inscription. Thus, data provided by the PRNSP is greater than the births provided by the Demographic Registry Office. Data reported in this Form reflects the births as reported by the Demographic registry as of August 11, 2021.

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 2020

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

Types Of Individuals Served	(A) Title V Total Served	Primary Source of Coverage				
		(B) Title XIX %	(C) Title XXI %	(D) Private / Other %	(E) None %	(F) Unknown %
1. Pregnant Women	9,001	65.0	0.0	34.0	0.0	1.0
2. Infants < 1 Year of Age	2,345	65.0	0.0	34.0	0.0	1.0
3. Children 1 through 21 Years of Age	18,684	58.0	0.0	37.0	5.0	0.0
3a. Children with Special Health Care Needs 0 through 21 years of age^	5,838	72.8	0.0	24.4	2.8	0.0
4. Others	13,654	42.0	0.0	49.0	9.0	0.0
Total	43,684					

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	241	No	19,053	99.9	19,034	9,001
2. Infants < 1 Year of Age	25,551	No	25,095	74.6	18,721	2,345
3. Children 1 through 21 Years of Age	742,335	No	707,198	39.8	281,465	18,684
3a. Children with Special Health Care Needs 0 through 21 years of age^	244,188	No	188,735	33.1	62,471	5,838
4. Others	2,473,375	No	2,458,117	30.7	754,642	13,654

^Represents a subset of all infants and children.

Form Notes for Form 5:

According to the implementation of Section 20601 of the 2018 Bipartisan Budget Act (BBA) through the Public Assistance Program, all funds provided for the PR Government Health Plan for the past reporting Fiscal Year were Federal. Therefore, PR Title V did not matched funds or population served for the last Fiscal Year with participants of the Government Health Plan, and instead matched with the Catastrophic Remediabale Diseases Program. This may explain variations on the populations served from previous years.

Field Level Notes for Form 5a:

1.	Field Name:	Pregnant Women Total Served
	Fiscal Year:	2020
<hr/>		
Field Note:		
Data Source:		
1. Title V Home Visiting Program Participants (2,785 served)		
2. Women served by Perinatal Nurses (3,498 served)		
3. Women reached by Health Promoters [including outreach activities, prenatal and parenting courses] (2,408 reached)		
4. Women reached by Health Educators [including outreach activities, prenatal and parenting courses] (310 reached)		
Reference Data:		
1. Demographic Registry Vital Statistics 2020. This includes 57 births that were registered after Birth Certificate data was submitted to NCHS and eliminates 30 duplicates.		
<hr/>		
2.	Field Name:	Infants Less Than One YearTotal Served
	Fiscal Year:	2020
<hr/>		
Field Note:		
Data Source:		
1. Infants served by Title V Home Visiting Program (2,345 served)		
Reference Data:		
1. Demographic Registry Vital Statistics 2020. This includes 57 births that were registered after Birth Certificate data was submitted to NCHS and eliminates 30 duplicates.		
<hr/>		
3.	Field Name:	Children 1 through 21 Years of Age
	Fiscal Year:	2020

Field Note:

Data Source:

1. Non-pregnant adolescents served by Perinatal Nurses (79 served)
2. Children reached by Health Promoters [including outreach activities, prenatal and parenting courses] (4,612 reached)
3. Children reached by Health Educators [including outreach activities, prenatal and parenting courses] (3,369 reached)
4. Children served by Title V Home Visiting Program (1,235 served)
5. Children served by the Comprehensive Adolescent Health Program [Youth Health Promoters and Youth Advisory Council] (3,551 served)

Reference Data:

1. American Community Survey, Census 2019.

4. **Field Name:** **Children with Special Health Care Needs 0 through 21 Years of Age**

Fiscal Year: **2020**

Field Note:

Data Source:

1. CSHCN served in Pediatric (3,614 served) and Autism Centers (563 served)
2. CSHCN served at specialized pediatric clinics (454 served)
3. CSHCN who received coordination services by Title V State Level Coordinators (1,172 served)
4. Children who received services from the Catastrophic Remediable Diseases Program (35 served)

Reference Data:

1. PR Community Survey, 2020 Census

5. **Field Name:** **Others**

Fiscal Year: **2020**

Field Note:

Data Source:

1. Participants >21 years old reached by Health Promoters [including outreach activities, prenatal and parenting courses] (10,162 reached)
2. Participants >21 years old reached by Health Educators [including outreach activities, prenatal and parenting courses] (2,159 reached)
3. Non-pregnant women >21 years old reached by Perinatal Nurses (1,297 reached)
4. Women >21 years old who received services from the Catastrophic Remediable Diseases Program (36 served)

Reference Data:

1. American Community Survey, 2019 Census

Field Level Notes for Form 5b:

1. **Field Name:** **Pregnant Women**

Fiscal Year: **2020**

Field Note:

Data Source:

1. Campaign "El Encuentro de Mi Vida". Count all Residents Live Births 2020 (19,047 reached)
2. Pregnant women served by "Healthy Family" (PR-MIECHV) (71 served)
3. Title V Home Visiting Program Participants (2,785 served)
4. Women served by Perinatal Nurses (3,498 served)
5. Women reached by Health Promoters [including outreach activities, prenatal and parenting courses] (2,408 reached)
6. Women reached by Health Educators [including outreach activities, prenatal and parenting courses] (310 reached)

* To minimize duplication only women reached by the Campaign "El Encuentro de Mi Vida" is reported*

Reference Data:

1. Demographic Registry Vital Statistics 2020. This includes 57 births that were registered after Birth Certificate data was submitted to NCHS and eliminates 30 duplicates.

2. **Field Name:** **Infants Less Than One Year**

Fiscal Year: **2020**

Field Note:

Data Source:

1. Infants served by "Healthy Family", PR MIECHV (50 served)
2. Newborn Screening Program according to 2020 Birth Certificate Data (18,711 served).
3. Universal Newborn Hearing Screening Program (18,122 served)
4. Infants served by Early Intervention, IDEA C (172 served)
5. Infants served by Title V Home Visiting Program (2,345 served)

* According to PRNSP, a total of 19,069 births were screened in 2020. However, due to the COVID-19 pandemic, the Demographic Registry Office has reported delays in the newborn inscription. Thus, data provided by the PRNSP is greater than the births provided by the Demographic Registry Office.

Data reported in this Form reflects the births as reported by the Demographic registry as of August 11, 2021. To minimize duplication only infants served by the Newborn Screening Program is reported*

Reference Data:

1. IDB, Census 2020

3. **Field Name:** **Children 1 Through 21 Years of Age**

Fiscal Year: **2020**

Field Note:

Data Source:

- 1.Children served by PR-PREP (403 served)
2. Children served by PR-SRAE (3,360 served)
3. Children served by "Healthy Family" [PR-MIECHV] (61 served)
4. Children 1 to 2 years old served by PR Early Intervention [Part C of IDEA] (3,761 served)
5. Children 12 to 18 years old reached by media campaign "Alcanza tu Nivel Máximo" including television newspapers, radio, digital media (Facebook, Google, among others), cinemas and websites adds (260,970 reached)
- 6.Non-pregnant adolescents served by Perinatal Nurses (79 served)
7. Children reached by Health Promoters [including outreach activities, prenatal and parenting courses] (4,612 reached)
8. Children reached by Health Educators [including outreach activities, prenatal and parenting courses] (3,369 reached)
9. Children served by Title V Home Visiting Program (1,235 served)
10. Children served by the Comprehensive Adolescent Health Program [Youth Health Promoters and Youth Advisory Council] (3,551 served)

Reference Data:

1. IDB, Census 2020.

4. **Field Name:** **Children with Special Health Care Needs 0 through 21 Years of Age**

Fiscal Year: **2020**

Field Note:

Data Source:

1. CSHCN served in Pediatric (3,614 served) and Autism Centers (563 served)
2. CSHCN served in Pediatric and Autism Centers & served at specialized pediatric clinics [Zika funded] (919 served)
3. APNI's Family Information web page and Facebook page (22,355)
4. CSHCN served at specialized pediatric clinics (454 served)
5. CSHCN who received coordination services by Title V State Level Coordinators (1,172 served)
6. Children who received services from the Catastrophic Remediable Diseases Program (35 served)
7. WIC families educated by CMS Zika Linkage Coordinators (14,918 served)
8. Transportation (531 served)
9. 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] (17,820 served)

Reference Data:

1. PR Community Survey, 2019 Census

5. **Field Name:** **Others**

Fiscal Year: **2020**

Field Note:

Data Source:

1. Media Campaign "El Encuentro de mi Vida" including television, newspapers, radio, digital media (Facebook, Google, among others), cinemas and websites to men and women 22 to 49 years old (755,322 reached)
2. Webpage visits to "El Encuentro de mi Vida" webpage (12,703 visits)
3. Parents or tutors reached by PR-PREP (62 reached)
4. Participants >21 years old reached by Health Promoters [including outreach activities, prenatal and parenting courses] (10,162 reached)
5. Participants >21 years old reached by Health Educators [including outreach activities, prenatal and parenting courses] (2,159 reached)
6. Non-pregnant women >21 years old reached by Perinatal Nurses (1,297 reached)
7. Women >21 years old who received services from the Catastrophic Remediable Diseases Program (36 served)

* To minimize duplication only women and men over 22 years old reached by the Campaign "El Encuentro de Mi Vida" is reported*

Reference Data:

1. IDB, Census 2020.

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 2020

I. Unduplicated Count by Race/Ethnicity

	(A) Total	(B) Non- Hispanic White	(C) Non- Hispanic Black or African American	(D) Hispanic	(E) Non- Hispanic American Indian or Native Alaskan	(F) Non- Hispanic Asian	(G) Non- Hispanic Native Hawaiian or Other Pacific Islander	(H) Non- Hispanic Multiple Race	(I) Other & Unknown
1. Total Deliveries in State	19,018	291	39	18,624	0	24	0	10	30
Title V Served	18,680	283	38	18,307	0	22	0	10	20
Eligible for Title XIX	14,944	226	30	14,646	0	18	0	8	16
2. Total Infants in State	24,848	380	51	24,334	0	31	0	13	39
Title V Served	24,849	376	51	24,353	0	29	0	13	27
Eligible for Title XIX	19,878	304	41	19,467	0	25	0	10	31

Form Notes for Form 6:

Race taxonomies in PR are constructed on the basis of phenotype traits such as texture of hair, skin tone, and lip and mouth shape. There is also a generalized denial of racial prejudice and discrimination in the island. Although Vital Statistics data reports race and ethnicity, it is not a reliable data because it depends on how the mother visualizes the color of her skin. People in PR may also opt to report their race as white (despite skin tone) due to an unstated contempt for everything associated with being dark or black skinned.

