

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

Massachusetts

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

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I. General Requirements

I.A. Letter of Transmittal



MAURA T. HEALEY
Governor

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The Commonwealth of Massachusetts
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July 28, 2023

Christopher Dykton, Director
Division of State and Community Health
Maternal and Child Health Bureau
Health Resources and Services Administration
5600 Fishers Lane, Room 5C-26
Rockville, MD 20857

Dear Mr. Dykton:

On behalf of the Commonwealth of Massachusetts, we are pleased to submit the Massachusetts **FY24 Application and FY22 Annual Report for the Maternal and Child Health Services Block Grant Program**. A copy of this transmittal letter is attached to our web-based submission. The Application has been prepared in its entirety by the Bureau of Family Health and Nutrition, the Title V Agency for the Commonwealth.

Questions or requests for additional information may be directed to Maia Raynor (maia.raynor@mass.gov), Bureau of Family Health and Nutrition.

We look forward to your response.

Sincerely,

Handwritten signature of Eileen M. Sullivan in black ink.

Eileen M. Sullivan
Chief Operating Officer
Massachusetts Department of Public Health

Handwritten signature of Elaine Fitzgerald Lewis in black ink.

Elaine Fitzgerald Lewis
Director, Bureau of Family Health and
Nutrition
Massachusetts Department of Public Health

cc: Stephanie Doyle

I.B. Face Sheet

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

I.C. Assurances and Certifications

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

I.D. Table of Contents

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

II. Logic Model

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

III. Components of the Application/Annual Report

III.A. Executive Summary

III.A.1. Program Overview

Maternal and Child Health in Massachusetts

Massachusetts (MA) is committed to ensuring that all residents have the opportunity for optimal health regardless of race, ethnicity, socioeconomic status, physical ability, or other factors. This vision is supported by a strong public health infrastructure and health care delivery system, led by the MA Department of Public Health (MDPH), which provides outcome-driven, evidence-based programming to prevent illness, injury, and premature death, ensures access to high quality health services, and promotes wellness and health equity.

MA is a national leader in maternal and child health (MCH) programs and policy, being the first state, for example, to link disparate data together to study the opioid epidemic. MA reports state match that is much higher than the required \$3 for every \$4 federal. Based on FY22 federal expenditures of \$11,124,939, required state match expenditures were \$8,343,704, and over-match expenditures were \$62,677,193. In FY22, Title V provided direct and enabling services to over 1 million pregnant women, infants, children, and children and youth with special health needs (CYSHN).

Role of Title V

MA Title V supports a statewide system of services that is comprehensive, community-based, and family-centered. Title V sits in the Bureau of Family Health and Nutrition (BFHN), which houses other important MCH programs such as WIC, Early Intervention (EI) and Maternal, Infant, and Early Childhood Home Visiting (MIECHV). The Bureau of Community Health and Prevention (BCHAP) is a key partner. BFHN and BCHAP maintain staff in regional offices who work directly with families and support systems-building activities. The statewide reach of staff and integration of Title V across Bureaus are key to addressing MCH needs. Coordinated and integrated systems of care are a priority across all MCH programs, and especially for CYSHN, a population uniquely served by Title V. BFHN manages a continuum of linked services to ensure that CYSHN are connected to and supported by health, education, and social services in their communities. An Office of Family Initiatives supports this effort.

Title V plays an important policy and systems-building role, and most funding is dedicated to population-based and enabling services, such as the Childhood Lead Poisoning Prevention Program and injury surveillance. Title V is a convener and collaborator in addressing MCH issues and enhances initiatives funded through other sources, such as MIECHV. Federal Title V funding is critical to support program managers, epidemiologists, and other staff who are not covered by state funding. Within MDPH the Title V priorities and performance measure framework provide a unifying vision and strategic plan for MCH programs resulting in improved communication and greater collective impact.

Partnerships are critical in serving the MCH population and expanding Title V's reach. MDPH collaborates with families, community-based agencies, federal, state, and local government, hospitals and clinical providers, academia, and public health organizations, which allow Title V to have an impact beyond individuals served through direct and enabling services.

Impact of COVID-19

Title V staff have supported the MCH population throughout the pandemic in a variety of ways, such as: offering services virtually; facilitating access to concrete supports; raising awareness for families and providers of the importance of emergency care planning; and supporting data collection and surveillance for pregnant people, fathers, and infants. Many Title V staff have also supported the state's vaccination efforts. For example, they serve as liaisons to municipalities to develop community tailored solutions to address vaccination barriers, act as MDPH ambassadors to provide clear, accurate, consistent, culturally sensitive information about the vaccine, and lead

efforts to increase vaccination among children and their families. On May 11, 2023, Governor Maura Healey announced that the state's COVID-19 public health emergency ended, in alignment with the federal government's end date.

Program Framework & State Action Plan

Racial equity and the life course model are guiding frameworks for Title V. Health inequities exist due to structural racism – the ways in which institutions and social norms systematically advantage White people and oppress Black, Indigenous, and People of Color – leading to differential access to opportunities and resources that negatively affect MCH outcomes. The life course model posits that there are critical periods in life that shape our health, and that exposure to risk and protective factors impact both an individual's lifespan and future generations.

BFHN has established a Racial Equity and Family Engagement Strategic Plan as an overarching framework for promoting and sustaining equity for BFHN staff and the communities and families we serve by dismantling structural racism and co-creating healing-centered policies, practices, and social norms. Using the MIECHV Health Equity CoIIN key driver diagram (KDD) as a foundation, BFHN Leadership and BFHN's Racial Equity Strategy Team modified the MIECHV Health Equity KDD to develop primary and secondary drivers and change strategies that align with the Bureau's overarching aim. BFHN has identified measures to track progress towards the aim that are aligned with Title V performance measures for the priorities of advancing racial equity and family engagement. In April 2023, BFHN initiated a Learning Community to accelerate progress, nurture innovation, and build collective will towards the four primary drivers named in the strategic plan and provides a forum for sharing best practices related to the secondary drivers and projects aimed at testing and spreading change ideas.

In 2019-2020, MA conducted a statewide needs assessment to understand strengths and gaps in services, prioritize MCH needs, and develop a five-year state action plan. The table below lists Title V priorities for 2020-2025 and the corresponding National and State Performance Measures. Key accomplishments, challenges, and plans for each priority are described below.

| Domain | Priority | Performance Measure |
|------------------|--|--|
| Maternal/Women | Maternal morbidity and mortality: Reduce rates of and eliminate inequities in maternal morbidity and mortality. | SPM 1: % of cases reviewed by the Maternal Mortality and Morbidity Review Committee within 2 years of maternal death |
| | Substance use prevention: Prevent the use of substances, including alcohol, tobacco, marijuana, and opioids, among youth and pregnant people. | NPM 14: % of women who smoke during pregnancy |
| | Mental health and emotional well-being: Strengthen the capacity of the health system to promote mental health and emotional well-being. | See Child domain |
| Perinatal/Infant | Nutrition and physical activity: Foster health nutrition and physical activity through equitable systems and policy improvements. | NPM 4: % of infants who are ever breastfed and % of infants breastfed exclusively through 6 months |
| Child | Mental health and emotional well-being: Strengthen the capacity of the health system to promote mental health and emotional well-being. | NPM 5: % of children, ages 9-35 months, who received a developmental screening using a parent-completed tool in the past year |
| | Nutrition and physical activity: Foster health nutrition and physical activity through equitable systems and policy improvements. | See Perinatal/Infant domain |
| Adolescent | Sexual and reproductive health: Promote equitable access to sexuality education and sexual and reproductive health services. | SPM 2: Rate of teen births among Latinx adolescents NPM 10: % of adolescents ages 12-17 with a preventive medical visit in the past |

| | | |
|--|--|--|
| | | year |
| | Substance use prevention: Prevent the use of substances, including alcohol, tobacco, marijuana, and opioids, among youth and pregnant people. | See Maternal/Women domain |
| | Mental health and emotional well-being: Strengthen the capacity of the health system to promote mental health and emotional well-being. | See Child domain |
| Children and Youth with Special Health Needs | Health transition: Support effective health-related transition to adulthood for adolescents with special health needs. | NPM 12: % of adolescents ages 12-17 who received services necessary to transition to adult health care. |
| | Mental health and emotional well-being: Strengthen the capacity of the health system to promote mental health and emotional well-being. | See Child domain |
| Crosscutting | Racial equity: Eliminate institutional and structural racism in MDPH programs, policies, and practices to improve maternal & child health. | SPM 3: % of Bureau staff who have used any racial equity tool or resource in their work |
| | Family, father, and youth engagement: Engage families, fathers, and youth with diverse life experiences through shared power and leadership to improve MCH services. | SPM 4: % of Title V programs that offer compensated family engagement and leadership opportunities. |
| | Social determinants of health: Eliminate health inequities caused by unjust social, economic, and environmental systems, policies, and practices. | SPM 5: % of families who have had difficulty since their child was born covering basics, like food or housing, on their income. |
| | Healing and trauma: Support equitable healing centered systems and approaches to mitigate the effects of trauma, including racial, historical, structural, community, family, and childhood trauma. | SPM 6: % of staff that report a workplace culture that reflects a safe and supportive environment to mitigate primary and secondary trauma |

Maternal morbidity and mortality

Pregnancy-associated mortality rates increased 33% between 2012 and 2017 in MA, with stark racial inequities. MDPH convenes the Maternal Mortality and Morbidity Review Committee (MMMRC) to review maternal deaths and make recommendations to improve outcomes. The five-year action plan aims to improve the timeliness of the review process, engage community members, and leverage collaborative partnerships to disseminate MMMRC recommendations. Due to competing demands of the COVID-19 pandemic, in FY 22 only 14% of pregnancy-associated deaths were reviewed within two years of the date of death. MDPH recently hired staff to support this effort and participated in a Lean Six Sigma quality improvement training to identify activities that would improve the efficiency of the process. Efforts to improve timely completion of reviews include transitioning from manual entry of vital records into the Maternal Mortality Review Information Application (MMRIA) to a quarterly electronic upload, establishing remote access for abstractors to review hospital records, hiring additional abstractors to address the backlog of cases, and increasing the frequency of MMMRC meetings to ensure timely review of pregnancy associated deaths.

Substance use prevention

Title V plays an important role in preventing substance use during pregnancy and among youth, critical periods of development in the life course. The percentage of women who report smoking during pregnancy decreased from 4.3% in 2018 to 2.8% in 2021, exceeding our 2025 objective of 3.0% (we have thus revised our 2025 objective to 2.0%). Title V focuses on preventing use of substances including tobacco, alcohol, marijuana, and opioids. Central to the state action plan is revising the PRAMS survey to improve the measurement of tobacco, marijuana, and

alcohol use during pregnancy and partnering with school districts and school-based health centers to promote screening, brief intervention, and referral to treatment.

Mental health and emotional well-being

Barriers to promoting mental health and emotional well-being in MA include a shortage of culturally and linguistically diverse providers and a focus on intervention rather than prevention. Mental health concerns have been exacerbated by the COVID-19 pandemic. Key strategies to address this priority among women and children include providing training and technical assistance on perinatal mental health to providers and state agencies and promoting understanding of and screening for infant and early childhood mental health. Among adolescents and CYSHN, Title V is integrating positive youth development principles in MDPH-funded programs to foster protective factors, providing mental health support in schools, raising awareness of mental health concerns and resources for treatment among CYSHN and their families, and partnering with racially diverse communities to understand cultural differences for families with CYSHN and develop strategies to reduce stigma.

Nutrition and physical activity

Among 2019 births, 80% of MA infants were ever breastfed compared to 83.2% nationally and the Healthy People 2020 goal of 81.9%. However, there remain inequities in breastfeeding outcomes by race/ethnicity and socioeconomic status. According to the 2020-2021 National Survey of Children's Health, 84.4% of families with children ages 0-5 could always afford to eat good nutritious meals. The pandemic and rising inflation has made it more difficult for families to purchase enough food or healthy food. Key strategies to address this priority are to support hospital policies that promote breastfeeding for all people giving birth; partner with MassHealth and other agencies to maximize families' access to affordable, nutritious food; and promote safe physical activity through injury prevention initiatives such as management of sports-related concussions. Efforts to build out a comprehensive statewide breastfeeding strategic plan are underway, informed by data collection efforts that have been completed this year.

Sexual and reproductive health

Although the MA teen birth rate decreased significantly between 2008 and 2021 (2008: 20.1 births per 1,000 females age 15-19; 2021: 5.8 births per 1,000 females age 15-19), rates for Black and Hispanic youth are two and five times higher than for Whites, respectively. Improvements can be made in the availability of inclusive, age-appropriate, and evidence based sexual health education and resources. Key strategies to address this priority focus on ensuring sexual and reproductive health clinical services are accessible to Latinx and Black youth, integrating reproductive justice principles into the delivery of sexuality education and sexual and reproductive health services, and promoting access to preventive care at school-based health centers and with clinical sexual and reproductive health providers.

Health transition

NSCH 2020-2021 data indicate that 24.3% of MA youth with special health needs aged 12-17 received the services necessary to make transitions to adult health care. This is a statistically insignificant decrease from 26.3% in 2019-2020. NSCH 2020-2021 data still exceeds the 2016-2017 baseline of 17.9%. To support continued improvement, Title V will increase the availability of youth health transition information and resources, provide culturally and linguistically appropriate services and supports to youth and their families based on individual needs prior to and throughout the transition process, include youth voice in efforts to determine systems improvement work around health transition, and engage internal and external partners to strengthen the system and align services around health transition for young adults.

Racial equity

Although MA is a healthy state overall, racial inequities persist in many MCH outcomes, such as infant mortality and teen births. Title V aims to address root causes of these inequities by working to eliminate institutional and structural racism in its programs, policies, and practices by engaging with the MDPH Racial Equity Movement. Key strategies include developing tools and resources to address institutional racism within core elements of public health work,

such as procurement and data collection and analysis; fostering a workplace culture that acknowledges and addresses the impact of systems of oppression on MDPH staff; and changing hiring practices to increase employment of staff with intersectional identities. Strategies are aligned with BFHN and MDPH's strategic plans that center racial equity.

Family, father, and youth engagement

Effective engagement acknowledges that the families with lived experience bring valuable expertise to a partnership and should be compensated in meaningful ways. In FY22, 47% of programs funded by Title V offered compensated opportunities for families, fathers, and youth, an increase from 3.6% in FY21; the goal is to reach 50% by 2025. Title V is addressing institutional barriers to ensuring families and youth receive financial compensation for their partnership and leadership roles; building and sustaining relationships with families to share power in the design and delivery of services; implementing a statewide Family Engagement Framework; and developing best practices for virtual engagement of families, fathers, and youth beyond the COVID-19 pandemic that maintain quality of engagement and equity of opportunity.

Social determinants of health

Access to affordable, accessible, and safe housing, transportation, and employment are pressing needs in MA, and many families and youth are experiencing negative social and economic consequences due to COVID-19 and rising inflation. To address this priority, Title V will support and advise external coalitions and agencies to promote equitable access to childcare and educational opportunities for all children, support families in accessing concrete supports such as housing, job training, and public benefits, and promote best practices for access to virtual health and social services to help bridge the digital and economic divide.

Healing and trauma

Trauma affects individuals, communities, and systems. The performance measure for this priority tracks Title V efforts to improve policies, practices, and conditions to increase MDPH's capacity to operate as a healing-centered organization to mitigate the effects of trauma. The data source for this measure is in development. Title V will implement changes in policies, practices, and workplace culture; develop a data dashboard to measure community, family and child factors that reflect healing-centered systems of care; and ensure principles of healing centered engagement are embedded within MDPH-funded programs.

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

Title V funds are an essential component of the Commonwealth’s MCH efforts. Without federal MCH Block Grant funding support, many of the Title V program efforts and outcomes discussed in the Massachusetts State Action Plan and elsewhere in the Application could not be achieved.

State accounts for MCH programs are dedicated primarily to direct or enabling services and allow few, if any, staff positions. Federal funds support the leadership, program management, clinical expertise, and data access resources that direct, oversee, develop, and monitor those state-funded MCH programs. The areas of child injury, violence prevention, childhood lead poisoning prevention, and sexual and reproductive health are examples of this relationship.

Title V-funded staff implement and monitor compliance with state mandates and regulations in the areas of perinatal health (e.g., maternal mortality review and postpartum depression screening), birth defects surveillance (e.g., critical congenital heart defect screening), and universal newborn hearing screening. They contribute oversight and support for state-funded pediatric palliative care and catastrophic illness relief programs and, along with other Title V resources, are used in coordination with departmental and statewide initiatives in areas such as NAS, adolescent health, and racial equity. Title V supports epidemiologists who are essential resources for data access and performance monitoring activities. Title V-funded care coordination staff and specialized services are a critical link between many children and youth with special health care needs and the healthcare and other benefits offered by the state.

The two tables below summarize the percentage of Title V federal and state match funds devoted to each of the three types of services and to each of the MCH population groups. The tables demonstrate how the two funding streams complement each other and are used to maximize efforts to offer a well-balanced and effective Partnership.

| Type of Service | % of MCHBG budget | % of State Match Budget |
|-----------------------|-------------------|-------------------------|
| Public Health Systems | 72.97 | 17.50 |
| Enabling Services | 26.87 | 39.10 |
| Direct Services | 0.17 | 43.4 |

| Population Group | % of MCHBG budget | % of State Match Budget |
|------------------|-------------------|-------------------------|
| Pregnant Women | 17.28 | 2 |
| Infants | 4.53 | 0.61 |
| Children & Youth | 31.82 | 25.8 |
| CYSHCN | 38.78 | 61.11 |
| Others | 1.22 | 10.48 |
| Admin. | 6.37 | 0.0 |

Additional details about how blended Title V Federal-State Partnership funds are used in support of the National Performance and State Performance Measures that address all MCH population groups are provided in Section III.B – Budget Narrative. A table lists all measures and which federal and state funded programs support each one.

III.A.3. MCH Success Story

It is estimated that of the 1.4 million children living in Massachusetts,^[1] 314,000 have special health needs^[2] and of those children, 14,000-56,000 have medical complexity (CMC).^[3] The Division for Children & Youth with Special Health Needs' (DCYSHN) Care Coordination program is only able to serve roughly 1,000 of these children and families a year. Informed by the Care Coordination's program model, MassHealth has created the new Coordinating Aligned Relationship-centered, Enhanced Support (CARES) for Kids Program, which is designed to help fill this gap by providing a single source of prompt, family-centered care coordination for CMC across the health, educational, state agency, and social service systems. The CARES program will enroll provider health care coordination teams and has partnered with the DCYSHN to provide training to the providers tailored to meet the needs of their unique care coordination model. Effective July 1, 2023, the DCYSHN entered into an interagency service agreement (ISA) for FY24 with MassHealth that will provide funding to the DCYSHN to create the Care Coordination Assistance, Training, Education & Resource (CCATER) Center to provide training and technical assistance (TA) to provider teams regarding enhanced care coordination.

The DCYSHN Care Coordination Program has a longstanding history of prioritizing the needs of underserved and marginalized families by providing racially equitable, culturally and linguistically competent, enhanced care coordination approach that engages families as partners and addresses their health-related social needs. Their decades-worth of subject matter expertise will serve as the cornerstone of CCATER center curriculum and services. In addition, DCYSHN held family focus groups in November 2022 and formed a Steering Committee in March 2023 comprised of parents of CMC, providers, MassHealth representatives, family partners and DCYSHN staff to advise the CCATER center. This unique expertise and family perspectives aligns with MassHealth CARES goals to provide comprehensive and holistic care coordination that meets the medical and social needs of CMC.

Over the following months, the DCYSHN will work to hire staff, build the CCATER Center and develop an introductory training module around enhanced care coordination to be ready on November 1, 2023, to be followed by the future full training curriculum series. The goal of CCATER Center training and TA is to engage learners toward the delivery of high quality, socially determined, racially equitable, family engaged health care coordination services.

The ISA and partnership with MassHealth will allow the DCYSHN to use their expertise to train provider care coordination teams throughout the state, ultimately expanding access^[4] to quality enhanced care coordination for CMC, improving their well-being and quality of life,^[5] and transforming the culture of healthcare and care coordination in Massachusetts.

^[1] United States Census Bureau. Quickfacts: Massachusetts. Available at: <https://www.census.gov/quickfacts/MA>

^[2] NSCH. Child and Adolescent Health Measurement Initiative. 2020-2021 National Survey of Children's Health data query. Available at : <https://www.childhealthdata.org/browse/survey/results?q=9314&r=23>

^[3] Children's Hospital Association. Coordinating All Resources Effectively for Children with Medical Complexity (CARE Award): Early Lessons Learned from the Project. Sept 2016. Available at:https://www.childrenshospitals.org//media/Files/CHA/Main/Programs_and_Services/Quality_Safety_and_Performance/CARE/CARE_award_early_lessons_learned_sept2016.pdf

^[4]Dennis Z. Kuo, Rylin C. Rodgers, Nathaniel S. Beers, Sarah E. McLellan, Teresa K. Nguyen; Access to Services for Children and Youth With Special Health Care Needs and Their Families: Concepts and Considerations for an Integrated Systems Redesign. *Pediatrics* June 2022; 149 (Supplement 7). Available at: <https://publications.aap.org/pediatrics/article/149/Supplement%207/e2021056150H/188217/Access-to-Services-for-Children-and-Youth-With>

^[5] Cara L. Coleman, Mia Morrison, Sarah K. Perkins, Jeffrey P. Brosco, Edward L. Schor; Quality of Life and Well-Being for Children and Youth With Special Health Care Needs and their Families: A Vision for the Future. *Pediatrics* June 2022; 149 (Supplement 7). Available at: <https://publications.aap.org/pediatrics/article/149/Supplement%207/e2021056150G/188218/Quality-of-Life-and-Well-Being-for-Children-and>

III.B. Overview of the State

This overview provides information about the Commonwealth of Massachusetts to contextualize the Title V program structure and approaches described in the Application/Annual Report. It describes Massachusetts' demographics, geography, and economy; health care environment; the state public health structure; roles and responsibilities of the state health agency; and state statutes and regulations relevant to Title V.

Demographics, Geography, and Economy

Massachusetts has 7 million residents^[1] and is the fourth most densely populated state in the U.S.^[2] It is often thought of as urban because of the dense concentration of people in metro-Boston and other cities; however, as of 2017, 160 cities and towns in Massachusetts (45%) are considered rural based on the definition set by the Massachusetts Department of Public Health (MDPH) State Office of Rural Health.^[3]

An estimated 80.1% of Massachusetts residents identify as White, 9.8% as Black or African American, 12.3% as Hispanic, 8.0% as Asian, 0.9% as American Indian or Alaska Native, 0.2% Native Hawaiian and Other Pacific Islander, and 8.2% some other race.^[4] Immigrants make up 17% of the state's population, and one-fifth of the Massachusetts labor force is foreign born, with immigrants supporting the state's healthcare, science, and service industries, among others. The top countries of origin for immigrants were China (8%), the Dominican Republic (8%), India (7%), Brazil (7%), and Haiti (5%).^[5] During 2019, 31.3% of births were to non-US-born women.^[6] Nearly a quarter (24.5%) of people speak a language other than English at home, the most common being Spanish.^[7]

In 2021, the median age was 39.9 years. An estimated 19.5% of the population was under 18 years, 9.9% was 18-24 years, 26.8% was 25-44 years, 26.4% was 45-64 years, and 17.5% was 65 years and older.^[8]

Massachusetts is a center of higher education and is home to leading research universities and private research laboratories. Massachusetts is also a global leader in life sciences, from public health, pharmaceuticals, and medical devices to diagnostics and nanotechnology. Massachusetts has a high proportion of college graduates, with 46.6% of the population aged 25 years or older having a Bachelor's degree or higher, compared to 35.0% nationally.^[9] In January 2022, the unemployment rate was 4.8%, down from a high of 17.1% in April 2020 during the COVID-19 pandemic, but above the 3.0% unemployment rate in January 2020.^[10] During 2021, 10.4% of people were in poverty; an estimated 12.6% of children under 18 were below the poverty level.^[11] The median household income is \$89,645, higher than the U.S. household median (\$69,717).^[12] Despite the high median income, Massachusetts is an expensive state in which to live. Many households are cost-burdened; 29.5% of homeowners and 48.9% of renters spent more than 30% of their household income on housing.^[13]

Approximately 11.7% of the population has one or more types of disability, including visual, hearing, ambulatory, cognitive, self-care, and independent living disabilities.^[14] In 2019, 41.4% of Massachusetts adults aged 18-64 years with a disability were employed (+3.2% from 2018), compared to 81.7% of adults without a disability. Furthermore, 27.8% of people with disabilities lived below the poverty line, compared to 10.5% of people without disabilities.^[15]

An estimated 12-18% of reproductive-aged women have a disability.^[16] Compared with women without a disability, women with a disability are as likely to desire a future pregnancy, be sexually active, and experience pregnancy.^[17]^[18]^[19] However, women with a disability are less likely to report utilization of reproductive health care and more likely to experience pregnancy complications and adverse birth outcomes.^[20] A supplemental questionnaire on disability was added by selected Pregnancy Risk Assessment Monitoring System (PRAMS) sites and data collection began in 2019 to address a gap in population-based data on disability among women with a recent live birth. During 2020, 5.5% of women with a recent live birth in Massachusetts reported having a disability (defined as having "a lot of

difficulty” or “cannot do at all” on one or more of the following: remembering, seeing, hearing, communicating, walking/climbing stairs, or self-care).

Health Care Environment

Insurance Coverage

According to the 2021 Massachusetts Health Insurance Survey (MHIS),^[21] published in July 2022, the uninsurance rate remained low at 2.4%, well below the national rate based on estimates from the National Health Interview Survey. MA children aged 0-18 years had an uninsurance rate of 0.7%. A higher percentage (8.6%) of the Hispanic population was uninsured compared with other racial/ethnic groups (Black, non-Hispanic 5.8%, Other/multiple races, non-Hispanic 4.7%, Asian, non-Hispanic 1.9%, White, non-Hispanic 0.9%). Most respondents to the 2021 MHIS reported a usual source of care other than the emergency department (88.1%, including 92.9% of children) and a visit to a general doctor in the past 12 months (81.3%). This represents a decrease in both estimates from 2019 (91.0% of respondents, including 95.4% of children, reported a usual source of care and 86.4% reported a visit to a general doctor in the past 12 months in 2019). In addition, 17.5% of respondents visited a mental health professional over the past 12 months. Hispanic (81.3%), Black (81.2%), and Asian (82.1%) residents were less likely to report having a usual source of care than White residents (90.8%).

Despite the high rate of insurance coverage, health care costs remain a concern for many families. Forty-one percent (41%) of 2021 MHIS respondents reported affordability issues over the past 12 months. Almost a third (31.2%) reported experiencing any family unmet need for health care in the past 12 months because of the cost of care and almost a quarter (23.3%) had a family member receive a medical bill where the health insurance plan paid much less than expected or did not pay at all.

In Massachusetts, Medicaid and the Children’s Health Insurance Program (CHIP) are combined into one program called MassHealth. MassHealth provides coverage to more than 2 million members – 30% of Massachusetts residents. This high level of enrollment contributes to Massachusetts’ low uninsurance rate.^[22] The MassHealth 1115 waiver that began July 1, 2017 aimed to transform the delivery of care for MassHealth members and to change how care is paid for, with the goals of improving quality and establishing greater control over spending. The waiver implemented the most significant re-structuring of the program in two decades, shifting the delivery system toward value-based care. Through an Accountable Care Organization (ACO) model, MassHealth partners directly with provider organizations to deliver coordinated and quality care to its members. There are 17 ACOs (including one pediatric ACO) that are held financially accountable for cost, quality, and member experience. The 1115 waiver also contributed to maintaining near universal health care coverage for the Commonwealth, supported the Commonwealth’s safety net, and expanded access to substance use disorder services. MassHealth submitted a request to Centers for Medicare and Medicaid Services (CMS) in June 2021 to renew the 1115 waiver for five years (from July 1, 2022 – June 30, 2027), and the renewal was granted in September 2022.^[23] Waiver amendments aim to expand eligibility for the Medicare Savings Programs to comply with state law, launch a >\$2 billion initiative over five years to hold ACOs and ACO-participating hospitals accountable for reducing disparities in health care quality and access including a focus on maternal health, authorize postpartum coverage for members not otherwise eligible due to immigration status, enhance services for specialized populations such as care coordination for children with medical complexity, and provide flexibility related to place of services. In addition, it invests \$115 million per year in primary care through a new value-based sub-capitation model that includes specific requirements and standards for team-based, integrated care for children and youth. For more information about the MassHealth 1115 waiver and Title V collaboration with MassHealth, see the *Health Care Delivery System* section.

Workforce and Infrastructure

According to the MDPH Healthcare Workforce Center, as of 2017 (the most recent data available), there were 28,428 physicians in Massachusetts with an active license, with 52% reporting a maternal and child health (MCH)-

related specialty (e.g., pediatrics, family medicine, obstetrics and gynecology, and child and adolescent psychiatry). Of these, 8.8% (3,769) were pediatricians. Although Massachusetts has the highest number of physicians per population in the United States, these providers are not equitably distributed across the state. Over one third (38%) of physicians with an MCH-related specialty practice in Suffolk County (including Boston), which is home to just 11% of the state population. Many areas in the state, including rural communities, lack adequate access to care.

Massachusetts is home to a world-class pediatric hospital (Boston Children's Hospital) and nine other tertiary care hospitals that provide Level III neonatal care. There are 52 community health centers (CHCs) that have more than 300 total access sites across the state.^[24] CHCs are integral to providing high quality medical, dental, vision, pharmacy, behavioral health, addiction services and other community-based services to residents regardless of their insurance status or ability to pay. CHCs work to eliminate inequities in health outcomes by hiring multilingual and multicultural staff at every level of their organizations, deploying community health workers to help patients navigate the complex health system, and assisting residents in accessing health care coverage. CHCs also represent a major source of care for medically underserved women and children. According to the *Statewide Economic Impact of Massachusetts Community Health Centers* released in December 2020,^[25] CHCs served 1,037,086 patients, including 221,611 (21%) children and adolescents. In addition, 75% of patients were low income, 74% identified as an ethnic or racial minority, 1% were veterans, 1% were agricultural workers, and 4% were homeless. CHCs accounted for 24% lower costs for health center Medicaid patients, \$1.1 billion in savings to Medicaid, and \$1.8 billion in savings to the overall health system.

Overall Health Status

Massachusetts is consistently recognized for good health status in national rankings. According to America's Health Rankings 2022 Annual Report,^[26] Massachusetts has a ranking of #2 overall and ranks #1 in clinical care, #3 in health outcomes, #4 in social and economic factors, and #8 in behaviors (e.g., nutrition and physical activity, sexual health, sleep health, smoking tobacco use). Strengths include a low premature death rate, high reading proficiency among fourth grade public school students, and low uninsured rate. Identified challenges included high prevalence of excessive drinking, high income inequality, and high percentage of housing with lead risk. MDPH and Title V recognize that good health in Massachusetts is not equally shared. Persistent health inequities in access to services and in economic and health outcomes across demographic characteristics, most notably by race and ethnicity, point to historical and structural systems of oppression that continue to disadvantage people of color in the state. For example, 10.4% of the Massachusetts population lives below poverty level; however, only 7.8% of White residents live below the poverty level compared with 23.6% of Hispanic residents, 17.1% of American Indian and Alaska Native residents, 15.3% of Black residents, and 10.9% of Asian residents.^[27]

Impact of COVID-19

The COVID-19 pandemic both exacerbated pre-existing public health concerns and created new health crises to address. Even people who did not become sick with COVID-19 were managing stress, uncertainty, and isolation during this challenging time. In fall 2020, MDPH staff and stakeholders conducted the COVID-19 Community Impact Survey (CCIS) to better understand the immediate and long-term health needs, including social and economic consequences facing the Commonwealth. MDPH used these data to prioritize resources and inform policy actions to help address these impacts.

Findings from the survey are publicly available through the [COVID-19 Community Impact Survey Data Dashboard](#) and cover topics including access to healthcare, risk mitigation and access to COVID-19 testing, discrimination and race, social determinants of health, employment, housing security, intimate partner violence, mental health, and substance use. Findings were organized by population, including parents and families, caregivers, youth, young parents, people with disabilities, sexual orientation and gender identity, essential workers, and rural communities.

The pandemic substantially impacted normal healthcare operations, put stress on healthcare capacity, and disrupted healthcare capacity even for people who normally face few barriers to care. It impacted people's ability and willingness to access critical and essential healthcare services. Concerns were felt most acutely by populations who already faced healthcare barriers prior to the pandemic, and who also have the highest rates of delayed urgent care now. Although 60% of respondents who needed care could access it via telehealth, technology-related barriers remain a challenge for many populations.

The CCIS highlighted the impact of the pandemic on social determinants of health and their effects on MCH populations. Results showed that Massachusetts parents were 50% more likely than non-parents to worry about housing. Parents who were concerned about expenses or childcare were more likely to report poor mental health compared to parents who were not worried about expenses or childcare. Sub-groups of parents who were more likely to worry about expenses, basic needs, and poor mental health included: non-binary, transgender, questioning, queer, and bisexual/pansexual people, people of color, parents under the age of 35, and parents of children and youth with special healthcare needs. CCIS findings suggest that parents, including parents of CYSHN, could benefit from targeted supports accessing basic needs such as housing, food, and mental health resources.

In summer and fall of 2023, MDPH will conduct a second iteration of the CCIS. This survey, renamed the [Community Health Equity Survey](#) (CHES), aims to better understand the most pressing health needs facing Massachusetts residents, including social, economic, and environmental needs. CHES explores the root causes of health and aims to identify community strengths and gaps, health needs, concerns, inequities, and unintended consequences of decisions related to public health crises. Survey topics include access to basic needs like health care and transportation, physical and mental health and wellbeing, experiences with COVID-19, experiences with housing, education, and work, and demographic information, such as age, gender, and race. Findings will again be organized by population, including parents and families, caregivers, youth, young parents, people with disabilities, sexual orientation and gender identity, essential workers, and rural communities.

See the *State Action Plan Narrative by Domain* for discussion of CCIS data related to specific Title V priorities.

Public Health Structure

Public health in Massachusetts is a statewide commitment to ensure that all residents have the opportunity to experience the best health and well-being regardless of race, ethnicity, socioeconomic status, geographic location, physical ability, or other characteristic. This vision is supported by a strong health care delivery system and public health infrastructure, led by MDPH. MDPH provides outcome-driven, evidence-based programming to prevent illness, injury, and premature death; ensure access to high quality health and health care services; respond quickly to emerging public health threats; and promote wellness and health equity for all residents of the Commonwealth.

Established in 1869, MDPH was the first state board of health in the United States. Throughout its history, MDPH has been a pioneer in the development and implementation of public health programs and strategies, including being the first state to establish a childhood lead poisoning prevention program and universal newborn screening program. With over 3,200 employees, MDPH uses a variety of approaches including screening, education, research, regulation, inspection, and the provision of funding to local programs and interventions to promote health for all residents in the Commonwealth.^[28]

Massachusetts has a decentralized public health system, with each of its 351 cities and towns having its own governing body and health board with authority to provide public health services to its residents. These local public health authorities work in partnership with the MDPH Office of Local and Regional Health and others to deliver a core set of services. Local public health authorities are charged with a broad set of responsibilities for enforcement of state sanitary, environmental, housing, and health codes, such as protection of the food supply through inspections of

restaurants and other food establishments; inspections and permitting of septic systems, landfills, and other solid waste facilities; and developing, testing, and building awareness of emergency preparedness plans for a wide range of hazards. Unlike many other states, Massachusetts does not provide base funding to local public health authorities for core public health services. Local public health services are primarily funded by local property tax revenues and fees.^[29]

Massachusetts is a national leader in MCH programs and policy. The state's commitment to the MCH population is demonstrated by matching of federal Title V funds. While states are required to match every \$4 of federal Title V money with at least \$3 of state and/or local money, Massachusetts provides a substantial overmatch. The philosophy of the Title V program is to address the health needs of pregnant people, parents, and children, focusing on a life course approach and addressing the impact of structural racism on MCH. Efforts in Massachusetts focus on the policies, systems, programs, and services needed to optimize the health of the entire family.

The MDPH Bureau of Family Health and Nutrition (BFHN) administers the Title V program. The Title V Director, also the BFHN Director, reports to the MDPH Deputy Commissioner. MDPH is housed within the Executive Office of Health and Human Services (EOHHS), the largest secretariat in state government. EOHHS is comprised of 12 agencies, including Medicaid, Department of Children and Families, Department of Developmental Services, and MDPH. This structure provides Title V with capacity to promote systems of service, coordinate initiatives, and work collaboratively across a range of partners necessary for a comprehensive approach to Title V goals. The context of Title V within MDPH and EOHHS means that priorities and initiatives are synergistic and collaborative.

State Health Agency Roles and Responsibilities

In April 2023, Dr. Robert Goldstein was appointed MDPH Commissioner, replacing Margret Cooke who had served as Commissioner since June 2021. Prior to coming to MDPH, Dr. Goldstein was a Senior Policy Advisor at CDC, an infectious disease physician at Massachusetts General Hospital, and a faculty member at Harvard Medical School. Dr. Goldstein has identified five strategic priorities for the Department, which include: a continued focus and commitment to health equity; strengthening our emergency response and preparedness function; building the public health infrastructure necessary for the 21st Century; supporting the public health workforce, promoting recovery and resilience; and deepening the Department's engagement with the public and staff's collective dedication to service.

Dr. Goldstein has developed a plan to reorganize the Department to better support these priorities, develop strategies, set direction, facilitate collaboration, and ensure accountability. Major aspects of the new structure include the following:

- Establishment an Assistant Commissioner for Health Equity within the Commissioner's Office to provide increased visibility and accountability for the Department's health equity work. The MDPH offices and initiatives that will be overseen by the new Assistant Commissioner are the Office of Health Equity, the Vaccine Equity Initiative (VEI), the work of the secretariat-wide Interagency Health Equity Team, and the Office of Problem Gambling.
- Establishment of a new role of Deputy Commissioner who will oversee the operations of the four facilities that comprise the MDPH Public Health Hospital System and the State Office of Pharmacy Services.
- The current Deputy Commissioner, Jen Barrelle, will continue overseeing much of the programmatic work that takes place in our bureaus, including providing oversight for the Bureaus of Family Health and Nutrition and Community Health and Prevention.
- The Office of Preparedness and Emergency Management will move directly under the Commissioner, consistent with the Department's commitment to emergency response.
- The Office of Local and Regional Health will move directly under the Commissioner to strengthen the coordination and collaboration between and among the many local public health departments across the

state, as well as with internal and external public health stakeholders.

- Policy, Legislative Affairs, and Communications will continue to be situated in Commissioner's Office, providing perspective, guidance, and oversight in these three critical areas and helping to promote smooth cross-agency coordination.
- Finally, the Bureau of Environmental Health will be renamed the Bureau of Climate and Environmental Health to highlight the effects and potential consequences of climate change on health and environment and reflect the Bureau's role as the only state agency dedicated to understanding and addressing the health impacts of climate change.

An updated MDPH organizational chart is included in the Attachments.

Data Access and Capacity

An important resource providing easily accessible public health and racial equity data in Massachusetts is the [Population Health Information Tool](#) (PHIT),^[30] which launched in June 2019. PHIT is a web-based compendium of health data that is available to the public to inform community health needs assessment, program planning, and policy making. PHIT provides community-specific health data framed by six social determinants of health – education, employment, violence, social environment, housing, and built environment – to support help communities identify and address upstream contributors to poor health. PHIT users can access data dashboards and community-specific health priority reports, as well as contextual information to interpret the data and identify health inequities.

PHIT integrates data from myriad sources, including but not limited to Pregnancy Risk Assessment Monitoring System, Pregnancy to Early Life Longitudinal Data System, Behavioral Risk Factor Surveillance System, Vital Statistics, Injury Surveillance System, Birth Defects Monitoring Program, Substance Addiction Services, Early Hearing Detection and Intervention, WIC, and Early Intervention. Also included in PHIT are the Health Equity and Neonatal Abstinence Syndrome (NAS) Data Dashboards. The Race and Hispanic Ethnicity Health Equity Dashboard provides health outcome data from across MDPH in a centralized location. Key findings supplement charts to help viewers gain introductory level understanding of the impact of race on the health of Massachusetts residents. The NAS Dashboard includes data that address measures across three key time periods – pregnancy, birth, and infancy – for clinical providers, public health workers, and community agencies to monitor the care of families affected by perinatal substance use. Title V is currently collaborating with PHIT to establish a Title V Dashboard to provide readily accessible data on key MCH measures including Title V performance measures to inform decision-making and action planning.

Through a partnership with the Center for Health Information and Analysis (CHIA), MDPH also assembles and manages the Public Health Data Warehouse (PHD), a unique surveillance and research tool that provides access to linked, multi-year longitudinal, individual-level data to enable analyses of health priorities and trends. MDPH created the PHD in 2017, in an unprecedented effort to link data sets across state government to effectively address public health priorities, with an initial focus on opioid overdoses. Public and private partnerships help the MDPH Office of Population Health identify and answer key questions to inform public health responses and policymaking.

Another MDPH priority for the use of the PHD was to generate new, actionable information that will help Massachusetts address inequities in MCH outcomes, especially those across racial groups and other social factors. In 2018 a workgroup identified the MCH datasets to be included in the PHD (such as WIC, Department of Children and Families, Early Intervention, and the Massachusetts Immunization Information System), and designed research questions of interest to Title V and MCH in Massachusetts. The workgroup proposed an initial focus on three MCH topics: maternal morbidity and mortality, preterm birth and infant mortality, and adolescent health and wellness. Staff reassignments during the COVID-19 pandemic resulted in delays securing data use agreements and accessing the

data sets comprising PHD. The datasets have now been assembled, and a workgroup has recently released a data brief on severe maternal morbidity (SMM) “An Assessment of Severe Maternal Morbidity in Massachusetts: 2011-2020” (released July 2023). This data brief highlights the increasing trend of SMM from 52.3 per 10,000 deliveries in 2011 to 100.4 per 10,000 deliveries in 2020. The brief also highlights the growing disparity in SMM among Black birthing people compared to White birthing people with data from 2011-2020 showing 63.7 SMM events per 10,000 deliveries among White non-Hispanic birthing people compared with 146.1 SMM events per 10,000 deliveries among Black non-Hispanic birthing people. Planned upcoming data briefs include a deeper analysis of SMM among pregnant people by insurance status, presence of substance use disorder, housing instability, and mental health history.

In addition to PHIT and the PHD, MDPH has access to the Massachusetts All Payer Claims Database (APCD), a comprehensive source of health claims data from public and private payers in Massachusetts. Administered by CHIA, it is used by health care providers, health plans, researchers, and others to address a variety of issues, including price variation, population health and quality measurement. APCD data have been used in an evaluation of MDPH home visiting programs.

Performance Management and Quality Improvement

MDPH is committed to continuous performance management (PM) and quality improvement (QI) as a proven way to enhance the Department’s performance. The Department’s PMQI efforts help guide funding decisions, identify priorities, and analyze results to ensure that public monies are strategically invested in effective programs and services. The Office of Performance Management and Quality Improvement (PMQI) oversees the integration of QI culture at MDPH and convenes the PMQI Council. The PMQI Council meets bi-monthly to implement the department’s QI plan which involves annually assessing the QI culture, communicating PMQI efforts and successes across MDPH, and building PMQI capacity on all levels. The PMQI Team and Council integrate their efforts with the Department’s mission to achieve health equity, improve health outcomes, work collaboratively with its partners, and offer trainings on QI models and tools.

With its robust performance measurement framework and focus on implementing evidence-based practices and promising innovations, Title V is a leader in MDPH’s PMQI efforts. Title V staff continue to regularly participate in and help to provide instruction at Lean Six Sigma White, Yellow, Green and Black Belt trainings. In addition, Title V staff have always been members of and significant contributors to the PMQI Council.

BFHN has established a Racial Equity and Family Engagement Strategic Plan as an overarching framework for promoting and sustaining equity for BFHN staff and the communities and families we serve by dismantling structural racism and co-creating healing-centered policies, practices, and social norms. In April 2023, BFHN initiated a Learning Community to accelerate progress, nurture innovation, and build collective will towards the four primary drivers named in the strategic plan: 1) racial equity as a strategic priority, 2) antiracist infrastructure that centers families’ lived experience and community context, 3) family-centered antiracist service delivery, and 4) relationships and collaborations within and beyond BFHN center families’ needs. Using the MIECHV Health Equity CollN key driver diagram (KDD) as a foundation, BFHN Leadership and BFHN’s Racial Equity Strategy Team modified the MIECHV Health Equity KDD to develop primary and secondary drivers and change strategies that align with the Bureau’s overarching aim. The Learning Community provides a forum for sharing best practices related to the secondary drivers and projects aimed at testing and spreading change ideas.

Public Health Accreditation and State Health Assessment

In 2017, MDPH was awarded national accreditation by the Public Health Accreditation Board (PHAB). Since that time, MDPH has maintained its accreditation status by submitting annual PHAB reports and building capacity in PMQI. Title V staff actively contributed to achieving initial PHAB accreditation, including developing the State Health

Assessment to ensure alignment of MCH priorities and objectives, and have since been contributors to the PHAB Annual Reports. These contributions are often noted by PHAB evaluators as important accomplishments that should be shared with other accredited health departments (e.g., Racial Equity Data Road Map, home visiting program QI projects, the MA MIECHV needs assessment and program planning process). MDPH will maintain its national accreditation and is currently preparing for our application for reaccreditation which will take place in 2023.

COVID-19 Pandemic Response

Title V staff and programs have supported pregnant people, infants, children, youth, children and youth with special health needs, and their families through the COVID-19 pandemic in a variety of ways, such as:

- Offering services virtually (e.g., home visiting).
- Raising awareness for families and providers of the importance of emergency care planning and providing a variety of resources for this purpose.
- Facilitating access to concrete supports (e.g., unemployment benefits, diapers, transportation, groceries, personal protective equipment).
- Coordinating an information and referral pipeline for families of CYSHN.
- Creating a mechanism for emergency family support funding to low-income families of CYSHN who have experienced unexpected financial hardships related to job or income losses, hospitalizations, the death of a child or family member, and other similar catastrophic events.
- Establishing a surveillance system to monitor outcomes for pregnant women with lab-confirmed COVID-19 and their infants and adding COVID-related questions to the PRAMS survey.
- Using CCIS findings to respond to the needs of youth and families (e.g., addressing the impacts youth are experiencing beyond educational delays).
- Influencing prioritization of family caregivers of medically complex CYSHN to receive vaccinations as “unpaid essential” home health care workers during Phase 1 of the Massachusetts COVID-19 Vaccination Plan.
- Serving as site managers at UMass Chan Medical School’s VaxAbilities clinics for children with disabilities.
- Serving as community liaisons, vaccine ambassadors, and communications project managers for the VEI
- Leading the Pediatric and Family Workstream of the VEI
- Linking Massachusetts Immunization Information System (MIIS) and birth certificate data to better understand vaccination uptake among pregnant people

In 2021, MDPH was awarded CDC funding to address COVID-19 and advance health equity in racial and ethnic minority groups and rural populations within Massachusetts. Grant activities fall into four categories – COVID-19 mitigation, data metrics, community engagement and support, and social determinants of health. There is a strong emphasis on building the state’s data infrastructure.

- Data metrics: The funds support health equity data collection, analysis, dissemination, and management, allowing MDPH to understand the public health needs of the communities hardest hit by COVID-19. Examples of projects include using an innovative Community Evaluator model to collect qualitative data to assess the needs of priority population groups related to COVID-19; increasing the number of products for which there are translations, accessibility, and plain language materials; and developing a Fatherhood and Second Parent survey to assess the experience of fathers during pregnancy and the birth of their child, and their experiences with COVID-19 testing, vaccination, health status, social determinants of health, mental health and racism during the COVID-19 pandemic.
- COVID-19 mitigation: The funds support COVID-19 activities in rural communities including testing, COVID-19 outreach and educational services, assistance to individuals who face barriers to isolating or quarantining, vaccination, and connecting residents to local and state resources for social needs.
- Community engagement and support: The funds support health equity capacity building of MDPH staff, local

boards of health, and other public health professionals using a population health approach and will engage racial and ethnic minority populations and rural communities in developing improved approaches to testing and contact tracing.

- Social determinants of health: Funds support grants to local communities to address the social determinants of health with a focus on the key drivers of the disproportionate impact of COVID-19 on priority populations, as well as community outreach on the Federal Emergency Management Administration's (FEMA) funeral assistance program.

State Statutes and Regulations Relevant to Title V

Title V priorities are contextualized within state statutes and other regulations to improve population health through the most effective and efficient mobilization of available resources. There are no statutes in Massachusetts directly related to the establishment or operation of a Title V program as defined by HRSA/MCHB. There are, however, many statutes and regulations that address issues related to MCH and CYSHCN. Examples of relevant statutes and regulations, many of which involved leadership or significant input by Title V, include:

- extend eligibility for postpartum coverage on MassHealth to 12 months
- establish a MassHealth benefit for doula services (Fall 2023)
- launch the MassHealth Coordinating Aligned, Relationship-centered, Enhanced Support (CARES) for Kids Program, a targeted case management benefit for children with medical complexity, effective July 7, 2023
- established a commission to make policy recommendations to eliminate racial inequities in maternal health
- expanded birth defects monitoring and surveillance regulations
- postpartum depression legislation
- expanded newborn blood screening regulations
- expanded public health practice for dental hygienists
- expanded breastfeeding in public places
- required periodic measurement of BMI in schools
- training for physicians, nurses, and other providers on domestic and sexual violence
- medical review and approval of short and long-term respite care for complex medical conditions in skilled nursing facilities
- formation of a PANS/PANDAS (Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal infections/Pediatric Acute-onset Neuropsychiatric Syndrome) Advisory Council to the MDPH Commissioner
- bullying prevention in schools
- sports concussion policy and management in schools
- junior operator law and primary child passenger restraint law for children under age 14
- lowering the regulatory definition of blood lead poisoning to 10µg/dL
- MassHealth coverage of long-acting reversible contraceptive devices inserted in the immediate postpartum period separate from the global delivery fee
- paid family and medical leave legislation
- pay equity legislation that clarifies unlawful wage discrimination and makes workplaces fairer and more equal.

The COVID-19 pandemic changed both the lives of families and children and the public health system in innumerable ways. The Title V priorities, set before the pandemic began, are more important – and in many ways more challenging – to address than ever. However, the Title V program is well positioned in the state's public health and health care environment learn from the response and recovery from the COVID-19 pandemic and be prepared to address any future emerging threats to MCH population in Massachusetts.

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III.C. Needs Assessment

FY 2024 Application/FY 2022 Annual Report Update

MCH Population Needs

MDPH conducts a comprehensive statewide needs assessment every five years and in interim years engages in activities to ensure that needs assessment is an ongoing process. Below are examples of efforts to monitor and assess the continuing needs of the MCH population in Massachusetts.

PNQIN Family Engagement Survey

PNQIN developed a Hospital Family Engagement Collaborative Practice Survey for NICU/Special Care Nursery and Obstetrics and Gynecology teams to assess hospital and patient family engagement definitions and practices. This effort was led by the Title V Director who serves as the chair for the PNQIN Family and Community Subcommittee. With support from the Betsy Lehman Center, the Family Voices' Family Engagement in Systems Assessment Tool (FESAT) was adapted, and survey questions imported into REDCap. The survey was administered to 26 perinatal units from 41 hospitals. Results from this survey demonstrate that there is considerable variation in family and community engagement across Massachusetts obstetric and neonatal hospital units. Findings from this baseline assessment will inform supports, technical assistance, and resources PNQIN can offer to help hospitals strengthen and deepen their engagement activities. PNQIN will begin this process by convening a patient and family advisory council to co-develop PNQIN projects and initiatives, including supports related to patient, family, and community engagement. PNQIN will support and integrate family members from diverse backgrounds into PNQIN committees and workgroups so that the perspectives of pregnant and postpartum people with lived experiences inform PNQIN's strategy and projects. Following the creation of this advisory body, and the integration of family members into PNQIN activities, PNQIN will co-develop a new initiative to support hospitals as they strengthen their family engagement efforts.

WIC & Breastfeeding Needs Assessments

An annual needs assessment identifies WIC-eligible populations in all 351 cities and towns and guides the statewide distribution of funds. In 2021, 193,361 women, infants, and children were eligible for WIC, compared to 197,444 in 2020. Among those eligible in 2021, 48.1% of women, 80.9% of infants, and 58.2% of children participated in WIC. These coverage rates represent small decreases in coverage for women and infants but significant improvement for the coverage of children. Local WIC agencies use needs assessment results for outreach plans to engage and enroll eligible families.

The Nutrition Division is also completing a needs assessment in 2023 to strengthen breastfeeding services in the state, including the unique challenges families faced during the COVID-19 pandemic and opportunities to improve or expand services. The needs assessment process has been developed in partnership with the Internal MDPH Breastfeeding Workgroup and has included key informant interviews with internal and external partners, data review, a health care provider survey, and the development of a family-facing survey. The findings will be used to prepare statewide recommendations to better meet the needs of families and improve breastfeeding outcomes in the Commonwealth.

Center for Birth Defects Research and Prevention Strategic Planning

The Center for Birth Defects Research and Prevention (CBDRP) initiated a strategic planning process and engaged a consultant to lead this process. The purpose of the Center's Strategic Planning process is to: 1) refine the Center's mission and vision; 2) update its goals and objectives; 3) identify opportunities to: a) add new activities, b) enhance/strengthen current activities; and 4) create and/or strengthen Center collaborations. The Center engaged consultants in the fall of 2022 to lead the Strategic Planning process. An application was distributed to Center staff to

identify members for a core working team; simultaneously, an application was distributed to family leaders to identify individuals with lived experience to participate in this process. A kick-off meeting was convened in January of 2023, where staff and family leaders were grounded in the process and oriented family leaders to the work of the Center. The core group drafted content for the strategic plan and brought it to the family leaders and staff through an iterative process to get feedback and revise the plan. Part way through the process, the plan was brought to the Bureau's Senior Leadership Team and internal and external collaborators for additional input. One of the main changes to arise from the process is an update to the Center's name, given the growth of the Center, staff felt it no longer captured the breadth of the work. The name "Division for Surveillance, Research, and Promotion of Perinatal Health" is currently being considered. The final strategic plan will include an implementation plan, as well as a monitoring and evaluation plan; the plan is anticipated to be ready in July of 2023.

Division of Children and Youth with Special Health Needs (DCYSHN) Care Coordination Training and Technical Assistance Center

The DCYSHN is creating a care coordination center to provide training and technical assistance to providers regarding comprehensive, enhanced care coordination including training around the social determinants of health, racial equity, family engagement and trauma informed and healing centered care. Throughout this process, family engagement has been at the forefront. The center is being developed based on previous population health work done as part of the MCH population health learning journey with three other states and facilitators from MCH Workforce Development Center at UNC and Population Health Improvement Partners. The DCYSHN had a team of professionals creating a workplan together for this center. The team was comprised of DCYSHN staff and representatives from MassHealth, DPH Office of Health Equity and The Federation for Children with Special Needs and their Family Voices program. As a result of these efforts, the DCYSHN performed need assessments of families of CYSHN and providers, in order to create training that serves the needs of families and is tailored to providers. The DCYSHN held two focus groups in November 2022 with families of different races, ethnicities, and cultures with live translation. Twelve parents participated in total, seven spoke English, four spoke Spanish, one spoke Portuguese and one spoke Vietnamese. Of these parents, five identified as Latina, one as Haitian Creole, one as Vietnamese, and two as African American. The parents were asked about their understanding and experience with care coordination and their wants and needs around improved care coordination. These original focus groups contributed to the strategic planning for the care coordination center and curriculum. In March 2023, the DCYSHN expanded our core team to a full Steering Committee, made up of parents of CYSHN, providers and DCYSHN staff. This committee meets monthly and provides insights and feedback on the vision, plans and goals for the care coordination center. Their input ensures that the DCYSHN is creating comprehensive curriculum for providers to increase their knowledge and skills around serving and working with CYSHN and that the model and structure of the center will be effective in expanding care coordination in Massachusetts. The future will include further needs assessments working with the provider organizations that the center will serve and partnering with families to provide continued insights into the center's development efforts.

Pediatric Mental Health Access Grant Early Identification and Diagnosis of Autism Project

The Division of Pregnancy, Infancy and Early Childhood received supplemental funding from HRSA for the Pediatric Mental Health Care Access Project to expand pathways to early diagnosis and support for children with ASD. The project conducted a needs assessment to better understand the barriers to getting an ASD diagnosis for children 0-5 that included interviews with over two dozen key stakeholders and three focus groups with parents (n = 33). Emerging themes included: 1) effective communication, and accurate message transmission are severely hampered when a shared language is absent; 2) the potential presence of bias among assessors in ASD diagnosis is an important and sensitive issue to be addressed; and 3) coming to terms with an autism diagnosis can be incredibly challenging for families, regardless of their cultural background. The focus groups provided valuable insights into the experiences and perspectives of parents navigating the diagnosis process for their children with autism and prioritized culturally sensitive support throughout the diagnosis process, recognizing the influence of cultural beliefs

on families' perceptions and approach to autism.

Family Engagement and Leadership

One of the strategies in the MA Family Engagement Priority State Action Plan is to understand and better coordinate efforts across MDPH bureaus and offices to partner with and engage communities, families, fathers, and youth at the system (i.e., internal/state-level) and program level (i.e., external or direct service delivery level). The Title V Family Engagement Implementation Team worked with a CDC Public Health Associate to develop a Title V Family Engagement Survey, administered during spring 2023, to assess progress on this priority. The Title V Family Engagement Survey was a two-part survey comprised of: 1) an adapted version of the Family Engagement in Systems Assessment Tool (FESAT); a self-assessment tool to help programs reflect upon how families are engaged in program-level initiatives (including commitment to family engagement practices, transparency with families, representation of populations served, and impact of family engagement practices), and to share opportunities for improvement; and 2) a questionnaire collecting information on the various family engagement activities (including compensation) in Title V affiliated programs during FY22 for the Annual Report. Results are currently being analyzed and will be used by the Family Engagement Implementation Team to design training, and tools to support programs, highlighting internal best practices and peer learning opportunities.

In addition, BFHN has partnered with the Boston University School of Social Work to conduct an evaluation to understand the impact, reach, and opportunities for improvement and scale of programs such as Family TIES (Together in Enhancing Support) and Early Intervention Parent Leadership Program (EIPLP). The evaluation included key informant interviews with staff and leadership, secondary data analysis of Family TIES program data, and focus groups with parents who have participated in the programs. A final report will be available in July 2023 and include logic models for each program to support planning, implementation and quality improvement activities, a description of the Family TIES participants for Family TIES to better align resources and identify gaps and opportunities, and recommendations for improvement, innovation and future evaluation.

Emerging Issues

MDPH has identified the following emerging public health issues and Title V capacity and resources to address them.

Workforce Challenges

Like many industries across the country, state and local MCH programs and organizations are experiencing tremendous challenges in hiring and retaining staff. At the local level, programs such as WIC and home visiting struggle to appropriately staff client-facing services, limiting their ability to meet the needs of families. The Direct Service Provider Crisis has particularly impacted caregivers of children and youth with special health needs on multiple fronts, including lack of access to desperately needed respite. Workforce challenges is experienced at MDPH as well, where many staff have left the Department or state service over the past few years, leading to a loss of institutional knowledge and necessitating additional staff time and resources to fill vacancies. BFHN is leveraging this as an opportunity to recruit and hire new staff with a racial equity lens and using a healing-centered approach. More information about these hiring efforts can be found in the discussion of the racial equity priority in the *Crosscutting* domain. In addition, see *MCH Workforce Development* for information about efforts to strengthen the MCH workforce.

Inflation and Cost of Living

The rising inflation and cost of gas, food, and other goods in Massachusetts and across the country are adversely affecting families served by Title V. As result of the COVID-19 pandemic, many people in Massachusetts were already struggling with important basic needs, like housing, food, medicine, technology, and childcare. Title V

programs will support families in accessing concrete supports to meet these needs and assess the impact of public benefits and programs that promote economic stability, including Paid Family and Medical Leave, the Earned Income Tax Credit, and Supplemental Security Income benefits. The WIC program will continue to play a critical role maximizing the number of families with young children who have access to food resources for which they are eligible. WIC caseload has grown more than 20% since the beginning of the pandemic; this growth combined with significant food cost inflation across most of the WIC food categories raises concerns about the sufficiency of federal WIC funding to serve all families that wish to enroll in the program.

Housing Crisis for Migrant Families

Massachusetts is welcoming many new immigrant families with significant health and social needs. Significant numbers of families are currently in emergency shelter, and needs are amplified by challenges associated with transportation, health care access, developmentally appropriate play space for children and food storage and preparation facilities. Programs are working with community partners to ensure that families enroll in and have access to services for which they are eligible.

Constrained funding for MCH legislative priorities and emerging issues

Maternal and child health covers a wide breadth of programs and services that requires a multi-generational, life course approach to optimize the health and well-being of 860,000 people across Massachusetts. The challenge is that funds to support nearly 50 Title V programs are siloed and primarily dependent on federal grants, that are time limited, constrained, and restricted. With nearly 70% of the Title V MCH Block Grant supporting salaries, funding is significantly constrained by growing salaries and fringe costs. Additional resources are needed to support potential legislatively driven initiatives in Massachusetts like building out a doula workforce, expanding universal home visiting to all pregnant and postpartum people, and eliminating disparities in maternal and infant outcomes. State resources are essential to more effectively promote maternal and child health with initiatives such as strengthening outreach, coordination of care, a statewide breastfeeding strategy that supports all nursing people, ensuring robust data systems, and addressing emerging needs and crisis to name a few.

Agency and Program Capacity

Organizational Structure, Leadership, and Staffing

MDPH is part of the Executive Office of Health and Human Services (EOHHS), where legal, human resources, and information technology are centralized. The EOHHS Secretary reports to the Governor. The Bureau of Family Health and Nutrition (BFHN) within MDPH is the Title V Agency, with overall responsibility for the Title V program and funding. The BFHN Director is also the Title V Director, a senior manager who reports to the Deputy Commissioner of MDPH. A sister Bureau, the Bureau of Community Health and Prevention (BCHAP) also includes MCH-related programs. BFHN and BCHAP work closely on many initiatives, including the Needs Assessment and annual Title V reporting. The Childhood Lead Poisoning Prevention Program and Office of Health Equity are also significant components of Title V and reside in the Bureau of Environmental Health and the Office of Population Health, respectively.

Over the past year, MDPH and BFHN experienced significant leadership changes. In January 2023, Governor Maura Healy took office, appointing Kate Walsh and Dr. Robbie Goldstein as EOHHS Secretary and MDPH Commissioner respectively. Scott Geer joined BFHN as Deputy Director of Finance and Operation to further strengthen BFHN's infrastructure and play an important leadership role managing Title V's fiscal processes. After Karin Downes' retirement, Dr. Ann Peralta was hired as the Director of the Division of Pregnancy, Infancy and Early Childhood and the MCH Director. Finally, Suzanne Gottlieb, Director of the Office of Family Initiatives and Title V Parent Representative retired in February 2023 after nearly three decades of service. As BFHN expands parent engagement and leadership in Title V, several options are being considered for backfilling Suzanne's position,

including expanding partnerships with family-led organizations, dedicating a leadership position to family engagement in the Early Intervention System and designing a new role to meet the Bureau's needs for developing capacity in family engagement as one of our Title V priorities. Further information about the Title V Partnership senior management team and their qualifications is provided in *Attachment 2*.

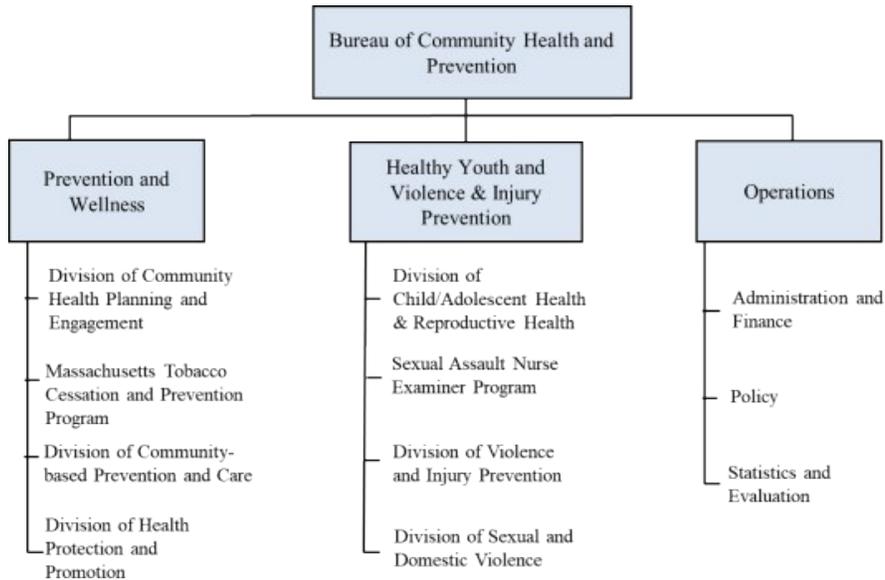
The organizational charts for BFHN and BCHAP are below and show the divisions and programs within each bureau. A MDPH organizational chart is attached, which shows the location of BFHN and BCHAP within the Department.

As of June 2023, approximately 220 full-time equivalent (FTEs) employees throughout MDPH work on Title V Partnership programs, with 136 FTEs paid from Title V Partnership funds. There are approximately 84 FTEs working on MCH programs but paid through other federal grants. In addition, BFHN employs (directly or via a contract) 12 parents of children and youth with special health needs for the EI Parent Leadership Project, Family TIES, and Universal Newborn Hearing Screening Program. Additional details about how parents, families, and youth are involved in Title V programming are provided in the *State Action Plan, Family Partnerships*, and *Attachment 3*.

The share of total 220BFHN staffing supported by Title V is slightly lower (48% versus 54% last year) due to successful efforts to cost-share staff with other federal discretionary grants. These totals and percentage distributions may continue to change during FY24 as efforts continue to bring the Title V budget into a more secure long-term equilibrium. The staff support may also be affected by the loss or reduction of federal discretionary grants, including ARPA funding.

Partnerships, Collaboration, and Coordination

MDPH builds, strengthens, and sustains partnerships with other organizations to better serve the MCH population and expand the capacity and reach of the Title V program. MDPH collaborates with families, public and private sector entities, federal, state and local government programs, clinical providers, academia, and public health organizations. The *Family Partnerships* section and *Attachment 3* describe Title V's partnership with families. *Attachment 4* describes partnerships with external organizations and MCH programs within MDPH. These partnerships, collaboration, and coordination give depth and effectiveness to the MA Title V program and are integral to daily operations.