Field Level Notes for Form 6:

1.	Field Name:	1. Eligible for Title XIX
	Fiscal Year:	2020
	Column Name:	Total
	Field Note:	During FY 2019-2020 GHP was mainly covered by Federal Funds under the BBA Policy Act of 2018.
2.	Field Name:	2. Total Infants in State
	Fiscal Year:	2020
	Column Name:	Total
	Field Note:	Birth data reports 19,053 births for 2020. However, 2020 International Database (Census) reports an estimate of 24,848 infants. The seismic events occurred at the beginning of 2020 and COVID-19 pandemic, may be possible explanations of why the difference between births and the infant population is more than the expected 10%. Many pregnant women gave birth in the mainland and then came back to the Island once the theses events stabilized. On the other hand, the occurrence of the COVID-19 pandemic influenced birth registrations in the Island. Because of the new platforms for birth inscriptions, the process that this involved, added to the fear of being exposed to the virus delayed birth inscriptions. The database submitted to NCHS by the due date (19,026 births), does not include 57 births that were registered during 2021 but includes 30 births that were duplicated in the database. The Demographic Registry Office provided MCAHD the updated as of August 11, 2021 with 19,053 births. However, according to the PR-Newborn Screening Program a total of 19,069 births were screened in 2020.
3.	Field Name:	2. Eligible for Title XIX
	Fiscal Year:	2020
	Column Name:	Total
	Field Note:	During FY 2019-2020 GHP was mainly covered by Federal Funds under the BBA Policy Act of 2018.

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

State: Puerto Rico

A. State MCH Toll-Free Telephone Lines	2022 Application Year	2020 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"		14,281

B. Other Appropriate Methods	2022 Application Year	2020 Annual Report Year
1. Other Toll-Free "Hotline" Names	Línea PAS	Línea PAS
2. Number of Calls on Other Toll-Free "Hotlines"		695,034
3. State Title V Program Website Address	www.salud.gov.pr/Dept-de-Salud/Pages/Unidades-Operacionales/Secretaria-Auxiliar-de-Salud-Familiar-y-Servicios-Integrados/Division-Madres-Ninos-y-Adolescentes.aspx; www.encuentrodemivida.com ; www.minivelmaximo.com; https://cajsaludpr.wixsite.com/websi	www.salud.gov.pr/Dept-de-Salud/Pages/Unidades-Operacionales/Secretaria-Auxiliar-de-Salud-Familiar-y-Servicios-Integrados/Division-Madres-Ninos-y-Adolescentes.aspx; www.encuentrodemivida.com /; www.minivelmaximo.com
4. Number of Hits to the State Title V Program Website		12,786
5. State Title V Social Media Websites	YAC's Facebook, Intagram and Twitter	YAC's Facebook, Intagram and Twitter
6. Number of Hits to the State Title V Program Social Media Websites		751

Form Notes for Form 7:

None

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	Miguel Valencia Prado
Title	MD
Address 1	PO BOX 70184
Address 2	
City/State/Zip	San Juan / PR / 00936
Telephone	(787) 765-2929
Extension	4572
Email	mvalencia@salud.pr.gov

3. State Family or Youth 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	coralaidée@salud.pr.gov

Form Notes for Form 8:

None

Form 9
List of MCH Priority Needs

State: Puerto Rico

Application Year 2022

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 appropriate supports 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 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 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 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
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	
	2020
Annual Indicator	85.7
Numerator	15,614
Denominator	18,215
Data Source	Vital Statistics
Data Source Year	2020

NOM 1 - Notes:

Numerator and Denominator: 2020 Vital Statistics.
 Missing data excluded from 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	
	2020
Annual Indicator	878.9
Numerator	1,669
Denominator	18,990
Data Source	PR Health Insurance Companies and Vital Statistics
Data Source Year	2019-2020

NOM 2 - Notes:

Numerator: Billing information for maternal morbidity by ICDs from 9 Health Insurance Companies. Includes private health insurance and government health plan (GHP), 2019-2020.

Denominator: 2020 Vital Statistics.

Note: ICD-10 correction for this NOM was received after data was requested. Individual morbidities cannot be identified because data is aggregated. ICD-10 correction will be implemented for the following data request.

Data Alerts: None



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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015_2019	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	
	2020
Annual Indicator	21.1
Numerator	4
Denominator	18,990
Data Source	Vital Statistics
Data Source Year	2020

NOM 3 - Notes:

Numerator and Denominator: 2020 Vital Statistics.

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	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
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	
	2020
Annual Indicator	10.2
Numerator	1,934
Denominator	19,026
Data Source	Vital Statistics
Data Source Year	2020

NOM 4 - Notes:

Numerator and Denominator: 2020 Vital Statistics.
 Missing data excluded form denominator.

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	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
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	
	2020
Annual Indicator	11.6
Numerator	2,196
Denominator	18,970
Data Source	Vital Statistics
Data Source Year	2020

NOM 5 - Notes:

Numerator and Denominator: 2020 Vital Statistics.
 Missing data excluded from 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
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	
	2020
Annual Indicator	33.7
Numerator	6,400
Denominator	18,970
Data Source	Vital Statistics
Data Source Year	2020

NOM 6 - Notes:

Numerator and Denominator: 2020 Vital Statistics.

Missing data excluded from 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
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 %			
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
2019	6.8	0.6	138	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

State Provided Data	
	2020
Annual Indicator	7.1
Numerator	135
Denominator	18,990
Data Source	Vital Statistics
Data Source Year	2020

NOM 8 - Notes:

Numerator and Denominator: 2020 Vital Statistics.

Note: 2020 death and fetal death data in preliminary.

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
2019	6.5	0.6	133	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	
	2020
Annual Indicator	7.2
Numerator	136
Denominator	18,990
Data Source	Vital Statistics
Data Source Year	2020

NOM 9.1 - Notes:

Numerator and Denominator: 2020 Vital Statistics.

Note: 2020 death data in preliminary.

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
2019	3.8	0.4	78	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

State Provided Data	
	2020
Annual Indicator	5.4
Numerator	103
Denominator	18,990
Data Source	Vital Statistics
Data Source Year	2020

NOM 9.2 - Notes:

Numerator and Denominator: 2020 Vital Statistics.

Note: 2020 death data in preliminary.

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
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

State Provided Data	
	2020
Annual Indicator	1.7
Numerator	33
Denominator	18,990
Data Source	Vital Statistics
Data Source Year	2020

NOM 9.3 - Notes:

Numerator and Denominator: 2020 Vital Statistics.

Note: 2020 death data in preliminary.

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
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	
	2020
Annual Indicator	284.4
Numerator	54
Denominator	18,990
Data Source	Vital Statistics
Data Source Year	2020

NOM 9.4 - Notes:

Numerator and Denominator: 2020 Vital Statistics.

Note: 2020 death data in preliminary.

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
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	
	2020
Annual Indicator	47.4
Numerator	9
Denominator	18,990
Data Source	Vital Statistics
Data Source Year	2020

NOM 9.5 - Notes:

Numerator and Denominator: 2020 Vital Statistics.

Note: 2020 death data in preliminary.

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	
	2020
Annual Indicator	0.0
Numerator	3
Denominator	19,026
Data Source	Vital Statistics
Data Source Year	2020

NOM 10 - Notes:

Numerator: Alcohol consumption during the last three months of pregnancy. Birth Certificate 2020.

Denominator: All births. Birth Certificate 2020.

Note: PRAMS Survey phase 9 was reviewed and the question for this indicator was requested to be included 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	
	2020
Annual Indicator	0.7
Numerator	13
Denominator	18,990
Data Source	PR Health Insurance Companies and Vital Statistics
Data Source Year	2019-2020

NOM 11 - Notes:

Numerator: Billing information for neonatal abstinence from 9 Health Insurance Companies. Includes private health insurance and government health plan (GHP), 2019-2020.

Denominator: 2020 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
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

NOM 14 - Notes:

None

Data Alerts: None



NOM 15 - Child Mortality rate, ages 1 through 9, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	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	
	2020
Annual Indicator	11.6
Numerator	29
Denominator	250,214
Data Source	Vital Statistics, US Census
Data Source Year	2020

NOM 15 - Notes:

Numerator: Vital Statistics 2020.

Denominator: International Database Population Estimates, 2020. US Census

Note: 2020 death data in preliminary.

Data Alerts: None



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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	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

State Provided Data	
	2020
Annual Indicator	26.1
Numerator	97
Denominator	372,008
Data Source	Vital Statistics, US Census
Data Source Year	2020

NOM 16.1 - Notes:

Numerator: Vital Statistics 2020.

Denominator: International Database Population Estimates, 2020. US Census

Note: 2020 death data in preliminary.

Data Alerts: None



NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2019	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

State Provided Data	
	2020
Annual Indicator	5.1
Numerator	10
Denominator	194,208
Data Source	Vital Statistics, US Census
Data Source Year	2020

NOM 16.2 - Notes:

Numerator: Vital Statistics 2020.

Denominator: International Database Population Estimates, 2020. US Census

Note: 2020 death data in preliminary.

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2019	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

State Provided Data	
	2020
Annual Indicator	1.5
Numerator	3
Denominator	194,208
Data Source	Vital Statistics, US Census
Data Source Year	2020

NOM 16.3 - Notes:

Numerator: Vital Statistics 2020.

Denominator: International Database Population Estimates, 2020. US Census

Note: 2020 death data in preliminary.