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

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

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

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

III.D. Financial Narrative

| | 2020 | | 2021 | |
|----------------------------|---------------|---------------|---------------|---------------|
| | Budgeted | Expended | Budgeted | Expended |
| Federal Allocation | \$11,136,329 | \$11,132,100 | \$11,137,226 | \$11,109,052 |
| State Funds | \$61,185,421 | \$52,948,982 | \$52,274,600 | \$51,131,235 |
| Local Funds | \$0 | \$0 | \$0 | \$0 |
| Other Funds | \$0 | \$0 | \$0 | \$0 |
| Program Funds | \$0 | \$0 | \$0 | \$0 |
| SubTotal | \$72,321,750 | \$64,081,082 | \$63,411,826 | \$62,240,287 |
| Other Federal Funds | \$104,684,326 | \$95,885,374 | \$101,468,043 | \$86,581,959 |
| Total | \$177,006,076 | \$159,966,456 | \$164,879,869 | \$148,822,246 |
| | 2022 | | 2023 | |
| | Budgeted | Expended | Budgeted | Expended |
| Federal Allocation | \$11,137,523 | \$11,124,939 | \$11,137,523 | |
| State Funds | \$75,600,803 | \$71,020,897 | \$90,037,124 | |
| Local Funds | \$0 | \$0 | \$0 | |
| Other Funds | \$0 | \$0 | \$0 | |
| Program Funds | \$0 | \$0 | \$0 | |
| SubTotal | \$86,738,326 | \$82,145,836 | \$101,174,647 | |
| Other Federal Funds | \$100,165,704 | \$103,347,859 | \$108,359,788 | |
| Total | \$186,904,030 | \$185,493,695 | \$209,534,435 | |

| | 2024 | |
|----------------------------|---------------|----------|
| | Budgeted | Expended |
| Federal Allocation | \$11,459,304 | |
| State Funds | \$70,318,762 | |
| Local Funds | \$0 | |
| Other Funds | \$0 | |
| Program Funds | \$0 | |
| SubTotal | \$81,778,066 | |
| Other Federal Funds | \$141,137,197 | |
| Total | \$222,915,263 | |

III.D.1. Expenditures

See the FY22 data in Form 2, Form 3a (Budget and Expenditure Details by Types of Individuals Served), and Form 3b (Budget and Expenditure Details by Types of Services). Notes for the Forms provide additional details and explanations about the amounts shown, including differences between budgeted and expended amounts, and more detail on the programs and activities supported by each category. In general, both federal and state funding have remained stable over the last several years, with some targeted increases in state funds.

Federal expenditures reflect the total spent from the relevant federal grant award, over its two-year window of availability. For State expenditures, however, expenditures are reported for a single fiscal year, using the state fiscal year (July 1 – June 30) as the reference point, as reconciling expenditures to budgeted encumbrances can be obtained only at the end of the accounts payable period for a state fiscal year. Contracted dollar amounts for purchased services, by program type and vendor, are available upon request.

As in previous years, Massachusetts reports state match that is much higher than the required \$3 for every \$4 federal. The following state accounts or portions of state accounts make up the total "State Funds Expended" amount of **\$71,020,897**.

This total excludes those portions of our MCH Partnership state accounts that are being used for claiming or match for other federal programs, including CHIP and discretionary grants.

- Family Health Services account \$11,526,027
- Early Intervention account \$42,046,253
- School Health Services and School-Based Health Centers \$2,093,412
- Dental Health account (partial) \$124,078
- Newborn Hearing Screening \$93,125
- State Nutrition account – state WIC funds and Growth & Nutrition Clinics \$3,491,315
- Catastrophic Illness in Children Relief Fund \$2,848,854
- Pediatric Palliative Care \$6,584,868
- Suicide Prevention account (partial – for Poison Control Center) \$240,000
- Youth Violence Prevention account \$1,047,777
- Perinatal Quality Improvement Network \$477,430
- Postpartum Depression Screening Pilot - \$297,758 (funding added in final FY22 budget)
- Down Syndrome Medical Home Clinic \$150,000 (funding added in final FY22 budget)

Based on FY22 total federal MCH expenditures (from the FFY21 award) of **\$11,124,939**, this breaks out as FY22 State Match (\$3 state for every \$4 federal) expenditures of **\$8,343,704** and State over-match expenditures of **\$62,677,193**. In FY22, state partnership funds represented **86.5%** of total Partnership expenditures.

Substantial amounts of our Partnership state funds are being claimed as match for other federal programs, primarily Medicaid CHIP. As Massachusetts has historically had a very large "over-match" for the MCH Block Grant, and the funds continue to be used for MCH-related programs, this makes obvious sense for the Commonwealth in order to maximize federal funding. However, as funds are used or not for these other matching requirements, the result can be changes in the "over-match" amount and percent that do not necessarily reflect changes in overall state spending for MCH-related purposes. In addition, because these types of claiming are made against expenditures, the changes will often appear as differences in reported expenditures vs. budgeted amounts, as the final claiming is negotiated and applied after our budgets have been submitted.

In state FY22, a total of **\$29,455,752** from state Partnership accounts and programs was used for claiming or match

for other federal programs and thus does not appear in the final expenditure totals. These other claiming amounts were removed from the following accounts:

- Family Health Services account used for CHIP H.S.I.
- School Health Services account used for CHIP H.S.I. and as match for another federal grant
- Nutrition account (WIC portion) for CHIP H.S.I. match
- Youth Violence Prevention account used for CHIP H.S.I. match
- Teen Pregnancy Prevention account for CHIP H.S.I. match

If these funds had been included in Partnership expenditures, state funds would have represented **90%** of total expenditures instead of **86.5%**.

In the TVIS Form 3b, “Direct Services” are now carefully defined and limited. Massachusetts has for a number of years been essentially out of the business of direct services (even using the previous definition). All such services fall into the Children and Youth with Special Health Needs category. Federally-funded direct services come only in a small program to pay for hearing aids or hearing evaluations for eligible children without adequate insurance. These costs are categorized as “Durable Medical Equipment.” On the state side, only our Early Intervention Services program meets the new definition of Direct Services. Early Intervention services are provided through approved rates to approved vendors by MassHealth (Medicaid), third party insurers, and the state (as payer of last resort). We have categorized these costs as “Other.”

As noted above, Massachusetts uses a tiny proportion of its Title V funding for direct services and none for services that are otherwise reimbursable by MassHealth (Medicaid). There are Enabling Services supported with Title V funds that we consider to be potentially reimbursable by MassHealth (or other third-party insurers). These include Title-V funded care coordination staff and home visits through our Early Intervention Parenting Partnerships Program (which are partially reimbursed now) and state-funded pediatric palliative care services. We continue to explore options both for expanded MassHealth coverage and other sustainability options so that these programs could serve many more families than they do now. We have been very successful over the years in expanding MassHealth and third-party reimbursement for a full range of Early Intervention Services. As a result, the Department pays less than 20% of total program billing as payer of last resort. The size of the current MassHealth budget (about 40% of the entire state budget) and the lack of significant progress in controlling health care costs overall in the state make opportunities to add covered services or new rates to MassHealth limited.

As can be seen in Form 5b, through direct, enabling, and public health services and systems, the Title V Partnership reached all pregnant women and virtually all infants born in Massachusetts in FY22. Approximately **65%** of all children and youth (including children with special health care needs) were reached. It is important to note that because fewer than 2% of all children in the Commonwealth are uninsured and because the state has a rich supply of health care services, many families do not need to rely on the more targeted Title V Partnership programs. However, we continue to look at ways to reach more children and youth with special health needs. In addition, our increased emphasis on racial equity and social justice is helping us focus on the gaps and inequities in services for specific populations.

In Massachusetts, the Title V Federal/State Partnership represents well-integrated programmatic and fiscal management that makes full and effective use of Title V, state, and other federal funds to implement a robust range of services and capabilities. The Bureau of Family Health and Nutrition, the state Title V agency, also includes two other major federal-state programs – Early Intervention Services (Part C of I.D.E.A.) and WIC. In addition, the Bureau oversees a number of major federal grants that also support improvements in maternal and child health.

These funding streams are used to maximize their collective impact and efficiency. Without federal MCH Block Grant

funding, many of the Title V program efforts and outcomes discussed in the Massachusetts State Action Plan and elsewhere in the Application could not be achieved. In particular, the leadership, programmatic expertise, and epidemiologic capacity funded solely with federal funds are essential to carrying out the comprehensive MCH agenda proposed.

For example, state MCH-related funding does not generally support staff and program management costs but provides major resources for several service areas. As a result, federal Title V funds are used to support virtually the entire staff infrastructure (**71.5%** of the grant goes for personnel costs) and to oversee the use of those state dollars. Federal funds are used to support the leadership, program management, clinical expertise, and data access resources that direct, oversee, develop, and monitor those state-funded MCH programs. The areas of child injury and violence prevention and sexual and reproductive health are examples of this relationship. Title V-funded care coordination staff and specialized services are the critical link between many children and youth with special health needs and the health care and other benefits offered by the Commonwealth.

Title V-funded staff also have major responsibility for implementing and monitoring compliance with state mandates and regulations in the areas of perinatal health (e.g., maternal mortality review and postpartum depression screening), birth defects surveillance (including critical congenital heart defect screening), and universal newborn hearing screening. They contribute oversight and support for state-funded pediatric palliative care and catastrophic illness relief programs. Title V-funded staff and other resources are used in coordination with departmental and statewide initiatives in areas such as neonatal abstinence syndrome, adolescent health, oral health, and racial equity. Title V-funded epidemiologists are essential resources for many data access and performance monitoring activities.

These blended funds are used in support of the National Performance and State Performance Measures that Massachusetts has selected. The funding support for each measure is summarized in the table in the next section, Budget. In some cases, major support comes from other federal grants as well. See Attachment 1 for more information on the number of individuals served by specific programs funded by the Title V Partnership and the Glossary for definitions of acronyms.

III.D.2. Budget

The Title V Partnership budget is designed to maximize the use of both federal and state funds to address the state's priority needs, improve performance related to the targeted MCH outcomes and expand systems of care for both MCH and CYSHCN populations. The Block grant supports all 10 Public Health Essential Services and all levels of the MCH Pyramid.

The FY24 total Partnership budget is made up of **\$11,459,304** of FFY24 MCH Block Grant funds (expected award, not including some expected unobligated balance carry-forward funds from our FFY2023 award) and **\$70,318,762** in state funds. Massachusetts continues to budget at least 30% each of our federal MCH funds for Preventive and Primary Care for Children (31.8%) and for Children with Special Health Care Needs (38.7%). Massachusetts does not have any continuation funding for special projects under Section 505(a)(5)(C)(i) or special consolidated projects as noted in Section 501(b)(1)[Section 505(a)(5)(B)].

The proportion of federal funds used for Title V Administrative Costs is within the allowable 10% (**9.3%**). Massachusetts continues to commit funds well above our statutory maintenance of effort level from FY1989 of \$23.5M and the state funding still includes Over Match of over **\$61M**.

Federal MCH funds are estimated at approximately the same level for FY24, although they remain lower than in FY2012. State funding has remained stable over the last several years with some increases in targeted areas. Cost-savings for the federal MCH funds continue to be vigorously pursued in order to stay up with increasing staff costs (including fluctuations in fringe benefit and indirect costs outside our control) and to stretch the award further programmatically if possible. The Bureau works closely with the MDPH Budget Office and our colleagues in other bureaus to plan for the various contingencies necessary as the state budget is developed, passed, and revised each fiscal year.

See the FY24 data in Form 2 (MCH Budget/Expenditure Details), Form 3a (Budget and Expenditure Details by Types of Individuals Served), and Form 3b (Budget and Expenditure Details by Types of Services). The Notes to 3a and 3b provide more detail on the programs and activities funded in each category. In general, both federal and state funding has remained stable over the last several years. Federal Title V support is critical to complement and expand the effect of state-funded programs and activities. In particular, the ability to support program managers and directors, epidemiologists, and other expert staff with federal funds is essential, as most state funding streams allow for few if any personnel positions.

Due to the state budget cycle, which structures all of our purchase of service expenditures and readily accessible budget and expenditure accounting information, all amounts shown are for the relevant State Fiscal Year, which runs from July 1 to June 30. (FY24 = July 1, 2023 - June 30, 2024). This reporting is consistent with budgets presented in previous applications and annual reports. Planned contracted dollar amounts for purchased services, by program type and vendor, are available upon request. All contracts are made on a state fiscal year basis.

Our total state match remains much higher than \$3 for every \$4 federal and it is more valuable to the Commonwealth to use the funds to generate additional federal funds. The state budget for SFY24 is based on the preliminary FY24 state budget.

The following state accounts make up the "Total State Funds" amount of **\$70,318,762**. This total excludes those portions of our MCH Partnership state accounts that are being used for claiming or match for other federal programs, including CHIP and discretionary grants. Several state accounts have been consolidated over the past two years.

The proportion of each consolidated account to be spent for each subcomponent may change during the year and will be adjusted in our FY24 Expenditures report.

- Family and Adolescence Reproductive Health. This consolidated account funds family planning services, teen pregnancy prevention, along with some funds for the MA Birth Defects Monitoring System and the Regional Poison Center.
- Early Intervention Services
- Maternal, Child and Family Health. This consolidated account includes Universal Newborn Hearing Screening, Pediatric Palliative Care, and Perinatal Quality Improvement Network programs.
- School Based Health Programs (including school health services & school-based health centers)
- State Nutrition Account (for WIC and Growth & Nutrition Services).
- Catastrophic Illness in Children Relief Fund
- Suicide Prevention (portion) (for Regional Poison Control Center)
- Youth Violence Prevention
- Postpartum Depression Screening Pilot

Based on a total new FY24 federal MCH award of **\$11,459,304** (current estimate), this breaks out as a budgeted FY24 State Match (\$3 state for every \$4 new federal) of **\$8,594,478**, and Over Match of **\$61,724,884**

The budget forms do not include substantial amounts of state funding for MCH programs that are used for match for federal CHIP H.S.I. claiming. For FY24, we have excluded an estimated **\$27,157,052** from state Partnership accounts and programs based on estimated claiming or match for other federal programs in FY24. These funds thus do not appear in the Federal-State Partnership total. The programmatic services and other activities supported by the funds continue to be fully described in our annual reports and state action plan. Claiming amounts have been removed from the following accounts:

- Family and Adolescence Reproductive Health – Family planning and teen pregnancy prevention funds (CMS CHIP match).
- School Health - (CMS CHIP match and for another federal discretionary grant).
- State Nutrition Account (CMS CHIP match).
- Youth Violence Prevention - (CMS CHIP match)

If these funds had been included in Partnership expenditures, state funds would have represented **89%** of the total partnership budget instead of **86%**.

The **\$141,137,197** of Other Federal funds for FY23 comes from **26** different federal grants. The Bureau continues to have good success in obtaining a wide range of federal categorical grants, although long term funding always remains uncertain.

In Massachusetts, the Title V Federal/State Partnership represents well-integrated programmatic and fiscal management that makes full and effective use of Title V, state, and other federal funds to implement a robust range of services and capabilities. The Bureau of Family Health and Nutrition, the state Title V agency, also includes two other major federal-state programs – Early Intervention Services (Part C of I.D.E.A.) and WIC. In addition, the Bureau oversees a number of major federal grants that also support the overall mission of improvements in maternal and child health.

These funding streams are utilized to maximize their collective impact and efficiency. Without federal MCH Block

Grant funding support, many of the Title V program efforts and outcomes discussed in the Massachusetts State Action Plan and elsewhere in the Application could not be achieved. In particular, the leadership, programmatic expertise, and epidemiologic capacity funded solely with federal funds is essential to carrying out the comprehensive MCH agenda proposed.

For example, state funding does not generally support staff and program management costs but provides major resources for several service areas. As a result, federal Title V funds are used to support virtually the entire staff infrastructure (77% of the grant goes for personnel costs) and to oversee the use of those state dollars. Federal funds are used to support the leadership, program management, clinical expertise, and data access resources that direct, oversee, develop, and monitor those state-funded MCH programs. The areas of child injury, violence prevention and sexual and reproductive health are examples of this relationship. Title V-funded care coordination staff and specialized services are the critical link between many children and youth with special health care needs and the health care system and other benefits offered by the Commonwealth.

Title V-funded staff also have major responsibility for implementing and monitoring compliance with state mandates and regulations in the areas of perinatal health (e.g., maternal mortality review and postpartum depression screening), birth defects surveillance (including critical congenital heart defect screening), and universal newborn hearing screening. They contribute oversight and support for state-funded pediatric palliative care and catastrophic illness relief programs. Title V-funded staff and other resources are used in coordination with departmental and statewide initiatives in areas such as NAS, adolescent health, oral health, and racial equity. Title V-funded epidemiologists are essential resources for many data access and performance monitoring activities.

The MCH BG pays for virtually no Direct Care Services in Massachusetts. The only Direct Care Services purchased with Title V funds are a small number of hearing aids for income-eligible children without adequate insurance. The only Title V State Partnership funds for Direct Care Services are those for Early Intervention Services, where our state account is payer of last resort after MassHealth and third party insurers.

| Measure | MCH BG funds | State Partnership funds | Other federal |
|---|--|--|--|
| NPM 4A: % of infants ever breastfed | MCH Leadership staff | State WIC/Nutrition program State PNQIN funds | Federal WIC funding MIECHV SSDI PNQIN Federal Early Intervention funding |
| NPM 4B: % of infants breastfeeding exclusively at 6 months | MCH Leadership staff | State WIC/Nutrition program State PNQIN funds | Federal WIC funding MIECHV SSDI PNQIN Federal Early Intervention funding |
| NPM 6: % of children, ages 9-35 months, who received a developmental screening using a parent-completed screening tool in the | MCH Leadership staff Early Childhood program staff Nutrition staff | State WIC/Nutrition program | Essentials for Childhood MIECHV Federal WIC funding |

| Measure | MCH BG funds | State Partnership funds | Other federal |
|---|--|---|---|
| past year | | | |
| NPM 10: % of adolescents with preventive services visit in year | Data support (epidemiologists) Office of Sexual Health and Youth Development staff | State Sexual and Reproductive Health contracts School-based Health Centers State-supported school health services | |
| NPM12: % of adolescents w & w/o SHCN receiving services to make transitions to adult health care | SHCN: Many CYSHCN staff (Leadership, Care Coordinators, Community Support Line) Youth transition website and initiatives | School health services | MassCARE Office of Family Initiatives |
| NPM 14A: % of women who smoke during pregnancy | MCH Leadership staff Data support (epidemiologists) | State PNQIN funds | SSDI PRAMS PNQIN MIECHV |
| SPM1: Percent of cases reviewed by the Massachusetts Maternal Mortality & Morbidity Review Committee within 2 years of maternal death | MCH Leadership staff Maternal Mortality Review staff and consultants | | |
| SPM2: Rate of teen births among Latinx adolescents aged 15-19 | Data support (epidemiologists) Office of Sexual Health and Youth Development staff | State Sexual and Reproductive Health contracts Adolescent Sexuality Education | PREP STRIVE |
| SPM3: Percent of Bureau staff who have used any racial equity tool or resource in their work | Leadership and other Staff; funding for training initiatives | | WIC funding for training |
| SPM4: Percent of Title V programs that offer compensated family engagement and leadership opportunities | MCH Leadership and other MCH program staff (e.g. Care Coordination) | Pediatric Palliative Care programs Other state funded MCH programs Youth Violence Prevention Office of Sexual Health and Youth | Office of Family Initiatives Injury Prevention and Control Programs Early Intervention MIECHV MassCARE PNQIN |

| Measure | MCH BG funds | State Partnership funds | Other federal |
|--|--|-------------------------|--|
| | | Development | |
| SPM5: Percent of families who have had difficulty since their child was born covering basics, like food or housing, on their income | MCH Leadership staff SSI and Public Benefits staff Division for Perinatal, Infant and Early Childhood staff CLPPP contracts | CICRF | Essentials for Childhood Injury Prevention MIECHV |
| SPM6: Percent of BFHN and BCHAP Title V staff that report a workplace culture that reflects a safe and supportive environment to mitigate primary and secondary trauma | MCH Leadership Funding for training Division for Sexual and Domestic Violence staff | | MIECHV |

The blended Title V Federal-State Partnership funds are used in support of the National Performance and State Performance Measures that Massachusetts has selected, as well as for a wide array of other critical programs and activities that support the Title V priorities but are not reflected in specific NPMs or SPMs. Activities in those areas are also captured in the State Action Plan narrative for each domain. The funding support for each NPM and SPM is summarized in the table below. In some cases, major support comes from other federal grants as well. See Attachment 1 for more information on specific programs and the Glossary for definitions of acronyms.

We remain concerned about the MCH Block Grant itself, which cannot provide adequate funding to sustain current efforts as fixed costs (e.g. salaries, fringe benefits, and indirect cost) while offering opportunities to address new areas identified through the new Needs Assessment and Priorities. We are continuing a coordinated internal process to reduce the budget in conjunction with the Commissioner’s Office and other bureaus and offices throughout the department in order to get to an equilibrium budget. Further reductions are still needed and are under discussion at this time. In addition, any reductions in state funding will place further strain on federal funding to fill critical service and personnel gaps.

III.E. Five-Year State Action Plan

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

State: Massachusetts

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

State Title V Program Purpose and Design

Program Framework and Strategic Approach

The MDPH House, depicted in the *Overview of the State*, represents the foundation on which MDPH works to achieve its mission, with a focus on providing timely access to data, addressing the social determinants of health, and eliminating health disparities. Title V is a leader within MDPH in promoting data access and data-driven decision making. In addition to its robust performance measurement framework and focus on implementing evidence-based practices, epidemiologists in the Bureau of Family and Health and Nutrition's (BFHN) Division of Maternal and Child Health Research and Analysis ensure Title V has direct access to timely MCH data to inform program implementation, monitoring and evaluation, grant reporting, needs assessment, and performance management.

Title V also supports MDPH efforts to address social determinants and eliminate health inequities through its commitment to promoting racial equity, which is both a guiding framework and one of the 10 Title V priorities. Inequities exist in individual and population health outcomes due to structural racism – the ways in which institutions and social norms systematically advantage White people and oppress Black, Indigenous, and People of Color – that lead to differential access to economic opportunities, community resources, and social factors that have a detrimental effect on MCH outcomes. By focusing explicitly on racial equity, Title V can improve outcomes for all communities and help achieve the goal of health equity. The BFHN Racial Equity and Family Engagement Framework (BFHN REFEF) was drafted in 2022, leveraging work developed through the MIECHV Health Equity CollN. The BFHN REFEF was launched as the bureau's strategic framework for 2023- 2024, incorporating Title V priorities and measures, and has been shared across MDPH as an example of integrating racial equity and family engagement principles into action.

The life course model is another Title V framework. This model posits that there are critical periods in life that shape our health, and that exposure to risk and protective factors impact both an individual's lifespan and that of future generations. One way that Title V incorporates a life course perspective is through program efforts to promote mental and emotional well-being during three critical stages of development – the perinatal period, early childhood, and adolescence.

Assuring Access to Quality Health Services

The Massachusetts Title V program has historically been a leader in the development of a statewide system of services that is comprehensive, community-based, and family-centered. Title V is co-located in BFHN with other key federal and state MCH initiatives, such as WIC, Maternal, Infant, and Early Childhood Home Visiting (MIECHV), and Early Intervention (EI), which allows for greater communication and collaboration across programs serving children and families. BFHN maintains staff in regional offices that work directly with families and provide training and technical assistance, referral to services, and other capacity building activities. BFHN pays particular focus to coordinated and integrated systems of care for children and youth with special health needs (CYSHN), managing a continuum of linked services to ensure that families of CYSHN receive maximum benefit from community-based services and systems, including health care, education, and social services. Title V also works closely with hospitals, community-based agencies, professional associations, insurers, and others to achieve its mission. Title V partners with families from diverse linguistic, cultural, and socioeconomic backgrounds and life experiences in strategic and program planning, evaluation, needs assessments, advisory committees, and other activities to ensure high quality and culturally competent MCH and CYSHN services.

In Massachusetts, Title V serves an important policy and systems-building role, as evidenced by the fact that most of

the funding is dedicated to enabling and population-based services, such as maternal mortality review, perinatal home visiting, poisoning prevention, care coordination, and newborn screening. The only direct services provided with federal Title V funds are a small number of hearing aids for income-eligible children without adequate insurance, and the only state partnership funds for direct services are those for EI where the state is payer of last resort.

Partnership and Leadership Role

Title V serves as a convener, collaborator, and partner in addressing MCH issues and supporting MCH initiatives funded through other sources. The Title V priorities and performance measure framework provide a unifying vision and strategic plan for individual MCH programs within MDPH, regardless of funding source or program requirements. Title V facilitates breaking down internal siloes to identify shared goals, improve communication and collaboration, and achieve greater collective impact among discrete MCH programs.

The flexibility of Title V funding is instrumental in helping Massachusetts address intractable and structural issues affecting the health of the MCH population and other populations in the state. Title V invests significantly in the Crosscutting domain by focusing on priorities including racial equity, the social determinants of health, family, father and youth engagement, and healing-centered systems of care, and intentionally serving both a partnership and leadership role in addressing these priorities. For example, on the priority to eliminate institutional and structural racism in internal programs, policies, and practices, Title V is partnering with other bureaus and programs within MDPH to advance the existing Racial Equity Movement through funding, staff time, and expertise.

A large portion of federal Title V dollars fund MDPH staff, as most state funding streams for MCH allow for few personnel positions. Federal funds are used to support the leadership, program management, clinical expertise, and data access resources that direct, oversee, develop, and monitor state funded MCH programs. The areas of child injury, violence prevention, childhood lead poisoning prevention, and sexual and reproductive health are examples of this relationship. An ongoing challenge with this structure is providing adequate funding to sustain fixed personnel costs (e.g., salaries, fringe benefits, and indirect cost) while also addressing new priorities identified through the Needs Assessment.

These characteristics of the Massachusetts Title V program are important to provide context for the activities and approaches described in the State Action Plan that follows.

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

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

MCH Workforce Development

Staff professional development opportunities

MDPH is committed to creating a learning culture where employees have access to resources and professional development opportunities to build competency and capacity of the agency's workforce. A variety of resources are available to staff, including Title V staff, through the MassAchieve (formerly the Performance and Career Enhancement [PACE]) system, which is used for eLearning delivery, self-paced online training, and classroom registration. Courses are offered on a range of topics including strategic thinking, business writing, time management, conflict resolution, presentation skills, unconscious bias, disability awareness, interviewing, hiring, project management, and leadership. Staff are also supported to attend conferences and training programs offered through community partners, academic partnerships, and public health associations. Managers and supervisors receive support through executive coaching, training, team coaching, and succession planning. During the COVID-19 pandemic, MDPH offered professional development opportunities virtually. Additional learning opportunities support staff working remotely, such as hosting and facilitating Microsoft Teams meetings, navigating change, cultivating mindfulness, and monthly grand rounds for Bureau of Family Health and Nutrition (BFHN) staff. MDPH is planning to create a more comprehensive Workforce Development Plan by December 2023 and hired the Director of Public Health Workforce Development and Resilience on June 26, 2022 to support this process.

As part of its Diversity and Inclusion Plan, MDPH strives to maintain a work environment that is welcoming and accepting of individual differences and where inclusion and fairness are valued and operationalized. This requires making this vision a priority and involves engaged leadership, extensive workforce training, and supporting strategic and challenging conversations. The workforce diversity goals for 2022-2023 are as follows:

- Increase the percentage of managers at the M8 level and above who are People of Color by 4% each year (from 13.5% to 21.7%).
- Increase the percentage of Skilled Craft employees who are:
 - People of Color by 2% each year (from 14% to 20.7%).
 - Female by 2% each year (from 2.5% to 48.8%).
- Increase the percentage of Protective Services/Sworn employees who are female by 10% each year (from 10.6% to 48.8%).
- Increase the percentage of employees who identify as Veterans by 2% each year (from 1% to 7%).
- Increase the percentage of employees who identify as People with Disabilities by 3% each year.

MDPH strategies to address the first goal include developing a training plan to support the career growth of managers of color, launching a Fellowship program for managers of color, developing a plan to strengthen onboarding for new managers, and developing a comprehensive recruitment plan that includes recommendations from the Institutionalizing Racial Equity Initiative: Hiring Project^[1]. The first goal also directly aligns with the Title V objective to increase the percent of BFHN staff of color.

According to data collected by the MDPH Human Resources Department, BFHN is the most racially diverse bureau in the Department: 38% of BFHN staff are persons of color compared with 27% for MDPH overall. BFHN remains committed to further increasing the diversity of our staff and making continued progress on the related Title V objective. Within BFHN, a workgroup was established to clarify and document the processes and workflow related to hiring and onboarding with goals to: 1) standardize, streamline and increase the efficiency of these processes and 2) recruit and retain staff who speak the languages and are representative of the culture, race, and/or ethnicity, gender identity of the families BFHN programs aim to serve. This workgroup developed a Hiring Process Job Aid and an Onboarding Checklist that are available as resources for hiring managers. See the

Crosscutting domain for more information about synergistic Title V efforts to promote more racially equitable hiring and retention practices.

Student internships & CDC fellowships

Title V provides practicum opportunities and mentorship for student interns from schools of public health, fellows, and staff from CDC and CDC Foundation who help to enhance capacity to meet MCH goals and objectives. Over the past year, these trainees supported projects such as the following:

The Division of Pregnancy, Infant and Early Childhood hosted two student teams from the Boston University School of Public Health (BUSPH) who supported the MA Maternal Infant and Early Childhood Home Visiting Program (MA MIECHV) in three projects:

- In Fall 2021, MA MIECHV partnered with BUSPH students to assess the process for annual program site visits to ensure the site visits are meaningful and action oriented. After a literature review of best practices, key informant interviews with MA MIECHV staff, local implementing agencies, technical assistance providers, and the Colorado MIECHV program, the students offered recommendation for improving the process. The new process was implemented in spring 2022. Local home visiting programs and MA MIECHV staff note a substantial improvement in the utility of the site visit and have reflected that the new process is more trauma-informed (e.g., offered local programs a choice in how they present their program overview, transparency in the process).
- In Fall 2022, a team of graduate consulting students from BUSPH partnered with MA MIECHV to develop a report with recommendations for the development and implementation of a Learning Community for the MA MIECHV Data Innovations Project. The report included an environmental scan of how other Learning Collaboratives have been implemented; a literature review and logic model; and key informant interviews with MIECHV technical assistance providers, local home visiting programs, and the Home Visiting Collaborative Improvement and Innovation Network (HV CoIIN). This work helped MA MIECHV plan for the Data Innovation Project Learning Community's launch in Summer 2023.
- In Fall 2022, MA MIECHV also partnered with another team of graduate consulting students from BUSPH to better understand and address the root causes of challenges with home visitor recruitment and retention at local home visiting programs.

The Division for Children and Youth with Special Health Needs hosted 15 interns for two health transition projects over the past year. In summer 2022, three graduate students from local schools of public health drafted multiple sections of a Health Transition Tool Kit targeted to Youth and Young Adults with Special Health Needs (YYASHN). The sections included nutrition, substance use prevention, and physical activity. Additionally, three graduate students continued the work to plan for and create a YYASHN Advisory Council. The Council will provide input and feedback to the Division on topics related to transition such as the toolkit and use the experience to develop self-advocacy and leadership skills. Through fall 2022 and spring 2023, three graduate students joined to further develop the Tool Kit's content, adding sections on oral health and continuing the mental health section. Also, in spring 2023, three graduate students started the testing, editing, launching, promoting, and evaluation of the Tool Kit, while three undergraduate students continued and finalized the planning for the YYASHN Advisory Council.

Since October 2020, MA MIECHV has hosted two Associates from the CDC Public Health Associate Program (PHAP) for two-year assignments. The PHAP is a competitive, two-year, paid training program in which CDC Associates are assigned to state, tribal, local, and territorial public health agencies and work alongside other professionals across a variety of public health settings. Throughout the two-year training program, Associates gain hands-on experience that serve as a foundation for their public health careers. The MA MIECHV PHAP Associates have played key roles in designing and coordinating strategies to facilitate meaningful family engagement in all

aspects of the program. In February 2023, BFHN also applied for a PHAP Associate to support the MA Maternal Morbidity and Mortality Review Committee and the activities in the Title V Maternal Mortality priority state action plan.

MDPH also partnered with the CDC Foundation to strengthen the state public health workforce. Over two dozen CDC Foundation fellows supported BFHN as epidemiologists, communication specialists, and program managers. The fellows supported short-term or temporary projects, such as implementation of the Racial Equity Data Road Map within MA MIECHV, planning a Certified Lactation Counselor training for home visiting staff, abstracting medical record data for the Birth Defects Monitoring Program, contributing to NAS surveillance efforts, delivering trauma-informed/healing centered trainings to DCYSHN program managers to address supervisor, frontline staff and family mental health, and supporting the MDPH PANDAS/PANS Advisory Council, Health Transition project interns, and the Population Health cohort.

During Summer 2023 BFHN is hosting two interns through the Title V MCH Internship Program supported by the MCH Workforce Development Center. The aim of the program is to provide future MCH professionals with experience working in state and jurisdictional Title V agencies under the mentorship and guidance of Title V agency preceptors. The students are working with the Racial Equity Strategic Pathway Implementation Team (RESPIT) to revise and update the Racial Equity Data Road Map.

State Innovations in Staffing Structures

Community health workers

Community Health Workers (CHWs) are a vital component of the public health workforce in Massachusetts. MDPH estimates there are more than 3,000 CHWs in the state. CHWs contribute to improving access, use, and quality of health care, reducing costs, and reducing health inequities for all populations, including MCH. They are distinguished from other health professionals because they are hired primarily for their connection to and understanding of the populations they serve, have a distinct scope of practice, and have experience providing services in community settings.

MDPH strongly supports CHWs, provides leadership within state government for CHW workforce development, and has been the largest funder of CHW services and training in the state for decades. In addition to ongoing support of CHWs through program contracts (including MCH programs such as home visiting, childhood lead poisoning prevention, and substance use peer support), MDPH's Office of Community Health Workers (OCHWs) in BCHAP conducts capacity-building initiatives to strengthen the CHW workforce, such as providing technical assistance to CHWs pursuing CHW certification, supporting the Board of Certification of CHWs as they review and approve CHW training and education programs; training and curriculum development; research and publications; and national networking and promotion of the CHW movement. OCHWs is supported through CDC chronic disease funding, and since 2021, through two grants including DPH's Vaccine Equity Initiative (VEI) and CDC's CHWs for COVID-19 Response & Resilient Communities (CCR). MDPH also conducts regular CHW workforce surveillance to both assess the impacts of certification on the workforce and to track training needs and financing trends.

Statewide CHW certification became operational in October 2018, and the approval of CHW core competency training programs by the Board of Certification of CHWs in MDPH's Bureau of Health Professions Licensure began in 2021. MDPH anticipates a greater need for training and approved training programs for CHWs to qualify for state certification. There are approximately 12 training programs in MA currently offering training in the [Core Competencies for CHWs](#), including several community colleges. MDPH's work to advance the CHW profession has been recognized by MassHealth, which has invested funding in CHW core and specialty training as well as training for CHW supervisors, under its Delivery System Reform Incentive Program.

Funding for CHW salaries remains insecure and is often allocated through grants related to specific populations,

diseases, and conditions, although there has been some recent shift towards health care organizations supporting CHW salaries with core operating expenses. Funding priorities and amounts often change from year to year, leaving CHWs and the people they serve vulnerable. OCHWs is working closely with MassHealth and other state agencies to ensure that CHWs are included under Accountable Care Organization contracts and become sustainable members of the public health and healthcare workforce. These efforts include 1) expanding and evaluating the evidence base of CHW contributions to positive health outcomes and cost containment and 2) educating health payers and providers about the roles and impact of CHWs and how to integrate them into healthcare and other multidisciplinary teams.

Since the beginning of the pandemic, OCHWs has supported the CHW workforce and CHW employers through the development of resources. These include a guide to telehealth for CHWs and a resource for employers that provides practical examples of how to engage CHWs in COVID-19 related activities that are consistent with the Massachusetts scope of practice and Core Competencies. In 2021, OCHWs was awarded a 3-year CDC COVID-19 grant to support CHWs in community response and resilience. This grant focuses on integrating CHWs in primary care in 10 CHCs and re-connecting patients to health care and health related social needs services. Additional, through the VEI, CHWs from the CHCs mentioned above are being deployed to the communities' local board of health to address short term COVID response and long-term recovery and resilience.

Doulas

Title V is working with an array of community partners including MassHealth, the Massachusetts Health Connector, the Massachusetts Association of Health Plans, Massachusetts Health & Hospital Association, doulas, and community-based doula organizations to ensure all Massachusetts families have access to high quality, affordable doula services as part of a compassionate and respectful health care system that incorporates cultural humility into all practices. At the national level, the revised CMS Preventive Services Rule (42CFR 440.130) provided the opportunity for additional state Medicaid programs to cover doula services under a new regulation allowing reimbursement of preventive services provided by non-licensed service providers. MassHealth plans to start reimbursing doula services by the end of 2023. In preparation for reimbursing for doula services, MassHealth approached MDPH to request support in certifying or licensing doulas. It became evident that MDPH required legislative authority to certify or credential doulas in the state, and at the present time, MDPH is exploring opportunities with leadership and partners to obtain legislative authority. In the meantime, MassHealth will set eligibility criteria for their doula reimbursement in terms of training and/or experience required. MassHealth and MDPH have been in conversation about qualifications to ensure alignment wherever possible between what MassHealth announces later this year and certification standards to be developed and released in the future. In Massachusetts, Bill H. 1182, An Act Relative to Medicaid coverage for doula services, was introduced and received wide support from the House and Senate; however, it does not provide legislative authority for MDPH to certify doulas nor funding to support MDPH's efforts to build this initiative.

Title V recognizes and respects that there are multiple pathways to becoming a doula. The MDPH Doula Initiative seeks to support and expand a strong doula led workforce that includes the development of a certification pathway, enhancing ongoing professional development opportunities and establishing a pathway to sustainable financing. In addition, this initiative seeks to ensure high-quality doula services to Massachusetts families and raise the profile of the doula profession across the Commonwealth.

A doula is a trained professional who provides continuous emotional and physical support to families before, during, and after birth based on evidence-based practices and with cultural humility. Currently, doulas are not licensed or certified by Massachusetts and there is no single national or statewide accrediting body for doulas. Certification of doulas would allow Massachusetts to increase access to valuable perinatal care. Creating a certification pathway would help to: 1) professionalize doulas; 2) help ensure quality of care; 3) allow consumers to select doulas who have

been vetted by a trusted state agency; 4) legitimize broader funding opportunities of doula care; and 5) set up a means through which funders may eventually reimburse doulas.

As Massachusetts birthing people and families pursue hiring a doula, either out-of-pocket or through their insurance provider, certification from MDPH would help consumers validate the skills and knowledge of the doula. As the perinatal period is a vulnerable one, ensuring Massachusetts consumers have access to vetted, high-quality doula is an important part of improving maternal and infant health. And as more payers begin exploring coverage of doula services, a certification pathway managed by MDPH would allow payers to identify a group of doulas who meet MDPH's core competency standards.

The establishment of the Doula Partner Advisory Group (DPAG) was an integral next step of this initiative. Their role is to advise on topics related to the state's role in supporting the profession. This includes adopting professional qualifications of doula services, pending legislative authority. Defining and supporting the services doulas perform, developing core competencies for the workforce and promoting the integration of the doula profession into the larger healthcare system. Doulas who are members of the DPAG are reimbursed for their time and expertise through funding made available by the MDPH.

Title V will also continue to partner with the CDC to build epidemiologic capacity in Massachusetts. Refer to *MCH Data Capacity Efforts* for more information.

^[1] The Institutionalizing Racial Equity Initiative: Hiring Project was a pilot conducted by the Bureau of Community Health and Prevention (BCHAP) to address how to institutionalize principles and approaches to advance racial equity in the hiring process.

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

Massachusetts Title V has a history of strong, effective partnerships with families, particularly for children and youth with special health needs (CYSHN). Families from diverse linguistic, cultural, socioeconomic, and geographic areas and of diverse compositions (e.g., grandparents raising grandchildren, foster parents) are involved as partners in strategic and program planning, evaluation, needs assessments, advisory committees, and other activities. Key strategies to ensure meaningful engagement include compensating families for their expertise and time, holding meetings on evenings and weekends, supporting virtual participation, sponsoring travel to meetings, offering leadership development opportunities, and providing mentoring before and after meetings.

In addition to these strategies much more work needs to be done. The 2020 Title V needs assessment clearly identified a need to improve engagement of families – including fathers and youth – across all MCH domains by moving towards shared decision-making and leadership in maternal, child, and family health programs. This includes building and sustaining relationships and trust to share voice and influence in the design and delivery of services. As a result, a new priority was established for 2020-2025 that focuses on family, father, and youth engagement. Progress on this priority is measured by the percent of programs funded through the Title V federal-state partnership that offer compensated family engagement and leadership opportunities, recognizing that families' expertise and lived experience is as valuable as the time of the professional partners. Detailed plans for addressing this priority are discussed in the *Crosscutting* domain and descriptions of efforts to assess Family Engagement capacity are discussed in the *Needs Assessment* section. Examples of strong family partnerships are described below.

Federation for Children with Special Needs (FCSN): FCSN is the state's parent training and information center, the site of the MA Family Voices chapter, and home to the MCH-funded Family-to-Family Health Information Center. FCSN is versed in best practices in recruiting, training and mentoring families of children with special health needs and collaborates with Title V in multiple ways including participation on the Title V Advisory Committee.

Family TIES: MDPH funds Family TIES, the statewide information and referral network for families of CYSHN and their providers at the FCSN. Family TIES coordinators, who are parents of CYSHN, sit in MDPH satellite offices to ensure their ability to identify local and community resources and build relationships with families of CYSHN and the organizations serving them. Family TIES staff recruit other parents of CYSHN to serve as advisors to MDPH. Currently 191 advisors are available to sit on Advisory Committees, serve as co-trainers, participate in policy and program development, and assist in funding announcement review and materials design. These families are compensated for their time and receive skill building, training and mentoring to assist them to feel confident in sharing their expertise.

Early Intervention Parent Leadership Project (EIPLP): EIPLP offers training for families of CYSHN that enhances their skills to assume leadership roles. EIPLP connects with families whose children are receiving EI services early in their journey and in the community, offers information, skill-building and access to opportunities to participate as partners in systems improvement and change. Staff are all parents of children who received EI services. There are 14 parent representatives on the Interagency Coordinating Council, a statewide interagency group that advises MDPH as lead agency for EI. EIPLP disseminates an annual newsletter to over 28,800 parents that describes programs and services, shares opportunities for family involvement, and highlights stories of active family leaders.

Universal Newborn Hearing Screening Program (UNHSP): Since the inception of UNSHP, a parent has held a paid staff position. There are currently two parents on staff and one hard of hearing staff member. These staff provide direct family-to-family support for children who are deaf or hard of hearing as well as facilitate linkages to primary care and Early Intervention services. The UNHSP Advisory Committee includes two parent members and two members that are deaf or hard of hearing; currently, a parent chairs the Committee.

Young Children's Council (YCC): Several BFHN programs collaborate to develop a consistent platform for families to inform early childhood programming through the Young Children's Council, an advisory group for BFHN programs that focus on early childhood social emotional wellness and systems building. MDPH staff are growing family representation on the YCC and are working to change meeting practices and structure to ensure families have an equitable seat at the table. MDPH engaged a new cohort of 9 family leaders that bring diverse life experiences and backgrounds. These family leaders were active participants in council meetings and took on increasing levels of leadership in planning meeting agendas, developing new YCC resources, and strengthening council practices to be more equitable. To ensure the Council effectively captures and takes action to address feedback and ideas shared by the family leaders, MDPH developed a tracker tool with plans to pilot the tool in FY23.

Essentials for Childhood: Two family leaders participate on the Leadership Team, which engages in program planning and decision-making, and three family leaders participate on the Economic Opportunity Team. Family leaders are compensated for their time. Essentials for Childhood, in partnership with its current family leaders, is facilitating a Community Governance Board that consists of eight family or community members representing diverse demographic populations and geographic areas of the state.

Maternal Infant and Early Childhood Home Visiting Initiative (MA MIECHV): MA MIECHV received a MIECHV Innovation Award to develop and implement an Equity Data Dashboard that will allow timely data visualization of MIECHV performance indicators disaggregated by race, ethnicity, language, and gender, in addition to administrative and contextual data. The Dashboard will be the catalyst for a comprehensive training and capacity development structure focused on promoting racial equity and partnering with families to use data to address inequities that will support data-driven decision making in MA MIECHV communities.

Office of Sexual Health and Youth Development (OSHYD): Positive youth development, including developing leadership capacity, is considered the foundation of public health interventions for adolescents. OSHYD's Leadership Exploration and Development (LEAD) internship program provided an opportunity for paid youth-facilitated projects to address a need in their program or community. During FY23, OSHYD funded internships across 11 youth-serving agencies. Projects focused on topics such as youth leadership for youth with disabilities, peer-led suicide prevention strategies, civic engagement, and mental health awareness. LEAD internships provided youth an opportunity to earn a living wage for 12 weeks, gain valuable leadership skills, and provide feedback to OSHYD-funded programming.

Child and Youth Violence Prevention (CYVP) Programs: Youth are often employed as direct care staff by CYVP programs. In alignment with the Positive Youth Development model, previous participants are hired as staff or peer leaders to mentor younger members. Hiring youth as staff contributes to the continued development of these young people as leaders in their communities. In FY22, 528 youth were employed as direct care staff by CYVP programs. During FY22, CYVPU also developed a new procurement that incorporates family engagement and youth leader opportunities as core expectations of service provision and began in FY23.

Perinatal Neonatal Quality Improvement Network (PNQIN): PNQIN developed a Hospital Family Engagement Collaborative Practice Survey for NICU/Special Care Nursery and Obstetrics and Gynecology teams to assess hospital and patient family engagement definitions and practices. This effort was led by the Title V Director who serves as the chair for the PNQIN Family and Community Subcommittee. With support from the Betsy Lehman Center, the Family Voices' Family Engagement in Systems Assessment Tool (FESAT) was adapted, and survey questions imported into REDCap. The survey was administered to 26 perinatal units from 41 hospitals. Results from this survey demonstrate that there is considerable variation in family and community engagement across Massachusetts obstetric and neonatal hospital units. Findings from this baseline assessment will inform supports,

technical assistance, and resources PNQIN can offer to help hospitals strengthen and deepen their engagement activities. PNQIN will begin this process by convening a patient and family advisory council to co-develop PNQIN projects and initiatives, including supports related to patient, family, and community engagement. PNQIN will support and integrate family members from diverse backgrounds into PNQIN committees and workgroups so that the perspectives of pregnant and postpartum people with lived experiences inform PNQIN's strategy and projects. Following the creation of this advisory body, and the integration of family members into PNQIN activities, PNQIN will co-develop a new initiative to support hospitals as they strengthen their family engagement efforts.

Further details about how parents, youth, and families are involved in Title V activities are included in the state action plan narratives by domain.

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

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

MCH Epidemiology Workforce

MA Title V is a leader in promoting data access and data-driven decision making. In addition to its robust performance measurement framework and focus on implementing evidence-based practices, epidemiologists in the Bureau of Family Health and Nutrition (BFHN) ensure Title V has direct access to timely MCH data to support programming, assessment, monitoring and quality improvement. The Division of Maternal and Child Health Research and Analysis (DMCHRA) was established in fall 2020 to add a manager to the chain of command who can focus on MCH policy implementation, specific Title V priorities, grants management, respond to legislative mandates, oversee data analysis and dissemination (e.g., using PRAMS data to monitor the implementation of the Paid Family and Medical Leave (PFML) mandate among working parents), and support implementation of the Public Health Data Warehouse (PHD) in collaboration with the Office of Population Health. The DMCHRA Director supports cost effectiveness/return on investment analyses to demonstrate program effectiveness and think critically about how to use data for primary prevention, and to conduct root cause analyses to quantify more completely the inequities seen in health outcomes across MCH programs. The DMCHRA Director is also the SSDI Director and the Principal Investigator for the MA Perinatal Neonatal Quality Improvement Network (PNQIN), the state Perinatal Quality Collaborative, and provides leadership to the collaborative.

DMCHRA's role is to provide statistical information for needs assessment, performance management, quality improvement, and decision support in BFHN using data analytics, survey work, and evaluation studies. The Office of Data Translation (ODT), the organizational unit where the epidemiologists are located, is housed in DMCHRA. The ODT Director serves as the Assistant Director for DMCHRA. There are 12 FTEs in the Division who are responsible for collecting, managing, and analyzing MCH data. While most of the epidemiologists hold an MPH, there are also four doctoral level epidemiologists and one MD. To be fully staffed, DMCHRA needs two more full-time epidemiologists. Epidemiologists are funded by SSDI, Title V, and grants from CDC, HRSA, and NIH.

The Center for Birth Defects Research and Prevention (CBDRP) supports monitoring, research, and sharing of information around perinatal outcomes. There are ten epidemiologists (four with PhDs in Epidemiology, one MD, and five with MPHs). Two are funded by Title V, one is mixed funded (Title V and CDC), and seven are funded through CDC grants or placements. CBDRP also works with doctoral and master level students on analytic projects, funded through a CDC grant that includes a training program.

BFHN has had a CDC MCH Epidemiology Program assignee since October 2012. Her focus is building state MCH capacity and using epidemiologic research and scientific information to inform programs and policies. The CDC assignee, supervised by the Title V Director, works closely with DMCHRA/SSDI, CBDRP, and DPIE to recruit fellows from CDC-sponsored programs and to leverage training opportunities offered by CDC for the benefit of MDPH staff. For over a decade, BFHN has had CDC/CSTE Applied Epidemiology Fellows who provide high-quality epidemiologic support while learning the practical application of epidemiology. A CSTE Fellow who worked in CBDRP in a neonatal abstinence syndrome (NAS)/birth defects position during August 2020 –February 2022 was hired as a COVID-19 MCH Epidemiologist in a newly created position. A new CSTE fellow, with a focus on NAS and birth defects, joined CBDRP in the summer of 2022. A CSTE Fellow worked in DMCHRA from July 2021-January 2022 on a range of MCH data projects including a Fatherhood/Second parent survey, the PRAMS COVID-19 vaccine supplement, and data linkages. A new CSTE fellow will be joining DMCHRA starting in August 2023 for a two-year position.

BFHN has also successfully recruited staff through CDC's Public Health Associate Program (PHAP). Two CDC PHAPs have supported the work of the MA Maternal Infant and Early Childhood Home Visiting (MIECHV) Team (the

first in 2020-2022 and a second during 2022-2024). In February 2023, BFHN submitted a position description to recruit a PHAP to support the work of the MA Maternal Morbidity and Mortality Review Committee and support the activities under the Title V Maternal Mortality Priority.

BFHN continues to host graduate and undergraduate student interns for applied learning experiences on MCH topics. Two master-level students will be working with DMCHRA this summer to analyze PRAMS data on perinatal substance use and paid family medical leave. The CDC Assignee and members of the Racial Equity Strategic Pathway Implementation Team, developers of the MA Racial Equity Data Road Map, will be working with a Title V Intern team this summer to develop a workplan and timeline for revising and updating the Road Map. BFHN epidemiologists and program staff frequently participate in the CDC/Harvard School of Public Health Program evaluation practicum, a training and experiential opportunity for staff to enhance their skills in program evaluation. BFHN last participated in the practicum during January 2020, when MA MIECHV staff worked with Harvard students to develop an evaluation framework for the Parents as Teachers Recovery Coach Overlay. MDPH also provides practicum opportunities and mentorship for student interns from local schools of public health every year. The CDC assignee, CSTE fellows and student interns play an important role in the Title V Needs Assessment.

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

State Systems Development Initiative (SSDI)

The goals of the MA SSDI program, which is housed in DMCHRA, are to:

- Strengthen MA's capacity to collect, analyze, and use reliable data for the Title V MCH Block Grant to assure data-informed programming
- Strengthen MA's ability to access and link key MCH datasets to inform MCH Block Grant programming and policy development, and assure and strengthen information exchange and data interoperability
- Enhance the development, integration, and tracking of health equity and social determinants of health (SDoH) metrics to inform MA Title V programming
- Develop and enhance MA's capacity to collect timely MCH data, and support data analysis, reporting, and visualization to inform rapid state program and policy action related to emergencies and emerging issues/threats, such as COVID-19

To support goal 1, MA uses the Pregnancy Risk Assessment Monitoring System (PRAMS) data to monitor breastfeeding for NPM4, percent of infants who are ever breastfed, and percent of infants who are breastfed exclusively by race/ethnicity, insurance, WIC, maternity leave, disability, and postpartum depression. MA will use WIC data to monitor WIC participants receiving services from a breastfeeding peer counselor who exclusively breastfed for at least three months. We will monitor and report on NIS data as soon as they are available. Strengthening the capacity of the health system to promote mental health and emotional well-being was selected as a Title V priority in 2020. MA uses PRAMS data to track postpartum social support and emotional wellness across five measures. PRAMS also currently collects information about how often the baby's father contributes financial and emotional support to the birthing parent as parents with more financial and emotional support have lower prevalence of postpartum depressive symptoms and less stress. SSDI tracks these measures by race and ethnicity, as well as by education, insurance, disability status.

To support goal 2, SSDI staff are analyzing data from the Public Health Data Warehouse to identify risk factors that contribute to severe maternal morbidity (SMM), by characteristics including race/ethnicity, insurance, disability status, substance use disorder, incarceration, veteran status, severe mental illness, and participation in substance addiction services. The SSDI team presented preliminary data to stakeholders including the state Medicaid program on Oct 17, 2022. Data show an increase in SMM from 52.3/10,000 deliveries in 2011 to 100.4/10,000 in 2020, with rates for Black non-Hispanics (191.0/10,000 in 2020) nearly 2.5 times higher than the rate for white non-Hispanics (78.2/10,000 in 2020). People with obesity, pre-pregnancy diabetes, and pre-pregnancy hypertension had significantly higher rates of SMM compared to those without these conditions. When we compared SMM among those with and without Medicaid, there were no significant differences among White, non-Hispanic, Black, non-Hispanic, Hispanic and Asian non-Hispanic pregnant people. A Data Brief was developed and will be press released by the new Commissioner, Dr. Robert Goldstein on July 12, 2023 and will be posted publicly and shared with our clinical and community partners.

BFHN staff is collaborating with the Department of Family Medical Leave (DFML) to monitor implementation of the Massachusetts PFML legislation, which was implemented on January 1, 2021. To support goal 3, SSDI will compare trends for maternity leave from PRAMS to data from DFML. An analysis of 2020 PRAMS data from experiences prior to initiation of PFML benefits found that about one-third (33.2%) of MA employed birthing people with a recent live birth took unpaid leave only, 47.5% took paid leave only, 13.1% took both paid and unpaid leave, and 6.3% did not take any leave. In 2021, with the commencement of PFML benefits, 20.4% employed birthing people took unpaid leave only, 66.2% took paid leave only, 8.1% took both paid and unpaid leave, and 5.3% took no leave. SSDI will continue to monitor trends in postpartum leave-taking patterns and will work with DFML to promote equitable

utilization of PFML through data linkage and analysis.

For goal 4, MA SSDI continues to use PRAMS data to monitor pregnancy intention and contraception use by race/ethnicity, disability, insurance, and WIC participation. PRAMS data have tracked unintended pregnancies since 2012. MA PRAMS data from 2015-2016 were used to develop a data brief to present information on unintended pregnancies in MA to inform MassHealth (Medicaid) leaders about the importance of reducing barriers to the insertion of Long-Acting Reversible Contraception (LARC) in the immediate postpartum setting, including billing and reimbursement. In 2021, 17.2% of respondents reported their pregnancy was unintended, with another 11.4% feeling unsure of how they felt about the pregnancy, findings that have remained consistent since 2019. We will continue to monitor PRAMS data for pregnancy intention and contraception use as it becomes available. DMCHRA plans to create an infographic and/or fact sheet on unintended pregnancy in Massachusetts to share with our clinician and community partners.

SSDI has worked collaboratively with internal and external stakeholders to create a statewide [NAS Dashboard](#) of key metrics to monitor progress on aspects of care for families affected by perinatal substance use. Protocols for data reporting were developed across the care continuum for substance exposed newborns and newborns with NAS. The creation of the NAS dashboard built upon the robust collaborations and data systems in the state and includes data that address a variety of measures across three key time periods: prenatal, neonatal, and infancy. The SSDI program used data from PELL to update the Dashboard with 2019 data. The data now cover years 2011-2019 and can be sorted by insurance type, race/ethnicity, mother's age, mother's education, gestational age, birth weight, method of delivery and MA Executive Office of Health and Human Services (EOHHS) region. Data for 2020 births will be added in late Summer 2023. The Dashboard has been used by PNQIN to track population-level improvements while using hospital-based data to monitor key performance measures including reduction in use of pharmacologic therapy for NAS among opioid-exposed newborns, increase in use of skin-to-skin care, reduction in average hospital length of stay, reduction in care for opioid-exposed newborns in a special care nursery or neonatal intensive care, and increase in use of Plans of Safe Care by hospital discharge for opioid-exposed newborns.

SSDI is working to expand the use of MCH data to create a Title V dashboard, with metrics for national performance measures (NPM), state performance measures (SPN) and evidence-based strategy measures (ESM) for Massachusetts Title V priorities and will include 5-year objectives for each measure. Data will be displayed by MCHB domain and include values from 2019 through the current year, with predicted values to 2025. The new Title V Dashboard will allow programs, policymakers, and researchers to track population-level improvements in a wide range of MCH activities across the 10 Title V MCH priorities, including ESMs such as the percentage of women using the statewide smoking quit-line who are pregnant, and the percentage of WIC participants receiving services from a breastfeeding Peer Counselor who exclusively breastfed for at least three months.

SSDI staff played a key role in improving the 2015-2020 Title V oral health priority. The SSDI Director worked with oral health champions to create an Oral Health Steering Committee for the development of the MA Perinatal Oral Health Practice Guidelines for Pregnancy and Early Childhood. The guidelines were released in 2016 and the SSDI Director continues to support ongoing implementation. Since 2016, the percent of women who had a dental visit during pregnancy has steadily increased to 56.2%, 57.8% and 58.8% in 2017, 2018 and 2019, respectively. However, most likely due to the COVID-19 pandemic, this percent decreased to 51.1% in 2020 but began to rebound in 2021 at 52.7%. The SSDI Director is leading the effort to update these guidelines using the latest available knowledge, including interpretation associated with the risk of dental amalgam in children, especially those younger than six, people who are pregnant or planning to become pregnant, and lactating people. The SSDI program worked collaboratively with the Office of Oral Health in their efforts to develop the first Oral Health Series focused on Perinatal Oral Health, which were made of topic-specific issues in oral health and are posted [online](#).

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

Other MCH Data Capacity Efforts

Described below are additional epidemiological and data capacity activities that support timely MCH data and information systems, including Title V needs assessment and performance measure reporting.

Pregnancy Risk Assessment Monitoring System (PRAMS)

DMCHRA manages PRAMS, a critical source of data for Title V performance measure reporting, including objectives related to maternal mental health and substance use. Central to the 2020-2025 substance use prevention action plan is revising the PRAMS survey to improve the measurement of tobacco, marijuana, and alcohol use during pregnancy.

In FY19-20, MA added supplemental survey questions on perinatal substance use and maternal disabilities to PRAMS and conducted a call-back survey of mothers who report using substances in the perinatal period. While there previously were rich programmatic and administrative data available in MA, there were no population-based survey data on opioid use and misuse before, during, and shortly after pregnancy. Therefore, the addition of a set of opioid supplemental questions to the PRAMS survey allowed MA to assess maternal behaviors and experiences related to the use of opioids and to understand their effect on the health of the mother and infant. Data from the opioid call-back survey are being analyzed and will enhance state surveillance systems to better identify community needs and policy gaps. PRAMS data on maternal opioid use, reason for use, interactions with health care providers related to prescribing and counseling and need for and access to treatment services will inform opioid initiatives and programs focused on the MCH population in MA.

In FY21, MA PRAMS received CSTE funding to add supplemental COVID-19 questions to the survey. These data will help MDPH to understand women's experiences and needs during pregnancy and postpartum related to COVID-19 and provide state-level data to examine racial/ethnic inequities among pregnant women due to the pandemic. MA PRAMS will also implement a Fatherhood/Second parent survey in FY24 to better understand pregnancy and birth experiences and behaviors among new fathers and second parents.

One of the challenges of conducting PRAMS is maintaining the required response rate. The overall weighted response rate was 61.2%, 59.6%, and 57.0% for 2019, 2020, and 2021 respectively. While MA PRAMS has consistently met or exceeded the CDC minimum response rate threshold (50% in 2020-2021), there are lower response rates among Black non-Hispanic and Hispanic birthing people. Through a memorandum of understanding, MDPH has used the WIC program as an alternative source to the birth certificate for updated contact information for new mothers. The birth certificate does not include a phone number for dads which will make reaching dads by phone more challenging for the Fatherhood/Second parent survey.

PRAMS & Pregnancy to Early Life Longitudinal Data System (PELL)

MA developed the PELL data system, which tracks MCH outcomes longitudinally. The core linkage consists of live birth certificates and fetal death reports, provided by vital statistics, and linked annually by SSDI to their corresponding birth and delivery inpatient hospital discharge records. PELL also incorporates non-delivery inpatient hospital discharges, emergency department (ED), observational stay and program participation and surveillance data. Data from Early Intervention (EI), birth defects, WIC, newborn hearing screening, and home visiting are among the data that have been or are in the process of being linked. SSDI completed the linkage of 2020 birth and case mix data for PELL and will link 2021 data over the summer. PELL linkage of birth certificate data to delivery hospital discharge records has a 99% linkage rate for in-state resident births. One of the challenges of PELL is the lack of timely casemix data (hospital discharge, ED and observational stays) for annual linkages with the birth certificates. CHIA provides casemix data annually for the two prior fiscal years. For example, to link birth cohort 2020, MDPH

received FY21 at the end of December 2022.

During FY2023, DMCHRA received grant funding through ASTHO to conduct a linkage of PRAMS and PELL as part of a learning community effort. DMCHRA achieved 100% linkage between PRAMS and PELL using a combination of birth certificate number, maternal first and last name, maternal date of birth, and zip code. DMCHRA participates in the learning collaborative with other states doing similar linkages and shares lessons learned. Analyses are planned to evaluate the validity of gestational diabetes and pregnancy-induced hypertension as reported on PRAMS as compared to PELL.

PELL & WIC Linkage

After many delays due to COVID-19 related staffing issues, DMCHRA relaunched the linkage of PELL data to WIC participation data for 2012-2019 births and are linking 2020 births. Data from WIC participation records are available for 2012-2022 for pregnant and postpartum people and children from birth through age four years. Linkage rates among infants ranged from 94-96% with the birth certificate, and 99% of birth certificate records are linked in PELL. We are continuing to analyze linked data to evaluate WIC participation and subsequent otitis media and asthma in infancy and childhood, failure to thrive, poor growth, and childhood anemia, other infant/childhood emergency department, observational stay, and hospital utilization. We also are evaluating women's health outcomes including gestational diabetes and outcome of pregnancy, interconception care, contraception, and inter-pregnancy interval.

Evaluation of MA Home Visiting Programs

MDPH collaborated with the Tufts Interdisciplinary Evaluation Research (TIER) team on a quasi-experimental evaluation of home visiting programs spanning the continuum of home visiting services in MA, including the evidence-based home visiting models Healthy Families America and Parents as Teachers, as well as Welcome Family, a universal one-time postpartum home visiting program, and the EI Parenting Partnerships Program, a home-grown multidisciplinary team-based home visiting program. The evaluation used linked secondary data from home visiting program management information systems; electronic birth and death certificates, fetal death reports, and data on hospital discharges, ED visits and observational stays within the PELL Data System, APCD healthcare claims data, and EI program data. These linked data were used to examine short- and longer-term impacts of home visiting programs on maternal and infant health and development outcomes and timeliness of linkages to EI services. Findings from these evaluations highlighted the effectiveness of Welcome Family and EIPP in facilitating timely connection of families with Early Intervention when needed. The evaluation team published two peer-reviewed articles describing the results of the Welcome Family and EIPP evaluations.

Public Health Data Warehouse

The PHD, described in the *Overview of the State*, provides access to linked, multi-year data from across state government to enable analysis of health priorities and trends. Following an initial focus on opiate overdoses, the MDPH Commissioner identified MCH as the next priority for study to generate actionable information to help address inequities in MCH outcomes. The PHD team identified key questions related to maternal morbidity and mortality, preterm birth and infant mortality, and adolescent health and wellness. Data linkage and analyses are underway. A data brief on SMM was released in July 2023.

Like PELL, PHD data are not timely as they are provided on CHIA's fiscal calendar as described above. Another challenge is that PHD linkages are done by CHIA and have not produced linkage rates that are as high as the PELL linkages. APCD claims are used as the spine for the PHD linkage, but data can be missing from insurance providers who did not participate in the claims data upload. This was made more complicated by a [2016 lawsuit](#) that resulted in 10.3% of insurance providers foregoing data submission to the system from that point onwards.

Neonatal Abstinence Syndrome Surveillance

In 2020, the CDBRP's Birth Defects Monitoring Program (BDMP) began piloting the inclusion of NAS as a reportable condition to its existing active, population-based surveillance system. BDMP medical record abstractors collect individual-level data from medical records on birthing person-infant dyads with NAS including maternal demographics, maternal medication history, infant symptoms, maternal and infant toxicology screens, infant treatment, information on plan of safe care, and information on to whom the infant was discharged. A key feature of the system is its ability to quickly add questions to adapt and collect data needed by MDPH programs; for example, questions were recently added around breastfeeding and housing stability. The BDMP NAS Surveillance System (NSS) provides accurate, reliable, and timely estimates and trends of the incidence of NAS. These data can inform optimal care, improve associated health outcomes, identify inequities, help develop tailored plans for mothers and infants, assess the immediate and potential long-term needs of infants with NAS and their parents, and ensure proper allocation of resources.

COVID-19 Surveillance

MDPH is conducting COVID-19 pregnancy surveillance through the Surveillance for Emerging Threats to Pregnant People and Infants Network (SET-NET), a surveillance system to rapidly identify the impact of emerging health threats to pregnant people and their infants. Infectious disease case surveillance data on women of reproductive age with lab confirmed SARS-CoV-2 infection are linked to birth and fetal death certificates to identify pregnant persons with COVID-19. Medical record abstractors collect data on the pregnant person and their infant (through 6 months of age) to better understand the effects of COVID-19 on this population. This effort leverages the Birth Defects Monitoring Program and its collaboration with the Bureau of Infectious Diseases and Laboratory Sciences, building upon previous work to enhance the system to monitor outcomes for pregnant women with Zika infection. The MA SET-NET team will be wrapping up surveillance for COVID-19 during pregnancy after completion of medical record abstraction for 2020-2021 infections and will be supporting data linkage and medical record abstraction for surveillance of hepatitis C virus infections in pregnancy.

For more information about SET-NET, refer to the *Maternal/Women's Health* domain narrative.