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
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
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
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
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
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
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
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 <50 and is not reportable

⚡ Indicator has a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

Data Source: Youth Risk Behavior Surveillance System (YRBSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	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
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
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
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
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

NOM 22.1 - Notes:

None

Data Alerts: None


NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza


Data Source: National Immunization Survey (NIS) – Flu

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
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

NOM 22.2 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	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

NOM 22.3 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	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

NOM 22.4 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	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

NOM 22.5 - Notes:

None

Data Alerts: None



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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	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	
	2020
Annual Indicator	14.8
Numerator	1,475
Denominator	99,648
Data Source	Vital Statistics and International Database
Data Source Year	2020

NOM 23 - Notes:

Numerator: 2020 birth certificate.
 Denominator: 2020 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
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:

None

Data Alerts: None

NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year

Data Source: MCH Jurisdictional Survey (MCH-JS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
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)					
	2016	2017	2018	2019	2020
Annual Objective					79.4
Annual Indicator				78.7	78.5
Numerator				481,355	484,022
Denominator				612,005	616,350
Data Source				BRFSS	BRFSS
Data Source Year				2018	2019

i Previous NPM-1 BRFSS data for survey years 2015, 2016 and 2017 that was pre-populated under the 2016, 2017 and 2018 Annual Report Years 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
Annual Objective		79.4
Annual Indicator	77.9	77.9
Numerator	346,051	346,051
Denominator	444,413	444,413
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	79.3	80.1	80.9	81.6	82.4	83.2

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2021
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.
2.	Field Name:	2022
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.
6.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

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

Federally Available Data		
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)		
	2019	2020
Annual Objective		
Annual Indicator	43.6	44.0
Numerator	9,056	8,759
Denominator	20,766	19,897
Data Source	PRAMS	PRAMS
Data Source Year	2018	2019

Federally Available Data		
Data Source: MCH Jurisdictional Survey (MCH-JS)		
	2019	2020
Annual Objective		
Annual Indicator	65.3	65.3
Numerator	8,468	8,468
Denominator	12,960	12,960
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	44.4	44.9	45.3	45.8	46.2	46.6

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2021
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline FAD PR-PRAMS 2019 considering a 5% increase by 2025.
2.	Field Name:	2022
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
6.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.

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
Annual Objective		
Annual Indicator	29.1	23.1
Numerator	6,018	4,562
Denominator	20,645	19,765
Data Source	PRAMS	PRAMS
Data Source Year	2018	2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	23.3	23.6	23.8	24.0	24.3	24.5

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2021
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
2.	Field Name:	2022
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
6.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 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
Annual Objective		
Annual Indicator	24.3	24.1
Numerator	5,062	4,772
Denominator	20,809	19,808
Data Source	PRAMS	PRAMS
Data Source Year	2018	2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	24.3	24.6	24.8	25.1	25.3	25.5

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2021
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
2.	Field Name:	2022
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.
6.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025.

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
Annual Objective		
Annual Indicator	21.8	12.0
Numerator	22,875	10,721
Denominator	104,752	89,358
Data Source	YRBSS	YRBSS
Data Source Year	2017	2019

Federally Available Data		
Data Source: MCH Jurisdictional Survey (MCH-JS)		
	2019	2020
Annual Objective		
Annual Indicator	27.9	27.9
Numerator	58,635	58,635
Denominator	209,819	209,819
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	11.7	11.7	11.3	11.3	11.1	11.1

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2021
	Column Name:	Annual Objective
	Field Note:	Annual objectives based on FAD PR-YRBSS 2011 to 2019 considering a 5% decrease by 2025.
2.	Field Name:	2022
	Column Name:	Annual Objective
	Field Note:	Annual objectives based on FAD PR-YRBSS 2011 to 2019 considering a 5% decrease by 2025.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives based on FAD PR-YRBSS 2011 to 2019 considering a 5% decrease by 2025.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives based on FAD PR-YRBSS 2011 to 2019 considering a 5% decrease by 2025.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives based on FAD PR-YRBSS 2011 to 2019 considering a 5% decrease by 2025.
6.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Annual objectives based on FAD PR-YRBSS 2011 to 2019 considering a 5% decrease by 2025.

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
Annual Objective	72.3	72.3
Annual Indicator	92.0	92.0
Numerator	192,972	192,972
Denominator	209,819	209,819
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective			76.1	72.3	72.3
Annual Indicator	76	76	72.3	72.3	72.3
Numerator	179,519	179,519	174,840	174,840	174,840
Denominator	236,100	236,100	241,976	241,976	241,976
Data Source	BRFSS	BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year	2016	2016	2017	2017	2017
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	72.3	73.0	73.7	74.5	75.9	76.6

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2016
	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.

Data reported from PR BRFSS 2016.

2. **Field Name:** 2017

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 2016, 2017 final data will be reported by 2019.

3. **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.

4. **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 BFRSS 2021 is completed.

5. **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.

6. **Field Name:** 2021

Column Name: Annual Objective

Field Note:

Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

7. **Field Name:** 2022

Column Name: Annual Objective

Field Note:

Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

8. **Field Name:** 2023

Column Name: Annual Objective

Field Note:

Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

9. **Field Name:** 2024

Column Name: Annual Objective

Field Note:

Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

10. **Field Name:** 2025

Column Name: Annual Objective

Field Note:

Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

11. **Field Name:** **2026**

Column Name: **Annual Objective**

Field Note:

Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

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
Annual Objective	32.4	57.1
Annual Indicator	57.1	57.1
Numerator	107,696	107,696
Denominator	188,735	188,735
Data Source	MCH-JS-CSHCN	MCH-JS-CSHCN
Data Source Year	2019	2019

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective			31.6	32.4	57.1
Annual Indicator	30.8	30.8	30.8		
Numerator	46,505	46,505	46,505		
Denominator	150,935	150,935	150,935		
Data Source	PR-CSHCN Survey	PR-CSHCN Survey	PR-CSHCN Survey		
Data Source Year	2015	2015	2015		
Provisional or Final ?	Final	Final	Final		

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	57.1	57.4	57.7	58.0	58.3	58.6

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2016
	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:** 2017

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.

3. **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.

4. **Field Name:** 2021

Column Name: Annual Objective

Field Note:

Data is based on the 2019 MCH-JS and represent the PR-CSHCN population. Although previous indicators are not comparable with the new baseline indicator, the significant difference between indicators was considered to project annual objectives conservatively.

5. **Field Name:** 2022

Column Name: Annual Objective

Field Note:

Data is based on the 2019 MCH-JS and represent the PR-CSHCN population. Although previous indicators are not comparable with the new baseline indicator, the significant difference between indicators was considered to project annual objectives conservatively.

6. **Field Name:** 2023

Column Name: Annual Objective

Field Note:

Data is based on the 2019 MCH-JS and represent the PR-CSHCN population. Although previous indicators are not comparable with the new baseline indicator, the significant difference between indicators was considered to project annual objectives conservatively.

7. **Field Name:** 2024

Column Name: Annual Objective

Field Note:

Data is based on the 2019 MCH-JS and represent the PR-CSHCN population. Although previous indicators are not comparable with the new baseline indicator, the significant difference between indicators was considered to project annual objectives conservatively.

8. **Field Name:** **2025**

Column Name: **Annual Objective**

Field Note:

Data is based on the 2019 MCH-JS and represent the PR-CSHCN population. Although previous indicators are not comparable with the new baseline indicator, the significant difference between indicators was considered to project annual objectives conservatively.

9. **Field Name:** **2026**

Column Name: **Annual Objective**

Field Note:

Data is based on the 2019 MCH-JS and represent the PR-CSHCN population. Although previous indicators are not comparable with the new baseline indicator, the significant difference between indicators was considered to project annual objectives conservatively.

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
Annual Objective	26	6.4
Annual Indicator	6.4	6.4
Numerator	5,714	5,714
Denominator	89,053	89,053
Data Source	MCH-JS-CSHCN	MCH-JS-CSHCN
Data Source Year	2019	2019

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective			25.3	26	6.4
Annual Indicator	24.7	24.7	24.7		
Numerator	16,226	16,226	16,226		
Denominator	65,560	65,560	65,560		
Data Source	PR-CSHCN Survey	PR-CSHCN Survey	PR-CSHCN Survey		
Data Source Year	2015	2015	2015		
Provisional or Final ?	Final	Final	Final		

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	6.4	6.7	7.0	7.3	7.6	7.9

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2016
	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:** 2017

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.

3. **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.

4. **Field Name:** 2021

Column Name: Annual Objective

Field Note:

Data and annual objectives are based on the 2019 MCH-JS and represent the PR-YSHCN population. The small sample size (n=29) may produce unstable estimates, so it is possible these projections will be modified after subsequent surveys.

5. **Field Name:** 2022

Column Name: Annual Objective

Field Note:

Data and annual objectives are based on the 2019 MCH-JS and represent the PR-YSHCN population. The small sample size (n=29) may produce unstable estimates, so it is possible these projections will be modified after subsequent surveys.

6. **Field Name:** 2023

Column Name: Annual Objective

Field Note:

Data and annual objectives are based on the 2019 MCH-JS and represent the PR-YSHCN population. The small sample size (n=29) may produce unstable estimates, so it is possible these projections will be modified after subsequent surveys.

7. **Field Name:** 2024

Column Name: Annual Objective

Field Note:

Data and annual objectives are based on the 2019 MCH-JS and represent the PR-YSHCN population. The small sample size (n=29) may produce unstable estimates, so it is possible these projections will be modified after subsequent surveys.

8. **Field Name:** 2025

Column Name: Annual Objective

Field Note:

Data and annual objectives are based on the 2019 MCH-JS and represent the PR-YSHCN population. The small sample size (n=29) may produce unstable estimates, so it is possible these projections will be modified after subsequent surveys.

9. **Field Name:** 2026

Column Name: Annual Objective

Field Note:

Data and annual objectives are based on the 2019 MCH-JS and represent the PR-YSHCN population. The small sample size (n=29) may produce unstable estimates, so it is possible these projections will be modified after subsequent surveys.

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
Annual Objective		
Annual Indicator	48.7	53.3
Numerator	10,196	10,706
Denominator	20,921	20,073
Data Source	PRAMS	PRAMS
Data Source Year	2018	2019

Federally Available Data		
Data Source: MCH Jurisdictional Survey (MCH-JS)		
	2019	2020
Annual Objective		
Annual Indicator	71.4	71.4
Numerator	377,217	377,217
Denominator	528,457	528,457
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	53.3	53.8	54.4	54.9	56.0	56.5

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2021
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-PRAMS 2019 considering a 5% increase by 2025. because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.
2.	Field Name:	2022
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-PRAMS 2019 considering a 5% increase by 2025. because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-PRAMS 2019 considering a 5% increase by 2025. because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-PRAMS 2019 considering a 5% increase by 2025. because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-PRAMS 2019 considering a 5% increase by 2025. because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.
6.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Annual objectives baseline PR-PRAMS 2019 considering a 5% increase by 2025. because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

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
Annual Objective	72.3	72.3
Annual Indicator	78.1	78.1
Numerator	453,736	453,736
Denominator	581,051	581,051
Data Source	MCH-JS	MCH-JS
Data Source Year	2019	2019

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective			75.7	72.3	72.3
Annual Indicator	75.7	75.7	72.3	72.3	72.3
Numerator	519,746	519,746	433,883	433,883	433,883
Denominator	686,290	686,290	600,429	600,429	600,429
Data Source	BRFSS	BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year	2016	2016	2017	2017	2017
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	72.3	73.0	73.7	74.5	75.9	76.6

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2016
	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.