COVID-19 Vaccination Uptake among Pregnant People

CDBRP has linked birth certificate data to COVID-19 vaccination data from the Massachusetts Immunization Information System (MIIS). Through this linkage, staff were able to examine COVID-19 vaccination uptake among pregnant and recently postpartum people and found that this population was vaccinated against COVID-19 at a much lower rate (51% of those who delivered in October 2022) than the general population (92% of total MA population as of October 2022). They also found differences in uptake by race/ethnicity among those who delivered between May 2021–October 2022, with Hispanic (27%), American Indian/Alaska Native (28%), and Black (30%) pregnant people receiving vaccination during pregnancy at much lower rates than White (48%) and Asian (55%) pregnant people. In addition to providing estimates for broad race/ethnicity categories, data were disaggregated into more granular racial/ethnic subgroups to make within group comparisons and reveal the heterogeneity within these broad groupings. These data were disseminated through several presentations with groups internal and external to MDPH, and a slide deck with the data and tailored information for healthcare providers was [posted on mass.gov](#).

Community Evaluator Project

As part of the CDC COVID-19 health disparities grant, Title V is playing a key role in improving the use of data to assess the needs of groups disproportionately affected by COVID-19. Under the leadership of Title V staff, MDPH and TIER recruited, trained and supported a cadre of Community Evaluators (CEs) – people who are active in their communities and have experience with organizing or advocacy efforts – to assist in primary data collection and

ensure community members are an active part of the evaluation process. During FY22, CEs led four Cohort 1 projects:

1. Lawrence Telehealth Kiosk: CEs conducted surveys to evaluate the implementation of a telehealth kiosk in the Lawrence Public Library designed to create a safe, confidential, and accessible space for Lawrence residents to access health and social services.
2. Pediatric COVID-19 Vaccination: CEs conducted focus groups with parents/caregivers to identify barriers and facilitators to COVID-19 vaccination among children ages 0-4 years.
3. Pregnancy COVID-19 Vaccination: CEs conducted mixed methods data collection with people who were pregnant during the pandemic.
4. Experiences of Frontline Workers: CEs conducted interviews with restaurant workers and interviews and focus groups with childcare workers to learn about their experiences during the pandemic.

CEs completed data analysis and presented their findings and recommendations to project team and MDPH leadership at a Cohort 1 Closing Event in May 2023. TIER and the CEs are currently working on a summary report to present findings and recommendations from the Cohort 1 projects.

Five additional projects were selected for Cohort 2 projects: Adolescent Mental Health, Breastfeeding Support, Cancer Survivorship, Health and Disability, and Moving Data into Action. Recruitment is underway for CEs to work on Cohort 2 projects, and the projects will begin in Summer 2023. For more information about the Community Evaluator project, refer to the Maternal/Women's Health domain narrative.

Racial Equity Data Road Map

Over the past few years, MDPH has focused on using data as a tool to eliminate structural racism. Following a need identified in BFHN and BCHAP for greater capacity to collect and use data to promote racial equity, a cross-departmental workgroup developed the [Racial Equity Data Road Map](#), which was released in 2020. The Road Map is a collection of guiding questions, tools and resources that offers a suggested methodology for using data to address racial and ethnic inequities in service delivery and health outcomes. The team that developed the Road Map is now focusing on supporting its use by MDPH programs and will incorporate feedback from users of the Road Map and other stakeholders into future revisions. In addition, the Association of State and Territorial Health Officials (ASTHO), with funding from CDC, is leading a learning community to support four state teams to use the Road Map in their racial equity work. For more information about the Racial Equity Data Road Map, refer to the *Crosscutting* domain narrative.

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

MCH Emergency Planning and Preparedness

MDPH Emergency Preparedness and Response Plan

The MDPH mission is to prevent illness, injury, and premature death, to ensure access to high quality public health and health care services, and to promote wellness and health equity for all people in the Commonwealth. As a part of carrying out its mission, MDPH responds to public health and health care impacts resulting from a variety of incidents or events. There is a designated Office of Preparedness and Emergency Management (OPEM) and the MDPH All Hazards Emergency Operations Plan (EOP) identifies the steps MDPH will take to respond to all types of incidents and events. The EOP establishes the framework for MDPH support for local and state response activities to mitigate or prevent public health emergencies; prepare staff, volunteers, and members of the public to respond and recover from an emergency; respond appropriately; and recover effectively and efficiently.

The EOP can be used in conjunction with the [Comprehensive Emergency Management Plan](#) (CEMP) managed by the Massachusetts Emergency Management Agency (MEMA). MDPH and MEMA collaborate and coordinate their response actions as indicated by the situation. MDPH's EOP is typically reviewed annually and may also be modified following an exercise or real incident. Due to the demands of the COVID-19 response, the EOP was last updated in January 2019.

Since 2010, MDPH has worked with public health and health care stakeholders to identify and assess risks that may pose a particular threat to the public health and health care system in the Commonwealth, looking at both the likelihood of occurrence and the severity of impact. While the rating of severity of risks varies across the Commonwealth, common hazards identified include natural disasters (e.g., earthquake, hurricanes, winter storms, floods, heat waves, pandemic influenza) and disasters that are human-generated (e.g., radiological emergencies, chemical threats, terrorism). In its planning assumptions, the EOP recognizes that some individuals and families will be more vulnerable to the threats associated with the incident or event and/or may have difficulty accessing the public health and medical services they require. The CDC's Public Health Workbook to Define, Locate, and Reach Special, Vulnerable, and At-risk Populations in an Emergency identifies five categories that should be planned for during incidents or events:

- Economic Disadvantage (using poverty as a criterion may help reach a large number of people)
- Language and Literacy (includes people who have limited ability to read, speak, write or understand English or their native language)
- Medical Issues and/or Disability (Persons with any impairment that substantially limits a major life activity or physical, mental, cognitive, or sensory issues)
- Isolation (cultural, geographic, or social)
- Age (Older adults with chronic health issues or other impeding factors and infants and children 18 years or younger can also be at risk, particularly if they are separated from their parents or guardians)

Title V staff are not involved in the development of the EOP and do not have an explicit role in the state's Incident Management Structure, though they do play an important role in supporting and participating in an emergency response, described further below. The following personnel and groups have critical pre-identified responsibilities in the Department's readiness and response:

- *MDPH Commissioner*: As the lead health official for the Commonwealth, the Commissioner is responsible for directing the Department's response in an emergency and may authorize activation of the EOP.
- *The Commissioner's Executive Team*: responsible for strategic planning, policy, and leadership during an incident or event. In addition to the Commissioner, the team is comprised of the Associate Commissioner, Assistant Commissioners, Chief Operating Officer, Chief of Staff, General Counsel, Chief Financial Officer

and Director of Diversity. The OPEM Director, Communications Director and Director of Government Affairs are consulted. The Commissioner's Executive Team may also consult with other relevant Bureau or Office directors and may establish advisory groups of subject matter experts as needed.

- *OPEM Director*: The Director is responsible for overseeing planning and emergency preparedness for MDPH and may be delegated with authority by the Commissioner to coordinate a response within MDPH during an emergency and to activate the EOP.
- *MDPH Offices and Bureaus*: Organizational units throughout MDPH have response and/or recovery responsibilities during an emergency. Examples of Bureaus that may conduct specific response activities include, but are not limited to:
 - The Bureau of Infectious Disease and Laboratory Sciences (BIDLS) is responsible for tracking, responding to, and eliminating infectious diseases as well as performing laboratory tests to identify suspicious substances, food-, insect-, environmental-, and other pathogens, and treatable disorders in newborns.
 - The Bureau of Environmental Health (BEH) is responsible for environmental health concerns and threats, including deployment of the Nuclear Incident Advisory Team for radiological emergencies, and the Rapid Response Team for food safety emergencies.
 - BIDLS and BEH each have on-call staff available 24/7 to respond to calls regarding possible emergencies.

Title V Role in Emergency Planning and Preparedness

Routine surveillance and data collection are key components of the EOP. During normal operations, surveillance information may identify a hazard that would necessitate activation of the EOP and can also be used to inform decisions during a response. The Title V program has consistently played a role in surveillance and data collection during current and past emergencies. During the COVID-19 pandemic, Title V conducted surveillance for SARS-CoV-2 infection among pregnant people and their infants through the CDC's Surveillance for Emerging Threats to Pregnant People and Infants Network (SET-NET). The goals of MA SET-NET are to monitor the effects of COVID19 on pregnant people and their infants, inform clinical guidance and practice, and ensure that MDPH is prepared to meet the needs of pregnant people and infants during public health emergencies. This effort leverages the flexibility of the existing active Birth Defects Monitoring Program (BDMP) in Massachusetts and strong collaboration between BDMP and BIDLS, building upon previous work to enhance the system to monitor outcomes for pregnant women with Zika infection. For more information about SET-NET, see the Maternal/Women's Health domain.

In addition to its role in data collection and surveillance, the BFHN Division for Children & Youth with Special Health Needs (DCYSHN) collaborated with Emergency Medical Services for Children to support pediatric disaster preparedness, such as developing portable packets for families to easily transport their children's emergency information. The Title V Director and the DCYSHN Program Support Specialist, with background in emergency medical services, serves on the Emergency Medical Services for Children Advisory Board.

The DYSHN has worked with OPEM, MassHealth, and the Office of the Child Advocate to establish policies and practices related to emergency care planning and coverage for families of children with medical complexity if a parent becomes incapacitated or hospitalized due to COVID-19. Through this collaboration, dedicated [webpages](#) and resources were created that include a webinar and emergency planning materials delivered by two family leaders and experts in safety and person-centered planning, both parents of children with disabilities. DCYSHN also investigated emergency volunteer public health assistance and advised OPEM on the needs of CYSHN and their families during emergencies for the MDPH public awareness campaign during National Emergency Preparedness Month. Separate from the DCYSHN, OPEM region three, which covers Northeastern Massachusetts, held a two-day workshop in June 2023 to address the hospital pediatric surge capabilities, including developing a surge response plan, family reunification plans and appointing a pediatric emergency care coordinator.

Through the Vaccine Equity Initiative, Title V staff partnered with staff from across MDPH, including BIDLS, BCHAP, and the Commissioner's Office, on coordinated outreach and strategic planning on a comprehensive pediatric/family approach to COVID-19 vaccination. The short-term goal is planning for whole family clinics that offer both COVID-19 and other vaccines for children and adolescents, with a focus on facilitating a warm handoff to primary care services as needed to ensure children are connected to their medical home. In the long term, MDPH is looking towards systems integration and sustainability, building on the success of the VEI and existing MDPH programs, including BFHN and its relationships with families and family-serving organizations. This includes integration of the COVID-19 vaccine into routine clinical practice and supporting coordination between clinical providers and community-based organizations to address social determinants of health in addition to the vaccine.

For more detailed information about the ways in which Title V is currently responding to the COVID-19 pandemic and supporting statewide vaccination efforts, see the *Overview of the State*.

Future Title V Plans

Based on ongoing Title V program needs assessment efforts and lessons learned from current and previous emergency responses, gaps related to communications and real-time data were identified, which could impact Massachusetts' ability to adequately assess and respond to MCH population and program needs in a future public health emergency.

Effective April 28, 2023, Dr. Robert Goldstein was appointed as the new Commissioner of MDPH. Dr. Goldstein has a background in emergency planning at the CDC and plans to continue to prioritize emergency planning in his new role at MDPH.

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

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

Public and private partnerships

Collaborative work with other federal, state and non-governmental partners

The success of the Title V program in ensuring access to quality healthcare and needed services for the MCH population is contingent on strong partnerships with other federal, state, and non-governmental partners. Through collaboration with these partners, Title V contributes to building a system of care for pregnant people, parents, children and youth, including children and youth with special health needs, and families in the state.

Title V collaborates with its partners through participation on interagency advisory groups and initiatives, data sharing agreements, delivery of services, and the provision and receipt of training and technical assistance.

Examples of collaborations include:

- Young Children’s Council – Title V staff chair the Council, comprised of family members, state agencies, and community leaders who provide feedback and guidance to align MDPH and our partners’ work related to infant and early childhood mental health.
- Early Childhood Integrated Data System (ECIDS) – Title V staff helped develop and serve on the Board for this data dashboard that includes aggregated, de-duplicated, de-identified and analyzed data about program participation and academic outcomes. This includes participation in and transitions across early education and care, MIECHV, WIC, Early Intervention and public preschool and preschool special education.
- Perinatal-Neonatal Quality Improvement Network (PNQIN) – Title V is partnering with PNQIN to strengthen a maternal health system of care including implementing the ACOG Alliance for Innovation on Maternal Health (AIM) bundles and the CDC Levels of Care Assessment Tool (LOCATe) to establish maternal levels of care to improve maternal health outcomes and reduce maternal deaths. Title V Director serves as a member of the PNQIN Leadership Team, PNQIN Advisory Committee, as well as chairs the PNQIN Patient and Community Engagement Subcommittee.
- MassPINN – MDPH co-chairs the Massachusetts Prevent Injuries Now! Network (MassPINN), a broad-based coalition of injury prevention practitioners from state agencies, private organizations, and academic institutions.
- Association of Maternal Child and Health Programs (AMCHP) – Title V staff participate on AMCHP member committees to support national collaboration with other state MCH programs and professionals.
- Title V Advisory Committee – provides ongoing guidance and support to Title V initiatives in MA, informs strategies and measures for the Title V State Action Plan, supports ongoing needs assessment efforts, and helps identify and respond to emerging MCH issues, including the housing and refugee crisis.

Further examples of the type and degree of collaboration with our partners are provided in *Attachment 4*.

Innovation and integration of services in the healthcare delivery system

MCH is innovating in the healthcare delivery system to advance equity in maternal health:

- The Perinatal Neonatal Quality Improvement Network (PNQIN) launched the Maternal Equity Bundle in October 2022 to reduce overall rates SMM and to close the Black-White gap in SMM across birthing hospitals in Massachusetts. In addition, PNQIN provided funding for the SPEAK UP against racism training offered by the Institute for Perinatal Quality Improvement; we have trained over 500 providers across 34 birthing hospitals to dismantle racism, provide respectful care that is equitable and high-quality, and eliminate perinatal health inequities.
- Through funding from the Maternal Health Innovation Initiative, DPH is implementing remote blood pressure (BP) monitoring programs at Baystate Medical Center in Western MA using Babyscripts, and at Brigham and

Women's Hospital in Boston using a Bluetooth-enabled BP monitor to improve awareness of obstetric warning signs for patients with hypertensive disorders of pregnancy in the postpartum period. More than half of maternal deaths occur during the postpartum period. 35% of pregnancy-associated deaths with medical causes had documented hypertensive disorders, and Black non-Hispanic had the highest percentage of deaths due to a medical cause at 70.6% and the highest percent of documented hypertension on birth and death certificates at 47%. As of March 2023, Baystate has enrolled 455 patients and had 41 readmissions for HDP. Brigham has enrolled 71 patients and had 5 readmissions within 6 weeks postpartum.

- The Massachusetts Perinatal Neonatal Quality Improvement Network (PNQIN), the Betsy Lehman Center for Patient Safety and the Massachusetts Department of Public Health (MDPH) are exploring how Levels of Maternal Care might work in Massachusetts to help assure that mothers are cared for at hospitals with the resources and personnel to manage their unique needs. ACOG and the Society for Maternal-Fetal Medicine (SMFM) outlined the Levels of Maternal Care in 2015 as an important strategy to decrease maternal morbidity and mortality. In 2021, all 40 birthing hospitals in Massachusetts completed the Levels of Care Assessment Tool (LOCATe) that was developed by CDC to uniformly assess birthing hospitals' Level of Maternal Care. The Betsy Lehman Center is convening a LOCATe Implementation Committee of the Maternal Health Task Force (MHTF) to serve as a forum for the confidential review of LOCATe care survey data reported on a voluntary basis by all Massachusetts birthing hospitals. The Implementation Committee's analyses of LOCATe survey and other relevant health care data will support the planning and implementation of appropriate levels of maternal care and related safety and quality improvement activities throughout Massachusetts. The Title V Director and members of the Title V staff are actively involved in these committees.

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

Collaboration with Medicaid

Title V collaborates with MassHealth by connecting under/uninsured families to health insurance, serving on interagency groups, developing an understanding to support service provision/outreach, and data sharing to expand analytic capacity. Title V has developed a shared understanding of the priorities and structure of each agency, to identify mutual goals/opportunities for ongoing collaboration, and to improve communication on emerging issues for the MCH population. Examples of collaboration include:

- Leveraging MassHealth funding to sustain services for children/families, such as EI and EI Autism services, reimbursement for depression screening during pregnancy/postpartum and coverage of long-acting reversible contraception (LARC) inserted in the immediate postpartum period.
- Participating in MassHealth’s school-based Medicaid reimbursement program expansion, which allows Medicaid reimbursement for school-based care for all students regardless of a special education plan.
- Collaborating with MassHealth to support the establishment of a doula benefit in fall 2023 and explore a doula certification and workforce development initiative to ensure a diverse and supported workforce (*See MCH Workforce Development*).
- Data use agreement that enables DPH and MassHealth to share client records reviewed by the Maternal Mortality and Morbidity Review Committee and to better understand care/outcomes for MassHealth pregnant members and their children.
- Implementing a contraceptive quality improvement project, including a data use agreement to use MassHealth data to track the effectiveness of the intervention, measuring increases in contraceptive prescriptions and same-day LARC provision.
- Promoting emergency care planning for parental illness and hospitalization for families with children with medical complexity (CMC) and to strengthen the system of care.
- Collaborating with MassHealth in the design of the Coordinating Aligned Relationship-centered, Enhanced Support (CARES) for Kids Program, which provides a single source of prompt, family-centered care coordination for CMC across the health, educational, state agency, and social service systems. (*See below and MCH Success Story*)

Title V and MassHealth leadership meet quarterly to further opportunities for collaboration and strengthening of partnerships between BFHN/Title V and MassHealth. Leadership of MassHealth’s Parent, Family and Child Team and the Bureau of Family Health and Nutrition (BFHN) meet monthly to coordinate strategic goals and initiatives, while staff meet frequently on project-specific collaboration.

Program Outreach and Enrollment

Title V supports people who are under/uninsured to access healthcare that meets their needs and is culturally appropriate. Resource Specialists keep apprised of resources and providers and families can call the toll-free Community Support Line with questions about services and supports. Division for Children and Youth with Special Health Needs (DCYSHN) Care Coordinators work directly with families who have children with complex medical needs to connect them with affordable health coverage, link them to community-based resources, coordinate medical/social/educational systems, and promote continuity of care.

A key role of DCYSHN is to inform providers/consumers about the complex system that families rely on to finance healthcare CYSHN by:

- Tracking/sharing updates with BFHN staff and providers on changes in state/federal healthcare and impacts on CYSHN, including benefits/eligibility for services amid the COVID-19 pandemic.
- Providing training and technical assistance (TA) on eligibility for public benefit programs to child-serving

agencies, healthcare providers, hospital staff, school personnel, parent groups, or organizations that serve/advocate for CYSHN.

- Meeting with healthcare organizations, advocates, and health plans through coalitions such as the Children's Health Access Coalition to ensure that families/children have access to high quality, continuous and coordinated health services.

Starting April 1, 2023, MassHealth began redetermination. BFHN is participating in an interagency Children and Families Workgroup, to target communication and activities to that population of MassHealth members. With MassHealth, BFHN has distributed a Redetermination [toolkit](#) with information in multiple languages and Children & Family Redetermination Webinars to all providers/partners across EI, Home Visiting, WIC and CYSHN and hosted MassHealth to speak to providers. MassHealth is leveraging WIC's social media/texting platforms to distribute information to families. BFHN is supporting MassHealth in connecting our programs and partners to opportunities for grant funding to outreach to specific populations and become trained MassHealth Enrollment Assistors.

1115 Medicaid Demonstration Waiver^[1]

MassHealth's 1115 waiver must be renewed every 3-5 years. The current waiver aims to transform the delivery and payment of care to improve quality and establish greater control over spending. The waiver has implemented the most significant re-structuring of the program in two decades, shifting the delivery system toward value-based care (e.g. ACOs), contributed to maintaining near universal health care coverage, supported the Commonwealth's safety net, and expanded access to Substance Use Disorder services.

MassHealth submitted a request to Centers for Medicare and Medicaid Services in June 2021 to renew the 1115 waiver for five years, which was granted in September 2022. Several of MassHealth's waiver priorities align with those of Title V: 1) payment reform to enhance the population health impact in pediatrics; 2) addressing equity in maternal mortality/morbidity and in health related social needs; 3) ensuring a family focus in primary care. Title V staff have advised MassHealth on aspects of the 1115 waiver renewal and implementation related to maternal health equity, health equity data, health related social needs, care coordination, primary care and payment reform, and behavioral health integration. MDPH staff have participated in cross-agency leadership sessions with MassHealth and observed listening sessions on Care Coordination, Strategic Design, and Primary Care. MDPH also convenes an internal 1115 Waiver Workgroup, chaired by the BFHN Deputy Director for Strategy and Implementation.

The 1115 Waiver provides \$115 million per year in primary care through a value-based sub-capitation model that includes specific requirements/standards for team-based, integrated care for children/youth that includes a Family Partner with lived experience and/or a community health worker. Through the Transforming Pediatrics for Early Childhood Initiative, MDPH will support the implementation, spread and sustainability of high-quality, early childhood integrated care models that include a Family Partner. A focus of TA is ensuring high quality, team-based, pediatric primary care that is racially just, family centered and connected to the broader MCH system. MDPH staff participate in a workgroup on Infant Early Childhood Mental Health Integration, co-led by the Department of Mental Health and the Children's Mental Health Campaign, that promotes a focus on infant/early childhood wellness and mental health in primary care.

Maternal Health Equity

Effective April 1, 2022, MassHealth extended its postpartum coverage period to 12 months to individuals, regardless of immigration status, with attested MAGI income up to 200% FPL. This will improve access to health care and continuity of care and align Medicaid with the seamless insurance coverage experienced by postpartum enrollees with commercial insurance. The 1115 Waiver includes a >\$2 billion initiative over five years to hold ACOs/ACO-participating hospitals accountable for reducing disparities in health care quality and access with a focus on

maternal health. The Perinatal Neonatal Quality Improvement Network (PNQIN) continues to partner and provide TA. Finally, on January 5, 2023, Governor Baker signed into law [An Act Relative to Expanding Equitable Access to Maternal Postpartum Care](#), codifying MassHealth coverage for 12 months post-partum. MassHealth plans to start reimbursing doula services by the end of 2023 through a state plan amendment. (See *MCH Workforce Development*)

Care Coordination Services for Children with Medical Complexity

MassHealth launched its CARES for Kids Program in July 2023. Effective July 1, 2023, MDPH entered into an ISA for FY24 with MassHealth that will provide funding to DCYSHN to create the Care Coordination Assistance, Training, Education & Resource (CCATER) Center to provide training and TA to provider teams regarding enhanced care coordination. The ISA provides the opportunity for the DCYSHN Care Coordination program to shift from providing enabling services to providing infrastructure supports of training and TA to the systems of care supported by MassHealth.

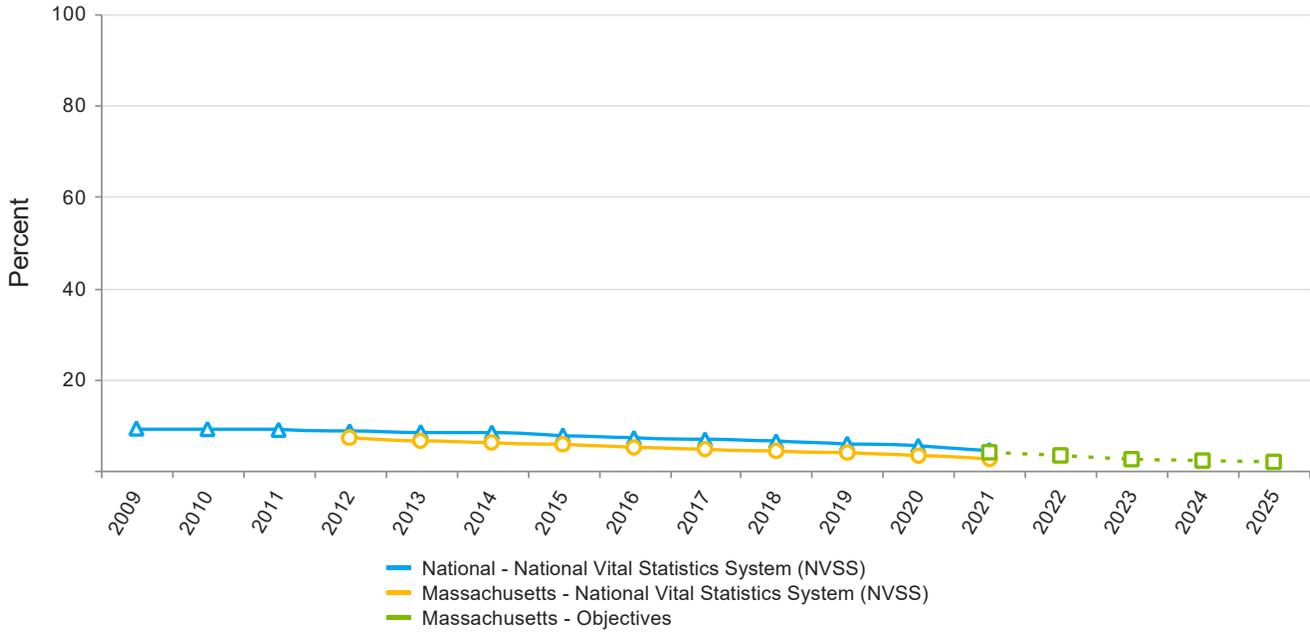
[1] [Amendment of 1115 MassHealth Demonstration \("Waiver"\) – March 2021 | Mass.gov](#)

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

Women/Maternal Health

National Performance Measures

NPM 14.1 - Percent of women who smoke during pregnancy
Indicators and Annual Objectives



| Federally Available Data | | | | |
|--|--------|--------|--------|--------|
| Data Source: National Vital Statistics System (NVSS) | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 4.1 | 3.4 |
| Annual Indicator | 4.3 | 3.9 | 3.5 | 2.8 |
| Numerator | 2,950 | 2,701 | 2,348 | 1,908 |
| Denominator | 69,078 | 69,085 | 66,398 | 69,127 |
| Data Source | NVSS | NVSS | NVSS | NVSS |
| Data Source Year | 2018 | 2019 | 2020 | 2021 |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 2.6 | 2.3 | 2.0 |

Evidence-Based or –Informed Strategy Measures

ESM 14.1.1 - Percentage of women using the statewide smoking quitline who are pregnant

| Measure Status: | | Active | | |
|------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 2.2 | 3.2 |
| Annual Indicator | 1.2 | 0.6 | 0.8 | 0.9 |
| Numerator | 24 | 10 | 13 | 16 |
| Denominator | 1,933 | 1,627 | 1,537 | 1,770 |
| Data Source | Massachusetts smoking quitline data |
| Data Source Year | 2019 | FY20 | FY21 | FY22 |
| Provisional or Final ? | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 1.0 | 1.1 | 1.2 |

State Performance Measures

SPM 1 - Percent of cases reviewed by the Massachusetts Maternal Mortality and Morbidity Review Committee within two years of maternal death

| Measure Status: | | Active | | |
|------------------------|------|---|---|---|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 10 | 20 |
| Annual Indicator | | 0 | 0 | 14.3 |
| Numerator | | 0 | 0 | 2 |
| Denominator | | 9 | 7 | 14 |
| Data Source | | Maternal Mortality Review Information Application | Maternal Mortality Review Information Application | Maternal Mortality Review Information Application |
| Data Source Year | | FY20 | FY21 | FY22 |
| Provisional or Final ? | | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 30.0 | 40.0 | 50.0 |

State Action Plan Table

State Action Plan Table (Massachusetts) - Women/Maternal Health - Entry 1

Priority Need

Prevent the use of substances, including alcohol, tobacco, marijuana and opioids, among youth and pregnant people.

NPM

NPM 14.1 - Percent of women who smoke during pregnancy

Objectives

1. By 2025, reduce the percentage of women who report smoking during pregnancy from 4.3% (2018 NVSS) to 2.0%.
2. By 2022, improve measurement of marijuana use/consumption among pregnant women by adding specific questions related to marijuana use/consumption during pregnancy (from the current question on any use which is asked during any prenatal visit to new questions which include all three trimesters and types of consumption) to the PRAMS survey.
3. By 2023, improve measurement of alcohol consumption among pregnant women by adding specific questions related to drinking during pregnancy (from the current question on pre-pregnancy drinking to include all three trimesters for both any alcohol use and binge drinking) to the PRAMS survey.

Strategies

1a. Add specific questions to PRAMS related to cigarette smoking/e-cigarette use/vaping during pregnancy (from the current question on smoking 3 months before, and last 3 months of pregnancy, and postpartum) to include all trimesters.

1b. Use PRAMS data to report on nicotine use during pregnancy and validate reporting of cigarette smoking on the birth certificate.

1c. Develop partnerships between the Tobacco Cessation program and other MDPH programs serving pregnant and postpartum people (e.g. home visiting, EI, WIC) to promote awareness of risks of nicotine use in all forms (e.g., cigarettes, e-cigarettes, vaping) during pregnancy, and promote resources for quitting, such as the quitline incentive program for pregnant people.

1d. Partner with the Tobacco Cessation program to conduct focus groups to consider questions for PRAMS that explore harm reduction messaging and perception that vaping is safer.

1e. Partner with PNQIN to provide training and technical assistance to OB providers as they implement quality improvement cycles to reduce nicotine use in all forms (e.g., cigarettes, e-cigarettes, vaping) during pregnancy.

2a. Use PRAMS data to report on marijuana use/consumption during pregnancy.

2b. Partner with the Bureau of Substance Addiction Services to expand funding for questions and to compare marijuana use data for trends with PRAMS data.

2c. Partner with BD-STEPS to share data on marijuana use during pregnancy.

2d. Raise awareness of PRAMS findings on marijuana use/consumption during pregnancy to people of reproductive age, other stakeholders, and PNQIN to inform their QI activities to reduce marijuana use/consumption during pregnancy.

3a. Use PRAMS data to report on alcohol consumption prior to pregnancy and analyze alcohol reporting on the birth certificate.

3b. Share findings with birthing hospitals to promote awareness.

3c. Partner with BD-STEPS to share data on alcohol use during pregnancy.

3d. Raise awareness of PRAMS findings on alcohol consumption before pregnancy and of birth certificate findings on alcohol consumption during pregnancy to people of reproductive age, other stakeholders, and the Perinatal-Neonatal Quality Improvement Network (PNQIN) to inform their QI activities.

3e. Collaborate with the FASD taskforce to include an explicit focus on prevention efforts and provider training, and to update existing educational materials.

ESMs

Status

ESM 14.1.1 - Percentage of women using the statewide smoking quitline who are pregnant

Active

NOMs

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

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

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

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

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

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

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

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

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

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

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

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

State Action Plan Table (Massachusetts) - Women/Maternal Health - Entry 2

Priority Need

Reduce rates of and eliminate inequities in maternal morbidity and mortality.

SPM

SPM 1 - Percent of cases reviewed by the Massachusetts Maternal Mortality and Morbidity Review Committee within two years of maternal death

Objectives

1. By 2025, the Massachusetts Maternal Mortality & Morbidity Review Committee (MMMRC) will increase the percent pregnancy-associated deaths that are reviewed within two years of occurrence from 0% to 50%.
2. By 2025, develop a structure for community input into the maternal mortality and morbidity review process that is authentic and addresses the power dynamics between medical providers and community stakeholders.
3. By 2025, leverage collaborative partnerships to inform practice and policy changes and disseminate findings including MMMRC recommendations.
4. By 2025, reduce inequities in rates of COVID-19 infection among birthing and lactating people of color by improving their vaccination coverage during pregnancy from 21.6% for Hispanic individuals, 21.5% for non-Hispanic Black individuals and 14.0% for non-Hispanic American Indian/Alaska Native/Other individuals to above 50.0% for these groups.

Strategies

- 1a. Link birth and death files and other datasets (such as MassHealth) to identify pregnancy-associated and related deaths in a timely manner.

- 1b. Strengthen and increase the number of memoranda of understanding and data sharing agreements with key stakeholders to ensure timely access to data.

- 1c. Improve process and timing for data abstraction into the Maternal Mortality Review Information Application (MMRIA).

- 1d. Through participation in the MDPH-sponsored Lean Six Sigma quality improvement training, identify activities to improve the timeliness of identification and review.

- 1e. Establish and implement a process for prioritizing the abstraction and review of pregnancy associated deaths where COVID-19 is indicated.

- 2a. Establish a process/mechanism for community engagement.

- 2b. Improve the process for developing recommendations based on maternal death reviews that is informed by community and clinical partners.

- 2c. Through participation in the MDPH-sponsored Lean Six Sigma quality improvement training, identify activities to improve community contribution to the review process.

- 3a. Analyze data to a) understand burden, causes, and distribution of mortality and morbidity by selected characteristics, b) develop data briefs, and c) report trends in a timely manner.

- 3b. Leverage multiple initiatives and partnerships to strengthen a maternal health system of care including implementing the ACOG Alliance for Innovation on Maternal Health (AIM) bundles and the CDC Levels of Care Assessment Tool (LOCATe) to establish maternal levels of care to improve maternal health outcomes and reduce maternal deaths.

- 4a. Conduct surveillance for SARS-CoV-2 infection among pregnant people and their infants by participating in the Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET) and document any racial and ethnic inequities observed among pregnant people with SARS-CoV-2 infection. Analyze data on COVID-19 vaccine coverage among pregnant and recently pregnant people and explore racial and ethnic inequities in vaccine uptake.

- 4b. Leverage the PRAMS survey to understand people's experiences and needs during pregnancy and postpartum related to COVID-19 and provide state-level data to examine racial/ethnic inequities among pregnant people due to the pandemic.

- 4c. Train and support a cadre of Community Evaluators to improve the use of qualitative data to assess the needs of groups disproportionately affected by COVID-19, including pregnant and lactating people.

- 4d. Collaborate with the Perinatal-Neonatal Quality Improvement Network's COVID-19 Vaccination in Pregnancy Initiative (funded by CDC) to improve provider capacity to counsel birthing/postpartum people, increase the number of birth facilities with protocols to encourage vaccination, and improve community-clinical linkages.

- 4e. Disseminate public health messaging about COVID-19 vaccination for pregnant and lactating people (recommendations, safety, and access) through vendors, partners, and directly to families.

- 4f. Participate in the implementation of the Vaccine Equity Initiative as program managers, community liaisons, and vaccine ambassadors, to increase acceptance of and access to the COVID-19 vaccine among populations and communities hardest hit by COVID-19.

State Action Plan Table (Massachusetts) - Women/Maternal Health - Entry 3

Priority Need

Strengthen the capacity of the health system to promote mental health and emotional well-being.

Objectives

Increase to 92% from baseline (89.5%, PRAMS 2018) the percent of women who have moderate or high social support following the birth of their baby.

Strategies

Provide training and technical assistance on perinatal mental health (including maternal mental health needs and co-morbidities including substance use and interpersonal violence) to health providers and other state agencies to increase awareness and reduce stigma.

Develop and disseminate a perinatal mental health data analysis plan that outlines a process for collecting and reporting the MA postpartum depression screening rate, the identification of perinatal mental health diagnoses, and the incidence of postpartum psychosis. The plan will be used to inform program planning and policy development, including reduction of racial and ethnic inequities. (Complete)

Leverage home visiting programs to screen for depression and social connectedness among pregnant and parenting people, including fathers, and facilitate connections to services.

Collaborate with MassHealth to develop certification of doulas to enable a pathway for sustainable financing for doula services and to improve perinatal emotional and physical health, social support, and patient advocacy.

Women/Maternal Health - Annual Report

Massachusetts has three Maternal and Women's Health priorities for 2020-2025:

- Strengthen the capacity of the health system to promote mental health and emotional well-being.
- Prevent the use of substances, including alcohol, tobacco, marijuana and opioids, among youth and pregnant people.
- Reduce rates of and eliminate inequities in maternal morbidity and mortality.

Priority: Strengthen the capacity of the health system to promote mental health and emotional well-being.

Findings from the Fall 2020 COVID-19 Community Impact Survey (CCIS) underscore the continued importance of this Title V priority due to the pandemic. Compared to the 2019 Behavioral Risk Factor Surveillance System (BRFSS), reports of poor mental health among CCIS respondents were three times higher, with one third of adults currently reporting poor mental health. People experiencing persistent poor mental health were 2-3 times more likely to experience barriers to accessing care, such as appointment delays/cancellations, concerns about contracting COVID-19, not having a private place for a telehealth appointment, cost/insurance coverage and lack of safe transportation. Requests for suicide prevention and crisis management resources were as high as 11% among certain subpopulations, and highest among transgender people, non-binary people, and people questioning their gender identity.

People experiencing poor mental health are more likely to report having had a change in their work status because of childcare or being worried about basic needs like getting medication and paying bills. While there has been an increase in people reporting poor mental health across all demographic groups, some populations are more likely to report poor mental health: transgender people, non-binary people and those questioning their gender identity; people with disabilities; American Indian/Alaska Natives; Hispanic/Latinx community; people who identify as multi-racial; people aged 25-44 years; people with lower income; and caregivers of adults with special needs.

Objective 1. Increase to 92% from baseline (89.2%, PRAMS 2018) the percent of birthing people who have moderate or high social support following the birth of their baby.

In 2021, 88.3% of birthing people reported having moderate or high social support, a modest improvement from 87.3% in 2019 and 86.3% in 2020, the latter most likely due to isolation and social restrictions during the COVID-19 pandemic. Because PRAMS is typically administered two to four months postpartum, all 2020 respondents would have completed the survey after the onset of the COVID-19 pandemic in March 2020.

Perinatal Mental Health Training and Technical Assistance (TA)

MDPH provided training and TA on perinatal mental health (including maternal mental health and co-morbidities such as substance use and interpersonal violence) to state agencies (such as the Department of Children and Families (DCF) and the Department of Early Education and Care), providers (including home visiting programs and community health centers), and health plans. The training and TA will contribute to increasing awareness and reducing stigma about perinatal mental health issues and will support continued implementation of the MA Postpartum Depression regulations.

Early Intervention Parenting Partnerships Program (EIPP)

EIPP is a home visiting program that uses a team approach to engage with and support families during pregnancy, continuing through the child's first birthday. Maternal mental health is a key topic of discussion, education, support, and referral. In FY22, 148 (62%) participants reported a history of depression, including postpartum depression (PPD), at enrollment. At the initial visit, all 237 participants were screened for PPD using the Edinburgh Postnatal Depression Scale (EPDS) with 22 (9%) screening positive for mild depressive symptoms and 36 (15%) screening positive for moderate or severe depressive symptoms. Of the 40 participants referred to individual counseling, 27

(68%) were enrolled in services, 10 (25%) declined the referral, 4 (10%) were ineligible for services largely due to lack of adequate insurance coverage and 8 (20%) were placed on a waiting list.

EIPP participants are assessed on a three-question social connectedness screening tool at key prenatal and postpartum stages. At the initial visit, 237 participants were screened, with 48 (20%) reporting that they do not have the support they need from others to care for themselves and their infant. Each EIPP site facilitates one 10-week support group annually for its participants. Topics include maternal mental health, mother/infant attachment, self-care, and parenting skills. Transportation, childcare, and food are provided to facilitate attendance.

MA Maternal, Infant, and Early Childhood Home Visiting Initiative (MA MIECHV)

MA MIECHV, funded by HRSA/MCHB, provides evidence-based home visiting services to pregnant and parenting families in 18 communities. MA MIECHV aims to improve the lives of children and families by supporting parenting, improving maternal and child health, and promoting child development and school readiness. MA MIECHV promotes emotional wellness and social connectedness among program participants in several ways.

MA MIECHV home visitors and supervisors attend training on common mental health concerns, strategies for supporting parents who experience mental health challenges, and mindful self-regulation skills to support home visitors when working with parents experiencing mental health challenges. The training incorporates reflective conversations and engages participants in help-seeking in response to episodes of mental distress, illness, or crisis. A three-day Facilitating Attuned Interactions training further supports staff to engage in reflective practice.

All MA MIECHV programs hold parent support groups and group series to facilitate connections among families. Programs identify topics based on the needs and interests of their participants and the larger community.

MA MIECHV home visitors screen for depression and social connectedness according to evidence-based model requirements and make referrals to services as needed. Depression screens are conducted using the EPDS or Center for Epidemiologic Studies Depression Scale (CES-D) within three months of delivery (for those enrolled prenatally) or within three months of enrollment (for those not enrolled prenatally). In FY22, 75% of MA MIECHV participants were screened for depression within the required time frame, a decrease from 90% in FY21. The decrease is due to a new contracted home visiting program misunderstanding due dates defined by this performance measure. The expected depression screens for this program account for approximately 10% of the total expected screens for this measure, and therefore our performance decreased overall for FY22. In FY22, 43% of caregivers referred to services for a positive screen for depression were documented to have received one or more service contacts, a slight decrease from 45% in FY21. MA MIECHV programs continue to report limited language and cultural capacity among mental health services in many communities as barriers to successful access to treatment. The long waitlists for mental health supports were exacerbated by the COVID-19 pandemic.

Welcome Family

Welcome Family, funded by MA MIECHV, is a universal nurse home visiting program for families with newborns in five communities. It offers a one-time nurse home visit and follow-up phone call to caregivers with newborns in Boston, Fall River, Lowell, Holyoke and Springfield. The goal of Welcome Family is to promote optimal maternal and infant physical and mental well-being and provide an entry point into a system of care for families with newborns. The visit is conducted up to eight weeks postpartum. Nurses identify and respond to family needs by providing brief intervention, education, support, and referrals to community services and resources. Welcome Family nurses screen for depression using the Patient Health Questionnaire-2 (PHQ-2) and social connectedness at the time of the visit. In FY22, 98% of Welcome Family participants were screened for depression and social connectedness. Of those screened, 11% screened positive for depression and, of those, 64% received a referral to services. A family may decline a referral, or the nurse may not offer a referral if the family is already receiving services. Families who did not

receive a referral received brief interventions by the nurse.

F.O.R. Families (Follow-Up Outreach Referral)

The F.O.R Families program serves families experiencing homelessness with complex medical needs, substance use disorder, safety concerns, and high levels of depressive symptoms. The program is a joint initiative between BFHN and the MA Department of Housing and Community Development (DHCD). During the intake assessment, and as needed in subsequent visits, home visitors assess participants for symptoms of depression, identify any potential risks to the parent and baby, and make referrals to mental health services. Mental health is a key topic of discussion, education, and support with families.

In September 2021, the home visitors resumed in-person visits to the shelters. All staff were trained on Creating an Internal Culture of Resilience and Promoting Resilience for Children in Emergency Shelter Placements. The team also participated in a Strengthening Families Protective Factors six-part webinar training series.

In FY22, 169 families were assessed. Twenty-six percent of participants reported that someone in the household had been diagnosed with depression and 17% reported that a household member had been hospitalized for a mental health crisis. Home visitors provide support through reflective listening during their visits and refer clients to mental health treatment in their community. Families are encouraged to maintain connections with their natural supports as a source of assistance when facing housing instability.

Priority: Prevent the use of substances, including alcohol, tobacco, marijuana and opioids, among youth and pregnant people.

This priority focuses on primary prevention of substance use as well as overdose prevention, prevention of subsequent substance exposed newborns, prevention of substance use in the next generation, and prevention of more significant use or negative sequelae.

Findings from the CCIS indicated that two out of five people who reported using substances in the last 30 days had increased substance use during the pandemic. Respondents with a cognitive disability and parents and caretakers of persons/children with special needs were more likely to report increased substance use. Nearly half of respondents reported alcohol use, and of those, 38% reported increased use during the pandemic. Over half of those who reported using tobacco in the past 30 days reported increased use since prior to February 2020. People using substances were more likely to report poor mental health but delayed seeking mental health care. Respondents – particularly those using cocaine, heroin, or other opioids – reported interest in accessing health services related to counseling, tobacco cessation, peer and recovery support.

Objective 1 (NPM 14). By 2025, reduce the percentage of people who report smoking during pregnancy from the baseline of 4.3% in 2018 (RVRS) to 3.0%.

Title V plays an important role in preventing substance use during pregnancy. NPM 14 tracks progress on reducing tobacco use during pregnancy to mitigate the high mortality, morbidity, and economic costs attributed to tobacco use. The percentage of people who reported smoking during pregnancy decreased to 2.8% in 2021, meeting the previous 2025 objective of 3.0%. MDPH therefore revised the 2025 objective to 2.0%.

The ESM for this NPM is the percentage of people using the statewide smoking quitline who are pregnant, with a goal of increasing to 6.2% by 2025. 1-800-QUIT-NOW provides free and confidential services in English and Spanish, and translation for other languages, by a trained quit coach to stop smoking. Quit coaches connect callers with quit-smoking resources through the caller's community programs, and callers may be able to receive free nicotine replacement therapy. According to the Surgeon General's report, "lines are an effective population-based

approach to motivate quit attempts and increase smoking cessation.”^[1]While smoking during pregnancy has been declining, the number of people, both pregnant and not pregnant, using the quitline annually has decreased from 1,933 in FY19 to 1,770 in FY22. Overall use of the quitline among pregnant people has also decreased from 24 pregnant people in FY19 to 16 in FY22 with the percentage at 0.9% use among pregnant people for FY22. To promote the use of the quitline among pregnant patients, the DMCHRA director and the Community Cessation Coordinator for the MA Quitline gave a webinar using PRAMS data 2012-2021 for the Perinatal Neonatal Quality Improvement Network (PNQIN) Perinatal Opioid Project on March 30, 2023, and DMCHRA staff and the Community Cessation Coordinator also presented PRAMS findings at the PNQIN summit on April 12, 2023. At both presentations, the benefits of the quitline were shared with prenatal providers to inform them of the program and promote resources for quitting such as the quitline incentive program for pregnant people who seek support in quitting smoking. The ESM objective of increasing the percentage of people using the quitline who are pregnant has been changed to 1.2% by 2025 to reflect recent years’ experience and a more realistic target.

PRAMS

MA PRAMS updated a study to assess agreement of the reporting of cigarette smoking between PRAMS and birth certificate (BC) during the last three months of pregnancy among a population-based sample of people giving birth from 2012 to 2021. People reported higher prevalence of smoking during the last three months of pregnancy in PRAMS than in BC, but both PRAMS and BC had significantly decreasing trends in smoking prevalence (7.8% in 2012 to 4.2% in 2021 in PRAMS; 4.4% in 2012 to 3.2% in 2021 on BCs). The overall percent agreement between PRAMS and BC was high (97.9%) and the Kappa statistics showed a moderate level of agreement (0.64) between PRAMS and BC. However, the Kappa statistics for subgroups including people who were Black non-Hispanic, Hispanic, aged less than 20 years, had less than a high school education and a preterm birth showed a lower level of agreement, even after adjusting for bias and prevalence. MA PRAMS will present these findings to the Title V Substance Use Priority Workgroup and the Registry of Vital Records and Statistics to support quality improvement (QI) efforts around data collection on the BC Parent Worksheet.

PRAMS and birth certificate findings on smoking in pregnancy and alcohol consumption were presented to perinatal clinicians including physicians, nurses, midwives, doulas, and social workers during a PNQIN Perinatal Opioid Project webinar in March 2023 and at the PNQIN annual summit in April 2023.

MA Tobacco Cessation and Prevention Program (MTCP)

In FY22 MTCP worked with Tufts Interdisciplinary Evaluation Research (TIER) to analyze data from their mixed methods research aimed at tailoring smoking cessation efforts to meet the unique needs of pregnant and parenting people and synthesize the data into a final report. Findings were presented to substance use treatment providers that serve people who are pregnant and family support providers. Given limitations to engaging pregnant people in phase I of the project due to COVID, MTCP also developed a RFQ to procure services to include research with people who are pregnant and parenting as phase II. The research vendor will conduct focus groups with pregnant and parenting people to develop harm reduction and trauma-informed messaging that includes vaping, identify appropriate channels for disseminating messages, work with tobacco/nicotine TA providers to include research findings into updating provider trainings and services, and identify mechanisms to more effectively promote quitting resources by using racial equity and intersectionality frameworks.

MA MIECHV

MA MIECHV provides training on substance use and trauma-informed practice, and all home visitors routinely screen participants for substance use. During federal FY22, 8% of the households enrolled in evidence-based home visiting services reported a history of substance use or need for substance use treatment, a slight decrease from 10% in FY21. However, this result is likely an under-report of the true number of households with a history of

substance use given the community-level substance use data for MA MIECHV communities. During the same time, 10% of households reported that someone in the household used tobacco products in the home, down from 12% in federal FY21.

In FY22, 40% of primary caregivers enrolled in home visiting who reported using tobacco or cigarettes at enrollment were referred to tobacco cessation counseling or services within three months of enrollment. This represented a decrease from 50% in FY21. MA MIECHV developed a Tobacco Cessation Toolkit to support home visitors with resources on tobacco cessation and strategies for having conversations with participants about tobacco use.

Objective 2. By 2022, improve measurement of marijuana use/consumption among pregnant people by adding specific questions to the PRAMS survey.

PRAMS

In 2021, 3.8% of people reported any use of marijuana during pregnancy (4.2% for White non-Hispanic, 4.9% for Black non-Hispanic, 3.5% for Hispanic and 0.4% for Asian non-Hispanic). This is a modest increase from 2020, during which 2.3% of respondent reported marijuana use. People with lower SES were more likely to use marijuana during pregnancy; among those with Medicaid, 8.8% used marijuana during pregnancy, compared to 0.5% with private insurance, and among people \leq 100% federal poverty level vs. $>$ 100%, rates were 13.0% and 1.5%, respectively. These data were presented at PNQIN's Perinatal Opioid Project described above, under Objective 1. MA PRAMS continues to analyze data to understand marijuana use during pregnancy and will include the Marijuana supplement in PRAMS Phase 9 in June 2023.

Center for Birth Defects Research and Prevention (CBDRP)

The CBDRP collects data on marijuana use during pregnancy through the Birth Defects Study To Evaluate Pregnancy ExposureS (BD-STEPS) telephone interview, a population-based case-control study to understand the causes of birth defects and identify potential risks for having a baby with a birth defect. As part of the study, individuals participate in an hour-long telephone interview on a range of topics, including medications used during pregnancy, and smoking and alcohol use in pregnancy. The interview includes questions on marijuana use in the month prior to pregnancy through the third month of pregnancy, the route of marijuana use (e.g., smoke, vape, eat), the frequency of use, and the reason for use (e.g., relieve nausea/vomiting, relieve stress/anxiety). Participants include control birthing people who had a liveborn infant with no birth defect and case birthing people who had an infant with one of the 23 eligible birth defects. Control participants are randomly selected from the birth population and their responses represent marijuana exposures in the MA birth population.

The Stillbirth Study was incorporated into BD-STEPS to leverage the existing study design to understand risk factors and interventions to reduce the occurrence of stillbirths. As part of this study, people whose pregnancies ended in a stillbirth and were not affected by a birth defect are recruited into the study and participate in the main interview, as well as a follow-up interview focused on risk factors for stillbirth. People who participate in this study include 1) control participants who had a liveborn infant with no birth defect and 2) case participants who had a pregnancy that ended in a stillbirth (includes stillbirths with and without a birth defect). People in this study are asked the same questions on marijuana use as above. Given this is a population-based study, responses represent those in the general population.

The questions related to marijuana use and consumption were added in 2019 and the data are expected to become available with the next data release in late 2023.

Objective 3. By 2023, improve measurement of alcohol consumption among pregnant people by adding

specific questions to the PRAMS survey.

PRAMS

MA-PRAMS does not currently have data on alcohol consumption during pregnancy. The current Phase 8 survey asks about alcohol consumption in the past two years and during the three months before pregnancy. MDPH will include the alcohol consumption during all trimesters of pregnancy questions on the MA PRAMS Phase 9 survey in June 2023 starting with January 2023 births. PRAMS and birth certificate data on alcohol consumption were presented at PNQIN's Perinatal Opioid Project described above, under Objective 1.

Center for Birth Defects Research and Prevention

Interim findings from BD-STEPS show that 58% of respondents giving birth during 2014-2019 (n=224) reported consuming any alcohol from the month before their pregnancy began to the third month of pregnancy. This proportion was similar among those who reported trying to become pregnant (58%) and those who did not (57%). Among respondents reporting any alcohol consumption during this period, 41% reported alcohol consumption during the first month of pregnancy, 6% during the second month of pregnancy, and 5% during the third month of pregnancy. These figures represent alcohol use among respondents who gave birth to liveborn infants without a birth defect whose patterns of substance use are meant to reflect those in the general population.

Fetal Alcohol Spectrum Disorders (FASD) Task Force

The goal of the state FASD Task Force, co-chaired through FY22 by the Title V MCH Director, is to highlight this developmental disability and strategies to prevent FASD, support families with children diagnosed with an FASD and support children, youth, and young adults living with FASD. In response to the 2020 Title V needs assessment, the FASD Task Force has been reframed to explicitly focus on prevention efforts. The Task Force convenes families, state agencies, academic institutions, and community agencies to address FASD at the policy, state, and community levels.

FY22 saw multiple changes in staffing for the MA FASD State Coordinators and at the state level. The previous Statewide FASD Coordinator, funded by MDPH through a contract with the Institute for Health and Recovery, retired at the end of Q2. Two new staff, both parents of children with FASD, were hired to take over the role. They have been supporting the FASD Task Force by continuing to engage families through support groups, meetings, and linking to the center at William James College that provides diagnosis for families with children suspected of having FASD. The Task Force met twice in 2022.

Additional activities to prevent the use of substances among youth and pregnant people

PNQIN

PNQIN, the state PQC (Perinatal Quality Collaborative), is dedicated to improving health outcomes of birthing people, newborns, and families through a QI collaborative of providers and partners. PNQIN aims to achieve collaborative learning through sharing of data and best practices and use of real-time data to drive improvement, while targeting health inequities. PNQIN receives financial and leadership support from MDPH. Since 2017, PNQIN has focused on addressing perinatal opioid use during three time periods: during pregnancy, focusing on increasing medication assisted treatment for mothers with opioid use disorder during pregnancy; at delivery, focusing on improving breastfeeding rates among birthing parents of infants with NAS; and during the first year of life, focusing on increasing the enrollment of infants with NAS in Early Intervention (EI) services. PNQIN held its Perinatal Opioid Project Fall Summit in November 2021, with over 400 attendees.

In FY22, with additional funding from MDPH, PNQIN partnered with the Institute for Perinatal Quality Improvement to conduct the SPEAK UP Against Racism Action Pathway Training-Recognizing Bias, Inequity, and Racism in Perinatal Care training. The pathway is action-oriented and supports individuals and groups to develop and implement action plans to dismantle racism, provide respectful, equitable, and high quality care, and eliminate

perinatal health disparities. As of February 15, 2022, 404 perinatal health professionals in MA completed SPEAK UP Champion education, representing 34 birthing hospitals.

Moms Do Care (MDC)

MDC is an opioid addiction program in seven project sites that offers pregnant and postpartum people recovery treatment. In FY22, MDC continued the work of implementing peer led, seamlessly integrated, trauma informed continuums of wrap around care for pregnant, postpartum and parenting women with opioid use disorders. The MDC TA team provided extensive TA and training in building the program model and assisted the MDC health care systems to plan for ways to sustain the regional, integrated systems of support established by the program. MDC advanced the perinatal peer mentor workforce by assisting the health care systems to hire, develop and sustain this workforce through: identification and training of peer mentor candidates and supervisors; consulting on HR policies and procedures; assisting health care systems to understand and value the roles and competencies of peer mentors; implementation of statewide learning collaborative calls; and continued collaboration with BSAS to assist peer mentors through the recovery coach credentialing process. The MDC training and TA team' trainings included the staff and leaders of multiple hospital and health care center departments and community partners. Trainings focused on ways to develop trauma informed, family-focused and recovery-oriented systems of care. MDPH continued to work with MassHealth and public health stakeholders to bring this direct service and system change model to a statewide reimbursable scale. In FY22, 186 new participants were enrolled, in addition to existing participants continuing from the previous fiscal year(s).

Plans of Safe Care (POSC)

The Child Abuse and Prevention Treatment Act mandates a POSC for every substance affected newborn. The purpose of the POSC is to support the prevention of ongoing substance use among pregnant people and new parents. POSC can also serve as a primary prevention strategy for a future generation of children by connecting children with developmental services and helping parents access recovery, parenting, and concrete supports. In FY22, BFHN and BSAS conducted trainings for substance use treatment providers, including family residential treatment programs and methadone programs, on how to support families in need of a POSC. FIRST (Families in Recovery Support) Steps Together and Moms Do Care sites, as well as certain birth hospitals continued to take the lead on developing and promoting POSC. The Journey Recovery Project Birth Planning Kit for pregnant women affected by substance use was disseminated to Massachusetts residents through the Health Promotion Clearinghouse. This resource provides a walk-through guide of the perinatal process, with worksheets, organizational tools, and resources to help with the Plan of Safe Care process.

FIRST (Families in Recovery Support) Steps Together

FIRST Steps Together, funded by the State Opioid Response grant, is a home visiting initiative for substance affected families that provides parenting and recovery support by peer family recovery support specialists to prevent ongoing substance use and subsequent substance exposed newborns. Program services include integrated home-based peer recovery support, evidence-based individual and group parenting interventions, care coordination, POSC, mental health services, dyadic therapy, and systems advocacy. In FY22, FIRST Steps Together expanded its funding base and began to see families affected by all types of substances, rather than just opioids and stimulants. During FY22, 195 new adult participants were enrolled in the program, in addition to the families continuing to be served in FY22.

FIRST Steps Together contributed to building the capacity of the peer recovery perinatal/parenting workforce through extensive curriculum development training and monthly learning collaboratives. In FY22, monthly webinars became available for any interested providers in the state. Topics included: Working with child welfare, burnout, children with special needs, and financial management. The "Taking the First Steps Together: A Guide to Creating Collaborative

Peer-Led Services For Parents Affected by Substance Use” was written primarily in FY22 for release in FY24. In FY22, Mothering From the Inside Out (MIO), an evidence-based intervention developed by the late Dr. Nancy Suchman to increase reflective capacity among parents with substance use disorders, become available to participants at all sites with clinicians. To expand the use of this intervention through other services in the state, a Train the Trainer curriculum was developed and piloted. Seven MIO clinicians were trained in the MIO train-the-trainer model. Four went on to deliver the full didactic training to new MIO clinicians. Fifteen clinicians from FIRST Steps Together, SUD treatment programs, and medical clinics began supervision in January 2022, and 11 clinicians completed the full MIO training.

Systems Collaboration for Substance Affected Families

In FY22, FIRST Steps Together participated in a workgroup with the Executive Office of the Trial Courts to create the state’s first family dependency drug court in the juvenile court system with participation from BFHN. The efforts of the workgroup resulted in a successful OJJDP grant application, and the initiation of 7 Family Treatment Courts.

MA MIECHV

MA MIECHV continued the pilot of cross-training and enhanced supervision for a Parents as Teachers (PAT) home visitor with lived experience with substance use and recovery. The goals of the pilot are to: 1) fill a gap in cohesive parenting support for families in recovery, 2) build capacity of home visitor/recovery coaches to support pregnant and parenting families with substance use disorder and supervisors’ capacity to support home visitor/recovery coaches; and 3) engage in cross-systems collaboration to support reunification and promote family stability. In FY22, 30 families participated in the pilot.

MA MIECHV supports collaboration between home visiting and DCF offices at the state and local level to support services for families affected by substance use who are DCF-involved. Given racial inequities in the country’s child welfare system, policies that facilitate access to home visiting through transitions in custody arrangements promote more equitable access to home visiting. During custody disruptions, home visiting has the potential to support participants in their identities as parents, understand their children’s ongoing development, and allow for continuity of voluntary services through different stages of involvement with DCF. MA MIECHV programs identify strategies to enhance continuity of services for families who are working to regain custody of their children, including support and education for parents working toward reunification and support for families in which grandparents may have custody. To support families with varying custody arrangements, home visitors participate in supervised visitation at DCF offices and coordinate with DCF workers to support participants with their service plans.

MA MIECHV also addressed model-specific barriers to supporting families through custody disruptions. Historically, PAT has specified that a parent and child be present during visits, disincentivizing programs from working with families experiencing custody disruptions despite a gap in parenting support services for this population. PAT home visitors offer visits with parents and children during supervised visitation at DCF offices supplemented by visits with only the parent and report that these visits without children, although not historically counted, are central to reinforcing parenting topics and building parents’ confidence. In FY22, TIER, in partnership with MA MIECHV, continued the mixed methods implementation study to understand these strategies and inform potential PAT policy changes and implementation guidance.

Priority: Reduce rates of and eliminate inequities in maternal morbidity and mortality.

Since 1997, MDPH has convened the Maternal Mortality and Morbidity Review Committee (MMMRC) to review maternal deaths, study the incidence of pregnancy complications, and make recommendations to improve maternal outcomes and eliminate preventable maternal death. Understanding the causes of these deaths provides insight into the factors that contribute to maternal morbidity and mortality. The performance measure for this priority tracks efforts to improve the timeliness of the review process and the efficiency with which review findings can be translated into

strategies to address inequities in maternal health outcomes.

Objective 1 (SPM 1). By 2025, the MMMRC will increase the percent of pregnancy-associated deaths that are reviewed within two years of occurrence from 0% to 50%.

Objective 2. By 2025, develop a structure for community input to the review process that is authentic and addresses the power dynamics between medical providers and community stakeholders.

Maternal Mortality and Morbidity Review Committee

MDPH aims to link birth and death files and other datasets (such as MassHealth) to identify pregnancy-associated and related deaths in a timely manner, strengthen and increase the number of memoranda of understanding and data sharing agreements with state agencies to ensure timely access to data, improve the process and timing for data abstraction into the Maternal Mortality Review Information Application (MMRIA), and establish a process/mechanism for community engagement in the review process.

Investigations by the existing MMMRC are authorized by the MDPH Commissioner, pursuant to M.G.L. c. 111, s. 24A. This statute allows MDPH to request birth and death records but does not require relevant entities to provide access to requested records nor does it authorize the MMMRC to access other sources of relevant data. As a result, there are critical records not consistently available, including autopsy reports from the Office of the Chief Medical Examiner, prenatal care records, toxicology reports, outpatient and emergency department records, and Emergency Medical Services records.

Competing demands associated with the COVID-19 pandemic have also caused delays in progress on these objectives. In FY22, 14% of pregnancy-associated deaths were reviewed within two years. MDPH used Title V funding to hire a Maternal Child Health Clinical Coordinator to ensure timely abstraction of pregnancy-associated deaths into MMRIA to support a review within two years of the death.

In FY22, MDPH members of the MMMRC completed a Lean Six Sigma QI training that identified activities to improve the timeliness of identification and review and community contribution to the review process. MDPH Vital Records is now sending linked birth and death certificates to the MMMRC electronically rather than in paper form, which supports increased timeliness in identification of pregnancy-associated deaths. MDPH established an MOU with the CDC so that the CDC now hosts the MA MMRIA and provides IT support. MDPH and CDC established a process for electronic download of linked vital records directly into MMRIA and are conducting data quality checks to ensure accuracy and completeness.

In FY22, MDPH responded to a Notice of Funding Opportunity (NOFO) from the CDC entitled "Preventing Maternal Mortality: Supporting Maternal Mortality Review Committees." This NOFO aimed to improve data quality to identify and characterize pregnancy-related deaths and address health inequities by supporting the capacity to develop and implement data informed strategies to prevent pregnancy-related deaths and reduce disparities. With this funding, MDPH will recruit community members to join the MMMRC, including representation from doulas, birth justice organizations, and those who lost a family member or who themselves have experienced SMM. We aim to develop a structure that is authentic and addresses the power dynamics between medical providers and community members, including requiring racial equity and implicit bias training and establishing norms for how the MMMRC can be inclusive of all members' expertise and perspectives. MDPH received the award in state fiscal year 2023.

Objective 3. By 2025, leverage collaborative partnerships to inform practice and policy changes and disseminate findings including MMMRC recommendations.

Maternal Mortality and Morbidity Review Committee

The MMMRC has identified barriers to accessing care, racial inequities, and the absence of systemic coordination of care as factors contributing to maternal deaths in MA. A Special Legislative Commission on Racial Inequities in Maternal Health, established by a legislative act in January 2021, was tasked with making recommendations to address barriers that result in racial inequities in pregnancy-related deaths. Specifically, the Commission was charged with gathering statewide data on maternal mortality and severe maternal morbidity (SMM) and making recommendations to eliminate racial barriers to accessing equitable maternal care. Representatives from MDPH and the MMMRC were appointed to this Commission. They presented a summary of current activities and identified gaps in services, such as limited legislative authority and staff capacity to support further community engagement in the process. A [final report](#), filed with the legislature in May 2022, included findings of the data and draft legislation necessary to carry out the Commission's recommendations.

In FY22, MDPH responded to the HRSA Maternal Health Innovation and Data Capacity Notice of Funding Opportunity. The proposal included the establishment of a Maternal Health Task Force (MHTF) to create a strategic plan to improve maternal health in the Commonwealth, building on [the Title V Needs Assessment results](#), [the 2022 Racial Inequities in Maternal Health Legislative Commission Report](#), and recommendations from the MMMRC. The MHTF will serve as the community and policy action arms of the MMMRC, mirroring and complementing the role of PNQIN, which serves as the clinical action arm. The MHTF will complement the work of the MMMRC and strengthen efforts to translate committee findings into prevention initiatives. The strategic plan will include strategies to strengthen maternal mortality and SMM data collection and support the adoption and implementation of community, state, and regional innovations and best practices that respond to identified state-specific gaps and improve maternal health more broadly. Representatives on the MHTF will include representative from organizations including MDPH, MassHealth, Title V, MA Chapter of ACOG, MA Chapter of ACNM, MA Association of Health Plans, Boston Public Health Commission, Boston Healthy Start, the North American Indian Center of Boston, the Black Doula Coalition, Massachusetts Childhood Psychiatry Access programs (MCPAP) for Moms, perinatal social work, fatherhood groups, residents with lived experience, and other partners as appropriate. MDPH received the award in state fiscal year 2023.

PNQIN

PNQIN implemented the Alliance for Innovation on Maternal Health (AIM), the goal of which is to reduce maternal mortality and SMM and reduce racial disparities by working with hospital teams to align hospital-level QI efforts. In FY22, PNQIN generated SMM reports stratified by race and ethnicity for eight pilot sites. These reports were shared with the participants sites and submitted to AIM. In FY22, PNQIN hosted 19 webinars to review the process and data reports. To date PNQIN met with all birthing hospitals to review their SMM data and offered TA as needed.

PNQIN also leads MA's efforts around Levels of Maternal Care (LoMC). Staff from BFHN and the Betsy Lehman Center worked together to implement the Levels of Care Assessment Tool (LOCATe). LOCATe includes a series of questions designed to measure relevant facility and staffing capacities and asked the hospital to report its own self-assessed LoMC. All 40 birthing hospitals in the state completed the survey and CDC analyzed the responses and reported back LOCATe-assessed levels for each hospital. Fifty percent of hospitals self-reported a higher level than their LOCATe-assessed level. Of the 20 hospitals that over-reported their LoMC, most did so by only one level, but several hospitals over-reported by two levels. There were no discrepancies of more than two levels.

Objective 4. By 2025, reduce inequities in rates of COVID-19 infection among birthing and lactating people of color by improving their vaccination coverage during pregnancy from 21.6% for Hispanic individuals, 21.5% for non-Hispanic Black individuals and 14.0% for non-Hispanic American Indian/Alaska Native/Other individuals to above 50.0% for these groups.

Surveillance for Emerging Threats to Pregnant People and Infants Network (SET-NET)

In FY22, the MA Center for Birth Defects Research and Prevention (CBDRP) continued surveillance for SARS-CoV-2 infection in pregnancy through their participation in CDC's Surveillance for Emerging Threats to Pregnant People and Infants Network (SET-NET). The goals of MA SET-NET are to monitor the effects of COVID-19 on pregnant people and their infants, inform clinical guidance and practice, and ensure that MDPH is prepared to meet the needs of pregnant people and infants during public health emergencies.

MA SET-NET identified people with SARS-CoV-2 infection during pregnancy through deterministic linkages between infectious diseases laboratory data and birth and fetal death records and submitted data to CDC quarterly. This fiscal year, MA SET-NET hired and trained two new medical records abstractors to support infant follow-up, monitoring outcomes of infants born to people with SARS-CoV-2 infection during pregnancy by collecting data from the 2 week, 2-month, and 6-month well child visit records. MA SET-NET data contributed to four national-level publications for which MA SET-NET team members were included as co-authors.

MA SET-NET has also led analyses using state-level data including, "Characteristics of Pregnant People With and Without SARS-CoV-2 Infection During Pregnancy, Massachusetts, March 2020 – March 2021," a study highlighting the elevated risk for COVID-19 during pregnancy that racially and ethnically minoritized pregnant people face due to socially mediated factors, such as structural racism, which drive differential risk for COVID-19 in communities of color. Another analysis examined the risk of pre-term birth conferred by SARS-CoV-2 infection during pregnancy and was published in *Perinatal and Pediatric Epidemiology*.

When COVID-19 vaccines became widely available, MA SET-NET linked data on COVID-19 vaccinations to birth and fetal death records to identify COVID-19 vaccine uptake among pregnant and postpartum people. A descriptive, disaggregated analysis by race/ethnicity and other sociodemographic factors (e.g., level of education, insurance status) was performed to identify inequities in COVID-19 vaccine uptake. Data were summarized in a presentation with key takeaways for healthcare providers and published [online](#).

MA SET-NET continues to apply a racial equity framework to its analyses by highlighting inequities among racially and ethnically minoritized people in not only risk for SARS-CoV-2 infection during pregnancy, but also adverse birth outcomes such as pre-term birth and stillbirth and COVID-19 vaccine uptake during pregnancy. Sharing data through presentations, publications, and infographics called attention to these inequities and helped to inform equitable COVID-19 prevention and mitigation efforts for pregnant people.

COVID-19 Disparities Community Evaluator Project

MDPH engaged TIER to design and direct a 2-year evaluation and needs assessment project as part of MDPH's *National Initiative to Address COVID-19 Health Disparities Award* from the CDC. The goals of the grant are to reduce pandemic-related health disparities, improve rural community health outcomes, and improve data collection and reporting capacity for populations disproportionately impacted by COVID-19. Using a community-based participatory research approach, TIER recruited, hired, trained, and supported a cohort of community evaluators (CEs) to ensure MA residents with lived experience in the communities prioritized in the grant were an active part of the evaluation process and public health response.

In FY22, CEs supported the first cohort of projects. Two projects focused on understanding barriers and facilitators to COVID-19 vaccine uptake among pregnant and postpartum people and pediatric populations with lower rates of vaccine uptake. CEs for these projects were hired based on their lived experiences, deep community knowledge, and interest in addressing health inequities through evaluation and needs assessment projects. Findings from these projects will be used to inform efforts to improve COVID-19 vaccine uptake among MCH populations.

PRAMS

MA PRAMS administered a COVID-19 supplement to collect data on how COVID-19 has affected pregnant and postpartum people and their infants for births from June 2020 through December 2021. PRAMS also administered a COVID-19 vaccine supplement, including questions about receipt of COVID-19 vaccination before, during and shortly after pregnancy, and reasons for not obtaining COVID-19 vaccination, for births January-December 2021. Data analysis and dissemination are on-going.

Fatherhood/Second Parenthood Survey

MDPH is planning to pilot a Fatherhood/Second parent experiences survey during Summer 2023. This survey will collect data about fathers' experiences during pregnancy and the birth of their child, and their experiences with COVID-19 including testing, vaccination, health status, social determinants of health, mental health, and racism during the pandemic. See more about the Fatherhood survey in the *Crosscutting* domain under the family engagement priority.

PNQIN

PNQIN worked with MDPH to improve COVID-19 vaccination among pregnant people. In FY22 PNQIN attended 43 community vaccination events in 13 of the 20 VEI communities that were hardest hit by COVID-19. PNQIN co-hosted and led various Town Halls with expert speakers to promote the importance of vaccination.

In FY 22, PNQIN developed a curriculum that consisted of a 75-minute training titled "Communication Skills Training for Clinicians Discussing COVID-19 Vaccination" in collaboration with UMass Center for Integrated Primary Care and community members. This training was designed to provide information to clinicians about discussing COVID-19 vaccination with pregnant and postpartum people, parents and caregivers of young children, and families. The training focused on addressing vaccine hesitancy and eliminating racial disparities in vaccination rates. During November 2021-July 2022, PNQIN and UMass hosted 4 virtual trainings based on the curriculum. Continuing education credits were offered for all MA providers who participated. A total of 202 providers completed the training and submitted documentation for CE credit. This training remains available on the PNQIN website and CE credits will be available through April 2023. Post-training evaluations results were positive: 76% of participants reported the training content was very/extremely useful and 22% reported it was moderately useful. A best practice protocol and resource guide was developed with input from OB and Infectious Disease subject matter experts. This received final approval and was disseminated in April 2022 and posted to the PNQIN website.

[1] <https://www.hhs.gov/sites/default/files/2020-cessation-sgr-full-report.pdf>

Women/Maternal Health - Application Year

Priority: Strengthen the capacity of the health system to promote mental health and emotional well-being.

Objective 1. Increase to 92% from baseline (89.2%, PRAMS 2018) the percent of birthing people who have moderate or high social support following the birth of their baby.

In 2021, 88% of PRAMS respondents indicated having moderate or high social support, compared to 86% in 2020 and 87% in 2019. MDPH will examine the changes in moderate or high social support comparing 2016-2019 (88%) and 2020-2021 (87%) with a difference-in-differences analysis for pre-COVID-19 and COVID-19 periods. PRAMS staff will examine the characteristics of people with a lower score of social/emotional connectedness, and the association of frequent postpartum depressive symptoms with this social connectedness question. This analysis will help to identify vulnerable populations and guide efforts to promote mental health and emotional well-being, especially in times of public health emergencies. MA PRAMS will be continuing the Social Determinants of Health (SDoH) supplemental survey through 2024 and will analyze the SDoH data in conjunction with social support questions to assess relationships with postpartum depression and maternal and infant outcomes.

In April 2023, DMCHRA completed an initial linkage of PRAMS to the PELL (Pregnancy to Early Life Longitudinal) data system. This linkage will allow for analyses that include the birthing parent's beliefs, attitudes, and experiences before, during and shortly after pregnancy from PRAMS with the longitudinal case mix data for hospital-based medical care from PELL. The linked data will enable exploration of the effects of the birthing parent's experiences of social support, racism, partner's support, and life stressors on severe maternal mortality (SMM) events during delivery hospitalization and in the postpartum. An analytic plan is being developed and will be underway in FY24.

Perinatal Mental Health Training and Technical Assistance

MDPH will continue to provide training and technical assistance (TA) on perinatal mental health (including maternal mental health and co-morbidities such as substance use and interpersonal violence) to state agencies (such as the Departments of Children and Families and Early Education and Care), providers (including home visiting programs and community health centers), and health plans.

Doula Initiative

BFHN will continue to host monthly Doula Partner Advisory Group meetings with the goal of drafting recommendations for doula certification. The Advisory Group includes doulas, a certified nurse midwife, and representatives from the American College of Obstetricians and Gynecologists, MassHealth, MA Hospital Association, the MA Health Plan Association, and the Commonwealth Care Alliance. MDPH provides monthly consultant fees to 8 doulas for their participation.

MA MIECHV

Home visitors will continue to screen participants for depression prenatally and postpartum and provide education, brief intervention, and referrals to mental health supports to people identified with depression. Additional FY24 activities include data collection and analysis on completed participant depression screens to assess progress on a MIECHV performance measure assessing the percent of primary caregivers enrolled in home visiting who are screened for depression using a validated tool. Data will also be collected and analyzed to report on an outcome measure assessing the percent of primary caregivers referred to services for a positive screen for depression who receive one or more service contacts. MA MIECHV will analyze these data by race, ethnicity, gender, and language to identify and address inequities in depression screening and referrals to services. Programs will continue to support families in accessing mental health services as needed and offer ongoing social connections in the form of group services. MA MIECHV will continue to support innovative staff positions within home visiting programs – such

as case workers or outreach coordinators – who can liaise with mental health and other services and facilitate successful connections to supports.

Welcome Family

Welcome Family nurses will continue screening for depression and social connectedness and offering referrals for diagnosis and support as needed. The program will use a family-driven and culturally appropriate approach when considering the types of referrals being made, recognizing that many families find value in informal supports, such as doulas and peer-to-peer support groups, compared to mental health counseling or medication.

FOR (Follow-up Outreach Referral) Families

Since September 2022, the Commonwealth has managed a spike in the number of families experiencing homelessness who reside in Emergency Assistance shelter. Due to the increasing number of families in shelter, FOR Families requested and was approved additional funding from the MA Department of Housing and Community Development to support five additional home visitors and one additional supervisor. Increased staffing capacity allow more families in shelter to have specific and individualized support to address barriers to achieving permanent and stable housing and health and well-being for their families. In hiring new staff, the program would look to recruit more Spanish and Haitian language speakers to reduce the need for interpreters and delays.

FOR Families will continue engaging families transitioning from homelessness to stable housing who are at high risk for stress, depression, violence, and substance use. Home visitors will monitor clients for symptoms of depression and provide education, supportive counseling, and referrals to mental health services. Home visitors will assess families' needs, define goals, develop plans, and connect with community support services. They will use staff meetings and case conferences with shelter providers as a method of technical support and education to their shelter colleagues about symptoms of depression and tips on family engagement.

Priority: Prevent the use of substances, including alcohol, tobacco, marijuana and opioids, among youth and pregnant people.

Objective 1 (NPM 14). By 2025, reduce the percentage of people who report smoking during pregnancy from the baseline of 4.3% in 2018 RVRs) to 2.0%.

PRAMS

MA PRAMS will launch Phase 9 survey in June 2023, starting with January 2023 births. Phase 9 questions include cigarettes/e-cigarettes (vaping) in all trimesters of pregnancy; the current Phase 8 survey asks about smoking during the three months before pregnancy and the third trimester of pregnancy. MDPH will examine PRAMS data from 2023 in FY25. MDPH will use PRAMS data to report on nicotine use during pregnancy and validate reporting of cigarette smoking on the birth certificate.

Perinatal-Neonatal Quality Improvement Network (PNQIN)

MDPH will continue to share PRAMS data at PNQIN statewide summits to foster collaboration and support quality improvement cycles to reduce nicotine, marijuana, and alcohol use during pregnancy (also tied to Objective 2 below). PNQIN will support hospital teams that have strong screening and referral processes in place and work to engage additional hospitals, with the goal of increasing screening and referral to existing statewide support services such as the MDPH Tobacco Cessation and Prevention Program.

MA Tobacco Cessation and Prevention Program (MTCP)

MTCP will use findings from surveys, key informant interviews of family support providers and substance use

treatment facility providers, and focus groups with birthing people to inform and implement trainings to build knowledge and confidence among providers when addressing tobacco/nicotine use among pregnant and parenting people. MTCP will also use the findings to promote the Quitline services, especially the pregnant and postpartum protocol, as a resource for providers to use with their clients.

MTCP will continue to engage with Market Decisions Research to finalize a report of findings, a communication plan, a dissemination plan, and a plan to work with tobacco/nicotine treatment TA providers to incorporate lived experience perspectives into trainings for providers. MTCP will implement messaging and trainings as well as develop an evaluation plan to assess feedback and progress towards increasing quality of existing programs and more effective promotion of tobacco/nicotine recovery resources using trauma-informed racial equity and intersectionality frameworks.

MA MIECHV

MA MIECHV will continue to provide training on substance use, NAS, substance use screening, and trauma-informed practice, and home visitors will routinely screen participants for substance use. Data on tobacco cessation referrals will be collected and analyzed to assess progress on a MIECHV performance measure assessing percent of primary caregivers enrolled in home visiting who reported using tobacco or cigarettes at enrollment and were referred to tobacco cessation counseling or services within three months of enrollment. MA MIECHV will analyze these data by race, ethnicity, gender, and language to identify and address inequities in depression screening and referrals to services. In addition, MA MIECHV will explore the use of a validated substance use screen to support home visitors in assessing risk for substance use and identification of appropriate referrals to treatment services.

Objective 2. By 2022, improve measurement of marijuana use among pregnant people by adding specific questions to the PRAMS survey.

Objective 3. By 2023, improve measurement of alcohol consumption among pregnant people by adding specific questions to the PRAMS survey.

PRAMS

MA PRAMS used the opioid supplement to collect marijuana use during pregnancy for births through December 2022 and will launch the Marijuana supplement with the initiation of PRAMS Phase 9 in June 2023, starting with January 2023 births. These findings will be used in a data brief on perinatal substance use which will be drafted in FY24 and posted on the MDPH and PNQIN websites.

The Phase 9 survey will be launched in June 2023, and MA PRAMS will add questions about alcohol consumption in all three trimesters of pregnancy; the current Phase 8 survey asks about alcohol consumption in the past two years and during the three months before pregnancy. MDPH will examine data from 2023 in FY25.

Center for Birth Defects Research and Prevention

In FY23, CBDRP will continue the Birth Defects Study to Evaluate Pregnancy exposures (BD-STEPS) and the Stillbirth Study. Data from these studies are released on a regular basis and CBDRP anticipates having MA data available by late 2023. This population-level data will allow MDPH to better understand the prevalence of marijuana use in pregnancy, as well as the frequency of use, route of use (e.g., smoke, vape, eat, consume drinks, dab) and reason for use (e.g., recreationally or to relieve nausea, anxiety, pain, symptoms of a chronic condition).

Fetal Alcohol Spectrum Disorder (FASD) Task Force

The FASD Task Force will increase training opportunities geared towards services for families caring for individuals with FASD (such as school systems, direct therapy and social work agencies, DCF Foster/Adoptive Care, and

Children's Behavioral Health Initiative providers), and research further opportunities to directly support families caring for individuals with FASD.

Additional activities to prevent the use of substances among youth and pregnant people

Additional efforts to address this priority that do not directly relate to the performance measure or other objectives are described below.

PNQIN

Title V will continue to support PNQIN initiatives and statewide summits, which convene almost all birth hospitals in the state to share best practices for the care of substance exposed newborns and their families. PNQIN will continue to focus on addressing perinatal opioid use during pregnancy, at delivery, and during the first year of life.

Moms Do Care (MDC)

MDC will continue to implement peer led, seamlessly integrated, trauma informed continuums of wraparound care for pregnant, postpartum, and parenting people with opioid use disorders. The MDC TA team will provide support and training in implementing the program and assist the MDC health care systems to plan for ways to sustain the wraparound services as well as collaborative, multidisciplinary networks of support established by the program. MDC will also continue to work with the health care systems and their regional partners to build and maintain the organizational system change initiatives and collaborate with Medicaid and public health stakeholders to bring this direct service and system change model to a statewide reimbursable scale.

Plans of Safe Care/Family Care Plans/Infants with Prenatal Substance Exposure

MDPH in partnership with the Department of Children and Families, will receive In-Depth Technical Assistance (IDTA) from the National Center on Substance Abuse and Child Welfare to further efforts to support families impacted by parental substance use and infants affected by prenatal exposure to substances. Goals for the IDTA include: 1) Develop a statewide governance structure for supporting families impacted by parental substance use and infants affected by prenatal exposure to substances. 2) Develop a shared language, vision, and mission to govern our cross-systems work. 3) Ensure MA maintains compliance with current Child Abuse Prevention and Treatment Act (CAPTA) regulations. 4) Implement a public health approach to the identification, engagement, and initiation of the Plan of Safe Care with families. An online video-based training will also be developed and made available through a MDPH learning management system.

FIRST Steps Together

In addition to direct service provision, the program will continue to create mechanisms to implement Plans of Safe Care, expand and refine the perinatal and parenting peer recovery and clinical workforce, improve systems of care for families impacted by parental substance use, and develop and disseminate best practices.

FIRST Steps Together will continue to build capacity to implement Mothering from the Inside Out, an evidence-based intervention to increase reflective capacity among parents with substance use disorders, through the training of two new cohorts of clinicians, and, if funding is secured, the development of a training curriculum for peer staff. MDPH will disseminate an extensive FIRST Steps Together implementation toolkit and create online training modules related to a range of relevant topics.

FIRST Steps Together will partner with the Executive Office of the Trial Courts to develop a pilot to provide services to participants in one Family Treatment Court.

There will be a continued expansion of the Group Peer Support model throughout the substance use treatment

system. This is a trauma-responsive support group model based on evidence-informed modalities that was developed initially to combat perinatal mood disorders.

MA MIECHV

MA MIECHV will continue to pilot an overlay of a Peer Recovery Coach within the Parents as Teachers (PAT) program. MA MIECHV will continue to use the MIECHV American Rescue Plan award to support a full-time peer recovery coach and expand the Berkshire Recovery Coach Pilot. Through this pilot, home visitors attend the Recovery Coaching and Ethical Considerations trainings required for Recovery Coach Certification. Supervisors attend the Recovery Coach Supervisor training to build their capacity to supervise recovery coaches. The home visitor/recovery coach positions will also have access to specialized training provided through FIRST Steps Together and to the peer learning collaborative, thus integrating State Opioid Response and MA MIECHV resources.

Priority: Reduce rates of and eliminate inequities in maternal morbidity and mortality.

Objective 1 (SPM 1). By 2025, the MMMRC will increase the percent of pregnancy-associated deaths that are reviewed within two years of occurrence from 0% to 50%.

Objective 2. By 2025, develop a structure for community input to the review process that is authentic and addresses the power dynamics between medical providers and community stakeholders.

Maternal Mortality and Morbidity Review Committee (MMMRC)

In FY24 MDPH will continue efforts to increase the percentage of pregnancy-associated deaths reviewed within two years of the death. MDPH has used a quality improvement approach to identify ways to streamline and improve the efficiency of the MMMRC process. MDPH is enhancing efforts to reduce abstraction time and improve efficiency of data collection. This includes the transition from manual entry of vital records into MMRIA to an electronic upload on a quarterly basis. With CDC grant funding, MDPH was able to hire four new part time medical record abstractors, bringing the total number of abstractors to five. In addition, the frequency of MMMRC meetings is being increased to reduce the backlog and timely review of new cases as they get reported and entered in MMRIA.

MDPH is also working to establish a structure for authentic community engagement in the MMMRC review process. MDPH has contracted with the Tufts Interdisciplinary Evaluation Team (TIER) to provide training and on-going TA to the MDPH Community Engagement Specialist/Maternal Health Coordinator working to interface with a wide array of community members and promote bi-directional communication on a consistent basis within the Committee review process. Training is scheduled to end in August and recruitment of at least five community members will begin in September 2023. In the meantime, the Community Engagement Specialist and MDPH MMR leadership is working with current committee members to transition to the use of plain language (instead of clinical terminology) during each review and to adopt a debrief session after each review that promotes continued understanding and commitment to the tenets of authentic community engagement.

Objective 3. By 2025, leverage collaborative partnerships to inform practice and policy changes and disseminate findings including MMMRC recommendations.

Maternal Mortality and Morbidity Review Committee

MDPH epidemiologists will analyze the data from MMRIA to document the number and rate of pregnancy-related and pregnancy-associated deaths in MA. Data will be examined to determine the burden, causes, and distribution by age, race, ethnicity, and geographic area of maternal deaths. Additionally, qualitative analysis of data will be conducted using information from medical reports, social worker notes, prenatal care records, police reports, public records, media, and key informant interviews (once legislative authority is granted) and focus groups within communities disproportionately experiencing high rates of poor maternal health. To contextualize these data, we will

also compile community level indicators and reports from multiple sources to create community profiles. We will use the MA Racial Equity Data Road Map as a guide to better contextualize the data in the setting of the broader historical and current policy and system factors that affect the health.

PNQIN

PNQIN will continue to support the implementation of the Alliance for Innovation on Maternal Health (AIM) collaborative QI project and serve as a liaison between the AIM national office and participating hospitals, providing guidance, education, and TA to hospitals. The Equity bundle was launched in September 2022 and will continue through September 2024. PNQIN will continue to conduct SMM webinars with hospitals to review their data reports, answer questions, solve coding issues, and encourage participation in the AIM Initiative.

PNQIN will also explore the implementation of on-site assessments of hospitals for designation of levels of care, explore linkage of Levels of Care Assessment Tool (LOCATe) results with process and outcome indicators, and operationalize the levels of care designations, ensuring equity and access to the appropriate level of care centers. PNQIN anticipates weaving the Levels of Maternal Care (LoMC) concept into ongoing PNQIN initiatives to not only ensure its longevity but to safeguard the quality improvement-oriented approach. In addition, PNQIN and partners from the Betsy Lehman Center will participate in a site visit that will be facilitated by ASTHO with the objectives to (1) compare and contrast two states that have implemented LoMC through a voluntary versus regulatory framework; and (2) review best practices for hospital quality improvement site visits regarding LoMC.

Objective 4. By 2025, reduce inequities in rates of COVID-19 infection among birthing and lactating people of color by improving their vaccination coverage during pregnancy from 21.6% for Hispanic individuals, 21.5% for non-Hispanic Black individuals and 14.0% for non-Hispanic American Indian/Alaska Native/Other individuals to above 50.0% for these groups.

Surveillance for Emerging Threats to Pregnant People and Infants Network (SET-NET)

CBDRP will continue to routinely share COVID-19 surveillance data on pregnant people and their infants as part of SET-NET. While the cohort is restricted to pregnant people with infections during 2020-2021 and, thus, has been completely ascertained, data from medical record abstraction continue to be updated and shared. In addition, CBDRP will continue to assist in the hepatitis C surveillance arm of SET-NET, by linking hepatitis C data to vital records and conducting medical record abstractions for identified cases. CBDRP will build upon their established collaboration with the Bureau of Infectious Diseases and Laboratory Sciences by having quarterly meetings to discuss the intersection of MCH populations and infectious diseases. Through this partnership, both will work to bolster preparedness efforts to ensure that the public health response to emerging infections meets the needs of MCH populations.

In addition, MA SET-NET will continue contributing to national-level studies and analyze their state-level data, carrying out their multistate study examining the risk of stillbirth associated with SARS-CoV-2 infection during pregnancy and an analysis examining the association between newborn hearing loss and SARS-CoV-2 infection during pregnancy. All analyses, both currently underway and yet to be designed, will center racial equity, stratifying analyses by race/ethnicity and exploring structural factors that contribute to any observed inequities.

MA SET-NET will continue to link birth certificate data with COVID-19 vaccination data from the Massachusetts Immunization Information System (MIIS) to examine COVID-19 vaccination uptake among pregnant and recently postpartum people. Findings from the descriptive, disaggregated analysis of COVID-19 vaccine uptake among pregnant people by race/ethnicity have been summarized in a MMWR Weekly Report currently under review and scheduled for publication in September 2024.

Community Evaluators

The first cohort of Community Evaluator projects will be wrapped up and findings will be translated into a report with recommendations for MDPH. The second cohort of projects will be executed and, together, both cohorts of projects will help MDPH better understand the effects of COVID-19 on MA residents disproportionately impacted by the pandemic. (See MCH Data Capacity Efforts section for information on Cohort 2 projects)

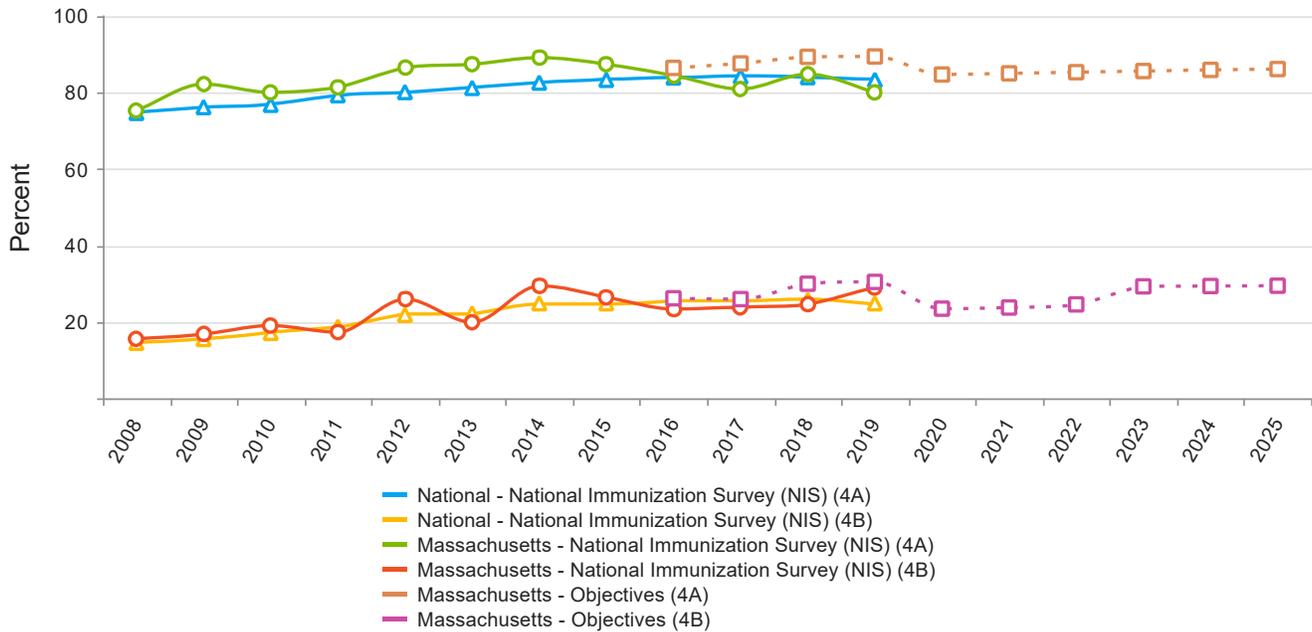
PRAMS

Both COVID-19 and COVID-19 vaccine supplemental data collection and analysis is ongoing, and a fact sheet is planned. Findings will be shared with community stakeholders, and clinicians through PNQIN to inform vaccination promotion for COVID-19 and future emerging threats.

Perinatal/Infant Health

National Performance Measures

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



NPM 4A - Percent of infants who are ever breastfed

| Federally Available Data | | | | | |
|---|--------|--------|--------|--------|--------|
| Data Source: National Immunization Survey (NIS) | | | | | |
| | 2018 | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | 89.2 | 89.3 | 84.6 | 84.9 | 85.2 |
| Annual Indicator | 87.4 | 84.3 | 80.7 | 84.8 | 80.0 |
| Numerator | 62,315 | 52,061 | 52,151 | 56,660 | 49,214 |
| Denominator | 71,304 | 61,736 | 64,642 | 66,828 | 61,531 |
| Data Source | NIS | NIS | NIS | NIS | NIS |
| Data Source Year | 2015 | 2016 | 2017 | 2018 | 2019 |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 85.5 | 85.8 | 86.0 |

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

| Federally Available Data | | | | | |
|---|--------|--------|--------|--------|--------|
| Data Source: National Immunization Survey (NIS) | | | | | |
| | 2018 | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | 30 | 30.5 | 23.5 | 23.8 | 24.6 |
| Annual Indicator | 26.6 | 23.2 | 23.9 | 24.5 | 29.2 |
| Numerator | 18,276 | 13,946 | 14,451 | 15,899 | 17,375 |
| Denominator | 68,687 | 60,086 | 60,423 | 64,937 | 59,420 |
| Data Source | NIS | NIS | NIS | NIS | NIS |
| Data Source Year | 2015 | 2016 | 2017 | 2018 | 2019 |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 29.3 | 29.4 | 29.5 |

Evidence-Based or –Informed Strategy Measures

ESM 4.1 - Percent of WIC participants receiving services from a Breastfeeding Peer Counselor who exclusively breastfed for at least three months

| Measure Status: | | Active | | |
|------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 16 | 17.5 |
| Annual Indicator | 15.1 | 16 | 17.1 | 17.9 |
| Numerator | 2,650 | 1,776 | 2,284 | 3,153 |
| Denominator | 17,583 | 11,125 | 13,374 | 17,659 |
| Data Source | Massachusetts WIC participant data |
| Data Source Year | 2019 | 2020 | 2021 | 2022 |
| Provisional or Final ? | Provisional | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 18.0 | 19.0 | 20.0 |

State Action Plan Table

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

Priority Need

Foster healthy nutrition and physical activity through equitable system and policy improvements.

NPM

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

Objectives

By 2025, increase the percent of infants who are ever breastfed from 84.3% (2016 NIS) to 86% and the percent of infants who are breastfed exclusively through 6 months from 23.2% (2016 NIS) to 29.5%.

Strategies

Conduct a needs assessment to inform the development of a breastfeeding strategic plan.

Collaborate with the MA Breastfeeding Coalition and the MA Baby Friendly Hospital Collaborative to support hospital policies that promote breastfeeding for all people giving birth, including those with disabilities.

Increase access to lactation counseling services for WIC participants, including breastfeeding peer counselors who reflect the cultural and linguistic diversity of the communities in which they work.

ESMs

Status

ESM 4.1 - Percent of WIC participants receiving services from a Breastfeeding Peer Counselor who exclusively breastfed for at least three months Active

NOMs

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

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

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

Perinatal/Infant Health - Annual Report

Massachusetts has one priority for Infant Health for 2020-2025:

- Foster healthy nutrition and physical activity through equitable system and policy improvements

Priority: Foster healthy nutrition and physical activity through equitable system and policy improvements

Objective 1 (NPM 4). By 2025, increase the percent of infants who are ever breastfed from 84.3% (2016 NIS) to 86% and the percent of infants who are breastfed exclusively through 6 months from 23.2% (2016 NIS) to 25%.

Breastfeeding confers long-lasting benefits to both infant and mother. Breastfeeding is associated with improved maternal-infant bonding and maternal mental health and reductions in obesity and type 2 diabetes in children and gestational diabetes in mothers in subsequent pregnancies. The performance measure for this priority, NPM 4, reflects efforts to improve environments, systems and policies that promote breastfeeding initiation and exclusivity to foster healthy nutrition beginning in infancy.

In FY22, MA saw a decrease in performance in breastfeeding related to its NPM projections and national prevalence. According to the most recent CDC National Immunization Survey results (NIS) 80% of MA infants born in 2019 were ever breastfed, which is lower but not statistically significantly different from the national prevalence of 83.2%. Although the breastfeeding initiation rate was reported as being lower than the national average, infants in MA were reported as breastfeeding for longer rates of duration and higher rates of exclusivity. Breastfeeding at 6 months and 12 months was reported as 62.9% and 44.2% compared to 55.8% and 35.9% nationally. Exclusive breastfeeding was reported as 52.8% at 3 months and 29.2% at 6 months compared to 43.9% and 24.9% nationally. Although we use this data to help us compare with other states, it is important to note that the NIS is a retrospective survey (respondents with children aged 19 to 35 months are asked the breastfeeding questions), and the survey sample size was limited to 354 respondents. The response rates from 2011–2021 ranged from 21.1% to 33.5%.

The 2019 Massachusetts Birth Certificate Data reported 86.7% of infants breastfed during the hospital stay. Rates by race were as follows: Asian, Non-Hispanic, 90.9%, Black, Non-Hispanic 88.9%, Hispanic 86.2%, White, Non-Hispanic 86%, and American Indian, Non-Hispanic 78.4%. Although breastfeeding initiation was high among most races, the PRAMS 2021 data reveals disparities in duration by race/ethnicity and socioeconomic status. By eight weeks postpartum, the proportion of mothers reporting any breastfeeding was 66.8% for Hispanic mothers, 73.3% for White mothers and 76.5% for Black non-Hispanic mothers, compared to 82.7% for Asian non-Hispanic mothers. Mothers with lower SES were also less likely to breastfeed at eight weeks; among mothers with Medicaid, 62.1% breastfed for eight weeks, compared to 78.9% with private insurance, and among mothers ≤100% federal poverty level vs. >100%, rates were 59.8% and 77.3% respectively.

WIC

The average rate of breastfeeding at six months post-delivery among MA WIC participants in FY22 was 35.8%, an increase from 31% in FY21. Still, these rates are substantially lower than the overall MA rate of 62.9%. The rates of breastfeeding duration and exclusivity among MA WIC participants continue to be significantly lower compared to overall breastfeeding rates. WIC participants often have less access to workplace breastfeeding accommodations and return to work earlier in the postpartum period, both of which hinder participants' ability to maintain breastfeeding, especially exclusive breastfeeding. In FY22, only 16.9% of WIC infants were exclusively breastfed for three months and only 13.4% exclusively breastfed for six months. Breastfeeding duration at three months is a key performance metric for both state and local WIC agencies. WIC is increasing its capacity to analyze its breastfeeding data by race and ethnicity to inform program activities.

In FY22, WIC offered virtual breastfeeding education and support to pregnant and breastfeeding participants. Breastfeeding peer counselors were available in all 31 programs, with more than 65 peer counselors statewide. Virtual group support and education sessions were offered to participants both prenatally and postpartum to promote longer breastfeeding duration; approximately 10,600 contacts with mothers were made per month. WIC continues to offer virtual Breastfeeding Basics training, and online study modules through Lactation Education Resources to WIC nutrition staff and breastfeeding peer counselors.

Participants eligible for Breastfeeding Peer Counselor (BFPC) Program services included pregnant participants who indicated they plan to breastfeed at least partially or were unsure of their breastfeeding intention, and women who were already breastfeeding. In 2022, 75% of eligible WIC participants who gave birth to singletons received BFPC services, a modest increase from 74.1% in 2021 and a substantial increase from 67.7% in 2019 and 63.4% in 2018. Ongoing consultation with WIC staff about the importance of peer counseling and improvements in documentation of peer counseling services are likely responsible for the increase in BFPC services reported.

Eligible Spanish-speaking WIC participants had the highest prevalence of having at least one BFPC contact (80.9%), followed by English-speaking participants (75.6%). WIC saw a modest increase in percentage of individuals with at least one BFPC contact in 2022 among those who spoke another language compared to 2021 (67.0% vs. 65.7% respectively), yet these numbers are still substantially lower than among English and Spanish speakers, suggesting that language may still pose a barrier for some WIC participants to receive BFPC services.

White WIC participants were most likely to receive at least one BFPC service (76.8%), followed by Black participants (70.9%), and then Asian participants (65.4%). This same pattern held for any exclusive breastfeeding: 35.0% among White WIC participants, followed by 31.5% for Black participants and 24.8% for Asian WIC participants. Prevalence of any breastfeeding at three months postpartum was similar between Black, Asian, and White WIC participants (35.3%, 34.8% and 36.5% respectively).

At six months postpartum, the prevalence gap was slightly wider; Asian participants had the highest proportion of any breastfeeding at (27.6%), followed by White participants at 25.1% and Black participants at 24.5%. Among WIC participants who breastfed exclusively, Asian participants had a lower prevalence of exclusively breastfeeding at three months (15.4%) compared to both Black and White participants (15.8% and 20.1%, respectively); at six months, Black participants had the lowest prevalence of exclusive breastfeeding (12.0%) compared to White and Asian participants (15.6% and 13.8%, respectively). After adjusting for race, language, maternal age and education, WIC participants with a recorded BFPC service had greater than 81% increased odds of initiating breastfeeding compared to participants eligible for BFPC but without a service recorded.

In measures of breastfeeding duration and exclusivity among WIC participants who delivered singletons in 2022, participants with a BFPC service had 55% increased odds of breastfeeding for six weeks, 37% increased odds of exclusive breastfeeding for six weeks, 43% increased odds of any breastfeeding for 13 weeks (3 months) and 23% increased odds for exclusive breastfeeding for 13 weeks, compared to WIC participants eligible for but without a BFPC service recorded. Improving use and documentation of BFPC services remains a WIC priority. Training of WIC staff on the importance of referral and documentation of BFPC services is ongoing. WIC has increased its capacity to analyze BFPC data and will examine the relationship type (e.g., text, prenatal group, in-person one-on-one) and frequency of a Breastfeeding Peer Counselor's contacts with the mother on rates of breastfeeding.

Breastfeeding Initiatives

As of 2022, there were 17 Baby-Friendly hospitals in the Commonwealth and approximately four more hospitals on the Baby-Friendly pathway. Over the past 10 years, MA has experienced a significant number of birth hospital closures. This was mostly due to declining birth rates, but also due to the need for critical care due to COVID-19. In

2009, MA had 49 birthing facilities, compared to 42 in 2021. Although the past few years have been challenging, the MA Baby Friendly Hospital Collaborative is committed and continues to meet virtually bi-monthly. This group continues to provide support and encouragement to birth hospital staff aiming to improve maternity care practices related to breastfeeding. MDPH is actively engaged with this Collaborative. Activities in 2022 included developing and producing a prenatal breastfeeding education video available in English and Spanish. The education aligns with Baby Friendly messaging and aims to help prepare families with what to expect with breastfeeding in the hospital and how to access support post-discharge. Both videos are located on the MDPH [Breastfeeding Initiative](#) website. In 2023, MDPH will translate the videos into Haitian Creole and Brazilian Portuguese to reach even more families statewide.

In 2022 MDPH began work to conduct a statewide breastfeeding needs assessment. This included working with two MCH Graduate Fellows from Boston University. Under the guidance of the Breastfeeding Coordinator, the Fellows conducted research and key informant interviews with internal MDPH staff, hospital staff, and community lactation support providers/staff. Activities also included development of a statewide provider survey, which was rolled out in early 2023. In 2022, MDPH also convened an internal breastfeeding workgroup, which meets every other month. This workgroup includes staff from different divisions and bureaus that work in the perinatal health space. These efforts will facilitate the development of a statewide breastfeeding strategic plan to improve outcomes across the Commonwealth.

Essentials for Childhood: Paid Family and Medical Leave

Title V supports Paid Family and Medical Leave (PFML), a policy effort that promotes breastfeeding. Nationally, approximately 60% of people stop breastfeeding earlier than they would like. One of the key reasons for this is the effort associated with pumping milk.^[1] People with longer maternity leaves can delay pumping, potentially increasing their breastfeeding duration. Recent research supports the conclusion that paid parental leave after the birth of a child increases breastfeeding initiation and duration, increases well-child visits and immunizations, and reduces re-hospitalization of both mother and infant.^[2]

In Massachusetts, the majority of the new MA Paid Family and Medical Leave program went into effect on January 1, 2021, with the full program (all benefit types) launching July 1, 2021. PFML grants new parents up to 12 weeks of paid leave for bonding after birth, adoption of a child, and/or foster care placement. In addition, medical leave can also be taken for recovery from childbirth or to support post-natal care, typically between 6-8 weeks depending on medical provider recommendation. MDPH Title V staff in partnership with BFHN Essentials for Childhood staff launched a partnership with the Department of Family Medical Leave to: 1) promote equitable access to paid leave through outreach and awareness activities, and 2) support data analysis, sharing, and linkage to enable both Departments to better understand benefit utilization and eventual impact of the benefits on health, well-being, and economic security of families, particularly families of disproportionately impacted by structural inequities. Please see the Crosscutting Essentials for Childhood: Paid Family and Medical Leave domain for further detail.

Perinatal Neonatal Quality Improvement Network (PNQIN)

PNQIN is committed to improving breastfeeding among high-risk infants including very low birth weight (VLBW) infants, infants with neonatal opioid withdrawal syndrome (NOWS) and substance exposed newborns (SEN). MDPH received funding from CDC to support PNQIN's work, which is overseen by the Director of the Division of Maternal and Child Health Research and Analysis in BFHN. The goal of the CDC grant is to apply a quality improvement approach to make measurable improvements in the care and outcomes of women and newborns affected by perinatal opioid use using a life course approach.

PNQIN and MDPH use birth hospitalization as an opportunity to partner with families with SEN, opioid-exposed

newborns (OEN) and NOWS to support the care of their newborn and to assure adequate connections with community-based supports and outpatient services. Breastfeeding can reduce the need for pharmacologic treatment in infants with OEN and NOWS and appears to reduce maternal stress, maternal smoking and non-prescribed substance use, improve mother-infant bonding and infant safe sleep practices. Increasing the percentage of SEN receiving mother's own milk at discharge requires successful family partnership at numerous stages of care, including appropriate prenatal maternal treatment, adequate family education, and family engagement throughout the newborn hospitalization. Among participating hospitals, mother's breast milk use at the time of hospital discharge in eligible OENs has been high but has shown a modest decrease from 64% in 2017 to 63.6% in 2022. Skin-to-skin care after birth and rooming-in during maternal hospitalization, which are supportive of breastfeeding initiation, can also be important components of non-pharmacologic care of OENs. Skin-to-skin care has increased from 68% in 2017 to 76.4% in 2022, while rooming-in increased from 61.6% to 77.3%.

PNQIN's activities have also included efforts to increase family-centered, non-pharmacologic care of OENs and thereby reduce need for pharmacologic therapy for NOWS. This focus on family-centered care for OENs is the foundation for Eat-Sleep-Console (ESC), a framework for NOWS care built around rooming-in and non-pharmacologic care, as well as an alternative approach to symptom assessment. Since PNQIN rolled out ESC in 2017, providers from 35 hospitals have attended an ESC workshop or webinar; 18 have launched ESC practices in their centers; and seven hospitals are submitting supplemental data on ESC to the PNQIN REDCap database. An ESC webinar was held in August 2020 and a virtual ESC training workshop was conducted in September 2020. An update on ESC was provided at the 2021 and 2022 PNQIN summits. Further sessions will be planned based upon hospital interest.

PNQIN launched regular ESC data reports in 2020 and has contributed to three peer-reviewed publications about the ESC roll-out. ESC has since been evaluated through a 26-center NIH clinical trial (ESC NOW) which was published in the New England Journal of Medicine in April 2023 demonstrating a 6.7-day reduction in newborn length of stay with the ESC care approach. PNQIN will continue to update available ESC training materials and our on-line ESC toolkit for hospitals interested in adapting this approach.

In 2020, PNQIN also organized six newborn-focused town halls to help MA hospitals respond to the COVID-19 pandemic during a time of evolving science and recommendations, helping lead to changes in outcomes. Biologically plausible routes of perinatal SARS-CoV-2 transmission including transplacental, contact with infected secretions during delivery and with respiratory droplets after delivery, and breast milk were reported, which led to breastfeeding hesitancy among postpartum people who have known or suspected COVID-19 infections or at risk for COVID-19. Between April and July 2020, data collected from 11 hospital teams showed an increase in rooming in from 11.8% to 100%, which is supportive of breastfeeding initiation.

Pregnancy Risk Assessment Monitoring System (PRAMS)

PRAMS data continue to inform [Breastfeeding Initiatives](#) (see above) through questions on hospital practices during the delivery stay. In 2020, likely due to the effects of COVID-19 on hospitalization stays, modestly more hospitals gave a gift pack with formula (45.1% in 2020) than in 2019 or 2021 (33.0% and 38.2% respectively). MDPH will be releasing the MA PRAMS 2019-2021 report in Spring, 2023 and continues to use PRAMS data to inform program development and quality improvement activities.

Early Intervention Parenting Partnerships Program (EIPP)

Breastfeeding can be especially challenging for people with complex environmental, mental health, and social concerns such as homelessness, interpersonal violence, food insecurity and postpartum depression. Exclusive breastfeeding is a key topic of discussion, education, support and referral in EIPP. Home visitors collect data on breastfeeding at birth and at six months. Of the 237 participants enrolled in EIPP in FY22, 62.4% breastfed their

infant at birth. Of these, 64.2% exclusively breastfed their infant. However, all EIPP participants stopped breastfeeding by 6 months postpartum. Among the 237 EIPP participants, 27 were referred to WIC services, 15 were referred to lactation support, and seven were referred to breastfeeding support groups. Key barriers to exclusive breastfeeding include personal reasons (51%), medical reasons (36.7%) and breast related problems (6.1%).

EIPP staff continue to collaborate with community WIC programs, OB/GYNs, lactation consultants, and pediatricians to promote breastfeeding during the first six months after birth through support groups, individual lactation support, and increased home visits during the first few weeks postpartum. EIPP sites bill MDPH directly for lactation consultation services.

MA MIECHV

There is considerable variation in rates of breastfeeding initiation, continuation, and exclusivity by race and ethnicity. Home visitors are well positioned to support and engage parents to make informed decisions about breastfeeding and ensure families are linked to appropriate breastfeeding support systems that meet individual needs. During FY22, 40% of infants (among mothers who enrolled prenatally) were breastfed any amount at six months of age, an increase from 28% in FY21. Home visitors continue to provide education, brief intervention, and referrals to improve breastfeeding initiation and duration rates. MA MIECHV continued to strengthen partnership with WIC at the state and local levels to support cross referrals and resource sharing among programs.

Through the MIECHV American Rescue Plan (ARP) award, MA MIECHV coordinated with the MA-based [Center for Breastfeeding](#) to offer Certified Lactation Counselors (CLC) training for up to 50 home visitors. The CLC training consists of a 52-hour virtual training course comprised of both open-book and interactive competencies. The virtual training was offered over six full days in April and May 2023. Following the 52-hour training and successful completion of the competencies, a final certification exam will be scheduled. The exam is proctored virtually via by computer video. By the end of the course, participants will have demonstrated competence in clinical lactation skills and knowledge that is essential to helping breastfeeding families. Pending results of the exam, the training would result in each MA MIECHV LIA having two or more home visitors certified as CLCs.

Welcome Family

Welcome Family nurses offer breastfeeding support to new parents through education, brief intervention, and referrals to ongoing services as needed, such as to breastfeeding support groups. Among the 1,497 families served by Welcome Family in FY22, 72% breastfed their infants all or some of the time at the time of assessment, which occurs between two and eight weeks postpartum. This represents a slight increase over the past four years, from 70% in FY17. For participants who reported that they breastfed their infants some or none of the time, the primary reasons for not exclusively breastfeeding included the mother's belief that she does not have enough milk (36%), the parent's belief that the baby is weaned (18%), and personal reasons (17%). Nurses provide tailored education and support in response to these concerns. Welcome Family nurses have reported that they have been able to successfully provide breastfeeding support during virtual visits throughout the COVID-19 pandemic. In addition, current staff who are not CLCs were strongly encouraged to attend the CLC training that will be sponsored by MA MIECHV in FY23, as described above.

There are some instances in which the nurses request to conduct a second visit with the family. Of the 25 second visit requests since 2018, 44% were to provide additional breastfeeding support or because of concerns about the infant's weight.

Additional activities to improve Perinatal/Infant health

Other activities to improve infant health not specific to the performance measure are discussed below.

Pregnancy Risk Assessment Monitoring System (PRAMS)

PRAMS data were also used to inform Safe Sleep activities with the Injury Prevention and Control Program (IPCP, see below). In 2021, 85.7% of birthing parents reported laying their infant to sleep in the recommended supine position, similar to the prevalence of supine sleep in 2019 at 87.5%. Racial disparities remain in supine sleep position, with the lowest prevalence reported among Hispanic and Black non-Hispanic birthing parents (69.7% and 72.5% respectively, in 2021) compared to White non-Hispanics and Asian non-Hispanics (93.9% and 87.2%, respectively, in 2021). These data were shared with IPCP.

Injury Prevention and Control Program (IPCP) (also includes activities of the Injury Surveillance Program)

In FY22, a state-wide interagency safe sleep task force, chaired by IPCP and composed of representatives from MDPH, the Department of Children and Families, the Executive Office of Health and Human Services, UMass Medical School, and the Office of the Child Advocate met every other month to identify opportunities to improve safe sleep services coordination.

The task force discussed how to respond to reports in the popular press about scientific developments around safe sleep. The task force also began planning an update to MDPH's safe sleep policy, which provides guidance around safe sleep practices for MA residents and practitioners. The update will align MDPH's policy with new guidance from the American Academy of Pediatrics released at the end of FY22.

IPCP also disseminated its crib audit tool, *A Safe Sleep Conversation Guide* in FY22. The tool is intended to guide infant home visitors in a conversation with parents, grandparents, and other caregivers about infant safe sleep practices. IPCP finalized the product in October 2021 and disseminated it in FY22 to internal and external stakeholders including MA MIECHV, Massachusetts Community Health Workers Program, WIC, Children's Safety Network and other child health and early intervention programs.

IPCP hosted three infant safe sleep trainings in FY22. Two of the trainings were designed and implemented for home visitors and social workers from the Department of Children and Families. These trainings provided 37 participants with strategies to support clients in practicing safe sleep and reducing harm in the infant sleep environment, tools and strategies for approaching safe sleep conversations, especially during phone or video visits, and access grief services and how to advise clients about protocols in the wake of an infant or child death. The third training was recorded for the Stepping Strong: Quincy Access Television. This training was designed to provide grandparents with the knowledge and recourses in reducing the risk of sudden unexpected infant death.

In FY22, the IPCP analyzed statewide counts of all injury deaths (2018-2020), hospital stays (FY2016-2020) and emergency department visits (FY2016-2020) among MA infants and children 0-17 years. The injury data counts were grouped in a matrix format across all injury causes (drowning, firearm, pedestrian, etc.) and intents (unintentional, assault, self-harm, etc.) using the CDC's standard recommended groupings. Thirteen matrices were completed and disseminated on the Injury Surveillance Program's web pages for public distribution to inform advocates, practitioners, and policy makers of the magnitude of injury events in infants and children in MA.

Child Fatality Review (CFR)

IPCP coordinates the Child Fatality Review (CFR) program, which aims to reduce the incidence of child fatalities and near fatalities. The program convenes 13 state agencies and several external organizations at the local and state levels. These partners take a multidisciplinary approach to analyzing individual deaths and trends in fatalities to inform changes in practice and policy that will address behavioral risk factors and social determinants of health. Deaths are reviewed by local county-level teams. These teams issue recommendations for implementation by members of the state-level team, which aggregates input from across the state to develop broader

recommendations for statewide changes in policy and practice. As the co-chair of the state team, the IPCP coordinates the team's activities, provides technical assistance to the local teams, and sends representatives to local team meetings.

One major TA and data collaboration that IPCP responded to in FY22 involved the Massachusetts Pediatric Injury Equity Review (MassPIER) project at Boston Medical Center (BMC). BMC staff developed the project as a means of enhancing existing child fatality reviews with tools to better understand the contribution of unintentional injury to child deaths and better identify inequities that may have contributed to these deaths. In FY22, IPCP provided epidemiological support to the project, helping project staff access and analyze injury-related data. IPCP also generated initial plans to develop a series of data profiles to support local CFR teams.

In FY22, the state team held meetings focused on social determinants of health, specifically the intersections between child health and employment, housing, education and the built environment. The State Team also reviewed recommendations from local teams. IPCP also supported local teams in their review of deaths by referring teams to subject matter experts as needed.

IPCP also continued to improve the structure of the database used to track reviewed cases and processes around data entry, allowing for more reliable sharing of recommendations, improved data quality, and better tracking of local team performance.

Center for Unexpected Infant and Child Death (The Center)

The MA Center for Unexpected Infant and Child Death provides bereavement support to individuals, families and communities of infants and young children (0-3) who die suddenly and unexpectedly. The Center's mission is based on providing individualized and compassionate responses to families and communities grieving an unanticipated death of a child under the age of three. The Center supports families whose children have died of SUID, motor vehicle accidents, suffocation, drowning, inflicted injury, trauma, or any other kind of unanticipated event. It also supports families who are grieving miscarriages, stillbirths, deaths stemming from extreme prematurity, or fetal demise.

In FY22, the Center provided direct support to 40 bereaved families. The Center offers respectful and culturally and linguistically appropriate care to and maintains a library of written resources in multiple languages that is available to families at no cost. Additionally, the Center:

- maintained an Annual Program Plan that covers emerging trends and data regarding child fatality, strategies for addressing family needs, and an action plan to address any barriers that may arise.
- facilitated an advisory board of 20 members including loss survivors, counseling professionals, funeral directors, healthcare providers, and first responders.
- participated on all local and statewide CFR Team meetings.
- hosted an annual full-day virtual conference (Responding to SUID: Strategies for the Professional), with 80 attendees from across the state.
- hosted an annual "Walk to Remember" to support families and communities who have been affected by infant, child, and prenatal death.
- published an annual "Book of Remembrance" for families to submit meaningful pictures, poems, stories, quotes, and other content in commemoration of their lost loved one.

Birth Defects Monitoring Program (BDMP)

BDMP has met the highest data quality standards of the National Birth Defects Prevention Network consistently since 2014. BDMP data are currently completed and available through 2020 and are integrated into other data

systems, including the Pregnancy to Early Life Longitudinal data system (PELL), the Environmental Public Health Tracking portal (EPHT), and the Population Health Information Tool (PHIT) to increase utility and public health value of those systems. Prenatal reporting, which began with 2011 pregnancies, has been integrated into the BDMP database and has substantially enhanced the multi-source approach of BDMP and improved the accuracy and completeness of case ascertainment. As a result, the MA birth defects prevalence rates are now similar to national estimates. Prenatal reporting also serves as a valuable tool for surveillance for emerging threats to pregnant people and infants, as evidenced during the Zika virus epidemic and the COVID-19 pandemic. In FY22, program staff led a multi-state project to look at the interval between pregnancies and how it may impact the risk of birth defect; using data from 9 states, they found that the prevalence of certain birth defects were increased for short and long intervals. Data from BDMP contributed to two additional multistate papers led by the National Birth Defects Prevention Network (NBDPN) titled “Interpregnancy interval and prevalence of selected birth defects: A multistate study” and “Prevalence of critical congenital heart defects and selected co-occurring congenital anomalies, 2014-2018: A U.S. population-based study”.

In FY22, BDMP was in its second year of piloting the inclusion of neonatal abstinence syndrome (NAS) as a reportable condition to BDMP, which allowed for active, state-wide, population-based surveillance for NAS. As part of NAS surveillance, BDMP medical record abstractors collect individual-level data from medical records on pregnant person-infant dyads with NAS including maternal demographics, maternal medication history, infant symptoms, maternal and infant toxicology screens, infant treatment, information on plan of safe care, and information on to whom the infant was discharged. As part of the pilot, BDMP undertook an evaluation of the NAS surveillance system to identify areas of strengths, as well as potential areas for improvement.

On a systems and operations level, BDMP undertook key quality improvement projects to refine the efficiency of the surveillance program. The program begun discussions of a transition to a new, web-based data system, Apex Oracle. BDMP has obtained electronic remote access to medical records at 92% of hospitals, this expansion was accelerated during the COVID-19 pandemic and the restrictions imposed on the abstractors’ visits to the hospitals. This allows for rapid review of medical records, which benefits all case abstraction. Other improvements were made to allow for improved annual case closing activities through the review and continuous improvements to key data elements and reports. The de-duplication of reports and records, central in a multi-source reporting program like BDMP, continued to be refined in FY22.

Surveillance for Emerging Threats to Pregnant People and Infants Network (SET-NET)

In FY22, the MA Center for Birth Defects Research and Prevention (CBDRP) established follow-up on infants as part of their pregnant person-infant linked longitudinal surveillance system (contributing to CDC’s Surveillance for Emerging Threats to Pregnant People and Infants Network (SET-NET)). Among infants born to pregnant people with SARS-CoV-2 infection during pregnancy, priority populations (infants who are SARS-CoV-2+ within two weeks of delivery, infants born to pregnant people who have passed away, and infants who pass away within the first year of life) and a random sample of non-priority infants are selected for medical record abstraction. CBDRP hired two medical record abstractors to assist with requesting pediatric records from pediatric practices across MA and abstracting the 1-week, 2-month, and 6-month well-child visit records to ascertain information about the infant’s physical exam findings, any referrals made, etc.

Essentials for Childhood: Earned Income Tax Credit

Earned Income Tax Credit (EITC), combined with the Child Tax Credit and other credits, brings significant resources into the community, reduces poverty, reduces exposures to adverse childhood experiences, and improves health outcomes, particularly for mothers and children. In FY22, the EfC Economic Opportunity team continued to support strategies and build partnerships to increase the number of eligible families who file for the EITC through Voluntary Income Tax Assistance (VITA) sites, including convening a partnership between Boston Children’s Hospital

Department of Accountable Care and Clinical Integration and Pediatric Physician Organization of Children's (PPOC), MASSCAP, ABCD Boston, and the Boston Tax Help Coalition to develop and implement a warm hand-off referral system between five pilot PPOC pediatric practices and their corresponding neighborhood VITA sites during the FY21 tax season (launch April 2022). Post tax season, the group continued to convene the to refine and improve the process in preparation for the FY22 tax season. See Crossing Cutting Essentials for Childhood: Earned Income Tax Credit section for more details.

^[1] Erika C. Odom, Ruowei Li, Kelley S. Scanlon, Cria G. Perrine, and Laurence Grummer-Strawn. "Reasons for earlier than desired cessation of breastfeeding." *Pediatrics* 131, no. 3 (2013): e726-e732.

^[2] Van Niel, Maureen Sayres MD et al. The Impact of Paid Maternity Leave on the Mental and Physical Health of Mothers and Children: A Review of the Literature and Policy Implications, *Harvard Review of Psychiatry*: 3/4 2020 - Volume 28 - Issue 2 - p 113-126

Perinatal/Infant Health - Application Year

Priority: Foster healthy nutrition and physical activity through equitable system and policy improvements.

Objective 1 (NPM 4). By 2025, increase the percent of infants who are ever breastfed from 84.3% (2016 NIS) to 86% and the percent of infants who are breastfed exclusively through 6 months from 23.2% (2016 NIS) to 29.5%.

WIC

Breastfeeding duration remains an important metric in the MA WIC Performance Management system. Key priorities include strengthening collaboration between WIC and birth hospitals and connecting people with breastfeeding counseling that is culturally sensitive and meets their language preferences. WIC is ideally positioned to provide breastfeeding resources and to coordinate services with local birth hospitals, as specified in *The Pathway to Baby-Friendly*, including step 3 (inform all pregnant women about the benefits and management of breastfeeding) and step 10 (foster breastfeeding support groups and provide referrals upon discharge). Promoting WIC breastfeeding services to birth hospitals across the state will reach a wide population of parents. To provide equitable access to breastfeeding support, WIC will tailor activities to hospitals in rural, suburban, and urban areas and will work to address structural barriers to accessing lactation care for people who are low income.

In FY24, WIC will continue efforts to increase expert breastfeeding clinical services by providing staff with materials and professional development resources required to sit for the International Board-Certified Lactation Consultant (IBCLC) exam. WIC will also continue to implement its Breastfeeding Peer Counselor Program (BFPC), an evidence-based strategy to promote breastfeeding initiation, exclusivity, and duration, and use peer counseling contact data to allow for more meaningful analyses of peer counselor coverage and impact. In addition, the program will continue to ensure that each local WIC Program has a designated breastfeeding expert (WIC IBCLC) or access to one of three Regional IBCLCs. The Regional IBCLCs provide extra support to BFPCs, who come across complex breastfeeding cases. BFPCs are trained to yield to IBCLCs when situations arise outside their scope of practice; IBCLCs can provide support if a mother or infant is having difficulties beyond what the peer counselor can address (i.e., an infant with severe latch difficulties with risk of dehydration).

Breastfeeding Initiatives

In FY24, MDPH staff will continue to support hospitals on the Baby-Friendly pathway through its involvement with the MA Breastfeeding Coalition and the MA Baby Friendly Collaborative. MDPH will continue to provide hospitals with relevant resources to support designation through Baby Friendly USA. Shared patient education materials between local WIC programs, MDPH, and hospitals have ensured consistent messaging related to breastfeeding initiation and exclusivity.

In FY24, the Nutrition Division, with support from the Internal MDPH Breastfeeding Workgroup, will utilize findings from the statewide breastfeeding needs assessment to develop a comprehensive strategic plan to improve breastfeeding outcomes across the state that is multi-sectoral and coordinated, offering a continuum of breastfeeding care and supports to pregnant and postpartum people.

PRAMS

MA-PRAMS includes questions on breastfeeding support and promotion during the delivery hospitalization. PRAMS continues to share these data with WIC and MDPH staff supporting breastfeeding and will include these data in an upcoming fact sheet on breastfeeding using PRAMS data. While MA-PRAMS data from 2020 births showed an increase in report of receiving a hospital gift pack with formula (45.1% in 2020 vs 33.0% in 2019) and a slight decrease in infant breastfeeding in the first hour of life from 78.7% in 2019 to 77.1% in 2020, both measures have

begun rebounding, likely due to easing of COVID-19 restrictions implemented in 2020. In 2021, birthing parents reported a decline in hospitals giving gift packs with formula (38.2%). Breastfeeding staff at MDPH will continue to use PRAMS data to track equitable promotion of best breastfeeding practices across all birthing hospitals and share the findings through the MA Breastfeeding Coalition and Perinatal Neonatal Quality Improvement Network (PNQIN).

PNQIN

To promote engagement of families of substance-exposed newborns (SEN) and newborns with neonatal opioid withdrawal syndrome (NOWS), all hospitals caring for newborns and their families in the state have been invited to join the PNQIN breastfeeding initiative. Current research indicates breastmilk intake is associated with reduced severity and delayed onset of NOWS, and decreased need for pharmacologic treatment, regardless of infant's gestational age and the type of drug exposure. While the opioid substitution medications methadone and buprenorphine are both compatible with breastfeeding, improving the use of breast milk among SEN and infants NOW remains challenging. People who struggle with substance use disorders during pregnancy are perhaps the most vulnerable of new parents. Understanding the benefits of breastfeeding for opioid-dependent pregnant people and their neonates will enable clinicians to safely recommend breastfeeding for long-term health of these individuals and their infants. In addition, standardizing toxicology testing policies which influence breastfeeding decision making is a priority for PNQIN over the upcoming year.

PNQIN's goal is to engage MA birthing hospitals in the initiative. Collaboration through open sharing of best practices and data is ongoing and will be supported by yearly statewide summits and regular webinars. Timely data collection will include a measure of breastfeeding at discharge.

Early Intervention Parenting Partnerships Program (EIPP)

Breastfeeding can be especially challenging for people with complex environmental, mental health, and social concerns such as homelessness, interpersonal violence, food insecurity and postpartum depression. Exclusive breastfeeding is a key topic of discussion, education, support and referral in EIPP. Home visitors collect data on breastfeeding at birth and at six months. Of the 237 participants enrolled in EIPP in FY22, 62.4% breastfed their infant at birth. Of these, 64.2% exclusively breastfed their infant. However, all EIPP participants stopped breastfeeding by 6 months postpartum. Among the 237 EIPP participants, 27 were referred to WIC services, 15 were referred to lactation support, and seven were referred to breastfeeding support groups. Key barriers to exclusive breastfeeding include personal reasons (51%), medical reasons (36.7%) and breast related problems (6.1%).

EIPP staff continue to collaborate with community WIC programs, OB/GYNs, lactation consultants, and pediatricians to promote breastfeeding during the first six months after birth through support groups, individual lactation support, and increased home visits during the first few weeks postpartum. EIPP sites bill MDPH directly for lactation consultation services.

MA MIECHV

In FY24, MA MIECHV will continue to monitor breastfeeding as part of federal performance measure reporting and require training in breastfeeding as part of the core competency for home visitors. Home visitors will provide education, brief intervention, and referrals to improve breastfeeding initiation and duration rates. Through the MIECHV American Rescue Plan (ARP) award, MA MIECHV coordinated with the MA-based Center for Breastfeeding to offer Certified Lactation Counselors (CLC) training for up to 50 home visitors in FY23. The certification exam will occur after the training course in early FY24. Pending results of the exam, the training would result in each MA MIECHV LIA having two or more home visitors certified as Certified Lactation Counselors (CLCs). MA MIECHV will support programs to identify ways for CLC-trained staff to provide breastfeeding support through

home visits and support groups.

Through the MIECHV Innovation Award, MA MIECHV will implement a Learning Community focused on addressing inequities in the MIECHV performance measure focused breastfeeding duration beginning summer 2024. Home visiting programs will have access to performance data disaggregated by race, ethnicity, gender, and language. Through the Learning Community and technical assistance, the programs will engage in CQI activities in partnership with CQI Parent Leaders to identify and address inequities and improve performance. MA MIECHV will leverage best practices learned from the Home Visiting Collaborative Improvement and Innovation Network (HV CoIIN) focused on breastfeeding to improve breastfeeding initiation and duration rates using a quality improvement approach.

In FY24, MA MIECHV will continue to strengthen partnership with WIC at the state and local levels to support cross referrals and resource sharing among programs. MA MIECHV and WIC will participate in a joint project for the BFHN Racial Equity and Family Engagement Strategic Plan Learning Community. Through the Learning Community, MA MIECHV and WIC aim to strengthen the collaboration and referrals between WIC and home visiting programs at the community level. MA MIECHV and WIC will engage local programs to identify strategies to test and scale to improve coordination, collaboration, and cross-referrals.

Welcome Family

Based on positive feedback from families about the breastfeeding support they receive during the home visit, Welcome Family will prioritize hiring nurses who are lactation consultants when vacancies arise. As infant feeding is one of the Welcome Family nurse competencies, MDPH will also support the nurses in seeking training and resources to maintain certification and to improve their knowledge and skills in breastfeeding support, such as understanding the impact of marijuana use on breastfeeding to provide appropriate clinical guidance.

Essentials for Childhood: Paid Family and Medical Leave

Title V supports Paid Family and Medical Leave (PFML), a policy effort that promotes breastfeeding. In FY24, MDPH Title V staff in partnership with BFHN Essentials for Childhood staff will continue to support the partnership with the Department of Family Medical Leave to: 1) promote equitable access to paid leave through outreach and awareness activities, and 2) support data analysis, sharing, and linkage to enable both Departments to better understand benefit utilization and eventual impact of the benefits on health, well-being, and economic security of families, particularly families of disproportionately impacted by structural inequities. Please see the Crosscutting Essentials for Childhood: Paid Family and Medical Leave domain for further detail.

Additional activities to improve Perinatal/Infant Health

Other activities to improve perinatal/infant health not specific to the performance measure are discussed below.

Pregnancy Risk Assessment Monitoring Survey (PRAMS)

MA PRAMS will launch the Phase 9 survey in June 2023 and will include the Marijuana and Social Determinants of Health supplements. Selected standard questions include infant age at which they were fed liquids other than breastmilk, hospital practices including skin-to-skin and breastfeeding as soon as possible, use of infant car seat and installation instructions. MPDH Division of MCH Research and Analysis (DMCHRA) will release the 2022 PRAMS report in FY24 and plans to create and disseminate data briefs and infographics on topics to include safe sleep practices and breastfeeding.