Data reported from PR BRFSS 2016.

2. **Field Name:** 2017

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 2016, 2017 final data will be reported by 2019.

3. **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.

4. **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.

5. **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 67.5%.

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 BFRSS 2021 is completed.

6. **Field Name:** 2021

Column Name: Annual Objective

Field Note:

Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

7. **Field Name:** 2022

Column Name: Annual Objective

Field Note:

Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

8. **Field Name:** 2023

Column Name: Annual Objective

Field Note:

Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

9. **Field Name:** 2024

Column Name: Annual Objective

Field Note:

Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

10. **Field Name:** 2025

Column Name: Annual Objective

Field Note:

Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

11. **Field Name:** **2026**

Column Name: **Annual Objective**

Field Note:

Annual objectives baseline PR-BRFSS 2019 considering a 5% increase by 2025. Because of COVID-19 a decrease in all preventive visits is expected in the following year. Objectives will be adjusted considering the observed reduction.

Form 10
National Performance Measures (NPMs) (2016-2020 Needs Assessment Cycle)

State: Puerto Rico

2016-2020: NPM 3 - Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

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

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective	70.8	74.8	29.5	51.6	51.7
Annual Indicator	74.4	57.9	51.5	55.1	48.9
Numerator	285	205	157	134	132
Denominator	383	354	305	243	270
Data Source	Vital Statistics	Vital Statistics	Vital Statistics	Vital Statistics	Vital Statistics
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 NPMs:

-
1. **Field Name:** 2016
-
- Column Name:** State Provided Data
-
- Field Note:**
 Numerator and Denominator: 2016 Vital Statistics.

 2016 Vital Statistics data in preliminary.

 Missing data excluded from denominator.
-
2. **Field Name:** 2017
-
- Column Name:** State Provided Data
-
- Field Note:**
 Numerator and Denominator: 2017 Vital Statistics.
 Missing data excluded from denominator.

 Note: LOCATe assessment tool was used to identify hospitals with a Level III+ NICU.

3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Numerator and Denominator: 2018 Vital Statistics. 2018 Vital Statistics data in preliminary. Missing data excluded from denominator.
	Note:	LOCATe assessment tool was used to identify hospitals with a Level III+ NICU for 2017 and 2018. This assessment started in 2017 and finished in 2018. Annual Objective of 2018 was based on the preliminary assessment started in 2017. Once the assessment was completed, the Annual Objectives 2019 to 2024 were calculated .
4.	Field Name:	2019
	Column Name:	State Provided Data
	Field Note:	Numerator and Denominator: 2019 Vital Statistics. Missing data excluded from denominator.
	Note:	LOCATe assessment tool was used to identify hospitals with a Level III+ NICU for 2017 and 2018. This assessment started in 2017 and finished in 2018. Annual Objective of 2018 was based on the preliminary assessment started in 2017. Once the assessment was completed, the Annual Objectives 2019 to 2025 were calculated .
5.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	Numerator and Denominator: 2020 Vital Statistics. Missing data excluded from denominator.
	Note:	LOCATe assessment tool was implemented to identify hospitals with a Level III+ NICU between 2017 and 2019.

2016-2020: NPM 4A - Percent of infants who are ever breastfed

Federally Available Data					
Data Source: National Immunization Survey (NIS)					
	2016	2017	2018	2019	2020
Annual Objective	88	83	83.5	90	95
Annual Indicator	82.7	81.9	85.9	85.9	85.9
Numerator	25,467	25,075	21,344	21,344	21,344
Denominator	30,787	30,611	24,861	24,861	24,861
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2015	2015
Federally Available Data					
Data Source: MCH Jurisdictional Survey (MCH-JS)					
	2019		2020		
Annual Objective	90		95		
Annual Indicator	87.4		87.4		
Numerator	130,477		130,477		
Denominator	149,303		149,303		
Data Source	MCH-JS		MCH-JS		
Data Source Year	2019		2019		

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective	88	83	83.5	90	95
Annual Indicator	94.8	96.6	96.3	97	96.5
Numerator	26,807	23,509	20,631	19,736	18,369
Denominator	28,266	24,328	21,418	20,344	19,026
Data Source	Vital Statistics	Vital Statistics	Vital Statistics	Vital Statistics	Vital Statistics
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	
		Numerator and Denominator: 2016 Vital Statistics.
		2016 Vital Statistics data in preliminary.
		Missing data excluded from denominator.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	
		Numerator and Denominator: 2017 Vital Statistics.
		Missing data excluded from denominator.
3.	Field Name:	2018
	Column Name:	State Provided Data

Field Note:

Numerator and Denominator: 2018 Vital Statistics.
2018 Vital Statistics data in preliminary.
Missing data excluded from denominator.

Note:

There is a difference in the annual indicator reported for the percent of infants ever breastfed between the federally available data (obtained from the Immunization Survey) and the state provided data (Obtained from Puerto Rico Vital Statistics) because they report different years. The federal data is from 2015 and the state data is for 2016 to 2018.

4. **Field Name:** 2019

Column Name: State Provided Data

Field Note:

Numerator and Denominator: 2019 Vital Statistics.
Missing data excluded from denominator.

Note:

There is a difference in the annual indicator reported for the percent of infants ever breastfed between the federally available data (obtained from the Immunization Survey) and the state provided data (Obtained from Puerto Rico Vital Statistics) because they report different years. The federal data is from 2015 and the state data is for 2016 to 2019.

5. **Field Name:** 2020

Column Name: State Provided Data

Field Note:

Numerator and Denominator: 2020 Vital Statistics.
Missing data excluded from denominator.

Note:

There is a difference in the annual indicator reported for the percent of infants ever breastfed between the federally available data (obtained from the Immunization Survey) and the state provided data (Obtained from Puerto Rico Vital Statistics) because they report different years. The federal data is from 2015 and the state data is for 2016 to 2020.

2016-2020: NPM 4B - Percent of infants breastfed exclusively through 6 months

Federally Available Data					
Data Source: National Immunization Survey (NIS)					
	2016	2017	2018	2019	2020
Annual Objective	19.7	21.2	20.6	27.9	29.4
Annual Indicator	20.1	20.1	26.5	26.5	26.5
Numerator	6,133	6,093	6,531	6,531	6,531
Denominator	30,551	30,260	24,618	24,618	24,618
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2015	2015

Field Level Notes for Form 10 NPMs:

None

**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					
	2016	2017	2018	2019	2020
Annual Objective		0	15.3	16	11.2
Annual Indicator	79.1	15.3	15.3	11.2	11.2
Numerator	382	3,610	3,610	1,840	1,840
Denominator	483	23,581	23,581	16,413	16,413
Data Source	Autism Registry	PRHIA	PRHIA	MCH-JS	MCH-JS
Data Source Year	2016	2017	2017	2019	2019
Provisional or Final ?	Provisional	Provisional	Provisional	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	11.2	11.3	11.4	11.5	11.6	11.7

Field Level Notes for Form 10 SPMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Source of Data is the Autism Registry. It is not representative of the island as it was mostly entered by health providers of the Autism Centers and RPCs.
2.	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.

3.	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.
4.	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.
5.	Field Name:	2021
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
6.	Field Name:	2022
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
7.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
8.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
9.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
10.	Field Name:	2026
	Column Name:	Annual Objective

Field Note:

Projections are based on an increase of 5% in five years.

SPM 2 - Prevalence at birth of neural tube defects.

Measure Status:				Active	
State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		9.2	8.4	6.4	6.5
Annual Indicator	9.2	8.5	5.3	5.6	9.3
Numerator	26	24	13	12	19
Denominator	28,326	28,339	24,310	21,492	20,431
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	2016	2016	2017	2018	2019
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional	Provisional

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	9.2	9.2	9.1	9.1	9.0	9.0

Field Level Notes for Form 10 SPMs:

1.	Field Name:	2021
	Column Name:	Annual Objective
	Field Note:	Annual objectives were revised because of a rise in NTD birth prevalence during 2019.
2.	Field Name:	2022
	Column Name:	Annual Objective
	Field Note:	Annual objectives were revised because of a rise in NTD birth prevalence during 2019.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives were revised because of a rise in NTD birth prevalence during 2019.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives were revised because of a rise in NTD birth prevalence during 2019.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives were revised because of a rise in NTD birth prevalence during 2019.
6.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Annual objectives were revised because of a rise in NTD birth prevalence during 2019.

Form 10
State Performance Measures (SPMs) (2016-2020 Needs Assessment Cycle)

2016-2020: SPM 1 - Percent of cesarean deliveries among low-risk first births

Measure Status:				Active	
State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		39.7	40.5	41.1	40.8
Annual Indicator	40.2	40.9	41.5	42.1	45.5
Numerator	3,865	3,357	3,125	3,115	3,062
Denominator	9,618	8,209	7,524	7,403	6,736
Data Source	Vital Statistics	Vital Statistics	Vital Statistics	Vital Statistics	Vital Statistics
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 SPMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Numerator and denominator: 2016 Vital Statistics.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Numerator and denominator: 2017 Vital Statistics.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Numerator and denominator: 2018 Vital Statistics. 2018 Vital Statistics data is preliminary.
	Note:	Many hospitals in PR has implemented the Hard Stop Policy (HSP). Recently, a champion of the HSP of the leading birthing hospital in the Island passed away. This resulted in a significant increase of the early elective delivery in this hospital. This may be one one of the reasons for the slight increase of low risk C/S in PR.
4.	Field Name:	2019
	Column Name:	State Provided Data
	Field Note:	Numerator and denominator: 2019 Vital Statistics.
5.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	Numerator and denominator: 2020 Vital Statistics.