In April 2023, DMCHRA completed an initial linkage of PRAMS data to the PELL (Pregnancy to Early Life

Longitudinal) data system. This linkage will allow for analyses that include the birthing parent's beliefs, attitudes, and experiences before, during and shortly after pregnancy with the longitudinal case mix data for hospital-based medical care found in PELL. PRAMS will allow for exploration of the effects on the birthing parent's experiences of racism and of life stressors on infant health outcomes including preterm birth and small for gestational age, as well as development of chronic conditions including asthma. An analytic plan is being developed and will be underway in FY2024.

Injury Prevention and Control Program (activities listed also includes the Injury Surveillance Program)

The Injury Prevention and Control Program (IPCP) will work closely with internal and external partners to promote and improve safe sleep messaging with the goal of increasing safe sleep behaviors and creating systems that reduce Sudden Unexpected Infant Death (SUID)-related risk factors. This includes attending the Interagency Safe Sleep Task Force and providing technical assistance as needed.

In FY24, IPCP will explore ways to update the content and completion of the MA SUID Investigation Form. This data collection form is meant to be completed by law enforcement after a SUID-related infant death and contains a series of questions regarding the environment and circumstances of the infant death. IPCP will develop a workplan that will include steps for implementing any needed data use agreements with the MA Office of the Chief Medical Examiner (OCME) and conducting preliminary formative evaluation work with OCME and the MA State Police (MSP) to understand the gaps in data and issues MSP employees face in completing the form.

In FY24, IPCP will continue to provide training and technical assistance on SUID prevention and response to child-serving state agencies and programs, parents and caregivers, home visitors, police and emergency medical service providers as needed. By analyzing training and technical assistance requests, IPCP will identify and respond to needs for additional educational materials. Materials will be analyzed for appropriateness for fathers and include father-specific messages. In addition, during SUID awareness month, IPCP will assure that MDPH social media channels promote information about infant safe sleep.

Child Fatality Review

IPCP staff will continue to provide technical assistance to local and state CFR teams around fatal childhood injuries. This includes attendance at 36 meetings a year and providing data on fatal and nonfatal injuries among children to the teams as needed. BFHN will work with a Public Health Fellow from the Boston University School of Public Health to conduct a landscape analysis and assess the feasibility of implementing a Fetal Infant Mortality Review, determining potential paths forward.

Center for Unexpected Infant and Child Death

In FY24, the Center will continue its partnership with MDPH as a member of state and local CFR teams to ensure a systems approach to reducing the incidence of SUID and other sleep-related infant deaths. The Center will increase its statewide training reach by continuing to offer an annual conference, "Responding to SUID: Strategies for the Professional," and will continue its ongoing relationship with the Department of Children and Families (DCF) Child Welfare Institute, a central training entity for all members of DCF. The Center will maintain ongoing relationships with families who have experienced a child death by engaging with them through targeted resource procurement. The Center will continue to offer opportunities for commemoration throughout the year for families, including an annual "Walk to Remember" and annual "Book of Remembrance". The Center's online presence continues to strengthen and expand reach through its user-friendly website, which allows individuals to self-refer for support, request materials, or request consultation.

Birth Defects Monitoring Program

In FY24, the Birth Defects Monitoring Program (BDMP) will share its data for public health systems in pursuit of high-

value research, surveillance, clinical practice, and public health guidance. BDMP's primary focus in FY24 will be on the transition to a web-based data system, Apex Oracle, which will allow for improved efficiency. The expansion of remote electronic access to hospital records, which stands at 92%, will remain another focus for FY24 and beyond. The program seeks to obtain the highest quality of remote access (e.g., some hospitals provide a queue with pdfs, while others allow more flexible access.)

In FY24, BDMP will approach hospitals to ensure those who have been reporting critical congenital heart defects (CCHD) in newborns prior to discharge continue to do so and motivate others to report as well. BDMP will issue updated guidance on CCHD screening based on the feedback of the CCHD Advisory Group. Program staff updated an analysis on delayed diagnosis for CCHDs in MA and a manuscript was published in the Journal of Pediatrics in FY23. In the analysis, BDMP evaluated disparities in universal screening, including differences by race/ethnicity and socio-demographic factors. These very important birth defects will continue to be monitored in FY24.

In FY24, BDMP will continue implementing Neonatal Abstinence Syndrome (NAS) surveillance and seek to perform a linkage of NAS surveillance data with Early Intervention (EI) data to assess service utilization including referral, evaluation, enrollment, retention, types, and timeliness of services for children with NAS, as well as disparities in these services. Another aspect of this project is to examine whether the rates of EI referral, evaluation, and enrollment vary by sociodemographic characteristics such as maternal age, race/ethnicity, country of birth, spoken language, education, insurance type, delivery hospital level. For the children with NAS, maternal medication-assisted treatment and plan of safe care will be also examined as factors. These results will be used to assess if there are disparities in who is receiving services and develop mechanisms to use NAS surveillance data to support referrals for families impacted by NAS.

Surveillance for Emerging Threats to Pregnant People and Infants Network (SET-NET)

In FY24, the MA Center for Birth Defects Research and Prevention (CBDRP) will continue to follow-up on infants as part of their pregnant person-infant linked longitudinal surveillance system (contributing to CDC's Surveillance for Emerging Threats to Pregnant People and Infants Network (SET-NET)). Among infants born to pregnant people with SARS-CoV-2 infection during pregnancy, priority populations (infants who are SARS-CoV-2+ within two weeks of delivery, infants born to pregnant people who have passed away, and infants who pass away within the first year of life) and a random sample of non-priority infants are selected for medical record abstraction. CBDRP also began assisting the Bureau of Infectious Diseases and Laboratory Sciences (BIDLS) with the hepatitis C arm of SET-NET and in FY24, CBDRP will complete abstraction of all SARS-CoV-2 dyads selected for infant follow-up and will continue infant follow-up abstractions for hepatitis C+ dyads selected for infant follow-up.

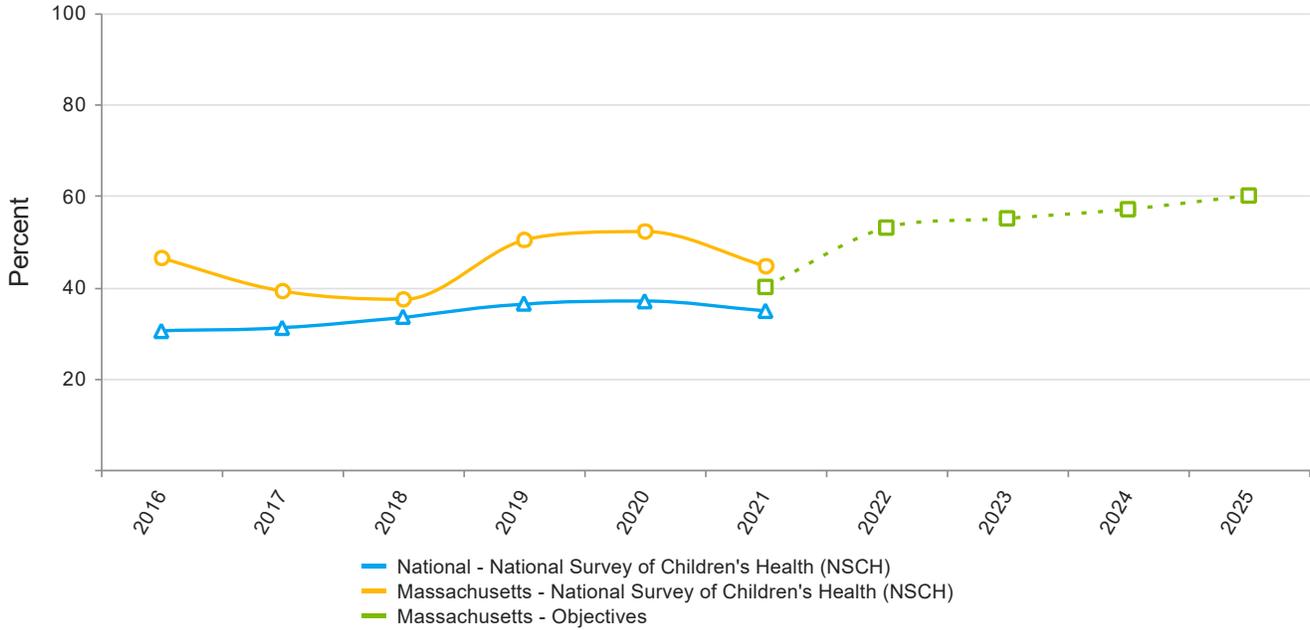
Essentials for Childhood (EfC): Earned Income Tax Credit

Earned Income Tax Credit (EITC), combined with the Child Tax Credit and other credits, brings significant resources into the community, reduces poverty, reduces exposures to adverse childhood experiences, and improves health outcomes, particularly for mothers and children. In FY24, until the culmination of the grant in August 2023, the EfC Economic Opportunity team will support strategies and build partnerships to increase knowledge of and access to EITC and other tax credits for eligible families. This analysis will include data from the second year of the pilot warm handoff referral project between Boston Children's Hospital's Pediatric Physician Organization of Children's (PPOC) pediatric sites and their corresponding neighborhood Volunteer Income Tax Assistance (VITA) sites during the FY22 tax season. Post tax season (July and August 2023), the group will analyze aggregate data to understand utilization, explore impact, and continued to refine and improve the process. See Crossing Cutting Domain Essentials for Childhood: Earned Income Tax Credit section for more details and additional activities.

Child Health

National Performance Measures

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



Federally Available Data

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

| | 2019 | 2020 | 2021 | 2022 |
|------------------|-----------|-----------|-----------|-----------|
| Annual Objective | | | 40 | 53 |
| Annual Indicator | 37.3 | 50.2 | 52.3 | 44.7 |
| Numerator | 59,973 | 80,602 | 76,477 | 62,384 |
| Denominator | 161,003 | 160,418 | 146,192 | 139,643 |
| Data Source | NSCH | NSCH | NSCH | NSCH |
| Data Source Year | 2017_2018 | 2018_2019 | 2019_2020 | 2020_2021 |

Annual Objectives

| | 2023 | 2024 | 2025 |
|------------------|------|------|------|
| Annual Objective | 55.0 | 57.0 | 60.0 |

Evidence-Based or –Informed Strategy Measures

ESM 6.1 - Percent of infants and children enrolled in WIC who are monitored using the Learn the Signs Act Early checklist

| Measure Status: | | Active | | |
|------------------------|------|------------------------------------|------------------------------------|------------------------------------|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 27 | 29 |
| Annual Indicator | | 30.1 | 27.2 | 8.4 |
| Numerator | | 10,412 | 11,707 | 11,245 |
| Denominator | | 34,612 | 43,087 | 133,258 |
| Data Source | | Massachusetts WIC participant data | Massachusetts WIC participant data | Massachusetts WIC participant data |
| Data Source Year | | 2020 | FY21 | FY22 |
| Provisional or Final ? | | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 31.0 | 33.0 | 35.0 |

State Action Plan Table

State Action Plan Table (Massachusetts) - Child Health - Entry 1

Priority Need

Strengthen the capacity of the health system to promote mental health and emotional well-being.

NPM

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

Objectives

By 2025, increase to 60% from baseline (37.3%, 2017-2018 NSCH) the percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year.

Strategies

Increase the capacity of a cross-disciplinary workforce to screen for and promote social-emotional health in early childhood to ensure timely and effective supports and interventions.

Leverage the Young Children's Council to align MDPH and state and community partners' work related to infant and early childhood social emotional wellness.

Through Essentials for Childhood, co-create with families and community members a toolkit to promote community social connectedness.

Implement the Learn the Signs Act Early Developmental Milestone Checklist Program in WIC clinics statewide to equip staff with tools and resources to identify and address developmental concerns.

Collaborate with MassHealth, the Department of Mental Health, the MA Association for Infant Mental Health and the MA Child Psychiatry Access Project to promote understanding of infant and early childhood mental health, effective social emotional screening and follow-up in pediatrics, and services and referrals including use of the Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood: DC:0-5 to assess infant and early childhood mental health.

ESMs

Status

ESM 6.1 - Percent of infants and children enrolled in WIC who are monitored using the Learn the Signs Act Early checklist

Active

NOMs

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

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

State Action Plan Table (Massachusetts) - Child Health - Entry 2

Priority Need

Foster healthy nutrition and physical activity through equitable system and policy improvements.

Objectives

1. By 2025, increase the percent of families with children ages 0-5 years old who can always afford to eat good nutritious meals from 77.9% (2017-2018 NSCH) to 87%.
2. By 2025, increase from 103 to 150 the number of injury-related data, technical assistance, and press requests that are completed by Injury Prevention and Control Program staff.

Strategies

- 1a. Maximize the access that families with young children have to food resources for which they are eligible by partnering with agencies such as MassHealth, Department of Transitional Assistance and Head Start through efforts such as enhanced data sharing about participant enrollment.
- 1b. Enhance the use of social media, digital marketing, and web-based tools to deliver targeted outreach to potentially eligible families and to facilitate enrollment in the WIC Program.
- 1c. Increase the availability of and access to fruits and vegetables through initiatives such as Healthy Incentives Program and the WIC Farmers Market Nutrition Program.
- 1d. Improve collaboration between WIC and Mass in Motion at the state and local levels to identify and implement upstream approaches to promoting food access and physical activity.
- 1e. Increase collaboration with the local food retailer community and with the national food retailer chains and EBT processors to maximize WIC access points and increase flexibilities for WIC benefit redemption through improvements in technology.
- 2a. Promote safe physical activity through injury prevention initiatives including roadway safety, water safety, built environment, and management of sports-related concussions.
- 2b. Increase representation of MCH stakeholders in work led by other state agencies and coalitions focused on improving the built environment, such as the Falls Prevention Coalition, MA Prevents Injuries Now Network, the State Highway Strategic Plan, and the Healthy Aging Collaborative.
- 2c. Ensure the IPCP stakeholder network is informed about injury prevention news and opportunities by circulating 48 newsletters annually.
- 2d. Provide 12 trainings annually based on stakeholder needs, including sports concussion management and prevention, safe sleep and other injury topics as requested.

Child Health - Annual Report

Massachusetts has two Child Health priorities for 2020-2025:

- Strengthen the capacity of the health system to promote mental health and emotional well-being.
- Foster healthy nutrition and physical activity through equitable system and policy improvements.

Priority: Strengthen the capacity of the health system to promote mental health and emotional well-being.

Objective 1 (NPM 6). By 2025, increase to 60% from baseline (37.3%, 2017-2018 NSCH) the percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year.

Title V is committed to increasing the capacity of a cross-disciplinary workforce to screen for and promote social-emotional health in early childhood to raise awareness of the connection between physical and emotional health. Many children with developmental delays or behavioral concerns are not identified as early as possible and miss critical opportunities for intervention and treatment. The performance measure for this priority, NPM 6, reflects efforts to increase developmental screening among young children. According to the 2020-2021 NSCH, 44.7% of children ages 9 through 35 months received a developmental screening using a parent-completed screening tool in the past year, higher than the national screening rate of 34.8% in 2020-2021, but lower than the Massachusetts screening rate in 2019-2020 (52.3%).

WIC

Children from low-income groups, such as those served by WIC, may experience delays in access to screening and diagnostic services and miss the opportunity to benefit from Early Intervention (EI) services. The WIC Developmental Milestones Program was developed in Missouri to integrate CDC's "Learn the Signs. Act Early." (LTSAE) campaign into WIC clinics, promote referral for early identification and encourage children's healthy growth and development. Because of its initial success, the program was replicated and refined in four Missouri counties, then expanded statewide and nationally through support from CDC and the Association of Public Health Nutritionists.^{[1],[2]}

MDPH received the WIC Developmental Monitoring Program grant from CDC's National Center on Birth Defects and Developmental Disabilities and the Association of State Public Health Nutritionists. The purpose of this grant is to integrate LTSAE into MA WIC to strengthen opportunities for developmental monitoring and connection to screening, services and supports for participating children and families. The evidence-based strategy measure for NPM 6 is the percent of infants and children enrolled in WIC who are monitored using the LTSAE checklist. In FY22, 8.4% of children (11,245 out of 133,258 infants and children) were monitored, while 23% of caregivers of WIC infants and children (30,951 out of 133,258 infants and children) were provided with education on development during appointments with WIC nutrition staff. In FY22, over 2,200 WICSmart online nutrition education modules on topics related to the 9- and 12-month developmental milestones were completed by parents and caregivers for their children's follow-up appointments. Due to a larger eligible caseload of infants and children in FY22 (133,358) compared to FY21 (43,087) and similar monitoring efforts between both fiscal years, the 2025 statewide goal for monitoring using the LTSAE checklist has been lowered, with an anticipated reach of 15% by 2025.

In early FY22, after the successful pilot of the LTSAE Developmental Monitoring Program by seven local WIC programs, staff from all 31 local programs were trained to work with parents and caregivers to complete age-appropriate developmental milestone checklists during their infant and/or child's WIC certification (initial), mid-certification (if enrolled longer than 6 months), and individual follow-up appointments. The training ran through July 2021, and all programs were actively implementing the program by August 2021. Four bulletins were sent to local program staff in FY22 providing reminders and updates about the program and continuing education opportunities. In late winter 2022, CDC revised the milestone checklists to better reflect what milestones most (75% or more)

children are meeting, to eliminate repeated milestones between checklists, and add two new checklist ages (15 months and 30 months) to match AAP's recommended ages for well-visits. As a result, the WIC state office offered a virtual training in Spring 2022 providing more information about the milestone revisions and offering a refresher on developmental monitoring for new and previously trained staff. Over 40 WIC local program staff attended the live training, which was also recorded for viewing at a later date. In May 2022, the WIC Act Early webpage on mass.gov went live providing information on and access to milestone checklists, and local and national resources for both families and providers. MDPH worked closely with the MA CDC Act Early Ambassador to create online checklists on the MA Act Early website, providing yet another means for developmental monitoring. In addition, the MA Act Early online checklists provide information on local resources and services and are available in English, Spanish, and Chinese with plans to include other languages in the future, furthering equitable access to monitoring tools.

In FY22, programs completed 11,245 developmental milestone checklists. If completed checklists indicated a potential developmental concern, staff provided a referral for developmental screening and further assessment. During FY22, all WIC programs statewide provided 954 referrals to EI, 193 referrals to Family TIES, 67 referrals to the local public school's special education department, and 9,307 referrals to CDC's Milestone Tracker App for continuous monitoring. Staff followed up on these referrals at subsequent WIC appointments to ensure families received services. The local programs reported that 3,254 infants and children received EI services and 331 received services from their local public school's special education department. In addition, there were over 98,000 hits to the Developmental Monitoring button in the WICShopper App in FY22, providing families with additional information and resources on early childhood development, including a link to download CDC's Milestone Tracker App.

MA MIECHV

During federal FY22, 6.2% of households enrolled in MA MIECHV home visiting services reported having a child with developmental delays or disabilities. MA MIECHV home visitors conduct developmental screenings (using the Ages and Stages Questionnaire-3 [ASQ-3] and ASQ-SE:2) on enrolled children to identify developmental concerns as early as possible. Home visitors plan activities to strengthen development in areas of concern and refer to EI and other appropriate community resources to ensure that children thrive in social and educational settings.

During FY22, 68% of MA MIECHV children were screened for developmental delays using a validated, parent-completed tool (ASQ-3) at the American Academy of Pediatrics recommended screening intervals (nine months, 18 months, 24 months, and 30 months). This is higher than the NSCH performance measure, likely because MA MIECHV programs are required to complete the ASQ for evidence-based model requirements. In addition, 84% of MA MIECHV children with a positive ASQ screen for developmental delay received services in a timely manner, meaning that they a) received individualized developmental support from a home visitor; b) were referred to EI and received an evaluation within 45 days; or c) were referred to other community services and received services within 30 days.

Young Children's Council (YCC)

In FY22, the YCC, chaired by the State Title V Director, continued to meet quarterly. The YCC aligns MDPH and community-based work related to infant and early childhood mental health and advises programs that focus on early childhood systems building. Council membership includes state and community agency representatives as well as increasing family representation, including male caregivers and families with a diversity of life experiences. MDPH staff continue to improve meeting practices and structure to ensure families are equitably involved.

In FY22, the YCC maintained its commitment to centering racial equity in meeting operations, presentations, and discussions. A continued theme from FY21 into FY22 was the impact of COVID-19 on young children and their families and opportunities for a more coordinated and equitable response. The YCC served as a resource for the

MDPH Vaccine Equity Initiative to inform vaccine rollout to children aged less than 5 years, including a focus on equity driven outreach and engagement strategies. Other meetings featured discussions to ensure the MDPH Pediatric Mental Health Care Access project centers families and racial equity in its implementation. The YCC brought on a new cohort of nine family leaders of diverse backgrounds, who are taking on increasing levels of leadership, including co-designing meeting agendas and facilitating breakout discussions. To ensure the YCC effectively captures and takes action to address feedback and ideas shared by the family leaders, MDPH developed a tracker tool with plans to pilot the tool in FY22.

Early Childhood Mental Health Integration

Title V staff support integration of early childhood social emotional health into pediatric primary care, aiming to carry forward the success of the SAMHSA-funded Project LAUNCH (Linking Actions for Unmet Needs in Children's Health) and Project LAUNCH Expansion, which ended in 2020. The LAUNCH team (an early childhood mental health clinician and family partner) engaged families in behavioral/developmental screening in pediatric primary care prior to developing a care plan with the family. Following a screening conducted by the pediatrician, the LAUNCH team followed up with more in-depth screening, including family risk screening. In FY22, Title V staff promoted models similar to LAUNCH, in particular focusing on the value of the Family Partner in supporting families and their young children's social emotional wellness.

MDPH was awarded the HRSA American Rescue Plan-Pediatric Mental Health Care Access cooperative agreement in August 2021. Because Massachusetts had an existing program to support pediatricians in getting consultation on children's mental health, Title V staff partnered with that entity, the Massachusetts Child Psychiatry Access Program (MCPAP), to enhance their early childhood mental health (ECMH) capacity, centering family engagement and equity. Title V partners with the MCPAP team at UMass Chan Medical Center, the Department of Mental Health, MassHealth, and the YCC to: establish and train an Early Childhood MCPAP team, including a part time psychiatrist and full time ECMH clinician, to provide telehealth consultation to primary care practices; provide training and case consultation using the ECHO model to enable primary care provider teams to support the behavioral health needs and wellness of children aged less than 6 years (including the evidence-based Pyramid Model and DC:0-5); and provide enhanced ECMH tools and resources and linkages to the early childhood and family support system.

MDPH staff advised the second iteration of an Infant and Early Childhood Mental Health Primary Care Integration Workgroup (formerly co-led by MDPH, and now co-led by the Department of Mental Health and the Children's Mental Health Campaign), which developed recommendations to transform pediatric primary care practices to include infant and early childhood mental health, considering how this approach might be reflected in MassHealth's 1115 Waiver.

Title V staff co-led the Internal MDPH 1115 Waiver Workgroup, a cross bureau group whose goals were to: stay informed, analyze new information, and surface opportunities to support and influence, raise concerns/risks, and determine/catalogue possible actions related to the MassHealth 1115 waiver; anticipate interests of other MDPH entities; bring the lenses of our partners/collaborators and anticipate needs, interests, and possible unintended impacts; and share learnings with MDPH Leadership and other relevant partners to connect the pieces and ensure the right voices are at the table. Title V Staff provided a briefing on the 1115 waiver, including opportunities and risks for MDPH, to the Commissioner and Bureau Directors in March 2022. Title V staff also met directly with MassHealth and other state agency leaders to surface policy and programmatic opportunities and concerns. A Title V staff was assigned to be MDPH observer of MassHealth Technical Advisory on Primary Care to promote information sharing.

In June 2022, Title V partnered with the agencies discussed above to apply for HRSA's Transforming Pediatrics for Early Childhood (TPEC) grant, focused on MDPH being a resource hub for integrated early childhood specialists in

pediatric primary care settings. The application highlighted the 1115 Waiver as a potential sustainability measure for integrated early childhood specialists, including family partners, through a sub-capitation model supporting team-based care for integrated behavioral health in pediatrics. MassHealth was supportive of this application and it's potential to highlight a focus on early prevention and intervention.

In FY22, Title V staff continued to work with MassHealth, the Department of Mental Health, and the Massachusetts Association for Infant Mental Health to promote use of the Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC:0-5). Title V's leadership in this cross-agency collaborative training implementation was highlighted by Zero to Three in an article entitled [Integrating DC:0-5 Into State Policy and Systems: 5 Years of Progress](#). Title V also collaborated with MassHealth and other partners to explore how to encourage use of the tool and appropriate billing practices, including through developing a crosswalk between the DC:0-5 and the DSM-V/ICD-10 codes, published in June 2022.

Interagency Early Childhood Work Group

In FY22 Title V staff served in leadership roles in the Interagency Early Childhood Workgroup (IECW), co-led by the Executive Offices of Education (EOE) and Health and Human Services (EOHHS). Title V staff will continue to support implementation of the workgroup's Memorandum of Understanding (MOU), "*Establish Shared Performance Indicators and Related Activities to Support Early Childhood Development and Education*," to promote coordination and collaboration in providing and supporting early childhood development programs and services. The MOU builds on three key strategic focus areas developed by the Workgroup, including: 1) family outreach and engagement, 2) provider supports and professional development related to birth-to-5 developmental screening and assessment, and 3) state agency coordination, especially in establishing performance indicators and continuing to share data.

As part of this initiative, Title V staff led a task group, which developed recommendations, informed by family voice, to support enhanced communication with families concerning their young children's development, including how to access developmental screening and relevant services and supports. Based on these recommendations, in FY22 the task group created a new state website for pregnant people and caregivers of children birth through age five that centralizes and facilitates easy access to information about state-funded early childhood and family health/well-being services available in their communities. The site also includes information about child growth and development, parenting support, and MA 211 (a call-line that connects people to information about critical health and human services available in their community) to further assist families in accessing local resources. The workgroup partnered with families to design the website to ensure it is family-friendly and accessible. The workgroup is monitoring traffic to the site and plans to make enhancements after the initial web analytics are discussed.

In FY22, Title V staff served on an IECW subgroup overseeing the operations of the newly formed Early Childhood Integrated Data System (ECIDS). The ECIDS includes data from the state's major programs serving young children, all of which offer developmental health supports such as developmental monitoring, screening, or assessments. Within MDPH, these programs include WIC, MIECHV, and EI. Other programs include the Department of Early Education and Care (Child Care Financial Assistance and Preschool Expansion programs), the Department of Elementary and Secondary Education (Public Pre-K, for children with and without an Individualized Education Plan) and the Children's Trust. ECIDS provides valuable insights to inform and improve the administration and impact of programs serving young children and their families, through aggregated, de-duplicated, de-identified and analyzed data about program participation and academic outcomes.

After a pilot of the system in FY21, the subgroup identified limitations in the breadth and depth of the current data sets. In FY22, the group identified resources to test a differential privacy strategy to address these limitations and allow for cross-filtering of the data and examination of smaller geographic units to provide more meaningful analysis.

While this strategy does enable ECIDS data to be viewed at the municipal level, additional limitations were discovered in the accuracy of the data for programs that have small participant numbers. The subgroup continued to explore strategies to address these challenges as well as began to develop standard operating procedures and decision-making structure for the ECIDS Governance Board, which includes DPH/Title V staff.

Priority: Foster healthy nutrition and physical activity through equitable system and policy improvements.

Objective 1. By 2025, increase the percent of families with children aged 0-5 years who can always afford to eat good nutritious meals from 77.9% (2017-2018 NSCH) to 87%.

The COVID-19 Community Impact Survey (CCIS), conducted in fall 2020, indicated that economic hardship brought on or exacerbated by the pandemic resulted in people being unable to afford enough food or healthy food for themselves and their family. The pandemic also made accessing groceries more challenging than before, especially among those without safe transportation and those more vulnerable to COVID-19. More than 1 in 4 (28%) CCIS respondents worried about getting food or groceries in the coming weeks. According to the 2020-2021 NSCH, 81.5% of families with children aged 0-5 years could always afford to eat good nutritious meals, a slight decrease from 84.3% in 2019-2020. Key strategies to reach this objective focus on building partnerships to maximize the access that families with young children have to food resources for which they are eligible, increasing the availability of and access to fruits and vegetables, and identifying and implementing more upstream approaches to promoting food access and physical activity.

WIC

WIC maintains a Memorandum of Agreement with Head Start to facilitate data sharing and support coordinated nutrition care of shared clients. WIC also has longstanding data sharing agreements with MassHealth and SNAP to identify and outreach to likely eligible but non-participating families. Following quarterly data exchanges and matching, text messages are sent to direct families to the WIC online application, routinely leading to spikes in the volume of online applications.

Massachusetts WIC, together with Washington State WIC, made progress on a USDA grant from the Gretchen Swanson Center for Nutrition to pilot an online ordering system for WIC participants, which will begin in the summer of 2024. The WIC state agencies are working with Walmart and EBT processor FIS to develop and implement a platform that will allow WIC participants to shop online at WIC-authorized Walmart stores and pick up their foods curbside or have them delivered.

The goals of the WIC Farmers' Market Nutrition Program are to provide fresh, locally grown fruits and vegetables to WIC participants and to expand awareness of WIC participation and WIC-supported sales at farmers' markets. Local WIC programs distribute farmers' market coupons in their communities during distribution events that feature nutrition education, other agency outreach, and often the farmers themselves. Eligible participants receive \$30 to spend at participating farmers' markets, farm stands, and community-supported agriculture plans. In FY22, the Farmers' Market Program served 22,522 participants with an overall coupon redemption rate of 65%, reflecting a substantial increase from 33% the prior year. This increase is most likely due to a return to in-person coupon distribution (for the first time since the COVID-19 pandemic) and more local WIC programs hosting distribution events at farmers' markets, thereby making it easier for participants to use their coupons right away.

In FY22, WIC and Mass in Motion, an MDPH grant program and statewide movement that promotes opportunities for healthy eating and active living in the places people live, learn, work and play, worked together to represent MDPH on the state's internal food security work group and collaborated to address food access concerns associated with the pandemic and its aftermath. WIC and Mass in Motion ensured there was a public health lens on food insecurity

discussions (such as social determinants of health and upstream causes/solutions). The programs also continued to promote the COVID-19 Community Impact Survey and discuss opportunities to update the survey for future assessment needs.

Metabolic Food and Formula Program

State law mandates that private insurers cover medically prescribed formulas and up to \$5,000 annually for special low-protein modified foods for people with phenylketonuria (PKU) and other metabolic disorders. The MDPH Metabolic Food and Formula Program fills the gap by providing coverage for special foods and formula to uninsured or underinsured individuals, and for MassHealth enrollees. In FY22, the program served 45 children aged birth to 18 years. This likely reflects a large proportion of children who need MDPH services, although the denominator is unknown. Metabolic clinics are effective at enrolling new and existing patients eligible for the program. Throughout the year, some participants do not order special food and formula through MDPH because they switch to insurance plans that make them ineligible, become enrolled in clinical trials for non-dietary therapies, have fewer dietary restrictions over time, are no longer following the diet, or have moved out of state. MDPH works with participants and metabolic dietitians to follow up as needed.

Growth and Nutrition Program

The Growth and Nutrition Program (GNP) is a network of MDPH-funded clinics that use a multidisciplinary approach to providing comprehensive, coordinated, family-centered assessment and treatment to infants and children from birth through six years who have been diagnosed with Growth Faltering or Failure to Thrive (FTT). The program aims to address the many causes of delayed growth or growth deceleration, including medical, nutritional, and psychosocial determinants. The multidisciplinary team includes a physician, dietitian, nurse, social worker, and other disciplines based on support needs. Some clinics may offer additional services such as feeding groups and home visiting services.

In FY22, there were five MDPH-funded contracts supporting eight GNPs across the state. These programs, located in Berkshire, Worcester, Middlesex, Essex, Norfolk, Suffolk, and Plymouth Counties, served 1,068 children, including 186 infants.

In the latter half of FY22, the Nutrition Division released a Request for Response (RFR) that sought to increase access to GNP services in areas that did not have funded clinics, in particular Hampden County, serving the greater Springfield area, and Bristol County, serving Fall River and New Bedford. Data from the 2018 All-Payor Claims Database indicated that the cities within these counties have some of the highest documented diagnoses of FTT. At the conclusion of FY22, six contract packages were finalized, providing funding to 10 GNPs starting July 1, 2022. These are three-year contracts offering two options to renew up to seven years. As a result of this RFR, funding is being increased to clinics that have seen a rise in caseload, and services will be provided to families in Hampden and Bristol Counties. Funding is expected to support 1,195 children annually.

School Health Services

The Comprehensive School Health Services (CSHS) program provides additional support to existing, required school health services through a multi-disciplinary approach that supports the delivery of quality, comprehensive health services. In FY22, funding was provided to 135 public school districts, charter schools, and educational collaboratives, and 27 private schools, which are responsible for reporting performance measures on an annual basis. These performance measures track activities intended to reduce the percentage of students who are overweight or obese by 1% each school year, including creating education programs and case management services. One of the performance measures required school districts to compare their FY22 BMI data to the average from the prior 3 years. Since BMI screenings were not conducted for two of the prior three years due to the COVID-19 pandemic, the performance measure could not be operationalized in FY22. It will not be possible to

operationalize this measure until FY25 or FY26, as some school districts were unable to resume BMI screening in FY22.

Per federal and state legislation, each school district must have a Wellness Committee at the district and individual school levels to monitor data and work with community partners, including local Mass in Motion groups, on strategies to promote healthy eating and active living. School nurses typically engage with these Wellness Committees and work to identify families that qualify for take home food programs supported by community gardens, farm shares, and food pantries. School food service departments also work closely with the Department of Transitional Assistance to identify families who may qualify for free and reduced meals who do not self-identify through the application process.

Objective 2. By 2025, increase from 103 to 150 the number of injury-related data, technical assistance, and press requests that are completed by Injury Prevention and Control Program staff annually.

Injury Prevention and Control Program (IPCP, also includes activities of the Injury Surveillance Program)

Injury prevention initiatives are important for increasing safe physical activity for children and youth. The IPCP provides information about injury prevention through trainings, policy analysis, and communications activities to state and community partners, and through the dissemination of injury data prepared by the program's epidemiologists. IPCP conducts an annual review of technical assistance (TA) requests (from both internal and external partners) to which the team has responded. Information from that review is used to update and improve accessibility of the IPCP webpages and identify unmet community needs. In FY22, IPCP received 55 injury-related TA requests (29 data-related and 26 program-related). This represents an increase from 10 in FY21, but still lower than previous years. This is attributed to many service providers continued focus on supporting communities in COVID-19 mitigation more than injury prevention.

Several subprograms/activities within IPCP expand the unit's reach and specificity of TA requests, including the following:

Traffic safety

In FY22, IPCP staff participated in the development of the Strategic Highway Safety Plan, a multidisciplinary effort to improve road safety in Massachusetts through engineering, enforcement, education, emergency response, awareness, and policy strategies. IPCP staff participated in two plenary planning sessions and 12 subcommittees focusing on emphasis areas. The IPCP director led the subcommittee examining issues around young drivers and identifying strategic priorities and action steps to reduce injuries.

In FY22, the IPCP director also acted as tri-chair for the MA Traffic Safety Coalition. This multi-sectorial coalition meets quarterly to explore evidence-based strategies to reduce and mitigate traffic and pedestrian crashes through environmental design, communications campaigns, and surveillance. FY22 topics included seatbelt use and equity, the Strategic Highway Safety Plan (SHSP), and the MA Long-Range Safety Plan: Beyond Mobility, the SHSP's Youth Emphasis Group and Kids Speaking Up for Distracted Driving.

IPCP staff continued work on *Promoting Child Passenger Safety: A Toolkit for Pre-Hospital Providers*, which aims to provide resources and information about how pre-hospital providers can set up and sustain a child passenger seat inspection and education program. IPCP staff completed development of the toolkit in May 2022 and began to disseminate the product to hospital providers and EMS personnel.

In FY22, IPCP also developed a presentation titled "Drowsy Driving in Massachusetts Teens, Key Findings from the 2017 and 2019 MA Youth Health Surveys" to share with traffic safety advocates and partners in FY23. The presentation highlighted the following results: of MA high school students who drove, 12.3% reported falling asleep at

the wheel in the past 30 days; students who reported sleeping 6 hours or less on an average school night were more than twice as likely to report falling asleep at the wheel as students who slept 7 hours or more; and groups disproportionately likely to experience falling asleep at the wheel included LGBTQIA students, students of color, and students with physical or learning disabilities, or long-term physical or emotional health problems.

Injury Prevention Training Series

In fall of 2021, IPCP hosted a four-part training series delivered to 73 infant and early childhood home visitors, providing information and resources on injury prevention strategies to share with the families they serve. Topics included general injury prevention and water safety, poison prevention, child passenger safety, and infant safe sleep. A post-survey of the trainings showed a 9.3/10 satisfaction rate regarding the knowledge learned, usefulness, and training content.

Starting in January 2022, IPCP expanded the curriculum to a 12-part series and began developing materials for the trainings. A total of 123 participants attended the trainings that took place in FY22 (General Injury Prevention and Home Safety and Water Safety trainings). Comparing the pre and post survey, participants knowledge for general injury prevention and home safety and water safety prevention strategies increased after taking the training. Given this success, additional trainings were planned for FY23, including Child Passenger Safety, Poison Prevention, Infant Safe sleep, Abusive Head Trauma, Paid Family Medical Leave and Reproductive Healthcare Resources, Question, Persuade, and Refer (QPR) (a suicide prevention 101 training), Self-care and Secondary Trauma, Young and Novice Driver Transportation, Pedestrian, Bike and Concussion Management, Falls Across the Lifespan, and Introduction to Health Outcomes and Positive Experiences (HOPE).

Sports concussion and general traumatic brain injury

MDPH sports concussion regulations provide standardized procedures and guidance to schools with children in grades 6-12 in the prevention and management of sports-related head injuries in all public schools and other schools that are members of the MA Interscholastic Athletic Association. The IPCP monitors school compliance with these regulations by collecting, analyzing and reporting submission of "Year End Reports" on concussions by schools subject to these policies. The number of Year End Reports received from schools increased from 385 schools in school year 2020-2021 to 461 in school year 2021-2022, similar to pre-pandemic reporting levels.

Also in FY2022, the IPCP collaborated with Massachusetts Rehabilitation Commission (MRC) and the Massachusetts Brain Injury Association (MA BIA) to develop a data template to understand the epidemiology of traumatic brain injury (TBI) in Massachusetts. This involved generating preliminary data on TBI by age groups (including children aged 0-2, 3-5, 6-18, and 19-20 years), race/ethnicity, county, and geographic subregions. IPCP provided TA to these collaborators in the interpretation of the data findings. Other TBI programming involved reviewing and editing the Sports Concussion content in the Boston University's SHIELD (School Health Institute for Education and Leadership Development) Training to identify areas of improvement and to ensure content was up to date.

MassPINN

IPCP co-chairs the Massachusetts Prevent Injuries Now! Network (MassPINN), a broad-based coalition of injury prevention practitioners across the state. During each meeting, the group receives a presentation and discusses programmatic and policy updates. FY22 topics included discussion of the intersection between racial equity and injury burden, community-based injury prevention collaborations with EMS agencies, connections between injuries and adverse childhood experiences, and Massachusetts' long-term strategic plan for transportation infrastructure. IPCP sent monthly updates to MassPINN members with relevant articles, opportunities, and events.

Water Safety

In response to a cluster of drownings at the end of FY21, IPCP developed a water safety communications campaign that was disseminated from July to September in FY22 through social media. The campaign targeted teenagers and highlighted warning signs of drowning and action steps teenagers can take to keep themselves and others safe. IPCP also provided TA to the Commonwealth's Executive Office of Environmental Affairs in developing a pilot program to provide free and low-cost swimming lessons. In August 2021, IPCP hosted a Water Safety training for 37 social workers from the MA Department of Children and Families. The training was well received and included local and national data on drownings, water safety strategies, and resources available to the foster and adoptive parents to reduce the risk of drownings.

[1] <https://health.mo.gov/living/families/wic/pdf/wic-developmental-milestones-executive-summary.pdf>

[2] <https://asphn.org/learn-the-signs-act-early/>

Child Health - Application Year

Priority: Strengthen the capacity of the health system to promote mental health and emotional well-being.

Objective 1 (NPM 6). By 2025, increase to 40% from baseline (37.3%, 2017-2018 NSCH) the percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year.

WIC

Local WIC program staff will continue to assist families in monitoring the development of their infants and children by administering and reviewing the CDC Milestone Checklists during either in person or virtual appointments. Staff will appropriately refer families for developmental screening when a completed checklist indicates a concern and follow up on that referral to ensure services are received.

MA MIECHV

MA MIECHV home visitors will continue to screen children with the Ages and Stages Questionnaire (ASQ) at the AAP-recommended intervals of 9, 18, 24 and 30 months and make referrals as needed. They will also continue to assess parent-child interaction using the PICCOLO or CHEERS Check-In screening tools, in adherence to the MIECHV parent-child interaction performance measure. MA MIECHV will provide technical assistance (TA) and support CQI activities to increase screening completion and use of screening tools. In addition, home visitors will continue to assess and report on the extent to which parents engage in activities to promote early childhood literacy. MA MIECHV will support local implementing agencies to establish partnerships with Raising a Reader to promote early literacy.

Beginning in summer 2024, MA MIECHV will implement a Learning Community focused on addressing inequities in the MIECHV performance measure focused on increasing assessments of parent-child interaction using a validated tool (i.e., PICCOLO or CHEERS Check-in). Home visiting programs will have access to performance data disaggregated by race, ethnicity, gender, and language. Through the Learning Community and TA, the programs will engage in CQI activities in partnership with CQI Parent Leaders to identify and address inequities and improve performance.

Young Children's Council (YCC)

The MDPH YCC will continue to meet quarterly in FY24. Council goals include: 1) alignment of MDPH and partners' work related to infant and early childhood social/emotional wellness and family well-being, 2) advising programs in the Division of Pregnancy, Infancy, and Early Childhood that focus on systems building, and 3) leading with the voices of families of young children from communities across MA to ensure these programs are designed and delivered fairly, equitably, and effectively. FY24 YCC meetings will also include advising on the HRSA grant, Transforming Massachusetts Pediatrics for Early Childhood (TMPEC). The YCC will advise MDPH on strategies to address barriers to equitable early childhood development services within pediatric primary care, including opportunities to strengthen connections between pediatrics and the early childhood system of care.

YCC membership will continue to include state and community agency representatives as well as growing family and community representation, including male caregivers and families with a diversity of life experiences. Compensated family leaders will take on increasing levels of leadership, including co-designing agendas, providing presentations, and leading discussion groups. Family leaders will also collaborate with MDPH staff to develop an electronic newsletter for Council members and caregivers of young children that will provide a streamlined process for sharing important resources and information as well as increase opportunities for engagement with the family leaders through co-designing and providing newsletter content.

Early Childhood Mental Health Integration

MDPH staff will continue to promote the integration of social/emotional wellness into pediatric primary care by building on learning from past initiatives and implementing a new initiative funded by HRSA's Pediatric Mental Health Care Access program.

Building on the success of MA LAUNCH and LAUNCH Expansion, for which funding ended in FY20, MDPH staff will continue to promote this recognized model of integration of early childhood social and emotional health in pediatric primary care, particularly highlighting the value of the Family Partner role in supporting families. MDPH staff will continue to provide TA to MassHealth and other partners to implement MassHealth's 1115 Waiver, which includes a pediatric value-based payment model, to allow for team-based care to promote the integration of behavioral health, similar to LAUNCH. MDPH staff will also continue to participate in the Infant and Early Childhood Mental Health Primary Care Integration Workgroup.

The MA Pediatric Mental Health Care Access Expansion program will utilize learnings from an intensive landscape analysis in FY23 to test enhancement of the MCPAP for Early Childhood Team to better support primary care providers on autism spectrum disorder (ASD) diagnoses for children from birth to age six with less complex presentations. The project aims to ensure that children under 6 receive ASD diagnosis to support access to interventions as early, equitably, and effectively as possible, with strong support to their families throughout the process. The Title V team will work to ensure that families, primary care, state agencies, providers, and insurers will continue to advise on strategies to expand pathways to diagnosis and support.

MDPH will continue implementation of the TMPEC, a 4-year grant awarded by HRSA in September 2022. TMPEC aims to increase equitable access to high quality early childhood development services, including Family Partners with lived experience, within integrated pediatric primary care practices that serve a high percentage of children insured by MassHealth. The project also aims to demonstrate the sustainability of integrated primary care models for young children through new payments mechanisms available within the 1115 MassHealth Waiver. TMPEC activities will focus on supporting implementation of Early Childhood Development (ECD) integration models in eight pediatrics practices across the state, including site specific training and TA as well as participation in a cross-site learning collaborative focusing on race equity, infant and early childhood mental health competencies, and family engagement and leadership. MDPH will also procure a second cohort of four pediatric practices to embed a Family Partner with lived experience within their integrated primary care team.

Interagency Early Childhood Workgroup

Title V staff will continue to participate in the cross-secretariat Interagency Early Childhood Workgroup through efforts connected to the Massachusetts Preschool Development Grant (PDG), which was awarded to the Department of Early Education and Care (EEC) in December 2022. The PDG supports the work across multiple state agencies to promote optimal educational, health, and economic outcomes for young children and their families. EEC is entering into an Interagency Service Agreement with MDPH to support agency staff, including funding of a full time Coordinator, to participate in grant activities, including: developing strategies for authentic inclusion of family voice in ongoing program development and policy planning, expanding ASQ and early literacy screening, and coordinating eligibility processes and easier access to benefits. MDPH will also partner with the PDG interagency partners to coordinate efforts to support early identification of young children who may need access to EI, special education, or other developmental, health or mental health supports through effective screening, referrals, and family support. MDPH will support common cross-systems professional learning opportunities on inclusive practice and comprehensive services.

MDPH staff will continue to participate in the Early Childhood Integrated Data System (ECIDS) Governance Board and support efforts to enhance use of data for analytics by coordinating participation of the three DPH programs

currently in the ECIDS: EI, WIC, and MIECHV. The Governance Board plans to initiate several projects, including development of a data story to communicate findings from the ECIDS dashboard to agency partners to build awareness of the system, with an anticipated focus on equity in enrollment and engagement in ECIDS participating programs.

Priority: Foster healthy nutrition and physical activity through equitable system and policy improvements.

Objective 1. By 2025, increase the percent of families with children ages 0-5 years old who can always afford to eat good nutritious meals from 77.9% (2017-2018 NSCH) to 87%.

Key strategies to address this objective focus on maximizing the access that families with young children have to food resources for which they are eligible, increasing the availability of and access to fruits and vegetables, and identifying and implementing more upstream approaches to promoting food access and physical activity.

WIC

WIC will continue data sharing activities with MassHealth, SNAP, and Head Start. Through a data match with MassHealth and SNAP, WIC identifies individuals who are likely eligible but not participating in WIC, contacts those households via text message, and includes a link to the online WIC application. WIC provides data back to SNAP to allow outreach to WIC participants that are likely eligible for but not participating in SNAP. Strengthened relationships between WIC and SNAP during the pandemic will continue to result in improved coordination between programs related to outreach and messaging. With Head Start, data sharing activities aim to streamline and minimize program reporting burden and are specific to health data that are required by both programs (i.e., height, weight, hemoglobin) as well as nutrition care plans.

The WIC Marketing Manager will work in partnership with WIC Nutrition, Operations, and IT teams to increase awareness of the program through social media, connecting families to the WIC online application, and maximizing use of online application data in the WIC Management Information System. Ongoing use of the Loving Support breastfeeding outreach materials will further enhance this effort. [Loving Support](#) is part of USDA's breastfeeding promotion initiative and provides resources for local and state WIC programs and participants.

Massachusetts WIC will continue to partner with Washington State WIC to implement a USDA grant from the Gretchen Swanson Center for Nutrition to pilot an online ordering system for WIC participants, slated to be launched in the summer of 2024. The state WIC agencies are working with Walmart and EBT processors FIS and CDP to develop and implement a platform that will allow WIC participants to shop online at WIC-authorized Walmart stores and pick up their foods curbside or have them delivered.

To ensure equitable access to WIC retailers across the state, WIC will continue to actively monitor vendor coverage and reach out to potential vendors in communities in need of additional retail locations. Members of the WIC Vendor Unit will provide leadership in national and state efforts to determine a stepwise process to modernize WIC retail transactions and eventually facilitate online ordering for WIC families. The WIC program will continue to facilitate the Vendor Advisory Group to seek advice from and provide guidance to MA WIC retailers in maximizing the WIC shopping experience. WIC will also continue ongoing enhancements of the WICShopper app.

WIC plans to continue in-person implementation of the WIC Farmers' Market Nutrition Program in partnership with the MA Department of Agricultural Resources, which it did for the first time since the COVID-19 pandemic started. Mailing coupons was necessary during the height of the COVID-19 pandemic, but in-person redemption resulted in significantly higher redemption rates. Local programs will once again plan safe, in-person distribution days or events and provide information on locations where coupons are accepted, instructions for their use, nutrition education

resources, and information about the Healthy Incentives Program, which is a dollar-for-dollar incentive that SNAP participants can earn when they buy fresh produce at participating farmers' markets, farm stands, and community-supported agriculture plans. It is anticipated that an increased number of local programs will host coupon distribution events at farmers' markets, thereby boosting redemption. The value of Farmers' Market Nutrition Program coupons will continue at the level of \$30 per eligible participant.

WIC and Mass in Motion will continue to explore collaboration opportunities to support healthy food access and reduce food insecurity among families with young children, with a focus on ongoing impacts of the COVID-19 pandemic.

Metabolic Food and Formula Program

The Metabolic Food and Formula Program provides medically prescribed formulas and special low-protein foods for children and adults with a diagnosis of phenylketonuria (PKU) or other related metabolic disorders who lack insurance coverage for these items or are MassHealth recipients. The program will continue to directly provide medically appropriate food and formula to low-income and/or underinsured children with metabolic disorders.

Growth and Nutrition Program

The Growth and Nutrition Program provides multidisciplinary care to children up to 6 years of age with faltering growth or Failure to Thrive. In FY23, services were expanded in order to serve additional regions of the state and to support a rise in caseload. It is anticipated that more than 1,200 children will receive Growth and Nutrition services in FY24.

School Health Services

The Comprehensive School Health Services program will continue to focus on school health needs, health disparities exacerbated by the pandemic, and data collection and reporting for all performance measures in FY24. Per federal and state legislation, each school district must have a Wellness Committee (also known as a Health Advisory Committee) at the district and individual school levels to monitor data and work with community partners, including local Mass in Motion groups, on strategies to promote healthy eating and active living. School food service departments work closely with the Department of Transitional Assistance to identify families who might qualify for free and reduced meals who do not self-identify through the application process. These programs will continue to address food insecurity that predates and was exacerbated by the pandemic, with the support of school nurses.

Objective 2. By 2025, increase from 103 to 150 the number of injury-related data, technical assistance, and press requests that are completed by Injury Prevention and Control Program staff annually.

Injury Prevention and Control Program (includes activities of the Injury Surveillance Program)

Injury prevention initiatives are important for increasing safe physical activity for children and youth. IPCP conducts an annual review of completed TA requests and uses that information to guide program activities, including updating and improving accessibility of IPCP webpages and identifying unmet community needs. IPCP will assess the FY23 12-part injury prevention training series for home visitors, community health workers, EI specialists and other family support service providers and develop a plan for future training. The initial goal of this training series was to improve providers' knowledge of injury risks and prevention tactics and improve service providers' capacity to connect families with free or low-cost safety equipment, such as car seats. IPCP staff will assess the need for training, evaluate how to best meet home visitors' needs, and determine whether there are other audiences to serve. The assessment will factor in any need to support certification requirements as well as any appropriate alignment with other funded programs in MDPH. By the end of FY24, IPCP will have a workplan for a restructured training series that maximizes efficiency. IPCP will also review the structure and content of its webpages to ensure material is up to date, logically organized, culturally responsive, and accessible.

There are several activities/subprograms within IPCP that will be continued in FY24 and expand the reach and specificity of IPCP TA requests. These include the following:

Traffic Safety

The IPCP director will continue to guide and support the activities of the MA Traffic Safety Coalition. Guided by TA requests, IPCP staff will recruit presenters for quarterly coalition meetings, and assist with dissemination of timely information to inform prevention of motor vehicle injuries. IPCP staff will provide TA to the team developing and implementing the action plan for the recently released 2023 Strategic Highway Safety Plan and to the state Department of Transportation around implementation of a new law protecting vulnerable road users, including pedestrians and cyclists.

Sports concussion

The IPCP will continue to enforce the MA Sports Concussion Regulations by collecting year-end reports and letters of affirmation from schools that have sports concussion policies in place. The program will also provide TA and support to schools who receive a complaint about how they have handled concussions that occur during extracurricular athletic activities. IPCP will explore the evolving concussion science, especially the consequences of repetitive concussions, as well as potential racial inequities in the implementation of post-concussion return-to-learn and return-to-play protocols with the aim of providing specialized support to under-resourced schools. IPCP will provide training and education to home visitors, community health workers, EI specialists and other family support service providers about identifying and responding to suspected concussions. The IPCP also plans to review the [online training](#) which is promoted with schools as part of the sports concussion regulations requirements.

MassPINN

The MA Prevent Injuries Now! Network (MassPINN) will convene quarterly and continue broadening their membership where able. ICPC will continue to support the development and dissemination of a MassPINN monthly newsletter with information about events, opportunities, research, and injury prevention in MA. MassPINN will explore new venues to disseminate information, attract new members, and provide TA.

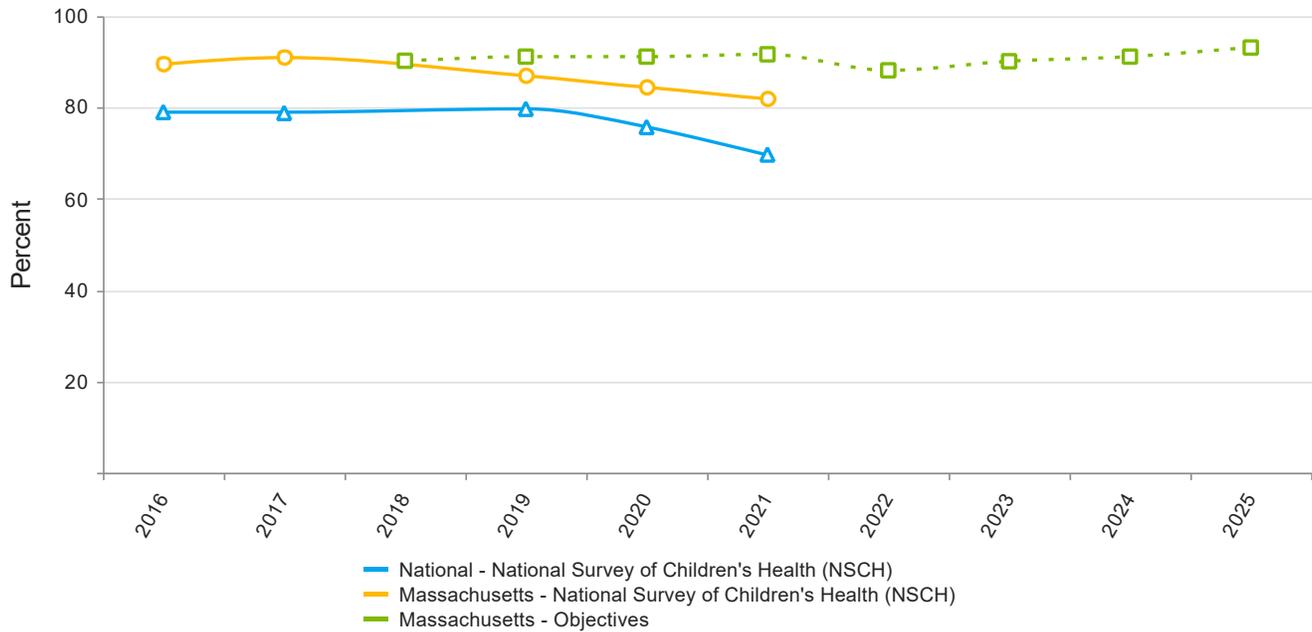
Water safety

IPCP staff will develop a sustainable, repeatable, adaptable communications strategy for summer water safety. Staff will review past campaigns and create a year-round timeline for reviewing previous year's performance, forecasting the next year, revising content as necessary, and facilitating dissemination of messages.

Adolescent Health

National Performance Measures

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



Federally Available Data

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

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|------------------|-----------|-----------|---------|-----------|-----------|
| Annual Objective | 90.1 | 91 | 91 | 91.5 | 88 |
| Annual Indicator | 90.9 | 90.9 | 86.9 | 84.3 | 81.7 |
| Numerator | 434,586 | 434,586 | 448,029 | 420,459 | 393,034 |
| Denominator | 478,159 | 478,159 | 515,782 | 498,941 | 480,952 |
| Data Source | NSCH | NSCH | NSCH | NSCH | NSCH |
| Data Source Year | 2016_2017 | 2016_2017 | 2019 | 2019_2020 | 2020_2021 |

Annual Objectives

| | 2023 | 2024 | 2025 |
|------------------|------|------|------|
| Annual Objective | 90.0 | 91.0 | 93.0 |

Evidence-Based or –Informed Strategy Measures

ESM 10.1 - Percent of School Based Health Center clients who are male

| Measure Status: | | | Active | |
|------------------------|-----------------------|-----------------------|-----------------------|--|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 45 | 46.9 |
| Annual Indicator | 42.7 | 40.6 | 45.3 | 42.7 |
| Numerator | 5,015 | 5,798 | 2,826 | 4,568 |
| Denominator | 11,748 | 14,286 | 6,243 | 10,705 |
| Data Source | SBHC program database | SBHC program database | SBHC program database | SBHC Electronic Health Records and Apex Data Hub |
| Data Source Year | 2019 | 2020 | 2021 | FY22 |
| Provisional or Final ? | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 48.3 | 49.0 | 50.0 |

State Performance Measures

SPM 2 - Rate of teen births per 1,000 Latinx adolescents aged 15-19

| Measure Status: | | | Active | |
|------------------------|---|---|---|---|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 24 | 22 |
| Annual Indicator | 26 | 26 | 24.8 | 21.1 |
| Numerator | | | | |
| Denominator | | | | |
| Data Source | MA Registry of Vital Records and Statistics |
| Data Source Year | 2018 | 2018 | 2019 | 2021 |
| Provisional or Final ? | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 20.0 | 18.0 | 16.0 |

State Action Plan Table

State Action Plan Table (Massachusetts) - Adolescent Health - Entry 1

Priority Need

Promote equitable access to sexuality education and sexual and reproductive health services.

NPM

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

Objectives

By 2025, increase to 93% from baseline (90.9%, NSCH 2016-2017) the percent of adolescents with a preventive medical visit in the last year.

Strategies

Increase preventive care visits at School-Based Health Centers (SBHC) by providing technical assistance and performance feedback to each SBHC and developing care practices that are welcoming for adolescents, particularly students with disabilities, young men, and LGBTQ youth.

Ensure that clinical sexual and reproductive health providers are a source of primary care for adolescents directly or by referral by reviewing program standards in all Sexual and Reproductive Health Program agencies and ensuring alignment with the Quality Family Planning Guidelines.

ESMs

Status

ESM 10.1 - Percent of School Based Health Center clients who are male

Active

NOMs

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

NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000

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

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

NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling

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

NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)

NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza

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

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

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

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

State Action Plan Table (Massachusetts) - Adolescent Health - Entry 2

Priority Need

Promote equitable access to sexuality education and sexual and reproductive health services.

SPM

SPM 2 - Rate of teen births per 1,000 Latinx adolescents aged 15-19

Objectives

1. By 2025, decrease the gap between the Latinx and White teen birth rates from 8 times higher among Latinx young women in 2016 to 5 times higher.
2. By 2025, decrease the gap between the Black and White teen birth rates to less than 2 times higher.
3. By 2025, provide training to 75% of Adolescent Sexuality Education and Sexual Reproductive Health Program grantees on the integration of reproductive justice principles into delivery of sexuality education and/or sexual and reproductive health services.
4. By 2025, 85% of females under age 25 are screened for chlamydia at clinics funded by the Sexual and Reproductive Health Program.

Strategies

1-2a. Maintain access to virtual and in-person sexuality education curricula that reflects both evidence and emerging practice, and expand to communities with limited to no sexual health education available.

1-2b. Ensure clinical sexual and reproductive health services (in person and telehealth) are accessible to Latinx and Black youth via school-based health centers, sexual and reproductive health clinics, and other sources of clinical care, and reflect innovative and emerging best practices.

1-2c. Increase the capacity of Adolescent Sexuality Education, STRIVE and PREP organizations to reach and retain vulnerable youth populations such as BIPOC youth, youth with NDD, LGBTQ youth, homeless youth, unaccompanied minors, and others.

1-2d. Develop strategic partnerships with DESE, Elevatus, and other nontraditional stakeholders to address gaps in sexuality education across Massachusetts. For example, reaching rural and other communities that experience high rates of teen birth and/or sexually transmitted infections that may not have access to state resources to support sexuality education delivery.

1-2e. Use a positive youth development approach to address reproductive health inequities among youth ages 10-24 through virtual and in-person prevention/upstream programming, secondary/downstream programming, and the youth internships program.

3a. Provide technical assistance to program grantees as they adopt and implement a reproductive justice framework, including but not limited to training on addressing racial bias, understanding intersectionality, serving LGBTQ youth, and serving youth with special health care needs.

4a. Provide training and technical assistance to SRH providers to incorporate CDC's "Recommendations for Providing Quality Sexually Transmitted Diseases Clinical Services" and most recent "Sexually Transmitted Diseases Treatment Guidelines."

4b. Develop and disseminate the Protect Access to Confidential Healthcare (PATCH) Act materials to local stakeholders (e.g., clinics, schools, community-based agencies and patients) to ensure confidential access to sexual and reproductive health services.

Priority Need

Strengthen the capacity of the health system to promote mental health and emotional well-being.

Objectives

1. By 2025, increase the percent of high school students who report having a teacher or other adult in school they could talk to about a problem to 77% from baseline (75%, 2017 YRBS).

2. By 2025, return to the pre-pandemic baseline the percentage of middle and high school students who report feeling so sad or hopeless almost daily for 2+ weeks in a row that they stopped doing some usual activities (high school: 33.8%, 2019 YRBS; middle school: 24.3%, 2019 YHS).

3. By 2025, return to the pre-pandemic baseline the percentage of middle and high school students who seriously considered attempting suicide in the past 12 months (high school: 17.5%, 2019 YRBS; middle school: 11.3%, 2019 YHS).

Strategies

- 1a. Use positive youth development and racial justice principles in MDPH-funded programs to foster protective factors among youth.

- 2a. Provide three-tiered behavioral health services in Schools Based Health Centers: 1) promotion of positive mental health throughout the school community; 2) early identification of emerging mental health issues; and 3) response team approach for students with a mental health emergency.

- 2b. Implement a school-based tele-behavioral health pilot program to reduce barriers to access for critically needed behavioral health services for school-age children.

- 2c. Support school-based health staff and staff of adolescent health and youth development programs in 1) providing mental health assessment, brief intervention, and referrals to treatment for youth and 2) engaging in self-care and peer support to navigate the stressors they face due to the COVID-19 pandemic.

- 2d. Increase the capacity of the Sexual and Reproductive Health Program and school health programs to respond to the mental health needs of youth resulting from the COVID-19 pandemic (e.g., grief from the loss of a parent/caregiver) through staff training and the provision of individual and group services/supports.

- 3a. Provide suicide awareness and prevention training to school personnel.

- 3b. Improve Local Child Fatality Review teams' capacity to review suicide cases and generate applicable recommendations.

State Action Plan Table (Massachusetts) - Adolescent Health - Entry 4

Priority Need

Prevent the use of substances, including alcohol, tobacco, marijuana and opioids, among youth and pregnant people.

Objectives

By 2025, increase by 5% (from 65% in FY19) the percentage of schools with students in grades 7-12 implementing SBIRT (Screening, Brief Intervention and Referral to Treatment).

Strategies

Update the SBIRT screening tool to the CRAFFT-2n to include additional questions and brief interventions for vaping and e-cigarette use among adolescents.

Partner with schools, school districts, and school-based health centers to promote the CRAFFT-2n screening tool through updated SBIRT training and technical assistance.

Partner with BSAS to obtain data from BSAS-funded coalitions on adolescent surveys which include questions on adolescents' perceptions of risk, parental attitudes, and peer attitudes when adolescents use marijuana, drugs, and alcohol.

Adolescent Health - Annual Report

Massachusetts has three Adolescent Health priorities for 2020-2025:

- Strengthen the capacity of the health system to promote mental health and emotional well-being.
- Promote equitable access to sexuality education and sexual and reproductive health services.
- Prevent the use of substances, including alcohol, tobacco, marijuana and opioids, among youth and pregnant people.

Priority: Strengthen the capacity of the health system to promote mental health and emotional well-being

The 2020 COVID-19 Community Impact Survey (CCIS) showed that almost half (48%) of all MA youth reported feeling so sad or hopeless almost every day for 2 weeks or more that they stopped doing some usual activities. This was 21% percent higher than the Youth Risk Behavior Survey (YRBS) (27% in 2017). LGBTQA youth, youth of trans experience, and youth with disabilities experienced the greatest inequities related to mental health concerns during the pandemic: 78% of youth of trans experience, 83% of non-binary youth, 84% of queer youth, 78% of youth with a cognitive disability, and 81% of youth with a mobility disability reported feeling sad or hopeless every day for 2 weeks or more.

Key strategies to address this Title V priority among adolescents include offering mental health assessment, brief intervention, and referrals to treatment within school settings; training mental health clinicians, community organizations, and school personnel on youth suicide screening, assessment and treatment; and using positive youth development (PYD) and racial justice principles in MDPH-funded programs to foster protective factors among youth. Measures for tracking progress on this priority relate to adolescent social connectedness and protective factors, reducing depressive symptomology among middle and high school students, and reducing consideration of suicide among middle and high school students. The latter two measures were added during FY21 due to the significant impact of the COVID-19 pandemic on the mental health of young people.

Objective 1. Increase the percent of high school students who report having a teacher or other adult in school they could talk to about a problem to 77% from baseline (75%, 2017 YRBS).

School-Based Health Centers (SBHC)

In FY22, MDPH funded 15 agencies (hospitals, community health centers [CHCs], and local health departments) that operated 33 SBHCs, which function as satellite outpatient primary care clinics located in school buildings. The SBHC program assesses students on a range of risk and protective factors, including presence of a trusted adult. In FY22, the program transitioned to a new data vendor. Since it was a transition year and sites were adapting to the new system, most sites were not yet reporting their screening results to MDPH, including protective factors such as presence of a trusted adult.

The SBHC Program hosted a three session professional learning series with the Bridge for Resilient Youth in Transition (BRYT) Program called *Healing is in the Return* to increase the capacity of all SBHC staff (nurse practitioners, behavioral health providers, and community health workers (CHWs) to foster resiliency for students and the school community and promote connection during the transition back to in-person learning. Main topics that were centered in this learning series included:

- COVID-19 as a collective slow-moving trauma
- How mental health symptoms show up in the classroom, especially around learning
- Adults struggling to help others regulate when they are not regulated themselves
- Awareness of who is included and excluded within the school community and actively working to shape a sense of belonging for students
- Strategies around moderation, hope, and validation
- SBHC role in challenging school norms and what they can do to support students in healing from collective

trauma.

School Health Services

A former CSHS performance measure objective was to achieve an annual 10% increase in the percent of students who report having at least one adult at school they can talk to if they have a problem. Feedback from school health staff is that they rely on student surveys (such as the YRBS and the Youth Health Survey [YHS]) to collect this information, and the data collection in the CSHS grant reporting is redundant. Additionally, school health is just one opportunity for students to connect with adults at school. Therefore, the School Health Unit eliminated this performance measure and data collection element from the CSHS performance measures in FY22 and will instead rely on YRBS and YHS data.

Data from the 2019 YRBS indicate that many high school students have adults they can talk to, and this has been a consistent finding since 2009. A majority (74%) of high school students report having a teacher in school they could talk to about a problem. Most (81%) high school students report having a parent or adult family member they could talk to about things important to them. However, further exploration of the data revealed that far fewer Hispanic and Black students report having an adult they can talk to than do their White, Asian, and Multiracial peers. The 2021 YHS did not collect this measure but found that despite the influence of the COVID-19 pandemic, 2021 rates of protective factors have remained similar to 2019 rates. However, in 2021, Black and Hispanic/Latino students were less likely than White students to report engaging in many protective factors, including volunteer/community work, organized activities, and sitting down to dinner with their families. All other racial/ethnic groups were less likely than White students to report feeling that their neighborhood was safe from crime, feeling safe with their parents/caregivers, and feeling that they belong at school. In addition, students who identified as LGBTQ were less likely to sit down to dinner with their families and to feel like they belonged at school than their straight, cisgender counterparts.

School nursing staff continue to ensure that they are available as a trusted resource to all students in the school. In FY22 the MDPH School Health program and their training vendor, Boston University School Health Institute for Education and Leadership Development (BU SHIELD), provided professional development to school nurses around responding to disclosures of sexual abuse/assault and providing culturally responsive health services to students who are refugees. They also developed and delivered a nine-part series on Supporting Mental Health in Schools, which is now an enduring offering on the BU SHIELD website. Health screenings (vision/hearing, height/weight, postural), including Screening, Brief Intervention and Referral to Treatment (SBIRT), are one opportunity for health services staff to connect with students they might not otherwise meet, and school health staff are encouraged to use the skills they have developed in these trainings to build trust and connection.

Office of Sexual Health and Youth Development (OSHYD)

In FY22, OSHYD provided trainings to increase the capacity of youth-serving professionals to support the mental health needs of adolescents. These trainings were instrumental in a dual strategy to prevent burnout of the youth-serving professionals and to strengthen their ability to provide safe spaces for adolescents during the COVID-19 pandemic.

- In September 2021, the OSHYD provided “Question, Persuade, Refer” training to providers. The goal of this training was to teach skills on how to identify the warning signs of suicide and provide three simple steps that participants can take to respond to individuals at risk for suicide.
- In November 2021, the OSHYD convened Adolescent Sexuality Education (ASE) & Personal Responsibility Education Program (PREP) providers for a Fall Provider meeting, led by Advocated for Youth, on Engaging Parents and Caregivers as Partners in Health Education. The goal was for providers to discuss benefits of and strategies for engaging parents/guardians as partners in health education.

- In May 2022 ASE & PREP providers attended a workshop titled *Techniques to Create an Inclusive and Affirming Learning Environment* led by Advocates for Youth. The goal of this training was for providers to learn strategies to create a more affirming space for LGBTQIA+ students in school and during out-of-school programming.
- In May 2021, OSHYD consulted with Aida Manduley, LCSW, to host a 2-day mental health training for providers. Aida is an award-winning Latinx activist, international presenter, and trauma-focused clinician. They provided a 2-day training titled “Beyond Staying Afloat: Recognizing, Addressing, Preventing the Stress Spectrum REDUX.” This training, attended by 79 providers, focused on ways providers can take care of their own mental health as they support youth and their families, in addition to tools and strategies for self and community care in an agency setting.

Objective 2. By 2025, return to the pre-pandemic baseline the percentage of middle and high school students who report feeling so sad or hopeless almost daily for 2+ weeks in a row that they stopped doing some usual activities (high school: 33.8%, 2019 YRBS; middle school: 24.3%, 2019 YHS).

School-Based Health Centers

Throughout FY22, MA schools returned to full-time in-person learning. SBHC providers quickly shifted back to in-person services and learned to integrate lessons learned from providing telehealth services into the in-person SBHC models to help expand access opportunities and improve engagement. SBHC providers continued to note an increase in behavioral health needs of students as they transitioned back into the classroom with their peers after many months of virtual learning. In response, the SBHC Program collaborated with the BRYT Program to offer training on the transition back to in-person learning to support resilience and foster connection.

In FY22, SBHCs provided three-tiered behavioral health services related to prevention and promotion and early identification. The first two tiers are described below and a third tier of behavioral health services – clinical intervention – is described under Objective 3.

Tier 1: Prevention and promotion: This level of service is tailored to school community needs. The school faculty and principal are engaged in identifying priority topics, including social emotional skills, school climate, and early recognition of mental health symptoms. Based on identified topics, the SBHC behavioral health provider works with school staff to develop classroom sessions and staff professional development aimed at providing universal education for the entire school community.

Tier 2: Early identification: This level of service includes developing and improving structures for early intervention for students with behavioral health needs with advisories, student support teams, and individual education plans. The SBHC behavioral health provider is available onsite to assess students who are referred by school staff for a preliminary evaluation. The outcome of this evaluation may include consulting individually with school staff on classroom management strategies to address inattention, discipline, and truancy. In FY22, primary care clinicians in SBHCs continued to screen for behavioral health concerns.

School-Based Telebehavioral Health Pilot Program

In early FY22, MDPH selected the Brookline Center for Community Mental Health to coordinate a new telebehavioral health pilot program in schools. The objectives of the program are to 1) reduce barriers to access for critically needed behavioral health services for school-age children with a specific focus on racial justice and 2) demonstrate the feasibility and elements necessary for success to replicate this program in other schools. Expanding access to telebehavioral health will provide referral and support resources for students struggling with substance misuse, as well as students with other mental and behavioral health needs. The Brookline Center will design the pilot program; select, fund, and support pilot sites; evaluate the program; ensure sustainability of the provision of services; and

produce a replication guide that will assist other schools in starting their own telebehavioral health programs.

During FY22, the Brookline Center convened an Interagency Working Group to advise the overall pilot program, including various bureaus within MDPH and local universities. The Brookline Center has also contracted with the Schneider Institutes for Health Policy and Research within the Heller School for Social Policy and Management at Brandeis University to evaluate the school-based TBH pilot initiative. In FY22, the Brandeis evaluation team completed an initial School-Based Telebehavioral Health Pilot Project Needs Assessment and identified 43 schools that are high priority for implementation of the pilot.

School Health Services

According to data from the MA YHS, the mental health needs of MA youth continue to increase post-pandemic: the rate of both high school and middle school youth who intentionally injured themselves increased in 2021 compared to 2019: 21% of high schoolers reported intentional self-harm in 2021 compared with 15% in 2019; middle school rates were higher with 27% reporting intentional self-harm in 2021 and 21% in 2019. However, the rates of youth feeling sad or hopeless and those considering suicide remained similar in 2021 compared to 2019 (although the rates show slight differences, the differences were not statistically significant). Additionally, in 2021, females and LGBTQ students were more likely than male and straight/cisgender students to report intentional self-injury, feeling sad or hopeless, and seriously considering suicide. Hispanic/Latino students were more likely than other racial/ethnic groups to report feeling sad or hopeless and considering suicide.

School health staff provide mental health assessment, brief intervention, and referrals to treatment for youth. Activities in our funded programs focus on vulnerable populations of youth and performance objectives include the following:

- Increase the percentage of students who are identified as experiencing symptoms of depression and/or anxiety, or suicidal ideation, and are not currently receiving behavioral health care, that are referred for mental health services by school health/counseling staff (Target – increase referrals by 10% annually). In FY22, 47% of districts met the target.
- Increase the percentage of students who are homeless or marginally housed that are assessed for unmet health needs by nursing services (Target – increase assessments by 10% annually). In FY22, 62% of districts met the target, compared to 42% in FY21.
- Increase the percentage of students with special health needs that have an individualized healthcare plan (IHP) developed (target – 100% IHPs developed). In FY22, 54% of nonpublic schools met the target and 42% are in process to meet the target.
- Increase the percentage of ELL students assessed for unmet healthcare needs by nursing services. (Target – 90% seen). In FY22, 58% of districts met the target.

In addition to services provided to students with CSHS grant funds, the School Health Unit also provided support to school health staff, who have been dramatically impacted by the COVID-19 pandemic. School health staff report high levels of burnout, and the Commonwealth has seen an increase in school health staff turnover, including chronically unfilled positions. To address these issues, CSHS has implemented several workforce training and development activities. During FY22, CDC awarded MDPH a two-year public health workforce development grant with 25% of the grant (\$10M) specifically intended for the school health workforce. Forty-two schools and school districts received \$100,000 per year for two years to retain and hire school health staff. Many schools identified a need for additional staffing to support unmet behavioral health needs among their student populations, and some of these schools hired licensed behavioral health clinicians and nursing case managers to meet this need. The School Health Unit has also worked with their professional development vendor (BU SHIELD) and other agencies to provide school health staff with workshops around self-care, managing difficult conversations, and an entire school mental health series, which

is now an enduring offering on the BU SHIELD website. Additionally, MDPH partnered with the DMH, which helps fund health care workers, to provide a weekly virtual drop-in support group for school health staff.

Office of Sexual Health and Youth Development (OSHYD)

In response to increased mental health challenges experienced by youth, ASE providers were allowed to bill for one-on-one mental health supports or “Wellness Checks” for youth during FY22 using the billing rate for youth development. Providers implemented check in calls to youth and mentoring and additional supports as needed. Providers expressed that this opportunity allowed them to develop and foster relationships with the young people in their programs.

In March 2022, OSHYD conducted a provider focus group with ASE- and PREP-funded agencies to understand the landscape of issues currently impacting youth, brainstorm opportunities for innovation, and learn from providers' best practices for retaining and reaching youth. Common themes from this discussion were as follows:

- Mental health is one of the biggest challenges experienced among youth and there is a need for more support to meet this need in schools.
- Partnerships with schools makes curriculum delivery easier due to having a “captive audience.”
- The importance of having a trusted adult and creating a supportive environment for peer connections.
- There are challenges to implementing curriculum in community groups due to not having a captive audience, attrition, and scheduling conflicts with partner organizations.

OSHYD used this programmatic feedback to make changes to the structure of MDPH-funded sexuality education programming for youth. This includes:

- Continuing to allow providers to bill under the ASE youth development unit rate for Wellness Checks. ASE providers were also given flexibility on projects to complete with youth under the youth development rate. Providers reported delivering activities such as mentoring, career development, college preparation, and mental health supports.
- Collaborating with the MA Department of Elementary and Secondary Education (DESE) to release a 3-tiered procurement that includes an option school districts may apply to in partnership with community-based organizations (CBO). The CBO will act as an implementation partner and support the school to prepare to implement an evidence-based sexual health curriculum.
- Providing continued technical assistance (TA) on parent and family engagement and a training on creating inclusive and affirming environments for LGBTQ+ youth.

Objective 3. By 2025, return to the pre-pandemic baseline the percentage of middle and high school students who seriously considered attempting suicide in the past 12 months (high school: 17.5%, 2019 YRBS; middle school: 11.3%, 2019 YHS)

School-Based Health Centers

In addition to Tier 1 and Tier 2 behavioral health services described previously, SBHCs also provide clinical intervention (Tier 3). In students with higher acuity (substantial clinical functional impairment), the SBHC behavioral health provider is responsible for providing appropriate referrals. The behavioral health provider can provide immediate clinical assessment for students experiencing a mental health crisis or onsite individual psychotherapy. The provider collaborates with school staff to develop and implement school-wide crisis response protocols, including for violence and suicide. Students with serious mental health disturbance require crisis response plans tailored to their individual needs. SBHC behavioral health providers were in increased communication with school staff in this fiscal year to help identify, stabilize, treat and/or refer students with increased acuity noted during the return to in-person learning.

Suicide Prevention Program

In FY22 a hosting issue arose that made the “S” Word: *The Role of Schools in Preventing Suicide* training unavailable. The training was developed to fulfill an unfunded mandate requiring two hours of suicide awareness and prevention training every three years to all licensed school personnel. The program team began to formulate and discuss what re-developing this training would entail.

Child Fatality Review

In FY22, the Injury Prevention and Control Program (IPCP) collaborated with the Suicide Prevention Program to support Local Child Fatality Review in their review of suicide cases. IPCP staff encouraged local teams not already doing so to review cases with a particular cause or manner—including suicide—together in a single meeting to improve teams’ understanding of risk and protective factors common across cases. One team adopted this approach at IPCP’s recommendation and convened a meeting to review several cases of suicide. For three local team meetings, IPCP staff facilitated the attendance of Suicide Prevention Program staff, who provided insight around individual suicide cases.

Priority: Promote equitable access to sexuality education and sexual and reproductive health services.

Objective 1 (SPM 2). By 2025, decrease the Latinx teen birth rate of 26.0 per 1,000 Latinx women aged 15-19 to 16.0 per 1,000 to reduce the inequity between Latinx and White youth.

Objective 2. By 2025, decrease the gap between the Black and White teen birth rates to less than 2 times higher.

Office of Sexual Health and Youth Development (OSYHD)

The 2020 MA teen birth rate was 6.1 births per 1,000 women aged 15-19 years, a 64% decrease from 17.2 in 2010. The 2020 Hispanic teen birth rate was 25.5, a 48% decrease from 49.2 in 2010. Racial and ethnic inequities in teen birth rates persist, as rates for non-Hispanic Blacks and Hispanics continue to be 3 and 9 times higher, respectively, than the rates for Whites. Over the last decade, MDPH has continuously targeted its prevention efforts on Black, Latinx, and LGBTQ youth because these populations bear the burden of unintended teen births and have historically had limited access to age-appropriate, medically accurate sexuality education. Prevention strategies have included using evidence-based sexuality curriculum that reflects young peoples’ experiences, peer leadership, and strengthening referrals to local sexual reproductive health clinics.

During FY22, OSYHD continued to operationalize its core values of racial justice, health equity, reproductive justice, ^[1] trauma-informed care, sustainability, youth development, and evidence-based/data-driven programming to support efforts to close the gaps described above. OSYHD identified several shared priorities across programs and has been working to address equitable policy change, improve program sustainability, and create opportunities for meaningful youth development and leadership.

OSYHD community-based programs use the [Massachusetts Life Plan tool](#) with young people aged 12-24 years. This tool provides an opportunity for CHWs to facilitate discussions with young people around health and goal setting, including in the domains of education, work, self-care, relationships, and sexual health. The Life Plan tool serves as a guide for community providers to engage youth in one-on-one or group interactions and in tracking their progress toward making positive changes in their lives. Community health providers use motivational interviewing to work with youth toward developing and making progress in youth-driven goals.

PYD is the foundation of public health interventions for adolescents. However, there is a lack of shared language and measurable outcomes for PYD programming. To address this gap, OSYHD and The Posse Foundation developed the Valuing Our Insights for Civic Engagement (VOICES) curriculum. VOICES provides a space for youth to understand their personal experiences and identities. Through various experiential learning activities, youth

strengthen their critical analysis and recognize the power of their voices for community change. The VOICES curriculum can be adapted and used in both school and community settings. VOICES allows participating youth an opportunity to explore topics such as identity, stereotypes, power, advocacy and how they can be a part of change in their communities. In FY22, 410 youth participated in the VOICES curriculum.

Key challenges across OSHYD programs include recruitment and retention of both program participants and staff, program sustainability, and how to authentically integrate youth voice into programming. OSHYD continues to work with funded agencies to plan for sustainability at the beginning of program delivery and examining how community assets and resources can contribute to program sustainability on a local level. To address participant recruitment and retention challenges, direct service staff make frequent contact with program participants using a variety of means (phone, text, and social media). Incentives, such as assistance with transportation, graduation events, and gift cards for program milestone completion also support program retention. To reach youth completion goals, staff over-recruit for planned program cohorts and strive to provide programming in settings easily accessible and often frequented by youth. OSHYD staff also worked with vendors to manage staff turnover and provide training as new staff are onboarded.

In FY22, planning for the Youth Advisory Board (YAB) began with collaboration from internal partners and Health Resources in Action (HRiA), an external consulting agency. The goal of the YAB is to engage youth to partner with OSHYD to redesign existing programs so that they best address the needs of the adolescent population in MA. Interested participants will be recruited from a pool of youth-serving agencies that deliver ASE, PREP, and STRIVE programming. While the board was not able to be launched in FY22, planning activities continued.

Additional efforts of specific programs within OSHYD to address this priority are described below.

Sexual and Reproductive Health Program (SRHP)

SRHP providers offer comprehensive sexual and reproductive health (SRH) services to decrease unintended pregnancy and sexually transmitted infections (STIs). Contracted agencies, including CHCs, free-standing SRH clinics, hospital-based clinics, and SBHCs operate in communities with higher rates of teen births and STIs, and focus on providing services to low-income, uninsured, adolescent, and refugee and immigrant populations. Agencies provide clinical sexual and reproductive healthcare on site and may provide education and outreach to promote SRH services, and/or supportive services to assist priority populations to access other types of social support services or clinical care.

In FY22, 17 agencies reached 1,140 young people through peer education programs and over 18,000 people through community-based education, many of whom were adolescents. Social media activities exceeded over one million impressions. All of these programs employed a combination of traditional in-person outreach, virtual outreach, and social media to alert and inform adolescents of the availability of services.

In FY22, 24% of female MDPH-eligible clients aged 13-19 years reported using long-acting reversible contraception (LARC), a slight increase compared to FY21 (22%). Clinics worked to reduce barriers, such as high upfront costs for supplies, provider lack of awareness about the safety and effectiveness of LARC for teens, and lack of training on insertion and removal. In FY22, the COVID-19 pandemic continued to be the biggest challenge for funded agencies. To adjust, the contracted SRHP clinics created hybrid in-person and telehealth access to services. While the transition to telehealth was imperative for the continuation of many clinical services, periodic prohibitions against in-person visits may have limited access to LARC services. Clinicians worked closely with adolescent clients during that period to ensure continuity of care and access to clients' preferred contraceptive methods.

In FY22, MassHealth and SRHP entered their fourth year of oversight of two organizations (Upstream and Partners in Contraceptive Choice and Knowledge (PICCK)) funded to provide five-year, statewide comprehensive training and

TA on contraceptive counseling and service delivery. Upstream addresses outpatient care service delivery, with a focus on CHCs, while PICCK targets hospitals and hospital-based clinics. In FY22, Upstream and PICCK pivoted from a COVID-informed virtual model to a hybrid model. They included some lessons learned and best practices from FY21, such as Zoom check-ins and train-the-trainer models of service delivery and re-introduced in-person precepting and cross-agency partnership projects.

Personal Responsibility Education Program (PREP)

PREP aims to increase positive reproductive health outcomes and life opportunities for youth in MA through sexual health and adulthood preparation education. Through a partnership with DESE, youth in both MDPH-funded community-based programs and DESE-funded school districts receive high quality, age-appropriate, and medically accurate comprehensive sexuality education. PREP programs are grounded in PYD principles and program facilitators are expected to be a trusted adult for the youth they serve. During FY22, PREP partnered with DESE to serve youth at the Salem and Springfield School Districts. The Springfield School District was not able to implement PREP programming because of staff turnover and challenges with recruiting teachers. The Salem School district served 22 youth during FY22. In addition to the partnership with DESE, MDPH directly supported five CBOs which served 444 youth with sexual health education. Both school and CBOs experienced a decrease in the number of clients served. This decrease can be attributed to navigating the impact of the COVID-19 pandemic from an institutional perspective (for example closures and re-opening) as well as youth recruitment and retention challenges.

Adolescent Sexuality Education (ASE)

In FY22, ASE programs served 3,683 youth with evidence-based or evidence-informed sexuality education curricula in 15 communities. ASE provides access to evidence-based and comprehensive sexuality education in communities with higher burdens of teen birth and STIs, and where such education might not otherwise be available. This program has served a lower number of youth than in previous years. This decrease can be attributed to recruitment and retention challenges, “Zoom fatigue” among potential participants, and navigating re-opening policies in school and CBOs. The numbers have been slowly increasing; however, some challenges remain with programs’ ability to reach youth, such as program staff turnover and vacancies at the agencies.

Massachusetts Pregnant and Parenting Teen Initiative (MPPTI)

MPPTI aims to increase life opportunities and enhance family stability among young families. Programs are implemented in communities with high teen birth rates and serve predominantly young families of color. In FY22, 405 participants, including 316 adolescent parents, were served by MPPTI. Fifty-nine percent (59%) of non-pregnant participants reported the use of a contraceptive method at program intake, and MPPTI-funded case managers worked to provide connections to clinical services for contraception, overall health, and well-child health services.

Successful Teens: Relationship, Identity, and Values Education Initiative (STRIVE)

The goals of the STRIVE Initiative are to increase life opportunities for youth by delaying the onset of sexual initiation, thereby preventing adolescent pregnancy and STIs/HIV; increasing youth connections to caring and trusted adults in their community; and increasing internal and external developmental assets through promoting PYD programming. In FY22, STRIVE worked with 181 youth aged 10-15 years, reaching them prior to initiation of sexual activity and risk for unintended pregnancy and STIs. STRIVE programs were also required to complete at least one family engagement event during the fiscal year. The primary challenges the STRIVE programs faced during FY22 were recovering from the impact of the COVID-19 pandemic and staff turnover and capacity.

Objective 3. By 2025, provide training to 75% of ASE and SRHP grantees on the integration of reproductive justice principles into delivery of sexuality education and/or sexual and reproductive health services.

Office of Sexual Health and Youth Development

In FY22, OSHYD hired a consultant to conduct key informant interviews to understand programmatic barriers for organizations or communities that could prevent integration of reproductive justice principles into delivery of sexuality education and sexual and reproductive health services. This information will help providers prepare for implementing a Reproductive Justice Curriculum Addendum for birth control lessons, which will have the primary goal of framing and providing historical context to birth control's complicated development.

In June 2022, OSHYD providers attended a workshop entitled "From the Root to Reality: Connecting the Dots from History to Health Outcomes" focused on racial equity and led by Jannah Bierens, MPH, MA. Jannah is the founder and principal owner of PHREEEDOM LLC (Public Health Racial Equity through Exploration and Engagement to Dismantle Oppression for Movement). The goal of the workshop was to ground providers in root cause definitions and equity concepts and reflect on the historical influence of racism and oppression that has shaped our society and culture. OSHYD required agencies to send at least one staff member in a leadership position to attend this workshop. Overall, 42 providers attended. In August 2022 OSHYD disseminated a survey to help identify learning topics that providers will have an opportunity to further explore in the late Fall/early Winter.

Objective 4. By 2025, 85% of females under age 25 are screened for chlamydia at SRHP-funded clinics.

Sexual and Reproductive Health Program

Among the 15 agencies that reported chlamydia testing information, 44% of females under age 25 received a chlamydia test in FY22 (12,012 females tested for chlamydia, out of 27,499 females served in the SRHP). Staff monitor and provide TA during monthly oversight meetings to increase chlamydia testing in clinics. The impact of COVID-19 and the uptake of telehealth services impacted STI screening rates. In FY22, we began to see a return to pre-pandemic productivity levels and improved learning regarding the provision of comprehensive telehealth services that incorporate laboratory testing. We anticipate that this along with increased monitoring will result in higher chlamydia screening rates for females under 25 in the future.

Objective 5 (NPM 10). By 2025, increase by 2% from baseline (90.9%, NSCH 2016-2017) the percent of adolescents who have a preventive medical visit in the last year.

According to the 2020-2021 NSCH, 69.6% of adolescents received a preventive medical visit in the last year, a decrease from the 2016-2017 baseline. This decrease is expected, as CCIS findings showed that the COVID-19 pandemic disrupted healthcare capacity even for people who normally face few barriers to care and impacted people's ability and willingness to access critical and essential healthcare services.

School-Based Health Centers

SBHCs offer onsite primary care and behavioral health services to all students, regardless of their ability to pay, while school is in session and is staffed by nurse practitioners. Research has shown SBHCs increase access to care and quality of care for underserved adolescents.^{[2],[3]} SBHCs are important in reducing both financial and non-financial barriers to health care: lack of insurance, lack of confidentiality, inconvenient office hours and locations, inability of working parents to leave their jobs to get children to care, lack of transportation, and apprehension and discomfort discussing personal problems affecting health. An explicit goal of the SBHC program is that all children and adolescents obtain health insurance and are connected to a medical home. SBHCs also support students to develop the skills they need to navigate the health care system upon graduation from high school. Because young men are less likely than young women to receive care from SBHCs, the evidence-based strategy measure for NPM 10 tracks the percentage of SBHC clients who are male, with the goal of reaching a proportion more similar to the student population in the state. In FY22, of 10,705 total SBHC clients, 42.7% were male.

In FY22, MDPH SBHCs provided a total of 11,687 primary preventive visits, which made up 25.6% of total visits. As

we transition data collection systems, we are working on improving accuracy of our visit counts. We expect this number is an undercount of both total visits and preventive visits.

While SBHC clinicians transitioned back to in-person learning, they worked to re-connect with students and provide in-person care upon their return to school. SBHCs continued to use telehealth to connect with students who were experiencing increased absence after the return to in-person learning to provide ongoing medical and/or behavioral health services and support during this challenging transition. SBHC clinicians engaged in a three session training series with the BRYT Program titled *Healing is in the Return* to help staff feel equipped with skills to foster connection and engagement with students upon the transition back to in person learning.

Sexual and Reproductive Health Program (SRHP)

In FY22, through state and federally (Title X)-funded SRH clinics, MA continued to promote the *Providing Quality Family Planning Services: Recommendations of CDC and the U.S. Office of Population Affairs (QFP)*. These recommendations expand family planning to include preconception and other preventive health services, including screening for obesity, smoking, diabetes, violence, mental health, reproductive life planning, and screening for and treating STIs. Additional preventive health services include breast and cervical cancer screening, immunizations, and other services based on nationally recognized standards of care. Clients seeking contraceptive services at SRH clinics often do not have another source of primary health care. SRH visits are opportunities for clinicians to offer broad preventive health services beneficial to overall health as well as to reproductive health. In FY22, as a central quality assurance/quality improvement activity, SRHP conducted virtual program reviews of its contracted agencies. This review included a comprehensive chart review to confirm and assure delivery of quality services and where necessary, provide TA. SRHP developed a participatory model where clinicians reviewed a sample of their own records and then worked with the program's Clinical Advisor to develop action plans based on the findings. This strategy was well received and allowed for a robust dialogue regarding both the SRHP Program Standards as well as the QFP. Training and TA on the new standards were provided to contracted agencies during monthly oversight meetings and during state-wide provider meetings.

In FY22, SRHP launched its first year of programming with the new SRH training center and learning management system. MDPH selected a nationally recognized training and technical assistance (TTA) organization, JSI Research and Training Institute, Inc., to provide comprehensive SRH TTA to clinical providers, including specialized skills for serving adolescents. Year one activities included creating and launching the website (MASRH.org), delivering several webinars, and developing two e-learning trainings, one titled *Racial Equity in Sexual and Reproductive Health Services* and the other titled *MDPH Sexual and Reproductive Health Program Core Values and Program Standards*.

Priority: Prevent the use of substances, including alcohol, tobacco, marijuana, and opioids, among youth and pregnant people.

According to 2020 CCIS, MA youth living in rural areas were significantly more likely to report increased substance use since the pandemic began compared to youth living in urban areas. More than 2 in 5 Black youth reported using more substances since the pandemic began, and Hispanic/Latinx youth reported twice as much substance use (17%) as American Indian/Alaska Native (8%) and Black (8%) youth. Alcohol and marijuana were the most common substances used. The substance use prevention and treatment resources youth reported needing most were in person therapy and peer support.

Objective 1. By 2025, increase by 5% (from 65% in FY19) the percentage of schools with students in grades 7-12 implementing SBIRT (Screening, Brief Intervention and Referral to Treatment).

School Health Services

Screening for substance use disorder in all MA public schools, in at least one middle school and one high school

grade, is now mandated through the STEP Act of 2016 (*An Act Relative to Substance Use, Treatment, Education and Prevention*)^[4]. This is done via SBIRT using a validated screening tool and has been implemented collaboratively by the MDPH School Health Unit and Bureau of Substance Addiction Services (BSAS). The tool uses the standard six-item CRAFFT (Car, Relax, Alone, Forget, Friends, Trouble) questions along with four validated pre-screening questions, which improves the sensitivity of the screening to identify individuals with substance use issues. The CRAFFT is designed for youth aged less than 21 years. Screening provides an opportunity for school nurses to develop deeper relationships with students, particularly students at risk for alcohol or substance use disorders, and equips nurses to listen and respond appropriately to behavioral health issues. Aggregate screening data are reported to MDPH annually, which include outcomes of screenings.

In FY22 the MDPH School Health Unit added another public health nursing advisor who works specifically with non-public schools, and the entities they interface with, in order to increase adherence to medication administration regulations and support implementation of screening regulations/statute including SBIRT screening.

In the Spring of 2022, the School Health Unit, BSAS, BU SHIELD and the Massachusetts SBIRT – Training and Technical Assistance program (MASBIRT-TTA) updated the approved SBIRT screening tool from the CRAFFT-2 to the CRAFFT-2N, including updating all associated trainings, in order to include screening questions and brief interventions that address nicotine use and vaping. This effort is intended to reduce youth vaping in MA and mitigate the negative health outcomes of vaping. In FY22, 72% of school districts with students in grades 7-12 implemented SBIRT screening.

School-Based Health Centers

In FY22, the SBHC program transitioned to a new data vendor. Since this was a transition year and sites were adapting to the new system, most sites were not yet reporting their screening results to DPH. Therefore, at this time we cannot report on the proportion of students visiting SBHCs that received SBIRT screening

Additional activities to prevent the use of substances among youth:

MassCALL3

In July 2021, the BSAS Prevention Unit began a new initiative called the Massachusetts Collaborative for Action, Leadership, and Learning 3 (MassCALL3). The goal of MassCALL3 is to prevent substance misuse (e.g., alcohol, nicotine, cannabis) among youth in middle and high school (approximate ages 12-17) through the implementation of comprehensive evidence-based substance misuse prevention programs, policies, and practices across multiple levels of the socioecological model (e.g., individual, peer, family, school, community). Emphasis is being placed on the application of a Restorative Prevention approach with a focus on race and health equity to address inequities in access to services, utilization of services, and substance misuse outcomes among historically marginalized populations. At present, the MassCALL3 initiative is supporting 41 grantees covering 178 of the 351 municipalities in the Commonwealth.

During the first 12 months of the MassCALL3 initiative (July 1, 2021 – June 30, 2022), all grantees were required to: (a) conduct an assessment of needs and resources within their catchment area, (b) identify areas for improvement within the local prevention infrastructure system, (c) prioritize substance misuse prevention intervening variables and outcomes of focus – including populations and settings of focus, (d) identify a comprehensive set of evidence-based programs, policies, and practices to be implemented, and (e) create a comprehensive strategic prevention plan – including a detailed one-year workplan for FY23. Each comprehensive strategic prevention plan is being reviewed by a Prevention Contract Manager within BSAS, a representative from the state's prevention TA center, and the cross-site evaluation team for the MassCALL3 initiative. Upon approval of the plan, MassCALL3 grantees will proceed to implement the specifications outlined in the strategic prevention plan. We anticipate final plan approvals

for the majority of grantees early in FY24 and expect that these grantees will then progress to providing direct and indirect prevention services with the population(s) identified in their approved plan.

^[1] [SisterSong](#) defines Reproductive Justice as the human right to maintain personal bodily autonomy, have children, not have children, and parent the children we have in safe and sustainable communities.

^[2] Allison, Mandy A., et al. "School-based health centers: improving access and quality of care for low-income adolescents." *Pediatrics* 120.4 (2007): e887-e894.

^[3] McNall, Miles A., Lauren F. Lichy, and Brian Mavis. "The impact of school-based health centers on the health outcomes of middle school and high school students." *American Journal of Public Health* 100.9 (2010): 1604-1610.

^[4] Bill H.4056. Available at: <https://malegislature.gov/Bills/189/House/H4056>

Adolescent Health - Application Year

Priority: Strengthen the capacity of the health system to promote mental health and emotional well-being.

Objective 1. Increase the percent of high school students who report having a teacher or other adult in school they could talk to about a problem to 77% from baseline (75%, 2017 YRBS).

School-Based Health Centers

SBHC staff will continue to support resilience in students and the school community to respond to the collective trauma related to the COVID-19 pandemic. There will be continued emphasis on connecting with students and building a solid therapeutic alliance. Clinicians will continue to assess for protective factors, including the presence of a trusted adult and school connectedness. The SBHC program intends to support the creation of an online educational platform that provides robust asynchronous learning to educate on our quality standards and core values, such as the importance of the trusted adult, to the statewide SBHC network.

All SBHC staff (including nurse practitioners, behavioral health clinicians, and community health workers) will build upon the strategies and skills that were developed in the training offered in FY22 titled: *Healing is in the Return*. Programmatic changes will be implemented in response to feedback provided by SBHC clients and non-clients obtained in FY23 aimed at assessing sense of student belonging and validating students using a strengths-based approach.

Office of Sexual Health and Youth Development (OSHYD)

The OSHYD will continue to provide trainings to funded organizations on positive youth development using the Search Institute's 40 Developmental Assets framework, with the goal to increase youth protective factors such as access to a trusted adult. In addition, OSHYD will provide trainings that address the Standards of Practice for Adolescent Sexuality Educators. The standards are professional disposition, racial equity and intersectional inclusion, trauma informed, positive youth development, content knowledge, program planning, implementation, and assessment. Other activities planned for FY24 intended to encourage youth to access trusted adults will include:

- OSHYD will conduct an annual Suicide Prevention *Question, Persuade, Refer* training to all programs as a strategy to increase protective factors among the adolescent population.
- OSHYD will continue to partner with Advocates for Youth to offer free virtual professional development opportunities for health educators/case managers. Advocates for Youth provides a virtual classroom space where educators can practice and refine a variety of skills needed to effectively teach sex education to teens. Educators will practice teaching student avatars using short scenarios and support from an instructional coach so they can quickly learn and master the skills they most need to be effective, such as: answering difficult questions when teaching sex education, tailoring lessons to meet different developmental levels, and providing trauma-informed sexuality education.
- Additionally, OSHYD will partner with the Planned Parenthood League of MA to offer the Sexuality Education Cornerstone Series Training (SECS). This training equips youth-serving professionals with a foundation of knowledge on sexual health information.
- OSHYD staff will continue to provide TA on family/parent engagement to OSHYD funded providers, with the goal to strengthen facilitators' ability to communicate effectively with youths' family/guardians about the importance of sexuality education and their role as trusted adults.
- OSHYD staff will provide the Valuing Our Impact for Civic Engagement (VOICES) curriculum training to new facilitators. VOICES is a civic engagement and leadership curriculum comprising six workshops to facilitates discussions with adolescents on topics such as identity, community, and their agency to make changes as leaders.
- Lastly, OSHYD will also continue to provide safe spaces for adolescents to explore topics such as sexuality and mental wellness as a part of its programming, including Adolescent Sexuality Education, Personal

Objective 2. By 2025, return to the pre-pandemic baseline the percentage of middle and high school students who report feeling so sad or hopeless almost daily for 2+ weeks in a row that they stopped doing some usual activities (high school: 33.8%, 2019 YRBS; middle school: 24.3%, 2019 YHS).

School-Based Health Centers (SBHC)

The SBHC program reprocured services for a new 10-year funding cycle beginning in FY23. In this procurement, there is a greater focus on leveraging a comprehensive care team with a greater emphasis on providing integrated and enhanced behavioral health care, using universal strength-based approaches to build on the resilience of youth and families, identifying and mitigating health risks, and actively addressing the impacts of racism on all children's ability to learn and thrive. In this expanded model, funded SBHCs must have a full-time behavioral health provider and medical provider onsite at the SBHC during all hours that school is in session. The new model is in response to increasing need for behavioral health services for youth, both prior to and especially as a result of the COVID-19 pandemic. SBHCs are encouraged to offer tele-behavioral health services in addition to having a provider onsite full-time. The expanded model also requires a full-time community health worker at each SBHC site. This role has proven crucial to strengthening connections with the school, building trusted relationships with students and families, improving outreach services, and facilitating meaningful feedback opportunities for students regarding SBHC services.

The SBHC Program will continue to offer professional development opportunities to SBHC staff to increase their capacity to respond to the behavioral health needs of students and continue to foster resiliency with the students and school communities. The SBHC program plans to continue to develop a robust educational platform that will allow for asynchronous learning and access to the SBHCs quality standards, a SBHC start-up toolkit to support community partners planning to initiate an SBHC, and continuous quality improvement initiatives to support funded agencies in implementing meaningful behavioral health screeners (in accordance with the national American Academy of Pediatrics and U.S. Preventive Services Task Force guidelines) with a focus on equity.

School-Based Telebehavioral Health Pilot Program

MA will continue to implement a telebehavioral health pilot program in schools. The overall objectives of the program are to reduce barriers to access for critically needed behavioral health services for school-age children with a specific focus on racial justice and demonstrate the feasibility and elements necessary for success to replicate this program in other schools. The primary focus in FY24 will be expanding tele-behavioral health services to additional districts identified in our FY22 needs assessment. MA will also focus on expanding the types and number of school tele-behavioral health providers operating in the state by offering capacity building to smaller, community-based clinics, including community-based clinics that are owned and operated by Black, Indigenous, and other People of Color (BIPOC) clinicians and clinics that have a diverse workforce that reflects the student populations across the state. Other activities in FY24 will include recruiting and training more community health workers to be embedded in pilot sites, continuing the training and technical assistance offered to providers and districts through our learning management platform, integrating Tier Three tele-behavioral health interventions, and conducting focus groups and surveys with key stakeholders at pilot sites, including clinicians, administrators, and students.

School Health Services

Comprehensive School Health Services (CSHS) grant activities will focus on providing specific strategies to achieve increased student connection. The following CSHS grant performance objectives have been revised to more accurately reflect the scope of school health service practice:

- Increase in the percentage of students who are identified as experiencing symptoms of depression and/or anxiety, or suicidal ideation, and are not currently receiving behavioral health care, that are referred for mental

health services by school health/counseling staff (Target – increase by 10% annually).

- Increase in the percentage of students who are identified as homeless or marginally housed assessed for unmet health care needs by nursing services (Target – increase assessments by 10% annually).
- Increase in the percentage of students who have special health needs (e.g. asthma, autism, ADHD, diabetes, life-threatening allergies, seizure disorders, diagnosed mental health disorder) that have an individualized healthcare plan (IHP) developed (target – 100% IHPs developed).
- Increase in the percentage of English Language Learners (ELL) students assessed for unmet health care needs by nursing services (Target – increase assessments by 10% annually).

The MDPH School Health Unit will also continue to support school health staff and schools facing many vacant school health positions. Schools will have an opportunity to continue to spend CDC workforce funding first awarded in FY22 to forty-two schools and school districts to retain and hire school health staff through a no-cost extension. The School Health Unit's professional development vendor (BU SHIELD) will continue to offer an entire school mental health series, which is now an enduring offering on the BU SHIELD website. School health staff, in partnership with the Division of Children and Youth with Special Health Care Needs and BU SHIELD, will continue their collaboration on a project facilitated by CDC Workforce funds that will help to support nurses caring for youth with complex healthcare needs in schools.

In FY23, CSHS grantees were eligible for additional state funding under a behavioral health expansion opportunity, and 18 schools and districts were selected for funding. This activity will continue in FY24 if adequate funding is available in the state budget. The theme for professional development for school nursing staff will focus on the IEP/504 process and the role of the school nurse, as well as continuing our work with Wheelock College around exploring, understanding, and addressing racism in educational and healthcare institutions.

Office of Sexual Health and Youth Development (OSHYD)

The OSHYD's Adolescent Health programs will revert to implementing programming based on its original design. While modifications have been critical tools for providers attempting to provide sexuality education during the worst of the COVID-19 pandemic, new agency staff are being onboarded with the understanding that modifications are the intended implementation plan and that is making it increasingly harder to evaluate the original program design. Funded agencies that continue to require accommodations to implement flexible program models on a case-by-case basis will be allowed to do so with permission from their contract manager. This will allow them to address the mental health needs of youth and will allow us to better monitor and track the types of mental health supports being implemented throughout the fiscal year. There are several internal and external factors contributing to poor mental health among adolescents such as housing instability, increased family responsibilities, the racial reckoning in the United States, and global conflicts. OSHYD programs serve as a consistent safe place for youth to process their feelings and access resources. Program strategies will include using funding to support the basic needs of young parents such as rental/utility assistance, dedicated spaces to de-compress and speak with peers about their feelings, and weekly staff wellness check-ins.

The Sexual and Reproductive Health Program's core values include providing confidential youth-friendly and trauma-informed care. Through its training center, MDPH will continue to provide training and technical assistance on these critical values for the provision of services for adolescents. Completing an e-learning module on the program's values will continue to be a required element of each contract. In addition to the curation of a collection of resources for providers on the topic, the training center will develop a tool kit to support providers to address the mental health needs of their adolescent clients. Oversight will occur during monthly meetings with contracted health centers.

Objective 3. By 2025, return to the pre-pandemic baseline the percentage of middle and high school

students who seriously considered attempting suicide in the past 12 months (high school: 17.5%, 2019 YRBS; middle school: 11.3%, 2019 YHS)

School-Based Health Centers

SBHC care teams will continue to use the Multi-Tiered System of Supports (MTSS) framework to support students and school communities. Staff will demonstrate heightened awareness of behavioral red flags among students in the clinical high-risk category, including those at risk of suicidality. Staff will operationalize the learnings on preparing emergency plans in response to dynamic and shifting levels of acuity. Program managers will engage in ongoing clinical quality improvement work for their agency and sites to ensure they are moving toward alignment with the national clinical guidelines from the AAP and USPSTF on behavioral health screening, including suicide screening.

Suicide Prevention Program

It is anticipated that a needs assessment geared towards understanding the current landscape of suicide awareness among school personnel will be completed. An instructional designer will be engaged to develop a new training for suicide awareness and prevention for school personnel that will be available online at no cost. The current project timeline anticipates that the training and custom online platform will be built at the end of the fiscal year.

Child Fatality Review

The Injury Prevention and Control Program (IPCP) anticipates that prior to FY24, coordination responsibilities for the Child Fatality Review program will be transferred to another agency. IPCP will continue to facilitate tailored technical assistance to local CFR teams, particularly around suicide prevention.

Priority: Promote equitable access to sexuality education and sexual and reproductive health services.

Objective 1 (SPM 2). By 2025, decrease the Latinx teen birth rate of 26.0 per 1,000 Latinx women aged 15-19 to 16.0 per 1,000 to reduce the inequity between Latinx and White youth.

Objective 2. By 2025, decrease the gap between the Black and White teen birth rates to less than 2 times higher.

Office of Sexual Health and Youth Development

The OSHYD's FY23 programmatic plans were significantly delayed as a result of staffing turnover at funded agencies requiring agencies to delay programming and prioritize hiring and onboarding of staff. OSHYD staff supported agencies in onboarding new staff by funding professional development and onboarding strategies. The Adolescent Sexuality Education Program (ASE) will focus on reaching Black and Latinx youth, using the following strategies: leveraging peer leaders to recruit youth within their social networks to participate in ASE programming; hosting focus groups with Black and Latinx youth to identify organizational and cultural barriers to program participation; and offering staff professional development opportunities on topics such as how to recruit and retain youth, exploring the impact of racial identity development, and building authentic relationships with youth.

The Personal Responsibility Education Program (PREP) will also continue its effort to serve Black, Latinx, LGBTQ youth and other marginalized youth populations that traditionally have not had access to quality sexuality education. PREP will strengthen its partnerships with the Department of Elementary and Secondary Education (DESE) to fund seven school districts/collaboratives to deliver sexuality education services. These seven additional districts will receive sexuality education curricula training, data and evaluation training, and technical assistance in implementing PREP programming in the classroom. PREP-funded agencies will also receive professional development trainings on the standards of practice for adolescent sexuality educators that will strengthen their services and ensure young people are receiving accurate, comprehensive, and inclusive sexuality education services.

OSHYD remains committed to integrating and centering youth voice. OSHYD will launch a youth advisory board. Ten

young people will be engaged to inform program designs and shape the youth internship program. Additional details about this initiative are described in the family, father, and youth engagement priority within the *Crosscutting* domain.

Objective 3. By 2025, provide training to 75% of Adolescent Sexuality Education and Sexual Reproductive Health program grantees on the integration of reproductive justice principles into delivery of sexuality education and/or sexual and reproductive health services.

Office of Sexual Health and Youth Development

OSHYD will continue to operationalize its core values of racial justice, health equity, reproductive justice, trauma-informed care, sustainability, youth development, and evidence-based/data-driven programming with a focus on centering racial justice and reproductive justice through its partnerships and services. Reproductive Justice framework trainings will be offered annually to MDPH-funded organizations. ASE and PREP program staff will be required to participate in these trainings and develop reproductive justice action plans to support the integration of reproductive justice principles into their service delivery.

Funded agencies will submit their action plans and receive technical assistance from OSHYD annually. OSHYD anticipates the following types of activities may be included in the agencies' action plans in FY24: organizational training on racial bias, history of the birth control pill development, exploration of agency policies that may pose a barrier to accessing services, development of a community advisory board to support the reproductive justice initiative, and curricula adaptations supportive of reproductive justice. These curricula adaptations may include acknowledgement of the history of contraceptive development ensuring that youth are aware of the kernels of truth behind some "myths" about contraception, particularly those that are common in communities of color. The integration of reproductive justice principles into sexuality education will be an ongoing and iterative process.

Objective 4. By 2025, 85% of females under age 25 will be screened for chlamydia at SRHP-funded clinics.

Sexual and Reproductive Health Program (SRHP)

The SRHP will launch its second year of the new 10-year program cycle (FY23-FY32). In FY23, six new agencies were awarded SRHP contracts. This expanded the network and geographic coverage from sixteen agencies to twenty-two agencies who were selected from a competitive procurement process. Procurement is based on the new SRHP Core Values and Program Standards, which emphasize evidence-based guidelines, including the Quality Family Planning guidelines, the Quality STD Clinical Services guidelines, the STD Treatment guidelines, and federal Title X regulations. The updated Core Values also emphasize the delivery of adolescent-friendly services, including protecting the confidentiality of adolescents and others who are not the primary subscribers on their insurance plans.

SRHP will be supported through an updated data system that collects and reports demographic and service information, extracted from contracted providers' electronic medical records. This data system will support the collection and reporting of data necessary to respond to this Objective. In addition, the SRH training center will provide training and technical assistance to both MDPH-funded vendors and other SRH providers throughout the Commonwealth that do not receive direct funding from MDPH. The training center will share best practices, clinical updates, and emerging trends with a wide SRH safety net service audience. These activities will ensure that clinical best practices, including chlamydia screening, will be disseminated to many SRH providers throughout the state.

All SRHP activities, including training and technical assistance provided by MDPH staff and the new SRH training center, are expected to be supported by both state funds and Title X funds. After two years out of the Title X program, MDPH was awarded funding and returned to the federal program as of April 1, 2022, under a newly revised program regulation.

SRHP will continue to incorporate into contract management the collection and reporting of chlamydia testing data

and monitor progress towards meeting this objective. SRHP will provide technical assistance regarding chlamydia testing during monthly meetings with contracted agencies, and additional training during semi-annual statewide provider meetings.

Objective 5 (NPM 10). By 2025, increase by 2% from baseline (92.3%, NSCH 2017) the percent of adolescents who have a preventive medical visit in the last year.

School-Based Health Centers

The SBHC program will continue to work with Apex, the selected data vendor, to accurately measure preventive medical visits in SBHCs. Professional development for SBHC clinicians will focus on developing care practices that are sensitive and welcoming to priority populations, including youth of color, immigrant/refugee youth, low-income youth, youth in rural communities, and LGBTQ+ youth. The SBHC program is explicitly communicating the expectation that preventive care visits be tailored to these populations and that specific strategies need to be implemented to intentionally recruit these students to enroll in SBHC care.

MA SBHC Quality Standards require SBHCs to conduct and document student satisfaction surveys and deliver services in response to feedback. All SBHC clients must be given the opportunity to provide student satisfaction feedback. MDPH will require SBHCs to launch and report on a satisfaction initiative that provides a meaningful opportunity for both existing clients of the SBHC and students who are not yet clients of the SBHC to provide feedback. The SBHCs will need to report on how these initiatives were designed to be culturally, linguistically, and age-appropriate for the student body and in accordance with CLAS national standards. SBHCs will report the findings from these initiatives to DPH, as well as their plans for making modifications to their SBHCs in response to this feedback.

Sexual and Reproductive Health Program

The SRHP will continue to ensure that contracted agencies are a source of primary care and referrals for adolescents through provision of technical assistance during monthly oversight meetings and during comprehensive on-site program reviews. In addition to providing education and training related to CDC's *Quality Family Planning Guidelines*, SRHP will continue to make available an e-learning module through its training center that shares best practices and guidance on program-specific guidelines that detail the expectation of specialized care for adolescents.

The SRHP will launch its second year of a 10-year programming cycle, which includes a comprehensive Training and Technical Assistance center that will provide ongoing guidance and support to contracted agencies on the recently updated program standards. During monthly FY24 grant oversight meetings, the SRHP will also provide direct technical assistance to the contracted agencies regarding adolescent preventive and reproductive health care.

Priority: Prevent the use of substances, including alcohol, tobacco, marijuana, and opioids, among youth and pregnant people.

Over the next five years, key strategies to address this priority among adolescents include promoting Screening, Brief Intervention and Referral to Treatment (SBIRT) in schools and school-based health centers and partnering with the MDPH Bureau of Substance Addiction Services (BSAS) to obtain and respond to data on adolescents' perceptions of risk, parental attitudes, and peer attitudes when adolescents use marijuana, drugs, and alcohol.

Objective 1. By 2025, increase by 5% (from 65% in FY19) the percentage of schools with students in grades 7-12 implementing SBIRT (Screening, Brief Intervention and Referral to Treatment).

School Health Services

The School Health Unit, in partnership with BSAS, will continue to implement SBIRT screening in schools. Particular

attention will be paid to increasing the number of non-public schools and approved special education programs that implement SBIRT. School Health Services continues to work closely with MASBIRT TTA, our SBIRT training vendor, to review and revise SBIRT training as needed, and to add additional training sessions to accommodate the marked increase in school staff turnover.

School-Based Health Centers

The SBHC program will continue to work closely with the Leadership Education in Adolescent Health (LEAH) program at Boston Children's Hospital to deliver professional development to SBHC staff on topics of interest related to screening for behavioral health needs. Additionally, the SBHC program plans to initiate a continuous quality improvement framework that is designed to support SBHC sites and their host agencies at building internal capacity to assess and improve their behavioral health screening practices to be in alignment with the national guidelines from the AAP and USPSTF. SBHC sites will be required to continue to use the CRAFFT+N to facilitate screening and brief intervention for students 12 years old and above.

The SBHC Program will require funded sites to report on the substance use treatment and prevention services that are offered at the SBHC in addition to the classroom based/school wide services and outreach/collaborative activities completed within the year.

Additional activities to prevent the use of substances among youth

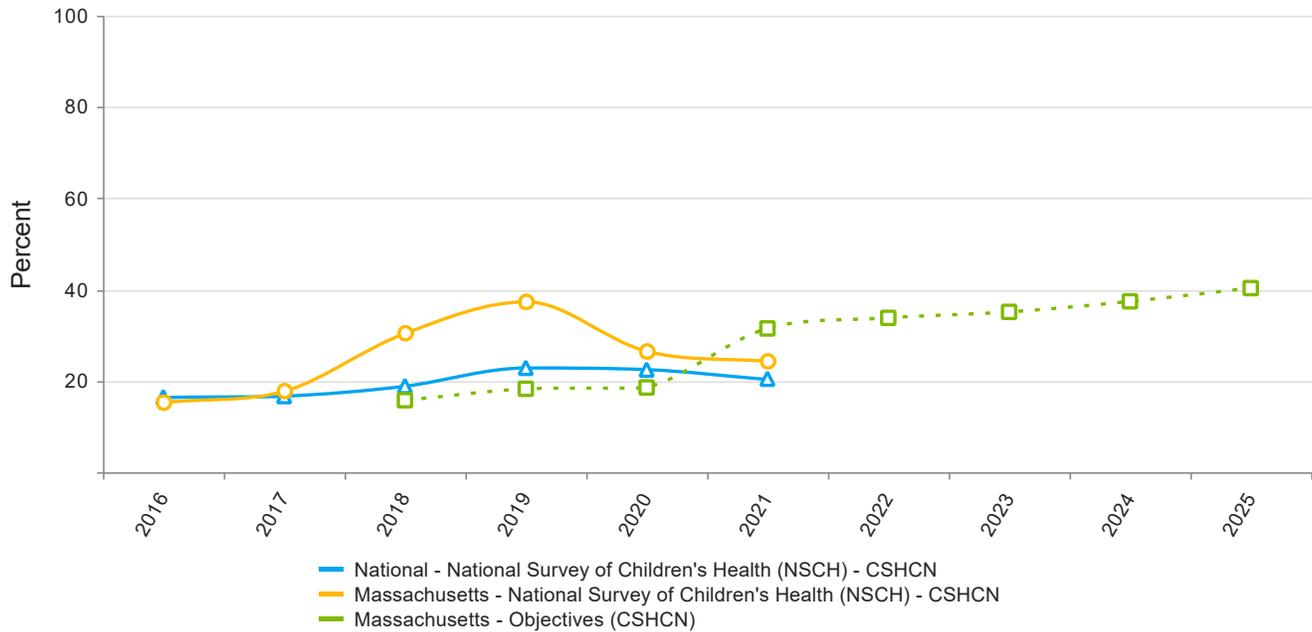
MassCALL3

As described in the FY22 report, MassCALL3 grantees developed strategic plans based on an assessment of needs and resources in their catchment areas. Each comprehensive strategic prevention plan is being reviewed by a Prevention Contact Manager within BSAS, a representative from the state's prevention technical assistance center (the BSAS Center for Strategic Prevention Support), and the cross-site evaluation team for the MassCALL3 initiative. We anticipate final plan approvals for the majority of grantees early in FY24 and expect that these grantees will then progress to providing direct and indirect prevention services with the population(s) identified in their approved plan.

Children with Special Health Care Needs

National Performance Measures

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



NPM 12 - Children with Special Health Care Needs

| Federally Available Data | | | | | |
|--|------------|------------|------------|------------|------------|
| Data Source: National Survey of Children's Health (NSCH) - CSHCN | | | | | |
| | 2018 | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | 15.8 | 18.3 | 18.6 | 31.5 | 33.8 |
| Annual Indicator | 17.9 | 30.5 | 37.2 | 26.3 | 24.2 |
| Numerator | 20,928 | 30,134 | 46,964 | 41,653 | 37,020 |
| Denominator | 116,869 | 98,859 | 126,255 | 158,326 | 152,992 |
| Data Source | NSCH-CSHCN | NSCH-CSHCN | NSCH-CSHCN | NSCH-CSHCN | NSCH-CSHCN |
| Data Source Year | 2016_2017 | 2017_2018 | 2018_2019 | 2019_2020 | 2020_2021 |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 35.1 | 37.4 | 40.3 |

Evidence-Based or –Informed Strategy Measures

ESM 12.1 - Percent of youth ages 14 and older receiving services from the DPH Care Coordination Program who receive health transition information and support from their Care Coordinator

| Measure Status: | | Active | | | |
|------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| State Provided Data | | | | | |
| | 2018 | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | 50 | 60 | 70 | 75 | 80 |
| Annual Indicator | 50.5 | 64.9 | 57 | 37 | 58.3 |
| Numerator | 101 | 159 | 118 | 114 | 144 |
| Denominator | 200 | 245 | 207 | 308 | 247 |
| Data Source | MDPH Care Coordination database |
| Data Source Year | FY18 | FY19 | FY20 | FY21 | FY22 |
| Provisional or Final ? | Final | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 65.0 | 70.0 | 75.0 |

State Action Plan Table

State Action Plan Table (Massachusetts) - Children with Special Health Care Needs - Entry 1

Priority Need

Support effective health-related transition to adulthood for adolescents with special health needs.

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 the percent of youth with special health needs who received services necessary to transition to adult health care from 17.9% (NSCH 2016-2017) to 40.3%.

Strategies

Increase access to health transition resources and information for families, youth, and providers.

Provide culturally and linguistically appropriate services and supports to youth and their families based on individual needs prior to and throughout the transition process.

Engage youth and young adults with special health needs and their families to ensure youth voice in efforts to strengthen the system and aligns services around health transition.

Engage internal (MDPH programs serving transition age youth) and external partners (clinicians, non-medical providers, sister agencies) to strengthen the system and align services around health transition for young adults.

| | |
|------|--------|
| ESMs | Status |
|------|--------|

| | |
|---|--------|
| ESM 12.1 - Percent of youth ages 14 and older receiving services from the DPH Care Coordination Program who receive health transition information and support from their Care Coordinator | 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 (Massachusetts) - Children with Special Health Care Needs - Entry 2

Priority Need

Strengthen the capacity of the health system to promote mental health and emotional well-being.

Objectives

By 2025, increase the percent of children with special health needs ages 3-17 who receive mental health treatment or counseling when needed to 85% from baseline (76.9%, NSCH 2017-2018).

2. By 2025, increase the number of infants and toddlers enrolled in Early Intervention who demonstrate improved positive social-emotional skills to 57.2% from baseline (49.3% in FY21).

Strategies

1a. Collaborate with community-based organizations such as the Parent Professional Advocacy League and the Federation for Children with Special Needs to raise awareness of mental health concerns and resources for treatment among children and youth with special health needs and their families.

1b. Through DCYSHN programs, provide services and supports beyond traditional mental health treatment that address basic needs that may lead to mental health concerns in this population (e.g., lack of respite care, food/housing insecurity).

1c. Establish partnerships in the Haitian, Cambodian, and Vietnamese communities to better understand cultural differences for families of children with special health needs (both physical and behavioral) and develop strategies to increase awareness of services and reduce stigma.

2a. Implement the evidence-based practice Parents Interacting with Infants (PIWI), into Early Intervention programs, including mandatory PIWI training for new staff entering the EI system. PIWI is an approach to working with families and their young children focused on promoting social-emotional development.

Children with Special Health Care Needs - Annual Report

Massachusetts has two priorities for Children and Youth with Special Health Needs for 2020-2025:

- Support effective health-related transition to adulthood for adolescents with special health needs.
- Strengthen the capacity of the health system to promote mental health and emotional well-being.

Priority: Support effective health-related transition to adulthood for adolescents with special health needs.

MDPH defines health transition as the transition from the pediatric to the adult health care system and self-management of health and related needs as is developmentally appropriate. Progress towards this priority is measured by the percent of children with special health needs who received services necessary to make transitions to adult health care. Key MDPH programs addressing this measure include Care Coordination, Community Support Line, SSI and Public Benefits Training and Policy, MassCARE, Youth Transition Initiatives and the Office of Family Initiatives.

Objective 1 (NPM 12). By 2025, increase the percent of youth with special health needs who received services necessary to transition to adult health care from 17.9% (NSCH 2016-2017) to 40.3%.

National survey data and clinician, family and youth reports indicate that transition from pediatric to adult health care and acquisition of self-management skills remain major issues for many youth with special health needs (YSHN). NSCH combined 2020-2021 data indicate that 24.2% of YASHN aged 12 through 17 in Massachusetts received the services necessary to make transitions to adult health care. This is a decrease from 37.2% in the 2018-2019 NSCH. However, the 2018-2019 percentage for this NPM had to be interpreted with caution due to small sample size and large confidence intervals. The 2020-2021 percentage still exceeds the 2016-2017 NSCH percentage of 17.9%. It is also likely that the pandemic, which resulted in fewer well child visits, contributed to fewer youth receiving transition related services than would have otherwise.

The ESM for NPM 12 is the percent of youth aged 14 and older receiving services from the MDPH Care Coordination Program who receive health transition information and support from their Care Coordinator. Selection of these strategies and this measure are informed by the clinical report, *Supporting the Health Care Transition from Adolescence to Adulthood in the Medical Home*, jointly authored by the AAP, American Academy of Family Physicians and American College of Physicians,^[1] and Got Transition's *Six Core Elements of Health Care Transition*,^[2] which is aligned with the algorithm specified in the clinical report and defines the basic components of health care transition support. As stated in the annual report, care coordination is a critical part of transition planning for CYSHN and may be instrumental in supporting the transfer of care from pediatric to adult medical subspecialists. *Six Core Elements* identifies care coordinators as key members of the collaborative team to support health care transition to adulthood. MDPH Care Coordinators can assist and complement the medical home's work on health transition readiness by providing information and support to families of transition age youth and young adults.

Care Coordination

In FY22, 58% of all youth aged 14 and older receiving services from the Care Coordination Program received health transition information and support from their Care Coordinator, compared to 37% in FY21. Care Coordinators provided 428 transition services to youth aged 14 and older. Services included providing information and materials to youth/families regarding appropriate adult-serving agencies and health care transition (including the transition letter when applicable as explained below), and helping to facilitate connections to housing, employment, education and life skills resources.

Care Coordination Program protocol is to send letters to families receiving Care Coordination services who have children aged 14, 17 and 21 years old to notify them of the availability of assistance and support from the program during these transition planning years. Care Coordinators provide families with tools and information designed to

promote health transition readiness and assist with the health care transition process. In FY22, the number of youth targeted for transition support per program protocol (minimum of receiving a transition letter at the appropriate age) who received at least one transition service was 108 out of 167 (65%). The list of clients who are of transition age (denominator) is usually run two times a year, alerting Care Coordination staff to follow up with those families. Transition lists were run June 2021 (right before start of reporting period) and then in January 2022, so some clients may have received transition services immediately prior to the start of FY22 and might not be captured in these numbers if they did not receive any other transition-related service in FY22. Care Coordinators worked together with families to assess their need for support and services related to health transition, connected families to adult-service agencies and helped parents and youth assess the need for legal guardianship. In concurrence with the family-centeredness principle of the program, the Care Coordinators also connected families to one another to share experiences and learn from one another. In addition, the program reached out to non-English speaking families from different cultures to promote equitable distribution of information and access to services.

Youth Transition Initiatives

The Division for Children and Youth with Special Health Needs (DCYSHN) continued to maintain web pages focused on health and health-related transition resources for youth, families and providers (www.mass.gov/dph/youthtransition). Staff keep the site current by identifying new resources and reviewing existing ones. The site provides multiple links including to www.gottransition.org, a federally funded resource center designed to assist youth and young adults move from pediatric to adult health care.

DCYSHN staff members presented health-related transition information at conferences and other venues attended by youth, families and providers. In May 2022, the DCYSHN Director, a CDC Foundation-contracted MCH program manager and former interns presented at the 2022 Annual AMCHP Conference about their process of creating a Health Transition Toolkit for youth and young adults with special health needs titled *"Prioritizing Youth & Family-Professional Partnerships to Create a Health Transition Toolkit for Youth and Young Adults with Special Health Needs."* This presentation was designed to educate attendees about the importance of meaningful engagement with families and young people at every step of a project and our goals around creating a health transition toolkit that is impactful, equitable, holistic and addresses the barriers that exist in navigating health care transition and health self-management for youth and young adults with special health needs.

The DCYSHN Director also participated in several statewide Health Transition work groups, including the Transition Subcommittee of the MA Chapter of the American Academy of Pediatrics CYSHCN Committee; the Steering Committee for the statewide Neurodevelopmental Disabilities (NDD) Transition Initiative in collaboration with the Boston Children's Hospital-Brigham and Women's Hospital BRIDGES Adult Transition Program; and the MA Advocates for Children Transition Work Group that produced an updated Transition Planning Form and a Student Profile Questionnaire for Individualized Education Programs that includes health transition. The NDD Transition Initiative addressed the major challenge of the lack of adult practitioners prepared to provide healthcare to transitioning youth and young adults with special health needs by implementing eight health transition pilot projects tested at participating pediatric and adult hospitals, medical centers, and community health centers by teams of pediatricians, internal medicine providers and family members.

Several transition-related projects had graduate-level public health intern support in FY22. The interns worked to increase access to health transition resources and information for YYASHN, their families and providers by starting the development of a Health Transition Toolkit targeted primarily to youth and young adults. The interns drew upon previous work produced by earlier intern teams including literature reviews, key informant interviews, focus groups and advisory meetings conducted with caregivers and YYASHN, and subject matter expert interviews in FY21. This work included the initial drafts of the following:

- Data analysis and interpretation from youth and family caregiver stakeholder engagement for the development of the Health Transition Toolkit.
- Drafts of the core elements of the Health Transition Toolkit including: Health Care, Guardianship, Self-Management & Personal Health, Caregiver & Family Wellbeing, Public Benefits, Advocacy, and Community Support
- Additional Toolkit holistic section drafts including Sexual & Reproductive Health and Mental Health.
- Strategy and stakeholder engagement on the creation of a youth and young adult with special health needs advisory council (YYAAC).

Community Support Line

The DCYSHN toll free statewide Community Support Line (CSL) provides information, technical assistance, and resources for families with children and youth with special health needs and the providers serving these families. The CSL fields phone calls daily with questions about services and resources for children and youth with special health needs. Staff assess the child's and family's needs (including childcare, special education, emergency planning, home and vehicle accessibility; housing; durable medical equipment, medical home, mental health, respite, SSI and other public benefits, transportation and, beginning at age 12, anticipatory guidance around transition); provide information about resources, parent education and technical assistance; and, when appropriate, make referrals to programs and services at DPH, other state agencies and community-based organizations. Anticipatory guidance around transition includes providing information to families about transition from pediatric to adult care, independent living skills and resources, guardianship, job training, MassHealth and other public benefits, and opportunities for social interactions and meaningful relationships. Of the callers who contacted the CSL in FY22, 16% received technical assistance on transition planning, including health care transition.

SSI and Public Benefits Training and Policy

Public benefits trainings were presented to 172 people including educators, health care providers and 80 parents of transition-age youth and young adults transitioning into the adult health care service system. The SSI Public Benefits Training and Policy Specialist served as a panelist for the "Transition Planning for Caregivers of Children with Intellectual Disability" conference sponsored by Boston Children's Hospital and the BRIDGES Adult Transition Program. Training and presentation topics included changes in eligibility for SSI and/or MassHealth, the SSI age-18 redetermination process, retention of MassHealth after turning 18, and MassHealth flexibilities and other benefit adjustments during the COVID-19 Public Health Emergency. Individual technical assistance and consultation were provided by phone or email to family members and/or providers on public benefits for transition-age youth and young adults. The brochure *A Bridge to Adult Health Coverage and Financial Benefits* was shared with providers and families at trainings and following individual consultations regarding health coverage for youth turning 18 years or older. As a member of the statewide Special Education Advisory Council convened by the Department of Elementary and Secondary Education (DESE), the SSI Public Benefits Training and Policy Specialist advised DESE on transition planning for students to post-secondary education, vocational supports or employment during DESE's IEP Improvement Project. In mid-FY22 the DCYSHN carried out a redesign of the SSI and Public Benefits Training and Policy Specialist role to align with DCYSHN's population health focus, in coordination with program succession planning.