2016-2020: SPM 2 - Percent of children with a preventive services visit in the last year

Measure Status:		Active			
State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		6.6	79.5	85.8	85.8
Annual Indicator	79.4	79.4	85.8	85.8	85.8
Numerator	357,484	357,484	307,621	307,621	307,621
Denominator	450,190	450,190	358,453	358,453	358,453
Data Source	BRFSS	BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year	2016	2016	2017	2017	2017
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 SPMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	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. Data reported from PR BRFSS 2016.
2.	Field Name:	2017
	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 2016, 2017 final data will be reported by 2019.
3.	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.
4.	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 stopped collecting MCH data by 2017 due to MCH-JS. However, MCH-JS doesn't reflect the reality of other NPMs (NPM 10 & NPM 13.2) in PR. Therefore, for this SPM, 2017 BRFSS data will be reported. MCH data will be available for BRFSS 2021.
5.	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. PRBRFSS stopped collecting MCH data by 2017 due to MCH-JS. However, MCH-JS doesn't reflect the reality of other NPMs (NPM 10 & NPM 13.2) in PR. Therefore, for this SPM, 2017 BRFSS data will be reported.

2016-2020: SPM 6 - Percent of EHR and tele-health system implementation phases completed.

Measure Status:		Active		
State Provided Data				
	2017	2018	2019	2020
Annual Objective	36.2	33.3	60	77.7
Annual Indicator	33.3	46.7	46.7	53.3
Numerator	5	7	7	8
Denominator	15	15	15	15
Data Source	CSHCNP data	EHR system implementation work team	EHR system implementation work team	EHR Team
Data Source Year	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Provisional	Provisional

Field Level Notes for Form 10 SPMs:

1.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	SPM 6 is the measure for priority 5 and substituted SPM 5.
2.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	SPM 6 is the measure for state priority 5.
3.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	Phases in an advance stage but still in process were not included in the numerator. This ESM has been inactivated, however, is being followed-up by the program and reported under the medical home priority.

**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
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Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	0.0	0.0	0.0	0.0	0.0	0.0

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:	Annual Objective
	Field Note:	There is no baseline data in order to estimate the Annual Objectives for this ESM. This indicator will be included as part of PR BRFSS 2021 state added questions. Once baseline data is known, Annual Objectives will be estimated.
4.	Field Name:	2022

Column Name: Annual Objective

Field Note:

There is no baseline data in order to estimate the Annual Objectives for this ESM. This indicator will be included as part of PR BRFSS 2021 state added questions. Once baseline data is known, Annual Objectives will be estimated.

5. **Field Name:** 2023

Column Name: Annual Objective

Field Note:

There is no baseline data in order to estimate the Annual Objectives for this ESM. This indicator will be included as part of PR BRFSS 2021 state added questions. Once baseline data is known, Annual Objectives will be estimated.

6. **Field Name:** 2024

Column Name: Annual Objective

Field Note:

There is no baseline data in order to estimate the Annual Objectives for this ESM. This indicator will be included as part of PR BRFSS 2021 state added questions. Once baseline data is known, Annual Objectives will be estimated.

7. **Field Name:** 2025

Column Name: Annual Objective

Field Note:

There is no baseline data in order to estimate the Annual Objectives for this ESM. This indicator will be included as part of PR BRFSS 2021 state added questions. Once baseline data is known, Annual Objectives will be estimated.

8. **Field Name:** 2026

Column Name: Annual Objective

Field Note:

There is no baseline data in order to estimate the Annual Objectives for this ESM. This indicator will be included as part of PR BRFSS 2021 state added questions. Once baseline data is known, Annual Objectives will be estimated.

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
------------------------	---------------

Baseline data was not available/provided.

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	0.0	0.0	0.0	0.0	0.0

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:	2022
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be projected once baseline data (FY 2020-2021) is provided. It is expected to be available by 2022.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be projected once baseline data (FY 2020-2021) is provided. It is expected to be available by 2022.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be projected once baseline data (FY 2020-2021) is provided. It is expected to be available by 2022.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be projected once baseline data (FY 2020-2021) is provided. It is expected to be available by 2022.
6.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be projected once baseline data (FY 2020-2021) is provided. It is expected to be available by 2022.

ESM 9.1 - Percent of Youth Health Promoters (YHP) who report not being bullied in Puerto Rico by September 2021-2025

Measure Status:	Active
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Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	0.0	0.0	0.0	0.0	0.0	0.0

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: Annual Objective

Field Note:
Annual objectives will be projected once baseline data (school year 2021-20212 is provided. It is expected to be available by 2022.

4.	Field Name:	2022
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be projected once baseline data (school year 2021-20212 is provided. It is expected to be available by 2022.
5.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be projected once baseline data (school year 2021-20212 is provided. It is expected to be available by 2022.
6.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be projected once baseline data (school year 2021-20212 is provided. It is expected to be available by 2022.
7.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be projected once baseline data (school year 2021-20212 is provided. It is expected to be available by 2022.
8.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be projected once baseline data (school year 2021-20212 is provided. It is expected to be available by 2022.

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					
	2017	2018	2019	2020	
Annual Objective	50	60	84.8	84.9	
Annual Indicator	59.9	59.3	84.7	68.3	
Numerator	85	64	72	28	
Denominator	142	108	85	41	
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	
Data Source Year	2016-17	2017-18	2018-19	2019-2020	
Provisional or Final ?	Final	Final	Final	Final	

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	85.0	85.1	85.2	85.3	85.4	85.5

Field Level Notes for Form 10 ESMs:

- Field Name:** 2016

Column Name: State Provided Data

Field Note:
 Known during the 2016-2020 cycle as ESM 10.2, it is now ESM 10.1 for this new 2021-2025 cycle. A correction was made to the previously reported data. Data for this ESM began to be collected during the 2016-2017 school year. However, the data began to be reported incorrectly in the reporting year that corresponds to the following school year. For this new cycle, PR Title V corrects this by placing the numbers to the corresponding school years within the EHB. For the 2015-2016 school year there was no data to be report as the collection method was being pilot tested.
- 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.

3. **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.

4. **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.

5. **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.

6. **Field Name:** 2021

Column Name: Annual Objective

Field Note:

Annual Objectives are subjected to changes dependig on the data reported for the 2021-2022 school year. 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 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.

7. **Field Name:** 2022

Column Name: Annual Objective

Field Note:

Annual Objectives are subjected to changes dependig on the data reported for the 2021-2022 school year.

8. **Field Name:** 2023

Column Name: Annual Objective

Field Note:

Annual Objectives are subjected to changes dependig on the data reported for the 2021-2022 school year.

9. **Field Name:** 2024

Column Name: Annual Objective

Field Note:

Annual Objectives are subjected to changes dependig on the data reported for the 2021-2022 school year.

10. **Field Name:** 2025

Column Name: Annual Objective

Field Note:

Annual Objectives are subjected to changes dependig on the data reported for the 2021-2022 school year.

11. **Field Name:** 2026

Column Name: Annual Objective

Field Note:

Annual Objectives are subjected to changes dependig on the data reported for the 2021-2022 school year.

ESM 11.1 - Percent of families at the CSHCN Program who report that they “always” have a care coordinator assigned to help them find the services they need.

Measure Status:		Active
State Provided Data		
	2020	
Annual Objective		
Annual Indicator	74.6	
Numerator	223	
Denominator	299	
Data Source	Medical Home Family Index Survey	
Data Source Year	2021	
Provisional or Final ?	Final	

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	75.3	76.0	76.7	77.4	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:	2022
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
6.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.

ESM 11.2 - Percent of families at the CSHCN Program who 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
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Baseline data was not available/provided.

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	0.0	0.0	0.0	0.0	0.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	Baseline to be measured through the Medical Home Family Index at the CSHCN Program between 2022 and 2023.
2.	Field Name:	2022
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be calculated once the baseline data is available between 2022 and 2023.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be calculated once the baseline data is available between 2022 and 2023.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be calculated once the baseline data is available between 2022 and 2023.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be calculated once the baseline data is available between 2022 and 2023.
6.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be calculated once the baseline data is available between 2022 and 2023.

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
Annual Objective		
Annual Indicator	48.5	71.8
Numerator	128	173
Denominator	264	241
Data Source	Regional Pediatric Centers	CSHCN Program database
Data Source Year	2018-19	2019-20
Provisional or Final ?	Provisional	Provisional

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	71.8	72.5	73.2	73.9	74.7	75.4

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:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
3.	Field Name:	2022
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
4.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
5.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
6.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.
7.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Projections are based on an increase of 5% in five years.

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
------------------------	---------------

Baseline data was not available/provided.

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	0.0	0.0	0.0	0.0	0.0

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:	2022
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be reported once baseline is available. Data is expected to be available between 2022 and 2023 and will be measured through the CSHCNP Database.
3.	Field Name:	2023
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be reported once baseline is available. Data is expected to be available between 2022 and 2023 and will be measured through the CSHCNP Database.
4.	Field Name:	2024
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be reported once baseline is available. Data is expected to be available between 2022 and 2023 and will be measured through the CSHCNP Database.
5.	Field Name:	2025
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be reported once baseline is available. Data is expected to be available between 2022 and 2023 and will be measured through the CSHCNP Database.
6.	Field Name:	2026
	Column Name:	Annual Objective
	Field Note:	Annual objectives will be reported once baseline is available. Data is expected to be available between 2022 and 2023 and will be measured through the CSHCNP Database.

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

Measure Status:	Active
------------------------	---------------

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	0.0	0.0	0.0	0.0	0.0	0.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2019
	Column Name:	State Provided Data
	Field Note:	Title V Home Visiting Program (HVP) started collecting data of pregnant participants who received oral health services post referral in February 2020. Baseline data is expected to be reported by 2021.
2.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	Title V Home Visiting Program (HVP) began collecting data on the number of pregnant participants who received oral health services post referral in July 2020. Data collection was delayed due to the COVID-19 lockdown. Baseline data is expected to be reported by 2022.
3.	Field Name:	2021
	Column Name:	Annual Objective
	Field Note:	There is no baseline data in order to estimate the Annual Objectives for this ESM. Title V Home Visiting Program (HVP) is currently collecting data of pregnant participants who received oral health services post referral. Baseline data is expected to be reported by 2022.
4.	Field Name:	2022
	Column Name:	Annual Objective
	Field Note:	There is no baseline data in order to estimate the Annual Objectives for this ESM. Title V Home Visiting Program (HVP) is currently collecting data of pregnant participants who received oral health services post referral. Baseline data is expected to be reported by 2022.
5.	Field Name:	2023

Column Name: Annual Objective

Field Note:

There is no baseline data in order to estimate the Annual Objectives for this ESM. Title V Home Visiting Program (HVP) is currently collecting data of pregnant participants who received oral health services post referral. Baseline data is expected to be reported by 2022.