MassCARE

MassCARE (Massachusetts Community AIDS Resource Enhancement) is a statewide program that provides access to coordinated, comprehensive, family-centered, culturally and linguistically competent medical care, social service support and peer services for women, infants, children and youth living with HIV and their family members. MassCARE's transition guidebook *Moving on Positively* has been available as a resource on the TargetHIV website (the national Ryan White Program's resource center) for several years. In FY22, one HIV-positive

youth/young adult received transition planning services and updated their transition plan; all others had already completed their transition process.

Office of Family Initiatives

MDPH funds Family TIES (Together in Enhancing Support) at the Federation for Children with Special Needs. All Family TIES staff are parents of children and youth with special health needs. Regional Parent Coordinators provide information and referral to families of children and youth with special health needs and their providers. Family TIES has a protocol to flag callers whose children are 14 and older to receive baseline information to support their knowledge of health and health-related transition. In FY22, they provided families with the DCYSHN youth transition and Got Transition websites and transition topic sheets. Families were invited to call back with any questions. Staff provided 36 “What is Family TIES” sessions which included information and resources about health and health-related transition. Attendees included families of children and youth with special health needs, health care providers and administrators, and state agency staff.

Priority: Strengthen the capacity of the health system to promote mental health and emotional well-being.

This priority applies to the CYSHN domain, as well as the Maternal, Child, and Adolescent domains, recognizing that CYSHN and their families may experience mental health challenges in addition to their special health needs. This priority is particularly important in the context of COVID-19. Strategies to address this priority among CYSHN focus on increasing the capacity of MDPH programs and medical providers to identify and address the mental health needs of this population.

Objective 1. By 2025, increase the percent of children with special health needs ages 3-17 who receive mental health treatment or counseling when needed to 85% from baseline (76.9%, NSCH 2017-2018).

According to the NSCH 2020-2021, 82.4% of children with special health needs ages 3-17 received mental health treatment or counseling when needed. This represents an increase from 81.3% in the NSCH 2019-2020.

Pediatric Palliative Care Network (PPCN)

The PPCN’s vision is for every family in Massachusetts living with a child who is medically fragile or dying to have access to pediatric palliative care. Emotional well-being is a cornerstone of the PPCN. PPCN is designed to improve the quality of life of the child and family by meeting the physical, emotional, social and spiritual needs experienced during illness, death and bereavement. In FY22, PPCN contracted with seven licensed hospice programs statewide to provide services not otherwise covered by insurance to 701 children with life-limiting illnesses and their families. PPCN is a payer of last resort; services provided by the program are not covered by insurance or any other source. Services include nursing consultation for symptom management, integrative therapies, psychosocial support, sibling and family support, and spiritual care. In addition to paid staff, volunteers also provided assistance supporting families in a variety of ways, including in-home respite, integrative therapies and sibling support.

PPCN provides integrative therapies such as music, art and other expressive therapies to the child and their siblings. Child life specialists work one-on-one with the child to promote effective coping through play, preparation, education, and self-expression activities. Child life services are offered in such a way to encourage optimum development of the ill child and to help them and their siblings cope with specific challenges associated with intensive medical treatment and hospitalization. Based on family feedback, the integrative therapies and child life services are the most valuable components of the program.

All families also receive a psycho-social assessment upon admission. Families are required to have an in-person visit by a social worker and nurse at least quarterly. This provides an opportunity for care plans to be reassessed and

revised if needed and appropriate referrals for additional supports made. PPCN social workers provide ongoing support to all families including referrals to mental health services and assistance with anticipatory grief and loss associated with having a child with a life limiting illness.

During the beginning of the COVID-19 pandemic, PPCN programs experienced challenges to find effective ways to continue to provide palliative care services. Each provider organization adopted some form of telehealth to continue to provide nursing, social work, child life, music therapy and even some integrative therapies such as massage and reiki. Families reported the value of virtual services, such as music therapy, for their child to stay connected and to reduce isolation. PPCN programs also pivoted to add new services such as support groups for parents and siblings that, for many families, were even more effective than in person due to not having to travel or find childcare. Telehealth and in person services remained in place in FY22, at the preference of the family.

Community Support Line

As described above, CSL Resource Specialists inquire about mental health as part of their assessment with callers. They provide families with technical assistance and information about services, including behavioral health services such as applied behavior analysis (ABA). In FY22, 11% of all callers had discussed mental health needs; 4% of children whose families called the CSL were referred to mental health services; and 11% were referred to the Department of Developmental Services.

DCYSHN Mental Health Initiatives

The MDPH COVID Community Impact Survey (CCIS) was completed by ~33,000 MA residents in the Fall 2020 and its findings were shared with the public through live webinars and archived on mass.gov between June to November 2021. DCYSHN contributed to the original questions, data analysis, and presentations of CCIS findings that included mental health concerns for both youth with disabilities (21% of all 3,054 youth respondents ages 14-24, estimated total 640) and 786 parents of children and youth with special health needs. In November 2021, the DCYSHN Director presented with the CCIS research team to the MDPH Commissioner and Public Health Council as well as via a live webinar to the public that was recorded and later posted on mass.gov. The CCIS findings highlighted the strong correlation between social determinants of health (e.g. income, housing and social isolation) and its impact on caregivers' and YYASHN's mental health. YYASHN experienced the greatest inequities of any group captured in the CCIS when it came to mental health concerns during the pandemic. To promote data to action, the DCYSHN Director promoted the CCIS results widely in FY22 across various state, community, university, and medical partners to stress the need for community involvement in addressing mental health needs of CYSHN and their caregivers.

The DCYSHN Director has served as the MDPH Commissioner's Designee and Chair of the state's PANDAS/PANS Advisory Council since the state legislation creating the Council was enacted in January 2021. The Council held its inaugural meeting in early FY22 and submitted its first report to the MA legislature in Fall 2022. Since then, DCYSHN programs have begun to serve the PANDAS/PANS community more frequently and have used this experience to expand its mental health knowledge.

Objective 2. By 2025, increase the number of infants and toddlers enrolled in Early Intervention who demonstrate improved positive social-emotional skills to 57.2% from baseline (49.3% in FY21).

Early Intervention

The MA Early Intervention (EI) Program identifies early social-emotional delays in children 0-3 years old and provides interventions to promote social connectedness. A priority within the State Systemic Improvement Plan (SSIP) and the MA State-Identified Measurable Result (SIMR) is improving the statewide percentage of children with improved positive social-emotional skills, including social relationships. EI and its advisory groups selected this SIMR because it is a measure for which MA is below the national average.

In FY22, the MA SIMR increased from 49.3% in FY21 to 50.06% in FY22. The Early Intervention Division attributes this increase to its infrastructure improvements identified in its FY22 SSIP such as increased staffing to increase parent and community involvement in its advisory board, increased data collection and analysis to support data-based decision-making, increased staffing designed to increase early intervention services provider capacity to use research-based strategies to improve children's outcomes and family engagement.

Additional activities to improve the system of care for CYSHN

Other activities to improve the system of care for CYSHN that were not specific to the priorities are discussed below and in the *Crosscutting* domain.

Office of Family Initiatives (OFI)

DCYSHN and OFI continue to address barriers – most notably the availability and awareness of services – that make it challenging for children and youth with special health needs and their families to access community-based services easily. To address these barriers, MDPH funds Family TIES (Together in Enhancing Support) at the Federation for Children with Special Needs. All Family TIES staff are parents of children, youth, and young adults with special health needs. Regional Parent Coordinators provide information and referral to families of children and youth with special health needs and their providers. In FY22, total contacts with the Parent Coordinators increased 7.4% over FY21. Family TIES staff are familiar with local and regional resources and provide training and technical assistance to families as they navigate the system of care. In FY22, Family TIES participated in 44 virtual outreach and/or training opportunities (attended by 366 parents and professionals) and disseminated 653 copies of its resource directory by mail. Family TIES included a summary of the program and the resources and supports available to families in 652 packets of information about Early Intervention (EI) sent to callers.

As the Central Directory/child-find arm of EI, Family TIES staff gave information and technical assistance about EI and how to access community-based EI services to 1,248 families and providers, a 76% increase over FY21. Family TIES also provides information and referral services to families whose children are 3-22 years of age. In FY22 the program had 9,989 phone contacts with families and providers. Although most callers spoke English, over 20 additional languages were reflected. Callers were given information about specific disabilities, support groups, community-based recreational opportunities, after-school options, respite, and funding assistance.

Family TIES also serves as the statewide Parent-to-Parent (P2P) organization in MA and is a member of Parent-to-Parent USA. In FY21 P2P matches were made for 43 families speaking six languages. Family TIES received another 35 requests that it addressed with telephone information, referrals, and technical assistance provided by the P2P Coordinator and Regional Parent Coordinators. At the end of FY21, 182 mentor parents were active and available for a match. "Listen and Learn," the MA P2P curriculum, is available in Spanish, Portuguese, Vietnamese, Chinese and Haitian Creole. Parents who speak other languages, including various African dialects and ASL, can access individual training to allow them to become support parents.

Approximately 28,000 parents of children currently or previously enrolled (within the past 10 years) in EI received the EI Parent Leadership Project (EIPLP) newsletter, *The Parent Perspective*, which provides information about the system, community services and events. Each issue includes an article written by a family member who is receiving or previously received EI services. *The Parent Perspective* is available in hardcopy and electronically. EIPLP maintained a robust social media presence, including Facebook, Twitter, Instagram and YouTube, through which the program continues to offer resources to families about a variety of topics including COVID-19 resources and information.

In FY22 EIPLP collaborated with the EI Division to create four new online trainings for families and providers:

Spanish versions of “What is EI?” and “What is EI and How Does it Work?”, “Transition Beyond the IFSP for Parents,” and “NCSEAM for Families.” All were widely publicized and are available on the [EIPLP YouTube channel, along with previously created trainings, “What is EI?,” “What is EI and How Does it Work” and “EI Services and Telehealth.”](#)

Massachusetts Technology Assistance Resource Team (MASSTART)

MASSTART supports children with medical complexity by providing consultation to their schools and families on developing a safe plan of care for their specialized health care needs while at school. Children with medical complexity often require medical treatment, medications or observation that need skilled nursing interventions while at school. MASSTART providers assist in developing children’s individualized health care plans and emergency plans, train school staff to understand and meet children’s special needs, conduct educational and training programs, and provide information and referrals to community-based services. By ensuring safety in school for children with complex needs, it supports the educational goal of placement in the least restrictive setting.

In FY22, MDPH contracted with two hospitals and an individual nurse consultant to provide this service. In FY22, MASSTART served 248 children and youth under age 22. MASSTART received 138 new referrals and responded to 93 technical assistance requests. MASSTART also held regular trainings for 388 school nurses/staff and 33 families. MASSTART providers collaborated regularly within their regions by attending multi-agency collaboration meetings and worked closely with the MDPH School Health Unit and Regional School Health Advisors. Families faced unprecedented challenges due to the COVID-19 pandemic as they dealt with the provision of remote school services and transition back to in-person school services for this vulnerable population. School nursing staff shortages also made it difficult for students with medical complexity to return to school. MASSTART provided consultation, outreach, and training via virtual platforms to serve families without interruption.

Medical Review Team (MRT)

The MRT reviews requests for children and youth with special health needs aged birth to 22 years for eligibility for placement in a pediatric nursing home or skilled nursing facility (SNF) for long term care (LTC), short term care (STC/respite), and short-term post-hospital care or, in the case of young adults aged 16-22 years, placement in an adult facility for skilled nursing or rehabilitation care. Each program has specific eligibility criteria and requires review by a multidisciplinary team prior to admission. FY22 was again characterized by the current COVID-19 pandemic and was particularly challenging for families. The bed situation in both pediatric skilled nursing facilities in MA was concerning as there were only a few open beds and emergency placements at the pediatric facilities were not possible. In addition, the facilities required a minimum STC length of stay. The national health care staffing shortage affected many families, as well as skilled nursing facilities, as neither were able to fill their nursing staff needs. Therefore, MRT saw an increased number of LTC applications. Due to the limited availability of short-term care beds, the number of STC applications decreased compared to FY21. The two pediatric skilled nursing facilities did not accept any post-hospital admissions.

In FY22, MRT reviewed 57 applications. MRT received 17 LTC referrals (8 in FY21); 39 STC referrals (58 in FY21), including 10 first-time referrals; no referrals for post-hospital care, and one referral of a young adult for skilled nursing and rehabilitation care (4 in FY21). The MRT continues to receive referrals for LTC and STC of more medically complex children with specific care needs such as ventilation. This has been challenging for the pediatric nursing facilities due to the higher level of trained staff needed. Children with ventilators require that a nurse be available on all shifts, so nursing homes have set a limit on the number of children requiring vent care that they can have in the facility at any given time. As a result, they must balance long- and short-term admissions, delaying admissions for some children. Children who are vent-dependent were not able to access short-term care.

With the limited number of beds available at the two pediatric skilled nursing facilities, STC, LTC, and emergency

care for families during the pandemic remained a major area of concern. Cross collaboration with multiple agencies, including MassHealth, has been strengthened to address this critical issue.

Community Support Line

In FY22 CSL resumed work on previous plans for outreach and training that had been put on hold in FY21 to respond to families' needs during the COVID-19 pandemic. Staff participated in or facilitated 42 outreach and/or training events, reaching at least 1,029 parents and providers. Of the 42 events, four were offered in Spanish, with the rest in English.

CSL continued to raise families' needs during the COVID-19 pandemic in the following areas: staying up to date on COVID-19 supports and sharing them with families and providers; assisting families with emergency planning; and helping families access basic needs, personal protective equipment, in-home care, nursing, and COVID-19 testing and vaccines. Issues that could not be resolved by CSL staff, and emerging and systemic issues, were elevated to Division leadership and senior management to engage other relevant state agencies. Many of these issues related to challenges faced by immigrant populations, including access to some health care services, technology, durable medical equipment and language access.

Interagency Collaborations for CYSHN

DCYSHN and OFI partnered with the Department of Elementary and Secondary Education, Department of Early Education and Care, and several other state agencies to develop a Family Engagement Framework (FEF) published in June 2020 that adopts shared principles and practices in a collective impact approach to family engagement across state systems. In FY22, the agencies continued to collaborate on writing FEF training modules. Ultimately 10 state agencies endorsed its usage, thus sharing common terminology and practices across agencies and with families. See the *Crosscutting* domain for more information.

Several DCYSHN staff are members of the MA Lifespan Respite Coalition led by UMass Chan Medical School. They contributed to the planning of an upcoming Caregiver Respite Line hosted by MassOptions and were interviewed for a training video for case managers and others who may refer caregivers to the line based on their lived and professional experience on this topic.

The Care Coordination Program continued to convene quarterly regional networking and collaboration meetings. The purpose of these meetings was to foster a collaborative approach to the care of children in that region who receive services from multiple agencies.

DCYSHN continued to work with MassHealth and the MDPH Office of Preparedness and Emergency Management (OPEM) to establish policies and practices related to emergency care planning. FY22 activities included hosting dedicated web pages and related resources and including the needs of CYSHN and their families during natural disasters and pandemics in the MDPH promotional campaign for the annual Emergency Preparedness Awareness Month.

See also the *MCH Emergency Planning and Preparedness* for information about DCYSHN's role and interagency collaborations related to emergency planning.

[1] Cooley WC, Sagerman PJ; American Academy of Pediatrics; American Academy of Family Physicians; American College of Physicians; Transitions Clinical Report Authoring Group. Supporting the health care transition from adolescence to adulthood in the medical home. *Pediatrics*. 2011; 128:182-200.

[2] Got Transition, The Six Core Elements of Health Care Transition, available at www.gottransition.org

Children with Special Health Care Needs - Application Year

Priority: Support effective health-related transition to adulthood for adolescents with special health needs.

Key strategies to address this priority include increasing access to health transition resources and information for families, youth, and providers; providing culturally and linguistically appropriate services and supports to youth and their families throughout the transition process; ensuring youth voice in efforts to strengthen the system and align services around health transition; and engaging internal and external partners to strengthen the system and align services.

Objective 1 (NPM 12). By 2025, increase the percent of youth with special health needs who received services necessary to transition to adult health care from 17.9% (NSCH 2016-2017) to 40.3%.

Youth Transition Initiatives

The Division for Children and Youth with Special Health Needs (DCYSHN) has several objectives to address health transition for youth and young adults with special health needs (YYASHN). DCYSHN will increase access to health transition resources and information for youth and young adults, their families, and providers by continuing the development and testing of a YYASHN Health Transition Toolkit that will promote transition best practices such as the Got Transition Six Core Elements, the Charting the Life Course Framework, the MA Family Engagement Framework (see the *Crosscutting* domain for more information), and a wide variety of other resources. The Toolkit will take a holistic approach to supporting this population, including topics such as nutrition, physical activity, mental health, substance use, sexual and reproductive health, public benefits, and other areas of importance to youth and families. Graduate public health students from local colleges and universities will continue to take previously written drafts for each section, share them with subject matter experts, parents and YYASHN to get their input on the drafted modules, edit them, and then conduct a soft launch by testing selected modules online before offering them in the public domain. MDPH was selected by the Boston University School of Public Health Center of Excellence in MCH to precept a 2023 MCH Practice Fellow to continue to develop, promote, and evaluate the Toolkit from January to December 2023.

DCYSHN will ensure youth and young adult voice is sought, listened to, and applied throughout its work on the toolkit project and in general by setting up a compensated and supported youth and young adult advisory council (YYAAC) to inform and support the Division's health transition activities. DCYSHN will employ transition principles from the MA Family Engagement Framework into its work to engage youth and young adults with special health needs and their families. The YYAAC will hold its first meeting in early FY24.

DCYSHN will also convene and engage with internal and external partners to strengthen the system and align services around health transition for youth and young adults through collaborative opportunities related to transition. This includes continuing to work with other state agencies, the medical community, the MA Chapter of the American Academy of Pediatrics (MCAAP) and community-based organizations to increase awareness of transition-related resources among pediatric and adult providers and promote strategies to bridge the pediatric and adult provider systems. DCYSHN staff will continue to participate in the MCAAP CYSHCN Committee, as well as workgroups on mental/behavioral health, telehealth, and respite care. DCYSHN will provide training and technical assistance on health transition to MassHealth CARES for Kids providers through the upcoming MDPH Care Coordination Assistance, Training, Education and Resources (CCATER) Center and use the Blueprint for Change for CYSHCN to assist with systems change efforts (see *Additional activities to improve the system of care for CYSHN* below).

The DCYSHN Director will continue to serve on the Steering Committee for the multi-disciplinary statewide Neurodevelopmental Disabilities (NDD) Transition Initiative in collaboration with the Boston Children's Hospital Autism Clinic, the Brigham and Women's Hospital Weitzman Family BRIDGES Adult Transition Program, and other state agencies and medical provider organizations from across the state. The NDD Transition Initiative will hold its

second summit in November 2023 and the DCYSHN Director is scheduled to be the keynote speaker.

DCYSHN involvement on several statewide transition-related coalitions has broadened to working with many more sister state agencies, universities, and community partners in strengthening the system and aligning services around health transition for youth and young adults with special health needs, and this will continue in FY24. These coalitions include: the Charting the LifeCourse Community of Practice led by the MA Developmental Disabilities Council; the MA Partnership for Transition to Employment led by the UMass Boston Institute for Community Inclusion; and the Transition IEP Working Group led by MA Advocates for Children. The intent is to align services to promote a holistic, wraparound approach to transition to adulthood for YYASHN.

Care Coordination

The Care Coordination Program will continue to implement its revised standards and processes on health transition, providing readiness assessments, information, and transition support for all enrolled youth ages 14 and over and their families. Care Coordination practice standards require staff to send letters to families of youth receiving services at ages 14, 17 and 21. The ESM for this performance measure is the percent of youth aged 14 and older receiving services from the MDPH Care Coordination Program who receive health transition information and support from their Care Coordinator. The Care Coordination program is in the process of translating the transition letters to Haitian Creole, Vietnamese, and Portuguese.

The Care Coordination Program will continue to incorporate the six core elements of Got Transition for moving from pediatric to adult healthcare into their work with families and providers. The program will continue to implement the evidence-informed, person-centered planning tool Charting the Life Course Framework in all activities with families as it becomes a common approach and shared concepts/language for the Division, state partners, and families. This framework, together with the MA Family Engagement Framework, the Blueprint for Change for CYSHCN, and the National Standards for Care Coordination, will ensure that services respect the uniqueness of each family and their racial, cultural and linguistic differences and create and promote pathways for partnership in the transition process. As part of the transition from enabling services to a population health-based services model, the Care Coordination Program is revising how it provides education and training around health transition by intentionally incorporating the Charting the Life Course and Family Engagement Frameworks and the Blueprint for Change for CYSHCN with an emphasis on providing racially equitable trainings and technical assistance that emphasizes quality of life and well-being.

Community Support Line

The Community Support Line (CSL) will continue data improvement efforts by including transition-related elements in the new DCYSHN Apex Oracle database that is under development. The move to this database will also enhance the collaboration of the CSL with other DCYSHN programs in priority areas. Resource Specialists will continue to offer anticipatory guidance to caregivers about transition to adult health care as well as other types of transitions for children, youth, and young adults with special health needs. Resource Specialists will continue to cover transition to adult health care in their community trainings and meetings. The guidance, technical assistance, and parent education offered to CSL callers and in community trainings will cover transition from pediatric to adult health care, guardianship, public benefits and health insurance changes, and independent living resources and supports. Callers will continue to receive follow up mailings and emails to reinforce the education and information offered by phone. The CSL will use its database to aggregate and analyze data, identify gaps in service, and improve outreach to communities about health-related transition.

Family TIES

Family TIES staff will continue to ask families of youth and young adults ages 14-22 about their level of self-management skills and will share resources to support families as they assist their young people to gain these skills

as is developmentally possible. Staff will continue to share information about health transition and the MDPH definition of health transition with all callers who have children ages 14 and older. This will be used to ascertain families' knowledge and experiences with transition. Based on what is learned during these calls, staff will follow up with resources and support. Materials will be included in informational packets sent to callers.

SSI and Public Benefits Training and Policy

In accordance with its program redesign in FY22, the Public Benefits and Health Policy program will emphasize population health goals in FY24 to assure that children, youth and young adults receive the benefits to which they are entitled, access quality health care, retain comprehensive medical coverage, and effectively transition from pediatric to adult health care and benefits. The Public Benefits and Health Policy Specialist will strengthen capacity across the workforce and among families by providing training to DCYSHN program staff, youth/young adults, parents/caregivers, providers and other external partners. Trainings will continue to cover the essential topics of SSI, MassHealth and transition to adult care and benefits, while expanding scope to include additional public benefits, tax credits, tools such as ABLE accounts that enhance education, employment, and life-course financial security, and health-related social needs. A resource guide will be provided to training participants. Trainings also will introduce health policy issues affecting CYSHN, young adults and families. Trainings for parents and youth will promote family engagement, including a benefits training for parents at the annual *Visions of Community* conference. Trainings will be offered in English and Spanish by the bilingual specialist, and through interpretation in at least two additional languages, building upon a training on SSI for Vietnamese parents in FY23. The Specialist will provide approximately 150 individual technical assistance consults during FY24 using a coaching and capacity-building model. In this way, the Specialist will partner with DCYSHN staff or external providers working with the child/family and support the team to effectively address the benefit issue while building the team's expertise and the family's knowledge and effectiveness. The program's health policy role also has expanded; the Specialist will monitor existing and emerging public benefits/financing and state and federal health-related policies and legislation that concern youth and young adults with special health needs and their families and will brief DCYSHN leadership and staff on key issues to support the Division's increasing engagement in public policy development.

Pediatric Palliative Care

The Pediatric Palliative Care Network (PPCN) will continue to assess the needs of youth and young adults as they transition to adult care and will begin to develop standards for transition planning specific to the needs of families served by the program. The PPCN will assure representation of youth and young adults with life-limiting and serious illness on the Advisory Council being developed for the Division.

Priority: Strengthen the capacity of the health system to promote mental health and emotional well-being.

Objective 1. By 2025, increase the percent of children with special health needs ages 3-17 who receive mental health treatment or counseling when needed to 85% from baseline (76.9%, NSCH 2017-2018).

Pediatric Palliative Care

PPCN will continue to address the physical, emotional, social, and spiritual needs of children with life-limiting illnesses and their families. PPCN will conduct monthly meetings with the program managers of the seven contracted community-based agencies to address cross-cutting issues among the agencies providing home-based palliative care. A key topic area for these meetings will be peer-to-peer learning and training to address the emerging increased acuity of psychosocial needs of the children and families receiving PPCN services. The PPCN Program Director will use these meetings, bi-annual provider education meetings and individual site visits to promote training and skills acquisition within internal PPCN staff to increase accurate assessment and timely referrals to quality mental health services for PPCN clients and their families. The PPCN Program Director will also partner with outside

experts within pediatric palliative care to learn more about cutting-edge models and interventions and review them for possible adaptation and application to the program. Within the focus of mental health and whole family wellbeing, the PPCN will begin an environmental scan specific to bereavement care needs.

Community Support Line

The new CSL assessment includes questions related to trauma and trauma history. This opens the conversation about referrals to mental/behavioral health services, creates opportunities for parent education and sets the ground for collecting data related to trauma in the population served. CSL staff will continue to connect families of CYSHN with local mental health services and provide parent education regarding the impact of treatment and therapies. CSL staff will also refer families to other state agencies such as DDS and DMH. Staff will also continue to respond to the increased mental health needs of CYSHN and their families due to COVID-19 by connecting them to appropriate resources.

CSL staff will continue to build relationships with communities and families of color to better understand their customs and beliefs and reduce the stigma around behavioral and mental health needs.

DCYSHN Mental Health Initiatives

In addition to programmatic efforts, DCYSHN will continue the following mental health activities in FY24:

- The MDPH COVID Community Impact Survey (CCIS) 2.0 will be disseminated in FY24 and draws upon the input of DCYSHN programs to include questions about mental health for CYSHN and disabilities. CCIS 1.0 findings indicated that both youth and young adults with special health needs ages 14-24 and caregivers of CYSHN experienced the greatest inequities affecting mental health.
- As described under the Health Transition Priority, the Health Transition Toolkit will include a module focusing on mental health for youth and young adults. DCYSHN will conduct a mental health survey for their parents and caregivers to inform the toolkit and DCYSHN practices when working with young people and their families.
- The DCYSHN Director will continue to chair the legislatively established MDPH PANDAS/PANS Advisory Council charged with advising on research, diagnosis, treatment, and education related to Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococcal Infections and Pediatric Acute Neuropsychiatric Syndrome (PANDAS/PANS). These neuroimmune disorders often cause an alarming change in behavior masking underlying medical strep and bacterial infections. Based on the devastating nature of these conditions to children and their families, as well as the cost to families, school systems, medical providers and insurers, DCYSHN will engage families about what is needed to support their mental health needs at the systems level.
- DCYSHN “Learning Thursdays” set aside time each month for DCYSHN staff to learn about emerging topics of importance to CYSHN. DCYSHN will invite family-led community organizations to present on mental health and trauma-informed/healing-centered care for the PANDAS/PANS population and CYSHN with fetal alcohol syndrome disorder.

Objective 2. By 2025, increase the number of infants and toddlers enrolled in Early Intervention who demonstrate improved positive social-emotional skills to 57.2% from baseline (49.3% in FY21).

Early Intervention

The Early Intervention Division (EI) anticipates revising its evaluation plan during FY24 to reflect a more targeted and streamlined approach to achieving improved social-emotional skills. EI expects to continue its emphasis on infrastructure improvement in FY24, which will have a direct impact on the ability of EI providers to implement high-quality services using the Parents Interacting with Infants (PIWI) model. All are part of EI’s logic model for increasing the number of infants and toddlers who demonstrate improved social-emotional skills:

- Develop and deliver a structured orientation for all appointed members of the Interagency Coordinating Council

(ICC) annually to ensure members receive training materials and have aligned expectations, leading to effective ICC meetings that improve EI's implementation of the IDEA.

- Create Key Performance Indicator Reports available to EI staff monthly, and train EI staff to interpret the data and share them with contracted EI programs.
- Hire a Comprehensive System of Personnel Development Coordinator to study and revise the existing personnel certification system and improve the professional development system, and a Finance Manager to develop and disseminate audit procedures to integrate within the general supervision activities.
- Engage key representatives from the state's Part C system to identify a new instrument with which to collect outcome data given the publisher's intent to discontinue the Battelle Developmental Inventory version 2.
- Continue to improve the EI state database to ensure collection of accurate, reliable, and valid data, including activating business rules and validations to check data quality.

Additional activities to improve the system of care for CYSHN

Interagency Collaborations for CYSHN

MDPH will advance the integration and coordination of services and supports provided to children and youth with special health needs and their families by meeting regularly with other state and community agencies through a collective impact approach. In addition to collaborations described above, DCYSHN will participate in the following initiatives:

- In FY23, DCYSHN negotiated an interagency service agreement with MassHealth to fund a new statewide MDPH Care Coordination Assistance, Training, Education and Resource (CCATER) Center in FY24, moving the MA Title V Care Coordination program down the MCH pyramid from enabling services toward a sustainable population-health model. DCYSHN received technical assistance to develop this model from HRSA's Population Health Learning Journey led by the MCH Workforce Development Center and Public Health Improvement Partners in FY22 and 23. MassHealth has similarly moved to a tiered pediatric Accountable Care Organization Enhanced Care Coordination model under its 1115 waiver renewal that will provide a total case management benefit to participating providers to coordinate care for children with medical complexity under their new MassHealth *CARES for Kids* program, also to be launched in FY24. The CCATER Center will provide training and technical assistance to CARES providers for care coordination, family support, and clinical technical support services to meet their program regulatory training requirements. The CCATER Center's Steering Committee, developed to advise the CCATER Center's strategic plan, now includes MassHealth, the Federation for Children with Special Needs (FCSN), the MDPH Office of Health Equity, several provider organizations and two multicultural families who have received DPH care coordination services. Racially equitable family engagement will be incorporated and modeled throughout the Center's activities to build the system's capacity to serve CYSHN, particularly those with medical complexity. Current best practices such as the Blueprint for Change for CYSHCN, the National Care Coordination Standards for CYSHCN, Got Transition, the MA Family Engagement Framework, and others will be intrinsic training topics and will be operationalized, monitored, and evaluated as the CCATER Center is developed in FY24.
- The Care Coordination program will continue to convene regional networking and collaboration meetings in each region and statewide collaboration and training meetings twice a year. The goals of these meetings are to foster collaboration, to facilitate trainings, and to provide updated information regarding trends that multiple agencies identify in working with families, youth and children with special health needs. These goals continue to be an integral part of the Care Coordination program's strategic plan to move from enabling services

towards population health-based services.

- DCYSHN will continue to be an active member of the MA Lifespan Respite Coalition prioritizing respite care within and across state agencies. In FY23, DCYSHN continued to raise up the respite needs of caregivers of CYSHN and conceived of and shared ideas for two innovative respite interventions with community-based organizations that applied for and received CDC/MA EOHHS American Rescue Plan funds for respite projects. DCYSHN will monitor and advise on the progress of these two projects: 1) the FCSN's Caregiver-to-Caregiver Respite Exchange Network and 2) Boston Children's Hospital's Complex Care Services partnership with local nursing colleges and universities to train nursing students about children with medical complexity by providing respite care for these families.
- MASSTART will continue to collaborate with the MDPH School Health Unit and Boston University SHIELD (School Health Institute for Education and Leadership Development) on the *CMC-SHARE: Children with Medical Complexity School Health Resources and Education Project*. This multi-pronged effort disseminates, facilitates, and houses valuable resources and training options for school nurses to aid in their care planning and delivery for students requiring complex medical care. It also includes technical assistance in effectively engaging school nurses, interdisciplinary teams, advocates and families in conversations that highlight community relationships and collaboration that can promote high quality and equitable care for this student population.
- The SSI and Public Benefits Training and Policy program will continue to participate in several inter-agency linkages at policy and systems levels, elevating issues affecting CYSHN and their families and strengthening system integration. The program's Specialist will represent MDPH on DESE's Special Education Advisory Council, which addresses educational issues including transition planning for students to post-secondary education or work; the EOHHS Families and Children Requiring Assistance Advisory Board, which addresses comprehensive community-based family supports as alternatives or complements to court involvement in behavioral supervision of children and youth; a multi-agency Transition Age Youth initiative that includes the EOHHS Office of the Child Advocate, DCF and MassHealth; and a MassHealth Redetermination work group, among others. To build expertise at a service level, the Specialist will provide public benefits trainings to service coordinators and vendors in child-serving agencies including DDS and MCB and present updates on benefits and policies at the regional interagency collaboration meetings convened by the Care Coordination program.

Cross-Cutting/Systems Building

State Performance Measures

SPM 3 - Percent of Bureau staff who have used any racial equity tool or resource in their work

| Measure Status: | | | Active | |
|------------------------|----------------------|----------------------|----------------------|---------------------------|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 71 | 77 |
| Annual Indicator | 65.9 | 65.9 | 65.9 | 65.9 |
| Numerator | 110 | 110 | 110 | 110 |
| Denominator | 167 | 167 | 167 | 167 |
| Data Source | Internal MDPH survey | Internal MDPH survey | Internal MDPH survey | MDPH Racial Equity Survey |
| Data Source Year | 2019 | 2019 | 2019 | 2019 |
| Provisional or Final ? | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 83.0 | 89.0 | 95.0 |

SPM 4 - Percent of Title V programs that offer compensated family engagement and leadership opportunities

| Measure Status: | | | Active | |
|------------------------|---|---|---|---|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 40 | 43 |
| Annual Indicator | 38.1 | 36.6 | 35.6 | 47.2 |
| Numerator | 16 | 15 | 16 | 25 |
| Denominator | 42 | 41 | 45 | 53 |
| Data Source | Title V Family Engagement Activities Form | Title V Family Engagement Activities Form | Title V Family Engagement Activities Form | Title V Family Engagement Activities Survey |
| Data Source Year | FY19 | FY20 | FY21 | FY22 |
| Provisional or Final ? | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 48.0 | 49.0 | 50.0 |

SPM 5 - Percent of families who have had difficulty since their child was born covering basics, like food or housing, on their income

| Measure Status: | | Active | | |
|------------------------|-----------|-----------|-----------|-----------|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 11 | 10.8 |
| Annual Indicator | 11.2 | 12.1 | 11.7 | 9.8 |
| Numerator | 149,357 | 161,483 | 154,136 | 128,459 |
| Denominator | 1,337,287 | 1,337,335 | 1,321,278 | 1,307,364 |
| Data Source | NSCH | NSCH | NSCH | NSCH |
| Data Source Year | 2018 | 2018-2019 | 2019-2020 | 2020-2021 |
| Provisional or Final ? | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 9.7 | 9.6 | 9.5 |

SPM 6 - Percent of BFHN and BCHAP Title V staff that report a workplace culture that reflects a safe and supportive environment to mitigate primary and secondary trauma

| Measure Status: | | | Active | |
|------------------------|------|------|--|---------------------------|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 50 | 53 |
| Annual Indicator | | | 0 | 0 |
| Numerator | | | 0 | 0 |
| Denominator | | | 100 | 100 |
| Data Source | | | Trauma-informed and Healing Centered Organizationa | MDPH Racial Equity Survey |
| Data Source Year | | | 2021 | 2022 |
| Provisional or Final ? | | | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 55.0 | 57.0 | 60.0 |

State Action Plan Table

State Action Plan Table (Massachusetts) - Cross-Cutting/Systems Building - Entry 1

Priority Need

Eliminate institutional and structural racism in internal Department of Public Health programs, policies, and practices to improve maternal and child health.

SPM

SPM 3 - Percent of Bureau staff who have used any racial equity tool or resource in their work

Objectives

1. By 2025, increase to 95% from baseline (64% in 2019) the percent of BFHN and BCHAP staff who have used any racial equity tool or resource in their work.
2. By 2025, increase the percent of BFHN staff of color from 36.8% to 42.6%.

Strategies

- 1a. Embed into MDPH opportunities for staff to engage in ongoing learning and dialogue, such as workshops, affinity groups, and town hall meetings, to promote common language, shared understanding, and authentic support for a public health framework centered on racial equity.
- 1b. Develop tools and resources to identify and address institutional racism within core elements of public health work – such as program planning, community engagement, procurement, and data collection and analysis – and build staff capacity to use them in the implementation and monitoring of MDPH-funded programs.
- 1c. Participate in the Cross-Department Racial Equity Collaborative, which aims to share best and promising practices for eliminating institutional racism and align related activities happening across MDPH.
- 2a. Foster a workplace culture that acknowledges and addresses the impact of systems of oppression on staff, including microaggressions, to improve staff retention.
- 2b. Implement changes to the hiring and recruitment process to increase employment of staff with intersectional identities, including those with disabilities, of diverse genders, and people of color.

State Action Plan Table (Massachusetts) - Cross-Cutting/Systems Building - Entry 2

Priority Need

Engage families, fathers and youth with diverse life experiences through shared power and leadership to improve maternal, child, and family health services.

SPM

SPM 4 - Percent of Title V programs that offer compensated family engagement and leadership opportunities

Objectives

By 2025, increase to 50% from baseline (38.1% in FY19) the percent of Title V programs that offer compensated family engagement and leadership opportunities.

Strategies

Understand and better coordinate current efforts across MDPH bureaus and offices to partner with and engage communities, families, fathers, and youth at the systems and program level.

Implement at MDPH the statewide Family Engagement framework developed in partnership with the Department of Early Education and Care and the Department of Elementary and Secondary Education.

Build and sustain relationships and trust with families of diverse demographic backgrounds and life experiences – including but not limited to fathers, youth, Black, Indigenous, and people of color, people with disabilities, and people who identify as LGBTQ – to share voice and power in the design and delivery of services.

Address institutional barriers (e.g. allowable grant costs, income tax documentation, established organizational culture, institutional racism) to authentic engagement and power sharing with families and youth and to ensuring they receive fair and consistent financial compensation for their partnership and leadership roles.

Ensure communications tools, such as marketing materials and intake forms, for “maternal and child health” programs are inclusive and representative of fathers.

Develop best practices for virtual engagement of families, fathers, and youth beyond the COVID-19 pandemic that maintain quality of engagement and equity of opportunity.

State Action Plan Table (Massachusetts) - Cross-Cutting/Systems Building - Entry 3

Priority Need

Eliminate health inequities caused by unjust social, economic, and environmental systems, policies and practices.

SPM

SPM 5 - Percent of families who have had difficulty since their child was born covering basics, like food or housing, on their income

Objectives

By 2025, decrease to 9.5% from baseline (12%, 2018-2019 NSCH) the percent of families who have had difficulty since their child was born covering basics, like food or housing, on their income.

Strategies

Increase families' access to and assess the impact of public benefits and programs that promote economic stability, including Paid Family and Medical Leave, the Earned Income Tax Credit, and Supplemental Security Income benefits.

Improve access for youth and adults, including those with disabilities to employment that is safe, accessible, stable and well compensated.

Support and advise external coalitions and agencies (e.g., the Statewide Special Education Advisory Panel, Coalition for Social Justice, Department of Early Education and Care) to promote equitable access to childcare services and educational opportunities for all children.

Promote access to safe and affordable housing and reduce environmental exposures through initiatives such as the Childhood Lead Poisoning Prevention Program.

Through Essentials for Childhood, develop a Community Connectedness Toolkit to strengthen community support for families and promote strong community social connectedness.

Using a family and community engagement approach, support families in accessing concrete supports such as housing, childcare, education & job training, public benefits, and financial resources through programs including home visiting programs for pregnant and parenting families and the Catastrophic Illness in Children Relief Fund.

Build reciprocal partnerships with external stakeholders – such as families, MassHealth, the Department of Transitional Assistance, Department of Transportation, Executive Office of Public Safety and Security, Child Fatality Review program, the MA Chapter of the American Academy of Pediatrics, and the Community Action Lead Project – to address systems-level inequities and align efforts and resources.

Collaborate with partners to promote and implement best practices for family access to and engagement in virtual health and social services that mitigate potential inequitable outcomes and help bridge the digital and economic divide.

State Action Plan Table (Massachusetts) - Cross-Cutting/Systems Building - Entry 4

Priority Need

Support equitable healing centered systems and approaches to mitigate the effects of trauma, including racial, historical, structural, community, family, and childhood trauma.

SPM

SPM 6 - Percent of BFHN and BCHAP Title V staff that report a workplace culture that reflects a safe and supportive environment to mitigate primary and secondary trauma

Objectives

1. By 2025, increase by 10% above baseline (to be established) the percent of BFHN and BCHAP staff who report a workplace culture that reflects a safe and supportive environment to mitigate primary and secondary trauma.
2. By 2025, use surveillance data from multiple sources to develop a data dashboard that measures Adverse and Positive Childhood Experiences (ACEs and PCEs) to inform program and policy strategies that promote healing centered engagement at community, family, and individual levels.

Strategies

1a. Design trauma-informed and healing centered organizational assessment questions as part of a Department-wide Racial Equity Survey to inform a strategic plan that promotes racial equity and healing centered approaches within programs and divisions within BFHN and BCHAP.

1b. Offer trainings and workshops on Healing Centered Organizations to develop a shared understanding of and support for a public health framework that builds capacity for promoting trauma-informed and healing centered approaches in programs, policies and practices within BFHN and BCHAP (including acknowledging and addressing the impact of structural racism and other systems of oppression on staff).

1c. Provide opportunities for ongoing dialogue, learning communities, and group reflection in internal BFHN and BCHAP meetings ensuring that principles and practices of healing-centered and restorative justice approaches are embedded in these meetings.

2a. Use existing surveillance data from NSCH, YHS, YRBS and PRAMS to analyze indicators of resilience and healing among the MCH population.

2b. Identify indicators of community factors that promote safe, stable, nurturing environments within communities to measure community capacity to support healing systems and approaches.

2c. Support communities in using data that reflects healing centered practices to inform community strategies that promote resilience and mitigate trauma.

2d. Ensure principles and practices of healing centered and trauma-informed engagement are embedded within program practices, data collection and reporting among DPH-funded programs within BFHN and BCHAP.

Cross-Cutting/Systems Building - Annual Report

Massachusetts has four Crosscutting priorities for 2020-2025:

- Eliminate institutional and structural racism in internal MDPH programs, policies, and practices to improve maternal and child health.
- Engage families, fathers and youth with diverse life experiences through shared power and leadership to improve MCH services.
- Eliminate health inequities caused by unjust social, economic, and environmental systems, policies and practices.
- Support equitable healing centered systems and approaches to mitigate the effects of trauma, including racial, historical, structural, community, family, and childhood trauma.

Priority: Eliminate institutional and structural racism in internal MDPH programs, policies, and practices to improve maternal and child health.

Title V aligns key strategies for this priority with the MDPH Racial Equity Movement (REM), which aims to eliminate institutional and structural racism in MDPH programs, policies, practices, and workplace. Focusing on racism is not at the exclusion of other forms of inequity; rather, an explicit focus on racism can also increase Title V's capacity to address inequities, such as those faced by people with disabilities or people who identify as LGBTQ+. Being explicit about the role of racism in public health is key to being able to identify intentional, actionable strategies to promote health and racial equity. Over time, success of the REM will be demonstrated by a workplace that is safer and more inclusive; staff who are engaged, aware, respectful, and healthy; programs that are community-centered and equity-informed; policies that are actionable, systems-focused, and responsible; and communities that are inclusive and engage partners in meaningful change toward improved individual and community health.

Objective 1 (SPM 3). By 2025, increase to 95% from baseline (64% in 2019) the percent of BFHN and BCHAP staff who have used any racial equity tool or resource in their work.

The REM responds to the need to improve the public health workforce's capacity to promote racial equity within the walls of MDPH, its programs, and the community. MDPH staff are developing tools and resources to identify and address institutional racism within core elements of public health work, such as community engagement, procurement, and data collection and analysis. The performance measure for this priority tracks improvements in staff capacity to use these tools in the implementation and monitoring of MDPH-funded programs.

Racial Equity Movement

The Cross-Department Racial Equity Collaborative (C-DREC) is a community of MDPH staff representing bureau-based racial equity teams and working groups that met monthly in FY22 to grow collective knowledge and skill, share best and promising practices, and align and support related activities happening across MDPH.

Part of the C-DREC model is that bureau-specific racial equity teams assess and address the unique needs and opportunities within their bureaus. Therefore, the BFHN Racial Equity Steering Team (REST) and the BCHAP Racial Equity Leadership Team (RELT) continued to oversee the work of the REM in their respective bureaus. Functional workgroups operating across bureaus, including professional development, procurement, policy, and evaluation, also continued to move the work forward.

Professional development provides the foundation on which the rest of this work builds. In FY22, MDPH partnered with the [Racial Equity Institute](#) (REI) to offer trainings to all interested staff. REI's two-day Phase 1 training is designed to develop the capacity of participants to better understand racism in its institutional and structural forms. Moving away from a focus on personal bigotry and bias, this workshop presents a historical, cultural, and structural analysis of racism. With shared language and a clearer understanding of how institutions and systems are producing

unjust and inequitable outcomes, participants leave the training better equipped to work for change. This work was initially supported through Title V funds and over time has been cost-shared with other MDPH investments given the increasing visibility and value for increasing staff's racial equity capacity. From July 1, 2021-June 30, 2022, REI offered two modified, virtual trainings to 180 MDPH staff.

In FY22, MDPH offered four racial equity labs for staff who have completed a two-day training to further their racial equity practice. The labs, planned and facilitated by external consultants, focused on diagnosing the challenges staff may face in their program or office, looking at the problem from a structural lens. They explored topics such as: racial equity reframing, where participants worked together to reframe projects using a racial equity lens, and supervision, where aspiring supervisors and managers practiced container building and having difficult conversations related to race.

Other opportunities for MDPH staff to engage in ongoing learning and dialogue included affinity groups, quarterly town hall meetings, and monthly racial justice lunch and learns. These events aim to promote common language, shared understanding, and authentic support for a public health framework centered on racial equity. **Examples of topics covered during racial justice lunch and learns and quarterly town hall meetings** included feedback on the MDPH Diversity and Inclusion Plan, informing project selection for an institutional equity pilot, discussing tenets of White Supremacy Culture, and centering equity in the COVID-19 response.

Racial identity affinity groups underscore the different roles for White people and people of color in racial equity work and provide an opportunity for staff to deepen their understanding of their personal roles in promoting racial equity. In FY22, there were quarterly affinity groups for White allies, people of color, Asian American and Pacific Islanders, men of color, and Black people. Key challenges with the affinity groups include how to meaningfully sustain the work that begins in affinity and how to engage leadership in this process, as it can be difficult to share space and be vulnerable with people in differing positions of power. Additional challenges are that these spaces are fluid and voluntary, with no fixed structure and a purpose that evolves based on participant interests. In addition, the people leading these groups are volunteers and there are no dedicated or shared resources to move ideas efficiently forward to clear measurable achievements.

A key strategy in the five-year action plan, and the performance measure for this priority, is developing tools and resources to identify and address institutional racism within core elements of public health work – such as program planning, community engagement, procurement, and data collection and analysis – and build staff capacity to use them in the implementation and monitoring of MDPH-funded programs. In FY22, the Racial Equity Procurement Workgroup continued to work towards a more equitable procurement process within MDPH. With guidance from the Workgroup various tools have been created to assist in the development and review of procurements. In 2021, standardized language including a standard question was developed and included in all MDPH Direct Service Request for Responses (RFR) boilerplates. In FY22, the Workgroup began planning a project to assess the impact that these tools and the standardized application question had on the procurement process with plans to recruit a graduate student to implement the evaluation in FY23.

Progress was also made on developing tools and resources to identify and address institutional racism within public health data collection and analysis processes (see discussion below about the Racial Equity Data Road Map).

The BFHN/BCHAP Racial Equity Survey is the data source for the performance measure for this priority (the percent of BFHN and BCHAP staff who have used any racial equity tool or resource in their work). The survey aims to understand staff knowledge, beliefs, and practices regarding racial equity work. The survey was most recently conducted in April 2019. Due to the COVID-19 pandemic, it has not been conducted since; however, MDPH plans to readminister the survey Department-wide in FY24. See the FY24 application for more information.

The successes and challenges experienced in FY22 show that the REM is part of transformational organizational change. MDPH strives to make short-term gains to maintain momentum and staff engagement, with understanding that real, lasting change takes time.

Racial Equity Data Road Map

In December 2020, a cross-departmental workgroup at MDPH – the Racial Equity Strategic Pathway Implementation Team (RESPIT) – released the [Racial Equity Data Road Map](#) to improve the use of data as a tool to eliminating structural racism. The Road Map is a collection of guiding questions, tools and resources that offers a suggested methodology for using data to address racial and ethnic inequities in service delivery and health outcomes. The Road Map guides its users to authentically engage the community, frame data in the broader historical and structural contexts that impact health, communicate that inequities are unfair, unjust and preventable, and design solutions that address the root causes of these issues.

In FY22, RESPIT focused on promoting and supporting use of the Road Map by MDPH programs and sharing information about the Road Map beyond MDPH. The Road Map webpage on mass.gov was launched on December 7, 2020. Through the end of FY22, the webpage was visited almost 9,000 times and the Road Map was downloaded over 3,200 times. RESPIT members have given over 40 presentations sharing the Road Map and examples of its application by public health programs. In addition to numerous Grand Rounds, Racial Justice Lunch and Learns, and presentations to various Bureaus and Divisions within MDPH, during FY22 the team shared information on the Roadmap at the National Family Planning and Reproductive Health Association 2022 National Conference and the National Network of Public Health Institutes Public Health Improvement Training.

The Road Map was also the inspiration behind a collaborative project between the Centers for Disease Control and Prevention (CDC) Maternal and Child Health Epidemiology Program and the Association of State and Territorial Health Officials (ASTHO) to build capacity of MCH programs across the country to use data more effectively to address racial inequities. The Data for Racial Equity Advancement in MCH Learning Community (DREAM-LC) project builds upon the Road Map and supports its use in other state programs and contexts. Through the DREAM LC, ASTHO has worked directly with five state teams (Illinois, Mississippi, Ohio, Nebraska, and Vermont) to adapt and use the Road Map and will be engaging additional states in FY24. ASTHO, CDC, and MDPH will work together to apply adaptations and lessons learned towards future iterations of the Road Map as well as the development of tools and complementary resources to enhance the Road Map's utility in diverse contexts.

In January 2022, the Journal of Public Health Management and Practice published a paper written by RESPIT members entitled "The Massachusetts Racial Equity Data Road Map: Data as a Tool Toward Ending Structural Racism." This paper was nominated for the Most Influential Publication by the CDC National Center for Chronic Disease Prevention and Health Promotion in the Program or Intervention Evaluation category.

Objective 2. By 2025, increase the percent of BFHN staff of color from 36.8% to 42.6%.

A second objective under this priority is to increase the percent of staff of color in BFHN. Over the next five years, strategies for this objective are to foster a workplace culture that acknowledges and addresses the impact of systems of oppression on staff to improve staff retention, and to center equity in the BFHN hiring and recruitment process.

Centering Racial Equity in Hiring and Onboarding New Staff

The primary aim of racial equity work in BFHN, as outlined in the BFHN Racial Equity and Family Engagement Strategic Plan, is to advance and sustain equity for BFHN staff and the communities and families we serve by

dismantling structural racism and co-creating healing-centered policies, practices, and social norms. A primary driver contributing to the achievement of this aim is the establishment of an antiracist infrastructure. One of the strategies in support of this driver is the development of a staff recruitment, inclusion, and retention plan with a specific aim to recruit and retain staff who speak the languages and are representative of the culture, race, ethnicity, and gender identity of the families BFHN programs aim to serve. As such, BFHN strives to center racial equity in all aspects of the hiring process.

During FY22, BFHN convened a working group to evaluate current processes for hiring and onboarding new staff in the Bureau, identify challenges and opportunities for improvement and standardization, and center racial equity throughout the processes. The working group met biweekly to process map the hiring process and identify pain points. The team then developed a Hiring Process Job Aid to provide information and resources to assist hiring managers in overcoming these challenges. The Job Aid builds upon the work that was done in FY21 that led to the development of the “Institutionalizing Racial Equity Initiative: Hiring Project” report, a resource providing information for integrating and standardizing principles and approaches to advance racial equity in the hiring process across MDPH. The working group also developed an Onboarding Checklist to support hiring managers to successfully and efficiently onboard new staff, recognizing that the onboarding experience is critical for supporting new staff to have a positive impression from the onset and ensure they are set up for success.

BFHN Racial Equity Steering Team (REST)

BFHN's REST aims to establish a common language and understanding of racism within the Bureau, create a safe space for discussing racism and how it affects our work, and ensure staff have the tools, resources and supports needed to develop and implement strategies that promote racial equity. This feeds into the longer-term vision to eliminate structural racism in BFHN policies, programs and practices and foster a healthy and equitable work environment.

Throughout FY22, REST worked with Bureau leadership to finalize the BFHN Racial Equity Key Driver Diagram (KDD), which today has been renamed the BFHN Racial Equity and Family Engagement Strategic Plan. The KDD is structured around 1) primary drivers, which are critical system elements to advance racial equity, 2) secondary drivers, which are elements that will result in a change in the associated primary driver, and 3) change ideas for each secondary driver that could be implemented at the bureau, division, or individual level. In early FY22, REST members and Bureau leadership attended a KDD 101 facilitated by the Bureau Director/Title V Director that allowed the team to reach a common understanding of how to develop and implement KDDs with a racial equity lens. In December, the REST and Bureau Leadership held an in-person retreat to review and prioritize change ideas which allowed the Bureau to narrow 130+ change ideas to approximately 50. In March- 2022, the Bureau hired a Deputy Director of Strategy & Implementation who now supports the testing and measuring of the Bureau's racial equity and family engagement work. Throughout the rest of FY22, REST supported the Bureau in sharing the KDD with all staff and soliciting feedback to ensure the entire Bureau had an opportunity to provide input.

Additional activities to eliminate institutional and structural racism in internal MDPH programs, policies, and practices.

Culturally and Linguistically Appropriate Services (CLAS)

The National CLAS standards seek to eliminate barriers to access, improve quality of care, and address the social determinants of health (SDOH) that drive disproportionate rates of disease between different populations. The MDPH Office of Health Equity (OHE) supports and monitors MDPH's internal and external efforts to meet the CLAS standards and ensure the use of CLAS as a framework for performance management and quality improvement (PMQI).

In FY22, OHE administered the CLAS Internal Assessment (IA) across the Department. With support from leadership, the response rate was 50% higher than the FY20 CLAS Internal Assessment. A total of 62 programs from across seven bureaus and six offices completed the assessment.

- Data collection and analysis: a majority of programs (68%) reported collecting individual-level data on race, while 58% collect data on ethnicity, and 51% on language. Similarly, 62% of programs reported having internal goals to address racial inequities, 58% have goals to address ethnic inequities, and 51% have goals to address language inequities. Additionally, 61% of programs reported having work plans that align with CLAS goals and measures.
- Diverse workforce: specifying that cultural competence is desired in job postings was reported by the highest percentage of programs (60%), while specifying that language ability other than English is desired was reported by 35% of programs. Overall, promoting jobs among networks that work with people with disabilities and promoting jobs on diverse networks were done by fewer programs.
- Language access and communication: a high percentage (65%) of programs reported providing materials in accessible formats (e.g., formats to assist visually impaired individuals), while a lower percentage (39%) reported providing language assistance services such as American Sign Language (ASL) or telephone interpreters, CART, materials in braille or other spoken languages.

In FY22, OHE provided CLAS technical assistance (TA) to all seven MDPH bureaus and their vendors; offered CLAS trainings to 16 programs; and shared resources with staff including the Making CLAS Happen Manual, the [Racial Equity Data Road Map](#), MDPH Language Access Plan, MDPH Race, Ethnicity, and Language data collection standards, and Budget for Equity Tool. The Budget for Equity Tool assists people to ensure that programs and vendors allocate adequate funding for language assistance services, which are crucial in advancing access and equity for people for whom English is not their first language and people who communicate differently.

Determination of Need Program (DoN)

The DoN regulation M.G.L. c 111, § 25B requires health care facilities to submit a plan for approval by MDPH for the development and improvement of language access and assistive services for individuals with disabilities and patients who do not speak English, have Limited English Proficiency, or use ASL. The Medical Interpreter Services Program, within OHE, supports the implementation of the language access component of the DoN Program, provides TA in the development of language access plans, and ensures compliance with language access regulations for health care facilities.

In FY22, OHE continued to assist health care facilities attend to the challenges of the pandemic (i.e., staff shortages, operations, and language access). OHE continued to provide tailored TA and recommendations on language access plans to DoN applicants. OHE worked with the Forum of Coordinators of Interpreter Services to discuss strategies and obtained comments on the impactful changes occurring in medical interpretation services operations. Internally, OHE worked with the Office of the Commissioner, the Office of Population Health, MDPH Policy and Regulatory Affairs, and the Bureau of Health Professions Licensure to discuss and strategize about these operational changes.

Vaccine Equity Initiative (VEI)

The VEI launched in February 2021 and aimed to 1) increase trust in the COVID-19 vaccine's safety and efficacy, acknowledging that in many communities of color, mistrust and hesitancy can stem from a history of medical mistreatment, 2) identify and reduce barriers for accessing the vaccine, and 3) increase vaccine access for priority populations. VEI focused on the 20 cities and towns hardest hit by COVID-19 and priority populations disproportionately impacted by COVID-19, including but not limited to: Black, Indigenous, and People of Color;

individuals with disabilities; individuals with mental illness and/or substance use disorder; and individuals who identify as LGBTQ+. To ensure an equity and community-driven approach VEI engaged and funded community- and faith-based organizations, Tribal and Indigenous People Serving Organizations, Community Health Centers (CHCs), rural health programs, local boards of health, and other community-based healthcare organizations to implement outreach, engagement, education, and access efforts.

MDPH Title V staff continued to play a critical role in various components of VEI during FY22. Ten BFHN staff served as Community Liaisons, a VEI program providing a MDPH staff person to work directly with each of the 20 VEI communities to support community-based strategies to increase knowledge of and access to the vaccine. Their efforts included exploring specific outreach and education opportunities and increasing availability and ease of accessing vaccine through community-based or mobile clinics in trusted spaces. During Fall 2021, VEI leadership identified a need to include pregnant people, young children, and families as a priority population in its work particularly given the growing cases of severe illness in pregnant people and the need to prepare and support families with young children ahead of the young child vaccine release (ages 5-11 in November 2021 and under 5 in June 2022). In response, VEI established a Pediatric and Family Vaccine Workgroup, led by Title V staff. The Workgroup goals were to increase trust in the vaccine, ensure vaccines were easily accessible and in family-friendly locations, and reduce inequities in vaccination rates for children and their families, including pregnant and breastfeeding people. Data from a survey conducted in December 2021 about parent attitudes toward COVID-19 vaccinations for children and youth ages 5-17 showed that parents who are vaccinated tend to vaccinate their children, and parents who are not vaccinated are much less likely to vaccinate their children. This reinforced the need to consider the whole family when designing strategies to increase COVID-19 vaccination of children. During the reporting period the Pediatric and Family Vaccine Workgroup conducted a range of activities to support outreach and engagement, provide educational opportunities, and work directly with community partners to ensure family-friendly community-based access to the vaccine. Specific Workgroup activities included:

1. Writing and disseminating communication and educational materials in the fall of 2021 to BFHN partners and community providers about the importance of vaccination for children and pregnant people (available in 12 languages).
2. Working closely with the Perinatal Neonatal Quality Improvement Network (PNQIN) to connect VEI Community Liaisons with clinical experts to provide on-site expertise regarding the vaccine at community events.
3. Strategizing with VEI leadership on family-friendly clinic ideas/locations (after work hours or on the weekends, trusted locations like libraries or schools, and kid-friendly activities while waiting).
4. Leveraging partnerships with community-based partners such as Early Intervention (EI), libraries, and YMCAs to engage them in partnering to host vaccine clinics, organize community conversations, and/or distribute educational materials. The Workgroup supported a number of townhall and community conversations including a townhall specifically for the CYSHN population.
5. Partnering with the MA Chapter of the American Academy of Pediatrics (AAP) to host a series of trainings titled *How to Become a Vaccine Champion: Strategies to Improve Confidence in COVID-19 Vaccines* to share evidence-based strategies, including motivational interviewing, to help improve COVID-19 vaccine conversations and address hesitancy with families with young children. Two trainings were held in the spring of 2022.
6. In partnership with staff at Boston University/Wheelock, developing a system for Child Life Specialists to volunteer at family COVID clinics. Child Life Specialists can help with managing cognitive fears, provide comfort goals and distractions, and promote coping among children and families to ensure a trauma-informed approach. Development of the program was continued in FY23.
7. Conducting feedback/listening sessions related to the COVID-19 vaccination of children aged 6 months–4 years to assess barriers and facilitators to vaccination.

Priority: Engage families, fathers and youth with diverse life experiences through shared power and

leadership to improve MCH services.

Objective 1 (SPM 4). By 2025, increase to 50% from baseline (38.1% in FY19) the percent of Title V programs that offer compensated family engagement and leadership opportunities.

Family engagement in the design and delivery of programs is crucial for improving outcomes. Effective engagement acknowledges that the expertise and lived experience families bring to the partnership is as valuable as the expertise of the professional partners, and families should be compensated for their expertise in meaningful ways. Therefore, the state performance measure for this priority is the percent of programs funded through the Title V federal-state partnership that offer compensated engagement and leadership opportunities for families, fathers, and youth. In FY22, 47% (25 out of 53) programs offered compensated opportunities, an increase from 35.6% (16 out of 45) in FY21. The goal is to reach 50% by 2025. Programmatic efforts to address this priority and measure in FY22 are described below. In the coming year, Title V will continue to address institutional barriers (e.g., allowable grant costs, income tax documentation, established organizational culture, institutional racism) to ensuring families receive fair and consistent financial compensation for their partnership and leadership roles.

Title V Family Engagement Implementation Team

In FY22, the Title V Family Engagement Implementation Team reviewed the State Action Plan to consider modifications to strategies based on how the COVID-19 pandemic has impacted how families prefer to engage with programs and how Title V programs can shift to meet family needs and preferences. Based on this discussion, the Team added virtual engagement strategies to be included in the family engagement best practices guide that the Team is planning to develop beginning in FY23. The Team also conducted a prioritization exercise to identify activities within the State Action Plan that would have the greatest impact towards achieving the Team's goals. Four activities were identified: 1) build a shared understanding and aligned approaches to family engagement through customizing the [Family Engagement Framework](#) Modules and providing training for Title V staff; 2) develop a Best Practices Guide for Family Compensation that addresses institutional barriers and builds program capacity; 3) complete a landscape assessment of Title V family engagement activities to inform capacity building activities, and 4) develop a communication system to support information, resource, and tool sharing, including developing an elevator pitch. Team meetings provided a venue to share innovations in family engagement practices across Title V programs. The Team provided TA for other MDPH programs experiencing challenges engaging families.

Office of Family Initiatives (OFI)

OFI is a resource to MDPH and community partners to support effective engagement of families whose children have special health needs, disabilities and/or chronic illness. OFI aims to create opportunities for families to grow confidence and skills to partner in the development and implementation of policies, programs and practices that ensure a responsive system of care. OFI staff are all parents of children with special health needs, most of whom have gone through the MA EI system.

By the end of FY22, the *Share Your Voice* program had a list of 191 parents of children and youth with special health needs who were available to advise Title V programs as opportunities arose. These families shared their voice and lived experience through the COVID-19 Community Impact Survey, surveys from CDC, the MA Statewide Family Engagement Center, the MA legislatively mandated Chapter 171 survey, and surveys from the Department of Elementary and Secondary Education. Family and youth voice was included in the development of the Youth & Young Adult Transition Toolkit and through attendance at conferences and meetings.

OFI continued to build relationships with organizations where families from diverse cultural and linguistic backgrounds sought help. The trusting relationships that have been fostered over many years allowed staff to share information about Title V and other health-related resources with families at 44 trainings with 366 families. Some of

the families engaged through this work are participating in Title V activities such as serving as advisors, helping to develop peer support groups, participating as Parent-to-Parent mentors, and attending trainings and conferences.

The Early Intervention Parent Leadership Project (EIPLP), a project of OFI, is designed to reach families early in their EI journey. Staff, all of whom have received EI services for their own children, inform families about how they can actively participate in the EI system, either at their local program, within their region, or at the statewide level. In FY22, over 28,800 families received the Parent Perspective newsletter which shares information about EI, the early childhood system of care and opportunities for participation.

In FY22 EIPLP held the second *Finding Your Footing (FYF): Using Your Family Experience to Impact Systems Change* family leadership training series. Offered annually, FYF is for families getting ready to move on from EI or who have recently graduated. Topics covered include StrengthsFinder, Effective Communication, Sharing Your Family's Story, Sharing Your Story Online, Team Building & Care Mapping, Conflict Resolution & Negotiation, and Racial Equity & Cultural Competence. This training has proven to be effective in developing important skills for family members interested in taking on leadership roles in their communities and working to improve systems that serve children with special health care needs. In FY22, FYF supported a cohort of 12 family members and included Portuguese interpretation and translation for two of them. To date, five members of this cohort have become involved in family leadership opportunities at MDPH and beyond, including two gaining employment in the EI field.

The EIPLP Family Engagement and Collaboration Coordinator continued to serve as the Co-Chair of the BFHN Racial Equity Steering Team and helped to develop and deliver Racial Equity training for MDPH EI staff and the EI Interagency Coordinating Council (ICC) through December 2021. In addition, she supported 14 family members whose children have special health care needs to serve on the ICC, a federally mandated body that advises the EI/Part C agency and continued to provide training and support to a cohort of family leaders on the MDPH Young Children's Council. Family TIES and EIPLP co-sponsored the Federation for Children with Special Needs' 2022 *Visions of Community* annual conference. Over 1,000 parents and professionals attended the virtual conference, which provided workshops and information about specific special health needs, family engagement, youth transition, public benefits and more.

OFI works across Title V and in other state and non-governmental agencies to represent the needs of families of CYSHN. FY22 activities included serving on the Emergency Medical Services for Children, Universal Newborn Hearing Screening, and Center for Birth Defects Research and Prevention advisory committees. The OFI Director was the MDPH representative to advisory councils of three of the agencies that comprise the state Protection and Advocacy Network for Individuals with Disabilities. These include the MA Developmental Disabilities Council and the two University Centers for Excellence in Developmental Disabilities Education, Research and Service in MA. This offers a platform to share information about health-related issues and health inequities, youth and young adult transition needs and resources, and opportunities to support family involvement. In FY22, the OFI Director presented to fellows at both LEND programs and met individually with fellows interested in learning more about family engagement. EIPLP and EI staff also presented to Boston LEND program fellows.