6. **Field Name:** 2024

Column Name: Annual Objective

Field Note:

There is no baseline data in order to estimate the Annual Objectives for this ESM. Title V Home Visiting Program (HVP) is currently collecting data of pregnant participants who received oral health services post referral. Baseline data is expected to be reported by 2022.

7. **Field Name:** 2025

Column Name: Annual Objective

Field Note:

There is no baseline data in order to estimate the Annual Objectives for this ESM. Title V Home Visiting Program (HVP) is currently collecting data of pregnant participants who received oral health services post referral. Baseline data is expected to be reported by 2022.

8. **Field Name:** 2026

Column Name: Annual Objective

Field Note:

There is no baseline data in order to estimate the Annual Objectives for this ESM. Title V Home Visiting Program (HVP) is currently collecting data of pregnant participants who received oral health services post referral. Baseline data is expected to be reported by 2022.

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
Annual Objective			39.3
Annual Indicator		39.3	34
Numerator		210	127
Denominator		534	373
Data Source		HVP Participants Records	HVP Participants Records
Data Source Year		2018-2019	2019-2020
Provisional or Final ?		Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	34.1	34.2	34.3	34.4	34.5	34.6

Field Level Notes for Form 10 ESMs:

- 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.
- Field Name:** 2021

Column Name: Annual Objective

Field Note:
 Baseline for Annual Objectives was corrected with 2019-2020 data as baseline (34%).
- Field Name:** 2022

Column Name: Annual Objective

Field Note:

Baseline for Annual Objectives was corrected with 2019-2020 data as baseline (34%).

4. **Field Name:** 2023

Column Name: Annual Objective

Field Note:

Baseline for Annual Objectives was corrected with 2019-2020 data as baseline (34%).

5. **Field Name:** 2024

Column Name: Annual Objective

Field Note:

Baseline for Annual Objectives was corrected with 2019-2020 data as baseline (34%).

6. **Field Name:** 2025

Column Name: Annual Objective

Field Note:

Baseline for Annual Objectives was corrected with 2019-2020 data as baseline (34%).

7. **Field Name:** 2026

Column Name: Annual Objective

Field Note:

Baseline for Annual Objectives was corrected with 2019-2020 data as baseline (34%).

Form 10
Evidence-Based or -Informed Strategy Measures (ESMs) (2016-2020 Needs Assessment Cycle)

2016-2020: ESM 1.4 - Reduce the percent of uninsured women in reproductive age in Puerto Rico, by September 2017-2021 (ongoing)

Measure Status:		Active			
State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		10	7.8	7.8	7.7
Annual Indicator	10.6	7.9	7.9	6.3	9
Numerator	95,622	68,727	67,041	51,313	72,892
Denominator	897,899	870,641	848,623	812,204	811,509
Data Source	PRHIA, ICO and US Census	PRHIA, ICO and US Census	PRHIA, ICO and US Census	American Community Survey	American Community Survey
Data Source Year	2016	2016-17	2017-18	2018	2019
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Numerator: PR Health Insurance Administration (PRHIA) and Insurance Commissioner Office (ICO) Denominator: 2016 International Database, US Census.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Numerator: PR Health Insurance Administration (PRHIA) and Insurance Commissioner Office (ICO) Denominator: 2017 International Database, US Census.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Numerator: PR Health Insurance Administration (PRHIA) and Insurance Commissioner Office (ICO) Denominator: 2018 International Database, US Census.
4.	Field Name:	2019
	Column Name:	State Provided Data
	Field Note:	Numerator: American Community Survey (PUMS) 2018_1 year estimates Denominator: American Community Survey (PUMS) 2018_1 year estimates
5.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	Numerator: American Community Survey (PUMS) 2019_1 year estimates Denominator: American Community Survey (PUMS) 2019_1 year estimates

2016-2020: ESM 3.7 - The use of LOCATe as an instrument to promote quality improvement in Neonatal and Maternal Care services by September 2020.

Measure Status:		Active		
State Provided Data				
	2017	2018	2019	2020
Annual Objective			96	96
Annual Indicator			96.3	96.3
Numerator			26	26
Denominator			27	27
Data Source			LOCATe	LOCATe
Data Source Year			2018-19	2018-19
Provisional or Final ?			Final	Final

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2019
	Column Name:	State Provided Data
	Field Note:	The only hospital that completed the LOCATe Survey and could not be visited to promote quality improvement, closed the Maternity Ward due to the impact of Hurricane María.
2.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	The only hospital that completed the LOCATe Survey and could not be visited to promote quality improvement, closed the Maternity Ward due to the impact of Hurricane María.

2016-2020: ESM 4.1 - The percent of Puerto Rico Home Visiting Program (HVP) participants who ever breastfed by September 2017-2021 (ongoing)

Measure Status:		Active			
State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		67	73.1	76	76.1
Annual Indicator	66.6	73.1	75.9	90.7	87.7
Numerator	341	578	626	769	412
Denominator	512	791	825	848	470
Data Source	HVP Participants Records	HVP Participants Records	HVP Participants Records	HVP Participants Records	HVP Participants Records
Data Source Year	2015-16	2016-17	2017-18	2018-19	2019-20
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

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

Field Note:

Due to COVID-19 lockdown (beginning in March 2020), HVP nurses (HVN) had limited access to HVP participants. Although interventions were made remotely, they did not have access to the documentation to report this data. On July 2020, HVN regained access to their offices and were able to continue collecting this data

2016-2020: ESM 11.6 - Percent of CSHCNP families' informational needs which were or are being addressed

Measure Status:		Active		
State Provided Data				
	2017	2018	2019	2020
Annual Objective			90	92
Annual Indicator			90.5	83.3
Numerator			1,252	1,487
Denominator			1,383	1,785
Data Source			CSHCN Program Family Survey	CSHCN Program Family Survey
Data Source Year			2018	2021
Provisional or Final ?			Provisional	Final

Field Level Notes for Form 10 ESMs:

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

Field Note:

This ESM measures the percent of informational needs addressed by the CSHCN Program, as reported by families.

Numerator: Number of informational needs that are being addressed by the CSHCN Program as reported by families.

Denominator: Number of informational needs reported by families at the CSHCN Program.

This ESM was inactivated but will continue to be measured internally by the Program. Stronger ESMs are being selected instead.

2016-2020: ESM 11.7 - Percent of families that report they feel more confident managing child's condition thanks to the information and support received at the CSHCNP.

Measure Status:			Active	
State Provided Data				
	2017	2018	2019	2020
Annual Objective			94.5	95
Annual Indicator			93.9	96.3
Numerator			231	288
Denominator			246	299
Data Source			CSHCN Program Family Survey	CSHCN Program Family Survey
Data Source Year			2018	2021
Provisional or Final ?			Provisional	Final

Field Level Notes for Form 10 ESMs:

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

Field Note:

This ESM measures the percent of families who report they feel more confident managing child's condition thanks to information and support received from the CSHCN Program.

Numerator: Number of families participating in the CSHCNP Family Survey that report they feel more confident managing child's condition after CSHCNP intervention.

Denominator: Number of families that participate of the CSHCNP Family Survey.

Objective for this ESM was met.

2016-2020: ESM 12.7 - Percent of CSHCNP families with YSHCN who were successfully contacted to notify them about the importance of transition to an adult health care provider.

Measure Status:			Active	
State Provided Data				
	2017	2018	2019	2020
Annual Objective			8	10
Annual Indicator			67.3	44.8
Numerator			35	108
Denominator			52	241
Data Source			Bayamon Pediatric Center	CSHCNP Census
Data Source Year			2018-19	2020
Provisional or Final ?			Final	Provisional

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2019
	Column Name:	State Provided Data

Field Note:

For 2019, the Bayamón RPC was the only center to realize this activity. Other centers encountered challenges performing YSHCN tracking due to the great quantity of paperback health records. For year 2020, numbers reported were submitted by the seven RPCs. Annual objectives had been calculated conservatively due to the absence of an EHR system in the program, and the objective was met. This ESM has been inactivated but the activity will be measured by the program after the EHR system implementation.

2016-2020: ESM 12.8 - Percent of YSHCN at the CSHCNP who are given the Transition Readiness Assessment.

Measure Status:		Active		
State Provided Data				
	2017	2018	2019	2020
Annual Objective			27.5	27.7
Annual Indicator			48.5	71.8
Numerator			128	173
Denominator			264	241
Data Source			Regional Pediatric Centers	CSHCNP Census
Data Source Year			2018-19	2020
Provisional or Final ?			Provisional	Provisional

Field Level Notes for Form 10 ESMs:

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

Field Note:

This ESM was extended to the new five-year cycle as ESM 12.1. Objective was met for this reporting year.

2016-2020: ESM 13.2.1 - The percent of infants of 6 months or more in the Home Visiting Program (HVP) screened for high risk for caries and referred for early oral preventive services in Puerto Rico by September 2017-2021 (ongoing)

Measure Status:		Active			
State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		5	85	73.6	73.7
Annual Indicator	0	0	73.5	95	86.3
Numerator			626	534	373
Denominator			852	562	432
Data Source	N/A	N/A	HVP Participants Records	HVP Participants Records	HVP Participants Records
Data Source Year	N/A	N/A	2017-18	2018-2019	2019-2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Data recollection for Early Childhood caries screening in HVP began in November 2016.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Data recollection for Early Childhood caries screening in HVP is in process.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	This indicator measures the percent of infants identified at high risk for early childhood caries by screening and referred for an early dental home visit.
4.	Field Name:	2019
	Column Name:	State Provided Data
	Field Note:	This indicator measures the percent of infants identified at high risk for early childhood caries by screening and referred for an early dental home visit.
5.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	This indicator measures the percent of infants identified at high risk for early childhood caries by a screening test and referred for an early dental home visit. Due to the COVID-19 lockdown (beginning in March 2020), HVP nurses (HVN) had limited access to HVP participants. Although interventions were made remotely, they did not have access to the documentation to report this data. On July 2020, HVN regained access to their offices and were able to continue collecting this data.

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" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">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:	<table border="1"> <tr> <td>Unit Type:</td> <td>Rate</td> </tr> <tr> <td>Unit Number:</td> <td>10,000</td> </tr> <tr> <td>Numerator:</td> <td>Number of live births with NTD in Puerto Rico.</td> </tr> <tr> <td>Denominator:</td> <td>Number of live births in Puerto Rico.</td> </tr> </table>	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.
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 Performance Measure (SPM) Detail Sheets (2016-2020 Needs Assessment Cycle)

2016-2020: SPM 1 - Percent of cesarean deliveries among low-risk first births
Population Domain(s) – Women/Maternal Health

Measure Status:	Active									
Goal:	To reduce the number of cesarean deliveries among low-risk first births.									
Definition:	<table border="1" style="width: 100%;"> <tr> <td style="background-color: #cccccc;">Unit Type:</td> <td>Percentage</td> </tr> <tr> <td style="background-color: #cccccc;">Unit Number:</td> <td>100</td> </tr> <tr> <td style="background-color: #cccccc;">Numerator:</td> <td>Cesarean delivery among (37 + weeks), singleton, vertex, births to nulliparous women.</td> </tr> <tr> <td style="background-color: #cccccc;">Denominator:</td> <td>All term (37 + weeks), singleton vertex births to nulliparous women.</td> </tr> </table>		Unit Type:	Percentage	Unit Number:	100	Numerator:	Cesarean delivery among (37 + weeks), singleton, vertex, births to nulliparous women.	Denominator:	All term (37 + weeks), singleton vertex births to nulliparous women.
Unit Type:	Percentage									
Unit Number:	100									
Numerator:	Cesarean delivery among (37 + weeks), singleton, vertex, births to nulliparous women.									
Denominator:	All term (37 + weeks), singleton vertex births to nulliparous women.									
Healthy People 2020 Objective:	Related to Maternal, Infant, and Child Health (MICH) Objective 7.1. Reduce cesarean births among low-risk women with no prior cesarean (baseline: 26.5%, Target: 23.9%)									
Data Sources and Data Issues:	Birth Certificates									
Significance:	<p>Cesarean delivery can be a life-saving procedure for certain medical indications. However, for most low-risk pregnancies, cesarean delivery poses avoidable maternal risks of morbidity and mortality, including hemorrhage, infection, and blood clots—risks that compound with subsequent cesarean deliveries. Much of the temporal increase in cesarean delivery (over 50% in the past decade), and wide variation across states, hospitals, and practitioners, can be attributed to first-birth cesareans. Moreover, cesarean delivery in low-risk first births may be most amenable to intervention through quality improvement efforts. This low-risk cesarean measure, also known as nulliparous term singleton vertex (NTSV) cesarean, is endorsed by the ACOG, The Joint Commission (PC-02), National Quality Forum (#0471), Center for Medicaid and Medicare Services (CMS) – CHIPRA Child Core Set of Maternity Measures, and the American Medical Association-Physician Consortium for Patient Improvement.</p>									

2016-2020: SPM 2 - Percent of children with a preventive services visit in the last year
Population Domain(s) – Child Health

Measure Status:	Active								
Goal:	To increase the number of children who have a preventive services visit.								
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>Parent report of children, ages 1 through 11, with a preventive services visit in the past year from the survey.</td> </tr> <tr> <td>Denominator:</td> <td>Number of children, ages 1 through 11.</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	Parent report of children, ages 1 through 11, with a preventive services visit in the past year from the survey.	Denominator:	Number of children, ages 1 through 11.
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	Parent report of children, ages 1 through 11, with a preventive services visit in the past year from the survey.								
Denominator:	Number of children, ages 1 through 11.								
Healthy People 2020 Objective:	Is not linked to any Healthy People 2020 Objective.								
Data Sources and Data Issues:	Behavioral Risk Factor Surveillance System (BRFSS), Maternal, Child and Adolescent Division Module.								
Significance:	<p>Increased use of clinical preventive services is a strategy aimed at improving the health of infants and children. The main goal of early preventive services is to provide opportunities to identify risks for the development of disease and implement preventive measures, or to detect an illness or disease in the earliest more treatable stages for adequate and early intervention. Children with chronic conditions also benefit of preventive service visits providing the opportunity to focus treatment on achieving as good as health as possible. Promoting visits to the doctor when the child is healthy provides the opportunity to evaluate growth and development, evaluate oral health, provide immunizations, and anticipatory guidance to parents. Screening for developmental delay and emotional disturbances at early ages provides a window of opportunity to help identify children which will benefit from early stimulation and therapies to help them attain their maximum potential. These services prevent and detect conditions and diseases in their earlier, more treatable stages, significantly reducing the risk of illness, disability, early death, and expensive medical care. Anticipatory guidance delivered to parents during preventive visits provide them the opportunity to learn strategies to protect their children from unintentional injuries, choose healthy lifestyles, understand developmental stages and how to stimulate optimum growth and development, and how to cope with the changes that occur during childhood. The early periodic screening diagnosis and treatment (EPSDT) requirements of the population served by the GIP is achieved by promoting the Puerto Rico Preventive Pediatric Service Guidelines (PRPPSG). The PRPPSG follow the recommendations of the Bright Futures Guidelines of the American Academy of Pediatrics and the United States Preventive Service Task Force. Recommendations include itinerary for preventive visits, developmental screening test, screening labs, comple</p>								

2016-2020: SPM 6 - Percent of EHR and tele-health system implementation phases completed.
Population Domain(s) – Children with Special Health Care Needs

Measure Status:	Active								
Goal:	By 2021, the CSHCN Program Regional Pediatric Centers will have an operational Electronic Health Record (EHR) and tele-health systems implemented.								
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 EHR system implementation phases completed</td> </tr> <tr> <td>Denominator:</td> <td>Total of implementation phases (15)</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of EHR system implementation phases completed	Denominator:	Total of implementation phases (15)
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	Number of EHR system implementation phases completed								
Denominator:	Total of implementation phases (15)								
Healthy People 2020 Objective:	N/A								
Data Sources and Data Issues:	N/A								
Significance:	EHR systems help transforms the health care system and advances medical home by improving all aspects of patient care: effectiveness, patient-centeredness, communication, education, timeliness, efficiency, equity and safety.								

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:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>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).</td> </tr> <tr> <td>Denominator:</td> <td>Women, ages 18 through 44, with a preventive medical visit in the past year.</td> </tr> </table>		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.
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									
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:	<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>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</td> </tr> <tr> <td>Denominator:</td> <td>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.</td> </tr> </table>	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.
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) 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:	<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>YHP that report not being bullied on the survey</td> </tr> <tr> <td>Denominator:</td> <td>YHP that completed the survey</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	YHP that report not being bullied on the survey	Denominator:	YHP that completed the survey
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	YHP that report not being bullied on the survey								
Denominator:	YHP that completed the survey								
Data Sources and Data Issues:	YHPP survey								
Significance:	<p>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 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 in various topics, including bullying. The YHP complete a 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.</p>								

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:	<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>The number of YHP surveyed after receiving PR-YHLT with increased perception of how to use the healthcare system.</td> </tr> <tr> <td>Denominator:</td> <td>The number of YHP reached with the PR- YHLT.</td> </tr> </table>	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.
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.								
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 Puertorrican 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 assigned 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								
ESM Subgroup(s):	CSHCN								
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:	<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 report that they have “always” a care coordinator assigned to help them find the services they need.</td> </tr> <tr> <td>Denominator:</td> <td>Number of families at the CSHCN Program who participated in the Medical Home Family Index Survey (adapted).</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of families at the CSHCN Program who report that they have “always” a care coordinator assigned to help them find the services they need.	Denominator:	Number of families at the CSHCN Program who participated in the Medical Home Family Index Survey (adapted).
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	Number of families at the CSHCN Program who report that they have “always” a care coordinator assigned to help them find the services they need.								
Denominator:	Number of families at the CSHCN Program who participated in the Medical Home Family Index Survey (adapted).								
Data Sources and Data Issues:	Medical Home Family Index Survey (adapted) at the PR-CSHCN Program.								
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 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								
ESM Subgroup(s):	CSHCN								
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. Baseline to be determined.								
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 agree that their child has a better health status thanks to the efforts of their care coordinator to help them access the needed services.</td> </tr> <tr> <td>Denominator:</td> <td>Number of families at the CSHCN Program who participated in the Medical Home Family Index Survey (adapted).</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of families at the CSHCN Program who agree that their child has a better health status thanks to the efforts of their care coordinator to help them access the needed services.	Denominator:	Number of families at the CSHCN Program who participated in the Medical Home Family Index Survey (adapted).
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	Number of families at the CSHCN Program who agree that their child has a better health status thanks to the efforts of their care coordinator to help them access the needed services.								
Denominator:	Number of families at the CSHCN Program who participated in the Medical Home Family Index Survey (adapted).								
Data Sources and Data Issues:	Medical Home Family Index Survey at the PR-CSHCN Program (adapted).								
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:	<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 YSHCN 14 to 21 years of age receiving services at the RCPs who completed the Transition Readiness Assessment Tool.</td> </tr> <tr> <td>Denominator:</td> <td>Number of YSHCN 14 to 21 years of age receiving services at the RCPs.</td> </tr> </table>	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.
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:	Data source: RPCs census. Data issues: No data issues are expected, but if issues arise, they would be discussed with the RPCs directors. When the EHR-IS is implemented, the method of data collection may be modified.								
Significance:	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.								

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								
ESM Subgroup(s):	CSHCN								
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. Baseline to be determined.								
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 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:	CSHCNP Database								
Evidence-based/informed strategy:	Six core elements of the Got Transition Model (MCH-Evidence Center Transition Brief https://www.mchevidence.org/documents/reviews/NPM-12-Transition-Report.pdf) 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.								
Significance:	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.								

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

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

Measure Status:	Active								
Goal:	By 2025, increase the percent of Title V HVP pregnant participants who receive oral health services post referral.								
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>The number of completed referrals of Title V HVP pregnant participants referred to oral health services.</td> </tr> <tr> <td>Denominator:</td> <td>The number of Title V HVP pregnant participants referred to oral health services.</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	The number of completed referrals of Title V HVP pregnant participants referred to oral health services.	Denominator:	The number of Title V HVP pregnant participants referred to oral health services.
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	The number of completed referrals of Title V HVP pregnant participants referred to oral health services.								
Denominator:	The number of Title V HVP pregnant participants referred to oral health services.								
Data Sources and Data Issues:	Title V HVP logs, reports and produced documents.								
Significance:	<p>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 MCAH proposes to strengthen collaborations with dentists and other stakeholders to develop strategies that promote preventive oral health care visits. The PR MCAH will monitor and guide public policies to improve access to preventive oral health services for all pregnant women. Title V Home Visiting Program nurses will provide education and referrals for oral health care to all pregnant participants. The rate of completed referrals will be monitored to ensure women receive the needed services.</p>								

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 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>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 caries 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 caries 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 caries who receive referrals for preventive oral care.								
Data Sources and Data Issues:	Program logs, reports and produced documents.								
Significance:	Oral health has an impact on general wellbeing throughout life. Risks for the development of caries in infant 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 infant 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 10
Evidence-Based or -Informed Strategy Measure (ESM) (2016-2020 Needs Assessment Cycle)

2016-2020: ESM 1.4 - Reduce the percent of uninsured women in reproductive age in Puerto Rico, by September 2017-2021 (ongoing)

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

Measure Status:	Active									
Goal:	At least 1% of uninsured women in reproductive age in Puerto Rico, by September 2017 (ongoing).									
Definition:	<table border="1"> <tr> <td style="background-color: #cccccc;">Unit Type:</td> <td>Percentage</td> </tr> <tr> <td style="background-color: #cccccc;">Unit Number:</td> <td>100</td> </tr> <tr> <td style="background-color: #cccccc;">Numerator:</td> <td>Number of WRA uninsured.</td> </tr> <tr> <td style="background-color: #cccccc;">Denominator:</td> <td>Total population of WRA.</td> </tr> </table>		Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of WRA uninsured.	Denominator:	Total population of WRA.
Unit Type:	Percentage									
Unit Number:	100									
Numerator:	Number of WRA uninsured.									
Denominator:	Total population of WRA.									
Data Sources and Data Issues:	PRHIA, ICO, US Census.									
Significance:	<p>Many persons are uninsured due to decreasing employer sponsored insurance coverage and rising health care costs. Uninsured women of reproductive age lead to many public health problems for women in general, and for newborns due to lack or limited prenatal care. Decreasing the number of uninsured is a key goal of the Affordable Care Act (ACA), which provides Medicaid coverage to many low-income individuals. In order to reach populations that are uninsured, the MCAH staff (community health workers, health educators, home visiting nurses) will include outreach to uninsured women and refer for Medicaid Program eligibility evaluation. This will strengthen compliance with the Affordable Care Act and assist in assuring more women have access to the Preventive Health Services and Prenatal Services.</p>									

2016-2020: ESM 3.7 - The use of LOCATe as an instrument to promote quality improvement in Neonatal and Maternal Care services by September 2020.

2016-2020: NPM 3 – Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

Measure Status:	Active								
Goal:	1.To visit 85% of participating hospitals in LOCATE to promote quality improvement in Neonatal and Maternal Care Services by September 2020.								
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 LOCATe participating hospitals visited by MCAH personnel.</td> </tr> <tr> <td>Denominator:</td> <td>Number of hospitals that participated in LOCATe.</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of LOCATe participating hospitals visited by MCAH personnel.	Denominator:	Number of hospitals that participated in LOCATe.
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	Number of LOCATe participating hospitals visited by MCAH personnel.								
Denominator:	Number of hospitals that participated in LOCATe.								
Data Sources and Data Issues:	Program logs, reports and produced documents.								
Significance:	<p>LOCATe’s primary goals are to produce a standardized assessment, facilitate stakeholder conversations and minimize burden for respondents. Furthermore, LOCATe addresses gaps in the evidence, identifies opportunities to improve guideline wording that supports more consistent translation into state policy and increases opportunities for quality improvement efforts at the facility and state level. Thus, in order to achieve quality improvement in maternal and neonatal care provided by PR’s birthing facilities it is necessary to have an open communication with these facilities and share the information LOCATe provides and epidemiologic data relevant to maternal neonatal care of their institution. Institutions may recognize their limitations in providing higher level care when needed and therefore the importance of establishing a network of hospitals to refer and transfer high risk pregnant women. The goals is to visit at least 85% of participating hospitals by September 2020 taking into consideration that 84% of all the birthing facilities of PR consented to participate en LOCATe.</p>								

2016-2020: ESM 4.1 - The percent of Puerto Rico Home Visiting Program (HVP) participants who ever breastfed by September 2017-2021 (ongoing)

2016-2020: NPM 4 – A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Measure Status:	Active								
Goal:	At least 81.7% Puerto Rico Home Visiting Program participants report ever breastfed by September 2017 (ongoing).								
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>The number HVP participants report ever breastfed.</td> </tr> <tr> <td>Denominator:</td> <td>The number HVP participants.</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	The number HVP participants report ever breastfed.	Denominator:	The number HVP participants.
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	The number HVP participants report ever breastfed.								
Denominator:	The number HVP participants.								
Data Sources and Data Issues:	HVP Program Reports.								
Significance:	Mothers who receive post-partum breastfeeding support are more likely to continue to breastfeed beyond the neonatal period. Because increase in the number of mothers breastfeeding is one of the aims of the MCAH program, the HVN will promote and offer breastfeeding education and support to all participants. The efforts will be monitored by the number of mothers who achieve the goal of breastfeeding successfully. This monitoring is important to evaluate the success of the interventions and propose modifications to the strategies.								

2016-2020: ESM 11.6 - Percent of CSHCNP families' informational needs which were or are being addressed
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:	For 2020, at least 92% of CSHCNP families report they receive, or are referred to receive, the information they need.								
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 reported information needs that are being addressed.</td> </tr> <tr> <td>Denominator:</td> <td>Number of reported information needs that are being addressed</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of reported information needs that are being addressed.	Denominator:	Number of reported information needs that are being addressed
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	Number of reported information needs that are being addressed.								
Denominator:	Number of reported information needs that are being addressed								
Data Sources and Data Issues:	CSHCNP Family Survey								
Significance:	Families look to providers for information, guidance, and support about their child's health and well-being. Navigating the health care system can be challenging for anyone. For families of CSHCN it can be even more challenging. Information given to them by providers will help them be more empowered, learn to navigate the system, access services needed for the child as well as for the family, and access other services and/or resources of support.								

2016-2020: ESM 11.7 - Percent of families that report they feel more confident managing child's condition thanks to the information and support received at the CSHCNP.

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:	For 2020, at least 95.5% CSHCNP families report they feel more confident managing child's condition thanks to information and support received from the CSHCN Program.								
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 participant families in the CSHCNP Family Survey that report they feel more confident managing child's condition after CSHCNP intervention.</td> </tr> <tr> <td>Denominator:</td> <td>Number of CSHCNP families that participate of the CSHCNP Family Survey.</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of participant families in the CSHCNP Family Survey that report they feel more confident managing child's condition after CSHCNP intervention.	Denominator:	Number of CSHCNP families that participate of the CSHCNP Family Survey.
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	Number of participant families in the CSHCNP Family Survey that report they feel more confident managing child's condition after CSHCNP intervention.								
Denominator:	Number of CSHCNP families that participate of the CSHCNP Family Survey.								
Data Sources and Data Issues:	CSHCN Program Family Satisfaction Survey								
Significance:	This measure will help us know impact of CSHCNP services on caregivers' degree of confidence to manage child's condition.								

2016-2020: ESM 12.7 - Percent of CSHCNP families with YSHCN who were successfully contacted to notify them about the importance of transition to an adult health care provider.

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:	For 2020, at least 10% of CSHCNP families with YSHCN 14 years of age or more were successfully contacted to notify them about the transition to an adult health care provider.								
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 YSHCN 14 years old or more at the CSHCNP who were successfully contacted</td> </tr> <tr> <td>Denominator:</td> <td>Number of YSHCN 14 years old or more at the CSHCNP</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of YSHCN 14 years old or more at the CSHCNP who were successfully contacted	Denominator:	Number of YSHCN 14 years old or more at the CSHCNP
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	Number of YSHCN 14 years old or more at the CSHCNP who were successfully contacted								
Denominator:	Number of YSHCN 14 years old or more at the CSHCNP								
Data Sources and Data Issues:	CSHCNP records								
Significance:	This measure gives information on how are we performing the second got transition core element: identifying and monitoring.								

**2016-2020: ESM 12.8 - Percent of YSHCN at the CSHCNP who are given the Transition Readiness Assessment.
 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:	For 2020, at least 10% of YSHCN identified at the CSHCNP will have been assessed for transition readiness.								
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 CSHCNP YSHCN who have been assessed for transition readiness.</td> </tr> <tr> <td>Denominator:</td> <td>Number of YSHCN families that were identified and successfully contacted to inform about the importance of transition to an adult health care provider.</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of CSHCNP YSHCN who have been assessed for transition readiness.	Denominator:	Number of YSHCN families that were identified and successfully contacted to inform about the importance of transition to an adult health care provider.
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	Number of CSHCNP YSHCN who have been assessed for transition readiness.								
Denominator:	Number of YSHCN families that were identified and successfully contacted to inform about the importance of transition to an adult health care provider.								
Data Sources and Data Issues:	CSHCNP records								
Significance:	This measure gives information on the degree that families are willing to receive support for transitioning to an adult health care provider.								

2016-2020: ESM 13.2.1 - The percent of infants of 6 months or more in the Home Visiting Program (HVP) screened for high risk for caries and referred for early oral preventive services in Puerto Rico by September 2017-2021 (ongoing)

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 2021 (ongoing).								
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>The number of HVP infants identified at high risk for caries who receive referrals for preventive oral care.</td> </tr> <tr> <td>Denominator:</td> <td>The number of HVP infants identified at high risk for caries.</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	The number of HVP infants identified at high risk for caries who receive referrals for preventive oral care.	Denominator:	The number of HVP infants identified at high risk for caries.
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	The number of HVP infants identified at high risk for caries who receive referrals for preventive oral care.								
Denominator:	The number of HVP infants identified at high risk for caries.								
Data Sources and Data Issues:	Program logs, reports and produced documents.								
Significance:	Oral health has an impact on general wellbeing throughout life. Risks for the development of caries in infant 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 infant 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 2020

Data Sources	Access				Linkages	
	(A) State Title V Program has Consistent Annual Access to Data Source	(B) State Title V Program has Access to an Electronic Data Source	(C) Describe Periodicity	(D) Indicate Lag Length for Most Timely Data Available in Number of Months	(E) Data Source is Linked to Vital Records Birth	(F) Data Source is Linked to Another Data Source
1) Vital Records Birth	Yes	Yes	Annually	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	Never	NA	No	
8) PRAMS or PRAMS-like	Yes	Yes	Annually	9	Yes	

Form Notes for Form 12:

None

Field Level Notes for Form 12:

None