Universal Newborn Hearing Screening Program (UNHSP)

UNHSP has a long history of compensated family involvement. Since its inception, a parent has held a paid staff position. There are currently two parents on staff and one hard of hearing staff member. The legislatively mandated UNHSP Advisory Committee includes two parent members and two members that are deaf or hard of hearing. Currently, a parent chairs the Committee. All public meetings continue to be held remotely, allowing additional parents to participate.

Activities in FY22 represented both in person and virtual offerings. The UNHSP directs families to these video

descriptions of programs, and they have received over 1100 views. In person family events were held in four outdoor spaces throughout FY22 and over 300 people attended. The annual Parent Forum was reimagined as an opportunity to offer a hands-on workshop, keeping the numbers intentionally small. A total of 22 parents attended this event to practice writing goals for IFSP's and IEP's. The Early Hearing Detection and Intervention (EHDI) meeting was held remotely, and 12 parents were funded to attend. UNHSP created a Padlet to provide information to attendees and a texting service to communicate with families. Staff also held a virtual pre-meeting and virtual social event for participants. Families reported feeling more connected to each other and to program staff at the conclusion of the weeklong meeting. UNHSP staff also participated in a HRSA run learning community to improve referrals to ongoing family-to-family support through a family-based organization. Real time information was shared between organizations. Additional parents are being recruited by the UNHSP to become trained support parents to increase the pool of families available who have deaf or hard of hearing children.

Care Coordination

The Care Coordination program continued to work with families of children and youth with special health needs with a family centered, racially equitable, and culturally and linguistically appropriate approach. The program adheres to a family empowerment capacity-building model. Care Coordinators initially show families how to access services and navigate systems, with the goal of families eventually being able to advocate for themselves. This process values the unique cultural, linguistic, literacy, or intellectual needs of the parent/family.

Families partnered with care coordinators to complete assessments, draft care plans, and access services and resources. In FY22, the program facilitated 103 Family Engagement activities (in addition to 27 community engagement activities). As part of a revision of the MDPH employee performance review, a self-reflection tool and rubric were developed to assess family engagement throughout the continuum of the relationship between the Care Coordinator and parents.

In addition, the Care Coordination program recruited and supported 137 families to attend the 2022 Visions of Community virtual conference described above.

Pediatric Palliative Care Network (PPCN)

The PPCN continued efforts to enhance and expand family engagement in FY22. PPCN implemented updated Operational Standards that were reviewed by family advisors and include updated family engagement standards.

PPCN continued to engage families in the qualitative quality of life evaluation led by researchers at Commonwealth Medicine at the UMass Chan Medical School. The evaluation's advisory committee, which included six parents/caregivers, was instrumental in informing the evaluation questions and outreach approach. Thirty-three PPCN parents/caregivers were surveyed and participated in focus groups as part of the evaluation, and findings were presented in English and Spanish to the community and family partners. Fact sheets summarizing the findings were created and distributed in English, Spanish and Hattian Créole. The Parent Advisory Committee Chair was named as an author on this evaluation and all parent participants were compensated for their engagement.

In early FY22, PPCN hired a family engagement consultant who worked directly with each vendor program to provide guidance and education around the Family Engagement Framework, CLAS and DEI initiatives. With this consultation the PPCN vendor programs implemented new family engagement opportunities including focus group work informing bereavement programming, parent led planning committees for family events, and community outreach for cultural brokerage opportunities. The PPCN continues to provide family-centered care with a focus on the individual needs of each client family.

In late FY22 a new PPCN director was hired; she came to this position with lived family experience, exemplifying the Division's commitment to lead with the family perspective.

Essentials for Childhood (EfC)

The EfC grant team identified the need for more community and family leadership and engagement, honoring the invaluable contributions that lived experience and community voice bring to the project's work. During FY22, EfC continued to partner with community leaders and compensate family leaders for participation on the various collective impact teams (CIT) and the Leadership Action (LAT) team, to ensure decision making and representation on the various working groups.

To ensure that community voices inform the initiative and to shift power to community members, EfC continued to work with community leader and father, Christian White, a compensated member of the EfC team, to launch and guide the rollout of a Community Governance Board (developed through work of the EfC Racial Equity Team during the previous year). With support from the Racial Equity Team, Mr. White recruited eight members for the Board, ensuring an equity-focus during recruitment and purposefully seeking representation from a diverse array of racial, ethnic, geographic, and other SDOH lived and professional experiences. The official kick-off meeting was in winter 2022. EfC staff provided capacity-building support to the Board during the rollout phase, including attending meetings as requested to provide presentations on key components of state and/or federal systems and grants to help orient Board members to the institutional systems and policies the grant is required to work within and clarify opportunities. The EfC team will continue to provide support and help establish accountability structures in the upcoming year and will document learnings from the process.

Family engagement was also a key part of building the EfC Community Toolkit (see Essentials for Childhood: Community Connectedness section below for more details).

Young Children's Council (YCC)

After the MECCS grant ended in July 2021, the Bureau of Family Health and Nutrition (BFHN) sustained the YCC as a platform for families to directly inform MDPH programs focused on child development, infant and early childhood mental health, and systems building. In FY22, MDPH engaged a new cohort of 9 family leaders that bring diverse life experiences and backgrounds. These family leaders were active participants in council meetings and took on increasing levels of leadership in planning meeting agendas, developing new YCC resources, and strengthening council practices to be more equitable. To ensure the Council effectively captures and takes action to address feedback and ideas shared by the family leaders, MDPH developed a tracker tool with plans to pilot the tool in FY23.

MA MIECHV

In FY22, MA MIECHV leveraged lessons learned from participation in the Home Visiting Collaboration Improvement and Innovation Network (HV CollN 2.0) to support parent engagement in CQI activities through an improvement sprint focused on provision of universal education related to intimate partner violence (IPV). Through participation in HV CollN, local implementing agencies (LIAs) recruited family members to participate on their CQI teams. Family leaders included caregivers or parents of a child currently or previously enrolled in home visiting services who are interested in participating in improvement efforts at the systems level in service of other families. LIAs used the "Toolkit to Build Parent Leadership in Continuous Quality Improvement" and had access to a Family Leadership Coach through the Education Development Center (EDC) to identify and implement strategies for recruiting and retaining families as members of their Advisory Committees and local CQI Teams.

In FY22, MA MIECHV hosted an Associate from the CDC Public Health Associate Program for a two-year placement (FY21 and FY22), who actively participated in the Family Engagement Coalition as a MIECHV liaison

with the goal of coordinating efforts to implement the Family Engagement Framework within MA MIECHV. In this role, the Associate engaged in cross-bureau discussions that guided MA MIECHV in the development of a plan to incorporate family engagement strategies into program planning and implementation. This process included assessment of current practices for family engagement and knowledge of family engagement principles to inform future initiatives to increase family leadership and incorporate family feedback into program goals. The assessment identified an opportunity to leverage participant testimonials from home visiting clients to highlight the positive impact of home visiting for a variety of purposes including legislative advocacy and tailored outreach. In FY22, LIAs received a resource guide grounded in ethical storytelling principles to support them to elevate the voices and experiences of families. MA MIECHV provides TA to LIAs to identify opportunities to share stories and ensure the storytelling process is parent-centered and trauma-informed.

In FY22, MA MIECHV received a MIECHV Innovation Award to develop and implement an Equity Data Dashboard that will allow timely data visualization of MIECHV performance indicators disaggregated by race, ethnicity, language, and gender, in addition to administrative and contextual data. The Dashboard will be the catalyst for a comprehensive training and capacity development structure focused on promoting racial equity and partnering with families to use data to address inequities that will support data-driven decision making in MA MIECHV communities.

Office of Sexual and Health & Youth Development (OSHYD)

In FY22, the OSHYD continued to operationalize its core values of racial justice, health equity, evidence-based practices, youth development, trauma-informed care, sustainability, and a commitment to elevate youth voice and power among its programs. OSHYD had planned to launch a Youth Advisory Board (YAB) and continue to provide Leadership Exploration and Development (LEAD) internships during FY22 but was not able to accomplish these activities due to the COVID-19 pandemic.

In FY22, planning for the YAB began with collaboration from internal partners and Health Resources in Action (HRiA), an external consulting agency. The goal of the YAB is to engage youth to partner with OSHYD to redesign existing programs so that they best address the needs of the adolescent population in MA. Interested participants will be recruited from youth-serving agencies that deliver Adolescent Sexuality Education (ASE), Personal Responsibility Education Program (PREP), and Students Teaching Respect, Integrity, Values and Equality (STRIVE) programming outlined in the *Adolescent Health* domain. While the board was not able to be launched in FY22, planning activities continued.

OSHYD's Leadership Exploration and Development (LEAD) internship program provided youth an opportunity to participate in paid youth-facilitated projects to address a need in their community. During FY22, OSHYD did not fund any LEAD internships due to COVID-19. Instead, agencies focused on providing social and emotional support and delivering virtual and hybrid programming. In late FY22, OSHYD began planning the relaunch of LEAD internship opportunities for FY23 as community-based agencies started providing full-time in-person programming. Applications were accepted for LEAD internship opportunities and 11 agencies were selected to provide internship opportunities starting in FY23.

Child and Youth Violence Prevention (CYVP) Programs

The CYVP Unit focuses on positive youth development and the engagement of young people. One way many programs achieve this is through youth development staff, who are often former program participants and many of whom are paid a stipend to help shape the ways in which programming engages other young people. This is also an opportunity to invest in youth leadership development. CYVP supported 528 youth development workers in FY22. During FY22, CYVPU also developed a new procurement that incorporates family engagement and youth leader opportunities as core expectations of service provision and began in FY23.

MA Perinatal-Neonatal Quality Improvement Network (PNQIN)

PNQIN's Neonatal Family Engagement Collaborative is a multi-site collaborative focused on reducing racial/ethnic and linguistic inequities in family engagement practices that occur among level II Special Care Nurseries (SCNs) and level III Neonatal Intensive Care Units (NICUs). In this project, the voices of families and their roles as leaders in local and statewide work, are a priority. PNQIN engages families of all backgrounds to serve as equal partners with NICU/SCN staff on local teams and at the project leadership level.

During FY22, 15 hospitals were engaged and 12 signed data use agreements and entered data into the collaborative data collection tool. Hospitals submitted over 40 "plan-do-study-act" cycles focused on four key drivers: 1) provider-family communication; 2) social supports (addressing unmet basic needs and adverse parental mental health); 3) parental engagement in "hands on care," such as skin-to-skin care and breastfeeding; and 4) discharge planning. In FY22/FY23, there were presentations on best practices for working with interpreters, NICU discharge for medically complex patients, trauma informed care in the NICU, organizational health literacy, NICU discharge planning guidelines and standards, and primary nursing and neonatologists in the NICU. After three years, the project is moving into sustainability mode.

Fatherhood/Second Parent Experience Survey

In FY22, the MA Pregnancy Risk Assessment Monitoring System (PRAMS) team continued planning for a survey of fathers and second parents called the "Fatherhood/Second Parent Experiences Survey." The goal of the survey is to collect data about the experiences of fathers and second parents during the COVID-19 pandemic, including the pregnancy and birth of their child, COVID-19 testing and vaccination, their health status (physical and mental health), SDOH, and racism. Data will help inform MDPH program approaches and strategies to be more representative and inclusive of fathers and second parents. While the launch of the survey was delayed in FY22 due to staffing changes and funding challenges, MDPH is committed to piloting the survey in FY24.

Priority: Eliminate health inequities caused by unjust social, economic, and environmental systems, policies and practices.

The performance measure for this priority is the percent of families living in a household with poor economic resources. This reflects an adverse childhood experience that can have lasting effects on health, well-being, and opportunity. It has significant effects at critical periods of development, cumulative burden across the lifespan, and across generations. Key strategies to address this priority are centered around five SDOH domains, as defined by [Healthy People 2030](#): economic stability, education access and quality, neighborhood and built environment, social and community context, and health care access and quality.

Objective 1 (SPM 5). By 2025, decrease to 10% from baseline (12%, 2018-2019 NSCH) the percent of families who have had difficulty since their child was born covering basics, like food or housing, on their income.

MDPH recognizes that many families and youth are experiencing severe negative social and economic consequences due to COVID and increased inflation that will make it more difficult to reach this performance measure goal. According to the 2020-2021 National Survey of Children's Health (NSCH), 9.8% of families had difficulty since their child was born covering basics like food or housing on their income, meeting the previous objective of 10%. MDPH therefore revised the 2025 objective to 9.5%.

Essentials for Childhood (EfC): Paid Family and Medical Leave (PFML)

The goal of EfC is to prevent child abuse and neglect by promoting safe, stable, nurturing relationships and environments. MA EfC focuses on strengthening community support for families through social connectedness and

economic supports.

As of July 1, 2021, all of the MA PFML types had officially launched, and the Department of Family and Medical Leave (DFML) released their inaugural data report in October 2021. During the first six months of the program (Jan 2021–June 2021) DFML approved 43,440 applications, with an average weekly benefit of \$705.98 for family leave and \$699.00 for medical leave.

During the reporting period Title V and EfC continued efforts to support PFML, primarily by establishing a partnership with DFML. In October 2021, MDPH and DFML met to advance shared goals of supporting a widespread and equitable rollout and uptake and to understand the impact of PFML on health and economic outcomes. The meeting concluded with an agreed upon plan to partner together on two key areas - data analysis and outreach/awareness.

- **Data:** The proposed data analysis partnership would establish a data sharing agreement (DSA) that would initially link DFML data to MDPH birth certificates to understand utilization of family and bonding leave and inform outreach. This DSA would allow future linkages with MDPH's PRAMS and Pregnancy to Early Life Longitudinal (PELL) databases to understand longer term health impacts. Analysis of both uptake and eventual impact of benefits on health, well-being, and economic security of families will focus on families disproportionately impacted by structural and racial inequities.
- **Outreach:** During the reporting period, EfC staff drafted an outreach plan highlighting a continuum of strategies from broad dissemination of information to more targeted speaking engagements and training opportunities for family and community-serving organizations. In partnership with DFML, EfC staff will leverage MDPH's extensive direct and indirect service programs, advisory councils, sister state agencies, community partners, and other partners serving families to support awareness of and access to PFML benefits. In Fall 2022, EfC and DFML conducted focus groups with two priority groups underutilizing the benefit - fathers and people earning under \$35k a year.

Essentials for Childhood (EfC): Earned Income Tax Credit (EITC)

In FY22, the EfC Economic Opportunity Team continued to support strategies and build partnerships to increase the number of eligible families who file for the EITC through Voluntary Income Tax Assistance (VITA) sites.

Building upon the successful participation of EfC Economic Opportunity Team members with a cohort of Massachusetts EITC partners in the CDC's EITC Policy Implementation Lab, the group refined their next steps together. Convened by EfC staff, the group developed and implemented a warm hand-off referral system between five pilot Children's Hospital Pediatric Physician Organization of Children's (PPOC) practices and their corresponding neighborhood VITA sites during the FY21 tax season (launched in April 2022). Post tax season the group continued meeting to refine the process in preparation for the FY22 tax season.

The EfC Economic Opportunity Team also developed two tools to spread awareness of EITC. The first was a user-friendly EITC and Free Tax Preparation tool for medical professionals to support information sharing, conversations, and referrals regarding EITC and free tax preparation. The document includes visual (flyers, videos, etc.) resources, examples of how to discuss EITC with patients, and referrals to VITA sites. The document will be vetted, finalized, and disseminated during the next reporting cycle. The second tool was a multi-benefit one-page flyer highlighting economic benefits for families including EITC and the Child Tax Credit that was disseminated to stakeholders in spring 2022.

EfC staff continued to participate on the EITC Healthy Families Coalition as it pursued increased economic opportunity and poverty reduction policies for families. These policies sought to expand EITC access to previously

excluded groups of people, including immigrants, and to expand the credit and other guaranteed forms of income to extremely low income households to eliminate the most extreme forms of poverty. EfC and Title V staff disseminated relevant information and resources from these coalitions to stakeholders to increase awareness of and access to these entitlements.

Essentials for Childhood: Community Connectedness

In FY22, the EfC Community Connection CIT continued to refine the Community Connectedness Toolkit, developed from the various work streams of the EfC project. Based on family focus group input, the team decided that the toolkit will include information on families' preferred approaches for accessing supports and services to promote their young children's development and tools that document processes that allow power and resources to be shared with greater equity. The Toolkit includes community wellness measures and a Municipal Inspiration List, which highlights effective community-level services and supports for young children's development. Further focus group feedback will be used to refine the goals, structure, and tools to be included, and dissemination strategies for the completed Toolkit.

SSI and Public Benefits Training and Policy

In FY22, the SSI and Public Benefits Training and Policy Specialist partnered with and served as a liaison for communication with external stakeholders seeking to improve social and economic systems, policies and practices that support families, especially those with children with special health needs, including:

- Children's Health Access Coalition, which promotes state policies, legislation, and budgets to improve the health of all children in MA in areas such as immigrant children's health access, behavioral and mental healthcare, home health care, and healthcare workforce development
- Immigrant Health Access Coalition, which monitors and provides input on state policies, legislation, and budgets affecting health care and social services benefits for immigrant households.
- Disability Determination Services Advisory Committee, with the specialist providing input to reduce barriers to accessing SSI and MassHealth for low-income children with disabilities and chronic illness, benefits essential to their ability to obtain health care, food and housing.
- Statewide Special Education Advisory Council, which provides annual recommendations to the MA Board of Elementary and Secondary Education. The panel addressed equitable education services to students of all economic statuses, geographic locations, races, and ethnicities. Special attention was given to student mental health, the IEP Improvement Project, and the transition to adulthood.

In FY22, the SSI and Public Benefits Training and Policy Specialist provided training and TA to health care providers, social service providers, EI programs, community-based organizations, school staff, and parents/caregivers of CYSHN. She played a critical information-sharing role during the COVID-19 public health emergency. Through relationships with external stakeholders, she received updates on federal and state regulatory, tax and agency operational changes (such as SSI operations, MassHealth flexibilities, extensions and relief policies in income benefits, nutrition programs and housing assistance, economic stimulus payments, and expanded tax credits) and distributed timely updates to BFHN and DCYSHN staff to share with their community networks and directly with families.

Occupational Health Surveillance Program (OHSP)

The mission of the OHSP, housed in BCHAP, is to promote the health, safety and quality of life of working people in MA. This is done by collecting and analyzing data about work-related injuries, illnesses, and hazards; using this information to develop prevention programs and policies; educating workers, employers, and health care providers to address occupational health and safety problems; and integrating occupational health into other public health activities at the state and local levels.

In FY22, “Young Workers” have remained a priority population for surveillance and intervention work, as part of the NIOSH funded “Fundamental Project.” This aims to improve access for youth to employment that is safe, accessible, stable, and well compensated. OHSP has continued to elevate the needs of this population through analyses of the CCIS youth section. These data have been presented to MDPH internal audiences as well as external stakeholders. The data indicated that 39% of youth reported working during the early phase of the COVID-19 pandemic (fall 2020). Youth were asked to take on more family responsibilities such as taking care of younger siblings and providing financial support. Youth were twice as likely to report losing a job during the pandemic than adults (19% v 10%). Sixty-three percent of youth who were currently employed worked outside the home, putting them at increased risk of COVID-19, and many were not provided protections by their employers, such as PPE, social distancing, and training to reduce COVID-19 exposure. Youth were asked to continue their education while working and helping out more at home; many youth worked in industries and occupations hit particularly hard by the pandemic such as restaurants and health care. Youth who graduated during the pandemic may have had a hard time entering the workforce during the pandemic as 28% of youth reported wanting help finding a job. The future economic and social impacts from COVID-19 will be acutely felt by youth for years to come.

OHSP also continued to lead the MA Youth Employment and Safety Team (a group of eight state and federal agencies) and coordinated efforts to protect and promote the health and safety of young workers across the Commonwealth. OHSP continued to work closely with community partners such as the MA Coalition for Occupational Safety and Health to promote equity-focused work. While the MA Safe Jobs for Youth Poster Contest was put on hold due to the pandemic, the Youth Employment and Safety team continued to meet regularly, discussing topics such as work permits, the CCIS data, and other related topics.

Catastrophic Illness in Children Relief Fund (CICRF)

The CICRF provides financial assistance to MA families caring for children with special health needs and disabilities. The Fund reimburses high medically related expenses for a child with special health needs aged less than 22 years that are not covered by insurance, public benefits, or other financial source. The family must have “catastrophic expenses” related to their income; eligibility is defined by law as medically related expenses exceeding 10% of income from all sources in a 12-month period (plus 15% of any amount over \$100,000).

In FY22, CICRF provided over \$1.9 million in financial support to 160 families caring for CYSHN who met the eligibility criteria. The children assisted by the CICRF had a variety of diagnoses, typically came from families with lower incomes, and had some form of health insurance coverage. Most notably, during FY22 approximately 76% of the families who received assistance had annual incomes less than 200% of the federal poverty level (\$55,500 for a family of four in 2022). In addition to providing financial assistance, the Fund provides information, referrals and TA related to accessing other financial supports, such as hospital financial assistance programs for outstanding medical bills, programs for vehicle and home modifications, rental/mortgage payment assistance programs, and fuel assistance programs. As a result, many families determined ineligible for the Fund due to the financial criteria have received other types of support from the Fund. Five out of six CICRF program coordinators speak other languages (Spanish, Haitian-Creole, and Portuguese), improving program capacity to explain documentation needs and complex Fund policies directly to families.

In FY22, CICRF completed a Lean Six Sigma project to streamline the Fund’s application process and shorten waiting times for families to know if they are eligible for financial assistance. To assist in implementation of the recommendations during FY22, CICRF started the recruitment process for a Data Administrative Coordinator to collect paperwork from families more efficiently. CICRF is developing the specifications for a new online application and customer relationship management system to replace the existing Access database. CICRF staff continue to build awareness of other state agencies, health care providers, community partners, family advocacy organizations,

and families about the existence of the Fund as a potential financial resource.

Division of Sexual and Domestic Violence Prevention and Services (DSDVPS)

Sexual and domestic violence impact all aspects of survivors' lives and are experienced inequitably by women, girls, women and girls of color, people who identify as LGBTQ+, people with disabilities, and women and girls who live in rural communities, among other historically marginalized populations. DSDVPS-funded sexual and domestic violence agencies work to prevent and mitigate the impacts of sexual violence and IPV and help survivors attain safety and well-being through a variety of strategies, including supporting families in accessing concrete supports. During FY22, DSDVPS-funded agencies provided access to a range of housing services, including emergency shelter services, housing stabilization, and shelter advocacy to help clients find emergency shelter, obtain housing advocacy to help clients find and/or apply for housing, and engage in economic advocacy.

Childhood Lead Poisoning Prevention Program (CLPPP)

Lead exposure disproportionately impacts lower income communities and communities of color, making it a critical health equity issue. In accordance with Lead Law requirements, the CLPPP implements a multi-tiered case management strategy to mitigate childhood lead poisoning, focusing on the child, their family, and the home environment. A team of three individuals, including a clinical care coordinator, a community health worker (CHW), and a code enforcement lead inspector, deliver case management services to families and facilitate connections to community-specific resources. The CHW component of CLPPP's case management model is funded as part of the collaboration between CLPPP and BFHN and is supported by Title V funds.

Home visiting services are provided by seven contracted organizations across the state. Many CHWs come from the communities they serve, and staff can communicate with families in eight languages. Home visitors conduct client identification and outreach, child and family assessments to identify needs, and provide linkages to appropriate community services. The CHW's assessment goes beyond lead exposure education and includes referrals to programs like EI, Head Start, WIC, fuel assistance and rental assistance programs to ensure the family has the necessary support to provide safe and stable housing for their children.

Because of mandatory universal screening and reporting, CLPPP effectively identifies lead-exposed children in a timely manner. Through the electronic case management and surveillance database children with a BLL 10µg/dL or greater receive additional evaluation and services. In FY22, CLPPP processed 204,120 blood test results for 190,563 children. Of those screened, 372 had lead poisoning and were referred to CLPPP for case management. CHWs have made the operational shift of using virtual visits when an in-person visit is not possible, but this is atypical. In FY22, CHWs conducted 33,392 lead exposure assessment interviews, resource referrals, and follow up visits to families with lead exposed children.

CLPPP uses surveillance data to identify geographic areas and populations at highest risk for childhood lead exposure. Population-based, primary and secondary prevention interventions are focused on children aged less than 6 years with an emphasis on those areas and populations identified as being disproportionately affected. CLPPP has two staff dedicated to primary prevention activities, a Director of Primary Prevention and a Primary Prevention Planner. These staff implement strategies for community engagement, rebuild coalitions, and engage with lead advocates to focus on primary prevention. Much of their focus is on communities where racial and economic inequities cause the most risk for lead exposure and perpetuate a cycle of lost potential, poverty, and injustice. During FY22, the Primary Prevention Team participated in Title V family engagement and SDOH planning meetings, attended a 2-day Child Health Equity Summit and 2-day Racial Equity training, improved client language data, launched LeadSafeHomes 2.0, conducted outreach and education focused on Afghan refugees, and implemented a statewide social media campaign for National Lead Poisoning Prevention Week in October 2021.

Lead exposure disproportionately affects refugee and other resettled children in the United States. Newcomer children may be exposed to lead in their native country from the environment, cultural practices, home remedies, or consumer products. Primary Prevention Staff worked with case management staff to adjust outreach practices to ensure culturally and linguistically appropriate services for Afghan refugees, conducted presentations with MA Office of Refugee and Immigrants and the Division of Global Populations staff and community partners to increase their understanding of lead exposure in high-risk populations and alternative sources of lead such as Surma, connected with resettlement agencies and CHCs to improve communication and coordination of services, and created new lead factsheets available in Arabic, Dari, Hindi, Pashto, and Urdu. As a result of this outreach and collaboration and because of the required screening for newly arrived children, MA CLPPP identified and provided case management services to 26 Afghan children, 20 of whom were aged less than 6 years and had BLLs greater than or equal 10 µg/dL, triggering a mandatory inspection. The remaining 6 children were over the age of 6 and had BLLs ranging from 40 µg/dL to 5 µg/dL. Three families had multiple children exposed. The environmental team inspected 13 homes (includes 3 homes with exposed siblings). Four of these families moved out of state before an environmental investigation. MA CLPPP primary prevention staff created a model and partnerships to respond to future refugee resettlements -- ones requiring new cultural expertise, communication skills, and collaborations with federal, state, and community-based organizations.

In FY22, primary prevention staff also launched LeadSafeHomes 2.0. This new database and its predecessor Lead Safe Homes 1.0 are a tool for property owners, renters, realtors, and housing advocates to learn about the lead status of a home before buying or moving in. A new landing page was created to make the database more navigable, including search tips in text and short videos. Nine trainings were given, reaching CLPPP staff, private lead inspectors, local health departments, landlord associations, and Mass Real Estate Board. The website averages more than 800,000 visits each year.

During spring through fall of 2021, CLPPP became aware of multiple recalls concerning the test kits used with LeadCare II devices, which are point of care devices used to test lead levels in-house at a provider's office. CLPPP used the Health and Homeland Alert Network to notify 9,000 physician assistants and nurse practitioners about the recall. CLPPP staff conducted direct outreach to 96 pediatricians using LeadCare devices to provide information and guidance about the recall and actions to take. CLPPP conducted exploratory investigations into the impact of this recall and provided the CDC Childhood Lead Poisoning Prevention Program with findings. The 2021 recall affected approximately 30% of all annual lead testing for MA children, which constitutes more than 58,000 capillary tests analyzed with LeadCare II devices.

Care Coordination

The Care Coordination Program provides access to the Family Support Fund for families receiving Care Coordination services. Under this program, families may request funding for respite and other support services if their child(ren) and youth have medical complexity. Funding categories include respite, services, equipment, and supplies reimbursement. In FY22, 415 families received this support. The Care Coordination program, as part of its family centered and racially equitable services, provided resources, knowledge, and referrals to help families of children and youth with medical complexity address basic needs, housing, immigration, and other barriers to emotional, social, health, and economic well-being.

F.O.R. Families (Follow-Up Outreach Referral)

The F.O.R. Families home visiting program assists families transitioning from homelessness to stable housing with securing basic needs such as healthcare, housing opportunities, childcare services, and financial resources. Families are referred to the program by the MA Department of Housing and Community Development (DHCD) and their contracted Emergency Assistance shelter providers. These referrals are for families with the most complex

physical, social and emotional challenges. Home visitors connect families to services to prevent or mitigate adverse health outcomes. Staff provides assessment, supportive counseling, and referrals to community resources. Challenges to accessing services for basic needs include mental health issues, substance use disorder, and domestic violence.

F.O.R. Families offers assessment and case management for families with identified risk factors, such as mental health issues, child welfare concerns and inadequate healthcare. Of the 169 families assessed in FY22, 18% of the heads of household were employed and 13% were disabled/unable to work. Fifteen percent of households reported they have run out of food; among them, 24% reported that this occurred monthly. To address these needs, home visitors collaborate with shelter providers to supply the families with transportation, employment opportunities, meal programs and other necessities.

Home visitors also identify risk factors and provide connections to services to prevent or mitigate poor health and/or developmental outcomes. In FY22, 39% of caregivers reported concerns with their child's development, specifically in psychological and behavioral areas. Families with children aged less than 3 years are routinely referred to EI; 10% of the program's participants had a child receiving EI services. Referrals to Head Start and childcare are offered for non-school aged children to provide increased social opportunities.

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Home visitors continued to support families in addressing barriers to pursuing educational goals and make referrals to education programs and other community resources. In FY22, 30% of primary caregivers who enrolled in home visiting without a high school degree or equivalent subsequently enrolled in, maintained continuous enrollment in, or completed high school or equivalent during their participation in home visiting. This represented a decrease from 37% in FY21. Home visiting programs noted that enrolling and maintaining enrollment in educational programs was not a priority for many program participants during the COVID-19 pandemic. Home visitors will continue to support families in addressing barriers to pursuing educational goals and make referrals to education programs other community resources.

Early Intervention Parenting Partnership Program (EIPP)

EIPP home visitors supported families in accessing concrete supports such as housing, financial income, childcare, and food with the support from the CHW who provides navigation and interpreter services to participants. In FY22, of the 237 participants enrolled, 40% were supported in accessing clothing and other material needs, 14% were referred to housing/shelters, 19% were referred to SNAP, 9% were referred to Transitional Aid, 7% were referred to childcare services, 7% were referred to a local food pantry, and 3% were referred to SSI. Amid the pandemic, families were less likely to accept referrals for services outside their home.

Lawrence Telehealth Kiosk/Cabina Video Salud

During FY22 Title V staff continued to support the development and implementation of the Lawrence Telehealth Kiosk/Cabina Video Salud. With community input and a successful partnership brokered by the Lawrence grantee, the Professional Center for Child Development (PCCD), with the City of Lawrence's Mayor's Office, it was identified that the Lawrence Public Library would be the best location for the kiosk as it is situated in the heart of the community, adjacent to the Senior Center and the public high school. PCCD also partnered with a local marketing company, Hispanic Market Solutions, to build out a community-informed multi-lingual public awareness campaign to market and advertise the Kiosk/Cabina Video Salud once installed. The physical kiosk was purchased and installed in fall 2021, branding and marketing commenced in winter 2021/2022, and the kiosk was officially launched in March 2022 with a ribbon cutting ceremony attended by the Mayor's Office and other local municipal and state leaders.

In spring 2022, Title V staff, PCCD, The Federation, and Lawrence community partners participated in a Community

Evaluator (CE) project led by TIER in collaboration with MDPH and funded by the CDC COVID-19 Health Disparities grant. This project engaged Lawrence-based CEs to design an evaluation plan for understanding the effectiveness and utilization of the Kiosk/Cabina Video Salud. Title V staff secured additional funding from the CDC COVID-19 Health Disparities grant to continue the implementation, marketing/advertising, and data collection for the kiosk project, and explore scalability based on the TIER CE recommendations and findings.

Priority: Support equitable healing centered systems and approaches to mitigate the effects of trauma, including racial, historical, structural, community, family, and childhood trauma.

Objective 1 (SPM 6). By 2025, increase by 10% above baseline (to be established) the percent of BFHN and BCHAP staff that report a workplace culture that reflects a safe and supportive environment to mitigate primary and secondary trauma.

Title V Healing Centered Systems Implementation Team

Trauma affects individuals, communities, and systems touched by MDPH, as well as those of us who work within the MDPH structure. MDPH's Healing Centered Systems priority has two objectives, one internally focused on workplace culture and one focused on mitigating the effects of trauma for the populations we serve. According to the San Francisco Department of Public Health, "trauma informed systems work is based on the understanding that our service delivery systems can inadvertently reinforce oppression and create harm. When our systems are traumatized, it prevents us from responding effectively to each other and the people we serve."^[1]The performance measure for this priority tracks Title V efforts to improve policies, practices, and conditions to increase MDPH's capacity to operate as a trauma-informed and healing-centered organization.

In FY21, the Healing Centered Systems Implementation Team had worked with a MCH Fellow to build an understanding of healing-centered engagement strategies and frameworks that foster racial equity in the work environment, and developed a Healing Centered Systems Organizational Tool, which included race/ethnicity of respondents and questions on experiences of equity, resilience, and healing. The intention was for this tool to be administered in at least two bureaus (BFHN and BCHAP) to serve as the data source for progress on this SPM. However, in FY21 and FY22 dissemination of the tool was held up by internal and state employee union reviews and we have not been able to establish a baseline. We were able, in FY22, to include consideration of Healing Centered Engagement together with centering racial equity as part of the overall agency strategic planning process that began in the spring of 2022. This will allow us to reach all agency staff rather than focusing on the Bureaus that have already been engaged in Healing Centered efforts.

Objective 2. By 2025, use surveillance data from multiple sources to develop a data dashboard that measures Adverse and Positive Childhood Experiences (ACEs and PCEs) to inform program and policy strategies that promote healing centered engagement at community, family, and individual levels.

In FY22, the Healing Centered Systems Implementation Team continued to collaborate on the CDC-funded Preventing Adverse Childhood Experiences Data to Action Grant (PACE:D2A), which, like the EfC grant, aims to measure and promote community factors that promote safe, stable, and nurturing environments. The PACE:D2A Surveillance Subcommittee selected and operationalized indicators from the identified data sources, including NSCH, Youth Risk Behavior Survey (YRBS), and the Youth Health Survey (YHS), to begin to develop an Adverse Childhood Experiences/Positive Childhood Experiences surveillance system. The Subcommittee also selected indicators from the PRAMS survey with a plan to operationalize these indicators in the coming fiscal year. Staff from the PACE:D2A grant worked with the MDPH Office of Population Health, the MA Department of Elementary and Secondary Education, YRBS staff, and the Population Health Information Tool (PHIT) team to realize a draft dashboard within the PHIT. The PHIT is located on the MDPH website, enabling MA communities to access ACEs/PCEs data to inform community strategies for healing centered approaches that promote positive childhood

experiences and mitigate adverse childhood experiences. In-FY22, PACE: D2A continued its partnership with Tufts Medical Center to inform the ACEs/PCEs dashboard and conduct the Healthy Outcomes from Positives Experiences (HOPE) Framework trainings to promote prevention strategies to address ACEs for youth and child serving agencies by promoting PCEs, including home visiting providers.

Division of Sexual and Domestic Violence Prevention and Services (DSDVPS)

DSDVPS identified four indicators of resilience that can be tracked at the statewide level and shared with community service providers and other partners to inform work with MCH populations. In FY22, DSDVPS used 2021 MA High School YHS data to obtain results for these four indicators:

- In 2021, 35% of MA high school youth reported engaging in volunteer activities during a one-week period. This is slightly lower among youth who also reported ever experiencing dating violence (34%) and higher among youth who experienced unwanted sexual contact (37%).
- In addition, 65% of MA high school youth reported being involved in organized group activities (sports, youth clubs, etc.) in a one-week period. This percentage was lower among youth who also reported ever having experienced dating violence (61%) and among students who reported ever having experienced unwanted sexual contact (58%).
- Among high school youth who reported that they needed to talk to an adult, 90% reported that they did talk to an adult when needed. This percentage was slightly higher among high school youth who also reported having experienced dating violence (93%) and slightly lower among high school youth who also reported ever having experienced unwanted sexual contact (89%).
- Ninety-one percent (91%) of MA high school youth reported that their neighborhood is safe or very safe. Percentages were lower among youth who reported ever having experienced dating violence (84%) and unwanted sexual contact (83%).

Additional activities to support equitable healing-centered approaches to address trauma

Additional efforts to address this priority that do not relate directly to the performance measure or other objectives are described below.

Division of Sexual and Domestic Violence Prevention and Services (DSDVPS)

DSDVPS funds rape crisis centers, domestic violence community-based services and shelters, intimate partner abuse education programs, supervised visitation centers, and programs for children who are exposed to domestic violence. DSDVPS-funded agencies provide direct services that incorporate practices of healing-centered and trauma-informed engagement. They participate in a variety of professional and community capacity-building strategies that promote resilience and trauma mitigation related to sexual violence and IPV experiences, such as coalition/task force meetings, community mobilizing, and professional training series.

In FY22, DSDVPS partnered with the MDPH Bureau of Substance Addiction Services to enhance program planning through trauma-informed and healing-centered approaches to address co-occurring conditions. Training and cross-training opportunities are under development for future years that will bring substance use and SDV staff members together to learn how safety and healing from both types of trauma can impact an individual and their world.

In partnership with OHE, DSDVPS enhances access to services for people with disabilities, as data show that people with disabilities experience higher rates of sexual and domestic violence. In FY21, DSDVPS and OHE piloted a new electronic version of the MA Facilities Assessment Tool (MFAT). The tool combines federal ADA and state Architectural Board guidelines for physical access to buildings and services for all MDPH-funded agencies. The tool's designer, the Institute for Human Centered Design, used feedback from the pilot to develop a newer, easier-to-navigate electronic version of the MFAT that is compatible with e-reading software. MDPH SDV providers tested the beta version of the MFAT in FY22, and the tool was finalized shortly after the close of the fiscal year.

In FY22, DSDVPS also partnered with the MA Women of Color Network (MASSWCON) to increase the effectiveness of services and supports for Black women survivors and their families across the MA SDV Field. MASSWCON held quarterly convenings to train and discuss 1) findings about the leadership of women of color in SDV programs 2) training for women of color to assume leadership in SDV organizations and 3) development of best practice guidance for working with Black communities on sexual and domestic violence.

Division for Children and Youth with Special Health Needs

In FY22, acting on the 2020 CCIS findings disseminated in Fall 2021 that highlighted persistently poor mental health outcomes for parents of CYSHCN, the Division continued its efforts to weave the value of trauma-informed/healing centered supports into its daily work for both staff and families. With the support of the CDC Workforce Development grant, the Division hired a CDC Foundation Fellow to develop and rollout a comprehensive curriculum, “Caring for Ourselves While Caring for Others,” that provided tools for learning and implementing trauma-informed/healing centered practices Division wide. The Fellow conducted a needs assessment at multiple levels of the Division (senior leadership, program manager and staff) to determine gaps in knowledge and expertise and customize curriculum to address individual, programmatic and Division needs. The final products included a four-part training curriculum delivered from April until mid-October 2022, a series of sustainable materials to reinforce learning, and a final report with recommendations.

Child and Youth Violence Prevention Unit (CYVPU)

The CYVPU Safe Spaces for LGBTQIA+ youth, community, and school-based programs continue to promote equitable, healing-centered approaches to address traumatic experiences and environments involving culture, education equity, and collective healing.

In FY22, Safe Spaces programs continued to provide drop-in spaces, a critical element for the programs to create a safe and affirming space for LGBTQIA+ youth to be with other youth who identify in similar ways, or to engage in culturally affirming activities. Youth who have accessed this unique model have reported that they feel like they “belong” and “matter” and that they manage their everyday life “better now than before.” Programs also increased access to mental and medical health care needs not covered by insurance; assisted in accessing basic needs such as meals and housing; and provided behavioral health support within the drop-in center or subcontracted with a behavioral health specialist.

The CYVPU also continued its partnership with MDPH’s Division of Sexual and Domestic Violence Prevention and Services to provide the three-part Sexual Trauma Training Series. These trainings included “Introduction to Crisis Counseling,” which is designed to develop basic crisis counseling skills and interventions specific to sexual violence; “First Disclosure Training,” which provides best practices for responding when someone says they’ve experienced sexual violence; and “Trauma Training 101,” which provides youth workers with tools to support young people who have been exposed to violence.

[1] <http://traumatransformed.org/wp-content/uploads/TIS-Program-Overview-11-15-17.pdf>

Cross-Cutting/Systems Building - Application Year

Priority: Eliminate institutional and structural racism in internal MDPH programs, policies, and practices to improve maternal and child health.

Objective 1 (SPM 3). By 2025, increase to 95% from baseline (64% in 2019) the percent of BFHN and BCHAP staff who have used any racial equity tool or resource in their work.

Racial Equity Movement (REM)

A continued priority will be to provide and improve upon opportunities for MDPH staff to engage in ongoing learning and dialogue to promote common language, shared understanding, and authentic support for a public health framework centered on racial equity. Formal opportunities will include two-day trainings, affinity groups, lunch and learn discussions, and town hall meetings.

MDPH will continue to contract with the Racial Equity Institute (REI) to offer ongoing racial equity trainings to staff and will continue to offer racial equity labs for staff who have completed a two-day training to further their racial equity practice. The labs will focus on diagnosing the specific challenges staff may face in their program or office, looking at the problem from a structural lens. They will explore topics such as: head/heart integration, racial justice PDSA (plan, do, study, act) support, Racial Equity Impact Assessments, solving problems collectively using capsules, pushback circles for managing difficult conversations, and group dynamics. The REM workgroups will continue developing and implementing strategies to support equity-focused systems change.

Increasing staff use of racial equity tools was an area of growth identified in the 2019 BCHAP/BFHN Racial Equity Survey and is used to measure progress on this priority. MDPH plans to implement a similar survey Department-wide, due to the growth of the REM beyond BFHN and BCHAP. MDPH hired a consultant to facilitate survey development and analysis. The survey development process has included consultation with MDPH staff to consider the unique needs and starting points of different bureaus, the importance of maintaining consistent questions from previous racial equity surveys, and careful planning about how the data will be used. The survey will assess attitudes, approaches, and perceived barriers and needs related to racial equity. The data will be used to guide the implementation of the Department's strategic plan and for planning and evaluating other MDPH racial equity initiatives, including tools and workforce development programming aiming to dismantle institutional and structural racism. This Department-wide project has engaged staff (majority BIPOC) from across bureaus and offices and is being facilitated by the Performance Management and Quality Improvement Program within the Commissioner's Office. Oversight of the project is through an Advisory Group (20+ staff participating) and Workgroup/subcommittee that have led the development of the survey content. Staff engaged in the project will pilot test and finalize the survey instrument and analysis plan, obtain necessary approvals, and deploy the survey electronically. It is anticipated that the survey will ask about staff self-reported competency in racial equity, behaviors around hiring, attitudes of leadership, approaches to their work, individual and institutional needs, work culture, and awareness and use of racial equity tools. A team of data analysts will be convened to analyze, interpret, and assist with the dissemination of the findings. Results will be used to identify areas for improvement for the Department overall, by bureau/office, and across demographic strata.

One of the goals of the REM Procurement Workgroup is to evaluate MDPH staff experience using the Racial Equity Principles, Guidance, and Level 1 Reviewer Training Slides. Feedback will be used to improve the accessibility and utility of the tools. The workgroup will also provide consultation and technical assistance (TA) to staff drafting RFRs and explicitly integrate racial equity into the existing Procurement 101 training for internal MDPH staff.

MDPH has been working with three consultants to create a sustainable infrastructure to support the REM. This includes conducting a landscape analysis of bureau and office racial equity work and ways to help move the work

forward; assessing current resources to coordinate the two-day racial equity training, integration meetings, and follow-up training and practice labs; designing a process for staff and programs to request racial equity TA; building a pathway for staff to become racial equity facilitators; designing a process to track racial equity resources and best practices; and assessing current capacity for utilizing tools such as the Racial Equity Data Road Map and developing recommendations for implementation, performance measurement, and evaluation.

Racial Equity Data Road Map

MDPH leadership now promotes use of the Racial Equity Data Road Map and its integration into strategic plans and will continue to do so in FY24. The BFHN Racial Equity and Family Engagement Framework/Strategic Plan and the MDPH Strategic Plan 2023–2024 both include a focus on developing a data infrastructure to improve racial equity. The RESPIT team aims to revise and update the Road Map based on lessons learned from programs that have used it, including states participating in the DREAM-LC led by CDC and ASTHO and described in the FY22 Annual Report. MDPH has matched with a Title V intern team that will work with RESPIT in summer of 2023 to support this work. RESPIT will also work to ensure that guidance and principles from the Road Map are incorporated into MDPH grant applications and federal grant reports and ensure alignment of the Road Map with the Culturally and Linguistically Appropriate Services (CLAS) Manual chapters related to collecting and using data.

Objective 2. By 2025, increase the percent of BFHN staff of color from 36.8% to 42.6%.

BFHN is continuing refinement and testing of the Racial Equity and Family Engagement Strategic Plan Change ideas in the strategic plan that contribute to workforce justice, equity, diversity, and inclusion include:

- Develop a staff recruitment, inclusion, and retention plan with a specific aim to recruit and retain staff (especially in leadership positions) who speak the languages and are representative of the culture, race, and/or ethnicity, gender identity of the families we aim to serve.
- Revise job application requirements to reduce barriers to job entry (e.g., accept equivalent or lived experience for educational attainment, disclose the salary range, do not ask for salary history, remove names, addresses and schools from resumes).
- Establish a hiring process (job description responsibilities, interview questions, screening and selection criteria) that recognizes candidates for their sensitivity to and understanding of the root causes of racial inequities, as well as willingness to self-reflect on one’s own culture and listening skills.

The BFHN internal working group that developed the Hiring Process Job Aid and Onboarding Checklist to support hiring managers in centering racial equity in these processes will continue to promote awareness and use of the documents. Using a quality improvement approach, the team gathers regular feedback from hiring managers on these resources. User feedback will be used to continually improve the documents.

This work aligns with one of the focus areas outlined in the MDPH 2023-2027 Strategic Plan, which is to advance equity-centered workforce development. To meet its mission to promote and protect health and wellness with an emphasis in health equity, MDPH must have a strong organizational infrastructure built by a diverse and skilled public health workforce. The strategic plan outlines three objectives for this focus area: 1) utilize equitable practices to recruit and hire candidates with relevant professional and lived experience and expertise addressing racial inequities in health, across all roles within MDPH; 2) increase retention and reduce attrition within MDPH, with an emphasis on retaining colleagues with experience and expertise addressing racial inequities in health and increasing racial/ethnic diversity among senior leadership and managers; and 3) ensure all staff are skilled in, invested in, and committed to principles and practices of racial equity, with a particular focus on building racial equity capacity and accountability amongst senior leadership and managers.

Additional activities to eliminate institutional and structural racism in internal MDPH programs, policies,

and practices

Culturally and Linguistically Appropriate Services (CLAS)

The Office of Health Equity (OHE) will continue to administer the CLAS Internal Assessment with all MDPH programs to identify areas for improvement and provide training and TA to staff and contracted vendors as needed. OHE will update the chapters in the CLAS manual on building community partnership using the racial equity lens. OHE will introduce the Budget for Equity Tool to the MDPH Accounting and Finance team early in the budget cycle to ensure programs allocate sufficient funding for language assistance services. In collaboration with other programs, standard procedures on how to budget, request and pay for American Sign Language/Communication Access Real-Time Transcription (ASL/CART) interpretation and translation were established and will be disseminated widely across the Department to leverage language justice. An online training module for CLAS 201 focusing on CLAS self-assessment for vendors will be completed and shared widely with MDPH staff who manage direct service contracts to ensure consistency in monitoring CLAS implementation across the Department.

Determination of Need Program (DoN)

The DoN program plans to: 1) update the current health care facilities language services Annual Report Survey to reflect post pandemic status and on-going changes in operations, services, policies, and procedures, 2) develop and conduct a survey to improve site visit reviews to further align MDPH requirements with facilities' compliance and increase collaboration in planning and operations, and 3) increase site reviews by 50%.

Vaccine Equity Initiative (VEI)

The VEI activities officially ended in June 2023. The on-going work established in VEI including funding for community, faith, tribal, and rural organizations to support outreach and engagement activities, support for local boards of health, partnerships with community health workers (CHWs) and community health centers, and on-going data tracking and analysis was transition into existing DPH Bureaus and Offices to ensure sustainability.

Priority: Engage families, fathers and youth with diverse life experiences through shared power and leadership to improve MCH services.

Objective 1 (SPM 4). By 2025, increase to 50% from baseline (38.1% in FY19) the percent of Title V programs that offer compensated family engagement and leadership opportunities.

Title V Family Engagement Implementation Team

The Family Engagement Implementation Team will continue work on priority activities, including building aligned approaches to family engagement across Title V programs and supporting programs' capacity to implement best practices for engaging families, with a focus on compensation. The Team has identified a training consultant to adapt the Family Engagement Framework modules for Title V staff and create opportunities for building skills and adapting existing program practices and will work to identify funding to support this activity. If funding is identified, the consultant will also develop a train-the-trainer guide to ensure Title V staff have the capacity to provide the modules on an on-going basis. Additionally, the Team hopes to partner with the consultant to develop a Community of Practice facilitator's guide for Title V staff who have received the training to reflect on implementation challenges and lessons learned from their peers. The Team will also continue to develop a family engagement best practice guide that will be aligned with the training modules to support operationalizing the principles and approaches included in the Family Engagement Framework. The guide will include a menu of options for fairly and equitably compensating families for their involvement and leadership in Title V programs; a Continuum of Family Engagement tool outlining various levels of family engagement and providing Title V-specific innovative approaches and examples; and best practice reminders to ensuring equitable language and literacy access. Finally, the Implementation Team will continue to work together to gather feedback to improve and refine the Title V Family Engagement Survey that was restructured in FY23 to include an adapted FESAT self-assessment (see further description in Needs Assessment section).

Early Intervention Parent Leadership Project (EIPLP)

EIPLP will offer a fourth round of the training series *Finding Your Footing: Using Your Family's Experience to Impact Systems Change*. Following a successful experience in FY22 of including three Portuguese speaking families in the training cohort, EIPLP will continue to recruit and support additional families whose primary language is not English. EIPLP will also work with community partners to recruit more fathers. *Finding Your Footing* graduates will be offered opportunities to use their skills in a variety of ways, including reviewing materials; participating on procurement teams; facilitating focus groups, meetings, and trainings; and serving on advisory councils. EIPLP will add trainings for families receiving EI services that include Emergency Preparedness, Family Rights in Early Intervention (EI), Telling Your Family Story, SSI & Public Benefits, and Early Intensive Behavioral Intervention (EIBI) Resources, as well as continuing collaboration with the Federation for Children with Special Needs in offering Turning Three Essentials four times a year in English and twice a year in Spanish. There will be opportunities for families to participate in reviewing the new procurement of EI services. This will include recruiting and training families to actively participate in the procurement review process.

Family TIES

Family TIES will continue to recruit, train and mentor parents for the Parent-to-Parent Program and administer the *Share Your Voice* program, reaching out to interested families with opportunities to serve as advisors to Title V program as opportunities arise. Family TIES will develop and deliver training about BFHN programs and eligibility criteria to community partners and will continue to operate an information and referral center to connect families with EI services and other community-based supports. The program will continue to share information in the top six languages spoken in Massachusetts to encourage families from diverse cultural and linguistic communities to connect with BFHN programs.

Two members of the Family TIES staff will share their family support subject matter expertise with MassHealth "CARES for Kids" providers as part of MA Title V's new population-health model, the Care Coordination Assistance, Training, Education, and Resource (CCATER) Center. They will serve as family support specialists on CCATER care coordination training and TA (CC T/TA) teams with MDPH care coordination and clinical specialists. Activities targeted to family support specialists on CARES teams will include individual coaching calls, group learning collaboratives and communities-of-practice, in-person site visits, and T/TA resources and materials. The goal is to model and coach family engagement practices and to create a support system for family support specialists in community practices who may not have a peer group.

Universal Newborn Hearing Screening Program (UNHSP)

Family members represent two of the six positions in the program. The UNHSP expects to have an open position and will work to recruit either a deaf or hard of hearing person or a parent of a deaf or hard of hearing child. The UNHSP also actively recruits families for additional leadership opportunities offered by MDPH or through the LEND program. In addition, families will be supported to attend the in person Early Hearing Detection and Intervention meeting in Denver, CO.

Care Coordination

The Care Coordination program will continue using the MA Family Engagement Framework to reach out to and engage families and elevate their partnership with the systems of care. The program will continue to use a rubric to assess and track the continuum of a family's development of knowledge and skills leading to increased success and self-sufficiency in accessing resources and navigating the system on their child's behalf. The Care Coordination program will continue to plan activities that reflect partnership and are decided in accordance with family's needs, expectations, and intended outcomes. Care Coordinators will continue to recruit and support family members, especially non-English speaking families, to attend the Federation for Children with Special Needs annual conference, the Mass Families Leadership Series, and other related leadership opportunities. The program will

continue to offer activities for connection and training for parents in Spanish, English, Haitian Creole, Portuguese, and Cape Verdean Creole, the most common languages spoken in the program. The program will continue to implement targeted outreach for refugee and immigrant families (Vietnamese, Haitian, Afghan, and others).

MassCARE

MassCARE will be transitioning to the Office of HIV/AIDS in the Bureau of Infectious Diseases and Laboratory Sciences under new leadership. The new Program Coordinator previously participated in the program as a youth and then parent consumer followed by serving as a hired peer for other program participants.

Pediatric Palliative Care Network (PPCN)

PPCN will initiate a statewide Family Advisory Council to inform program priorities and provide input on discrete projects. Through this engagement, parents/caregivers will have opportunities to contribute locally at the vendor program where their family is served.

Additionally, parents/caregivers and youth will be represented as experts, providing strategic input and education to vendor staff at program manager meetings and biannual statewide education conferences. Parent/caregiver and youth advisors will be compensated through stipends for their engagement.

Continued support and education will be provided for PPCN vendors on equitable hiring practices, DEI, and family engagement, with a commitment to standardizing benchmark measures in each of these domains. In addition to engaging families as advisors, program vendors will be encouraged and supported to provide opportunities for parent professionals interested in working in this field, professionalizing the lived experience when applicable.

Essentials for Childhood (EfC)

EfC will continue to engage and compensate family leaders on all collective impact teams, the Leadership Action Team, and the Community Governance Board at the new FY23-established rate of \$40 an hour. Family leaders will also be compensated for their involvement in planning the new FY24 Notice of Funding Opportunity application and for their involvement in any current grant final reporting or culmination activities.

In addition, the EfC team will continue to support the final stages of refinement of the Community Governance Board. The activities and processes related to the Board's structural development, planning, implementation, and lessons learned will be documented and developed into a process tool for inclusion into the Community Connectedness Toolkit, a final deliverable that will be submitted to the CDC at the culmination of the grant. The goal is that documentation of the Board's development and implementation will be a helpful tool to support others who may be interested in developing Community Governance Boards as key operational elements to ensure community voice is forefront in making structural changes within public processes.

Young Children's Council (YCC)

Through Title V funds and two newly awarded grants, the Pediatric Mental Health Care Access Project and Transforming Pediatrics for Early Childhood, MDPH is able to continue the family leadership efforts of the YCC. MDPH will continue to support the current cohort of nine family leaders and will seek to engage two male givers in the Council. The family leaders will continue to partner with MDPH staff to design meeting agendas, develop YCC newsletter content, and discuss additional leadership development opportunities based on the interests of the group, including presentations and facilitation of group discussions.

MA MIECHV

MA MIECHV will continue to leverage lessons learned from the YCC, the Title V Family Engagement Implementation team, and the Home Visiting Collaborative Improvement and Innovation Network (HV CoIIN) to support parent

leadership in the planning, implementation, and improvement of program activities. MA MIECHV will continue to compensate families for their engagement and leadership at the state and local levels. MA MIECHV plans to recruit, support, and compensate parent leaders to advise program activities through a Parent Leader Panel.

MA MIECHV will host an Associate from the CDC Public Health Associate Program (PHAP) for a two-year placement (FY23 and FY24). Functioning as the MA MIECHV Family Engagement Coordinator, the PHAP will support efforts to engage families as partners contributing to home visiting programming at the state and local levels. Beginning in October 2022, the Associate joined the Title V Family Engagement Implementation team and the YCC to facilitate information sharing on family engagement best practices. The Associate will engage in cross-bureau discussions that guide MA MIECHV in implementing a strategic family engagement plan that incorporates the Massachusetts Family Engagement Framework's strategies into training and program operations. The Associate will support MA MIECHV to use the results of the Title V Family Engagement Survey to reflect on current strengths, focus areas for improvement, and set SMARTIE^[1] (specific, measurable, ambitious, realistic, time-bound, inclusive and equitable) aims.

MA MIECHV will continue engaging CQI Parent Leaders through MIECHV Innovation Award activities. CQI Parent Leaders include caregivers or parents of a child currently or previously enrolled in home visiting services who are interested in program improvement. CQI Parent Leaders will participate in a Learning Community focused on using CQI methods to identify and address inequities in MIECHV performance indicators disaggregated by race, ethnicity, language, and gender. They will work closely with LIA Teams to interpret the data, design data-driven solutions, and carry out action plans focused on advancing equitable access to and delivery of home visiting services. Partnering with families to interpret data, explore root causes of identified inequities, and design solutions will ensure that solutions are relevant and meet the needs of families.

Office of Sexual Health & Youth Development (OSHYD)

OSHYD will launch a youth advisory board to partner with OSHYD to redesign existing programs to best address the needs of the MA adolescents. Interested participants will be recruited from a pool of youth-serving agencies that deliver ASE, PREP, and STRIVE programming outlined in the *Adolescent Health* domain. OSHYD will interview a diverse group of candidates aged 15-24 years and select a cohort of ten youth to pilot the model. Transportation and lack of infrastructure are barriers that have prohibited OSHYD from implementing a youth advisory model in the past. To address these barriers, meetings will be virtual, and members will be based in and supported by local community organizations to ensure they are connected to a local agency to provide support for technology access, compensation, supervision, and mechanisms for fostering leadership skills. Advisory board members will be trained in racial equity principles, leadership, and experiential team building activities. The advisory board will provide an opportunity for young people to be compensated for their labor and expertise while simultaneously deepening OSHYD's efforts to build and maintain relationships with youth constituents across the programs. Future projects may include development of public health campaigns for adolescents, social media campaigns, curriculum re-design, and developing guidance for youth-serving programs on creating youth-friendly spaces.

The MA Pregnant and Parenting Teen Initiative will launch a statewide advisory board for parents under 25 in collaboration with the Department of Transitional Assistance. The goal of this advisory board is to engage parents to work in partnership with OSHYD/DTA to close gaps in services and address the needs of the parents under 25 population in Massachusetts.

Child and Youth Violence Prevention (CYVP) Programs

Positive youth development, and the engagement of young people in shaping the design and delivery of programs, is central to the work of the CYVP Unit. CYVP procured its youth violence prevention contracts, which began in FY23. The procurement has new requirements for youth leadership and family engagement, including requiring that all

funded providers enhance their peer leader development programming. Youth who play leadership or staff roles in programs will continue to be compensated for their time. They will provide important perspectives to service providers and help engage youth and community members for community mobilization.

Perinatal Neonatal Quality Improvement Network (PNQIN)

Results from the PNQIN Massachusetts Hospital Perinatal Family Engagement Survey conducted in October 2022 demonstrate that there is considerable variation in family and community engagement across Massachusetts obstetric and neonatal hospital units. Hospital respondents also expressed a need for resources to help them strengthen and deepen their engagement activities. PNQIN will use these survey findings to inform planning for how to support hospitals in developing policies, practices, and initiatives to engage with families and communities. PNQIN will begin by convening a patient and family advisory council to co-develop projects and initiatives, including supports related to patient, family, and community engagement. PNQIN will support and integrate family members from diverse backgrounds into committees and workgroups so that the perspectives of pregnant and postpartum people with lived experiences inform PNQIN's strategy and projects.

Fatherhood/Second Parent Experience

MDPH will pilot the Fatherhood/Second Parent Experiences survey in collaboration with Dr. Craig Garfield's team at Ann & Robert H. Lurie Children's Hospital of Chicago, who also worked on Georgia's PRAMS for Dads pilot study. MDPH is actively developing all components of this project and planning to launch the survey in summer 2023 with six months of data collection. MDPH will support Dr. Garfield's team to conduct data analysis and share findings in FY24–FY25. Upon successful completion of the pilot, MDPH will apply lessons learned and work to secure funding to implement the survey on an ongoing basis.

Priority: Eliminate health inequities caused by unjust social, economic, and environmental systems, policies, and practices.

Objective 1 (SPM 5). By 2025, decrease to 9.5% from baseline (12%, 2018-2019 NSCH) the percent of families who have had difficulty since their child was born covering basics, like food or housing, on their income.

Essentials for Childhood (EfC): Paid Family and Medical Leave (PFML)

The MDPH PFML Team will continue to implement the data and outreach partnership with DFML. The team will support outreach of the benefit and seek understanding of the uptake and impact on health, well-being, and economic security of MA families, particularly considering the impact of the pandemic and families impacted by structural racism. Activities will include:

1. **Data Analysis:** Establishing a data use licensing agreement (DULA) between MDPH and DFML for linkage of DFML and MDPH birth certificate data to understand utilization of family and bonding leave and inform outreach, and linkage with PRAMS and PELL to analyze longer term health and other socio-economic impacts.
2. **Outreach:** Title V and EfC staff will continue to disseminate PFML informational materials through broad outreach strategies and establish targeted outreach and training opportunities to support knowledge of and access to PFML benefits. Specific activities will include finalizing and launching an Economic Benefits webpage on the DPH website of which one key benefit will be PFML; setting up training opportunities for DPH advisories and/or family support programs (e.g., WIC, home visiting, early education and care, and community action agencies) to learn the fundamentals of the PFML program and how to support families to apply online for the benefit; and working in partnership with DFML and the MDPH team implementing the CDC Preventing Adverse Childhood Experiences Data to Action Grant (PACE:D2A) grant to develop and implement a PFML public awareness campaign, particularly geared for under-resourced communities, to

support knowledge of the benefit and the long term health benefits of paid leave, and highlighting the new family-friendly and language accessibility features.

Essentials for Childhood (EfC): Earned Income Tax Credit (EITC)

The EfC Economic Opportunity Team will continue to convene the MA EITC partnership of Boston Children's Hospital, MASSCAP, ABCD Boston, and the Boston Tax Help Coalition to pilot the second year of the warm hand-off referral system between Children's-affiliated pediatric practices and their neighborhood VITA sites. The team will complete an analysis of the second-year pilot data upon closure of the FY22 tax season. The partnership will use the results to inform next steps, understand utilization, and share the process to help other entities interested in launching a similar program.

In addition, EfC staff will continue to refine, develop, and implement activities to build EITC messaging, including disseminating the EITC tool for medical practitioners and launching the Economic Benefits page on the MDPH website. EfC staff will participate in the EITC Healthy Families Coalition and the Medical Tax Collaborative, as they pursue increased economic opportunity and poverty reduction policies for MA families. Staff will disseminate relevant eligibility information and other tax credit changes, such as the Healthy Families Tax Credits Coalition (formerly EITC Health Families Coalition), support mechanisms to increase access to tax credits, breakdown structural wealth inequities, and increase family financial, physical, and mental health. Specifically, the Coalition supports the increase of EITC state match from 30% to 40%, the increase of fiscal support for the state's VITA sites, and the establishment of a Child and Family Tax Credit of \$600 per dependent phased in over three years.

Essentials for Childhood (EfC): Community Connectedness

The EfC Community Connection Team will finalize the Community Connectedness Toolkit. This toolkit will include a range of tools including, but not limited to: tools that explain the value of community connection for families and promote ideas to create strong social connection; the EITC Tool, a resource for medical offices and professionals to bolster economic supports for patients; the economic benefits flyer for families; and processes to engage community members and allow power and resources to be shared with greater equity, including resources for racial justice affinity groups. EfC will disseminate the toolkit both within Massachusetts and to other states, and with communities or initiatives interested in replicating and testing these processes.

SSI and Public Benefits Training and Policy

The Public Benefits and Health Policy Specialist will play an essential role in supporting DCYSHN's work to eliminate health inequities by monitoring relevant policy development and initiatives and briefing Division leadership and issue-focused project teams. The specialist also will monitor changes in public benefits including those resulting from the end of the COVID-19 Public Health Emergency and will provide timely updates to Division staff and external partners. Among other venues, updates will be provided at the regional and statewide stakeholder collaboration meetings convened by the DCYSHN Care Coordination program. The specialist will participate as a member of external stakeholder coalitions including the Children's Health Access Coalition and the Immigrant Healthcare Access Coalition and will serve on interagency bodies including the Department of Elementary and Secondary Education (DESE) Special Education Advisory Council and the EOHHS Families and Children Requiring Assistance (FACRA) Advisory Board. She will provide training and TA on public benefits internally to DCYSHN staff and to a broad range of external partners including health and social service providers, hospital staff, EI programs, staff of other state child- and youth-serving agencies, community-based organizations, school health staff and educators, parents/caregivers of CYSHN, and youth and young adults. The scope of training and TA has been broadened to encompass a range of public benefits addressing social determinants of health, Health Related Social Needs (HRSN) and health equity, in addition to the essential topics of SSI, MassHealth and maximization of health insurance. Examples include PFML and other caregiver supports, new MassHealth 1115 waiver services addressing HRSN, tax credits, benefits rules promoting employment, and benefits eligibility and barriers for children in immigrant

families.

Occupational Health Surveillance Program (OHSP)

One of the main goals of the OHSP is to address the needs of underserved workers, consistent with MDPH's mission to reduce health disparities (occupational health equity). This is illustrated through equity-focused work in both surveillance and prevention domains. OHSP recognizes that the burden of work-related injuries and illnesses are not borne equally. For example, an analysis of workers' compensation claims for workers aged less than 18 years showed that MA teens from neighborhoods with a higher percent of residents living in poverty were more likely to be injured at work. This finding underscores the importance of understanding the socio-demographic characteristics of neighborhoods where the most vulnerable worker groups, such as low-income workers, live and/or work and the multiple hazards faced by these groups at work and in the community. Young workers remain a key priority population for OHSP, and the program will continue related surveillance activities.

Catastrophic Illness in Children Relief Fund (CICRF)

CICRF will continue to provide financial assistance to eligible families as well as information, referrals and TA related to accessing other financial supports. Staff will continue to build awareness with other state agencies, health care providers, community partners, family advocacy organizations, and families about the existence of the Fund as a potential financial resource, and work with other programs within the Division for Children and Youth with Special Health Needs to explore new ways to use technology and social media to reach community partners, referral sources and families.

To speed up the application review process, CICRF has invested substantial time and resources on quality improvement over the past few years. As a result of these efforts, CICRF will begin accepting online applications in July 2023 to make it easier for families to apply for financial assistance. The electronic application with a secure platform (REDCap) will allow families to upload necessary documentation. Initial feedback from families who have tested the new online application is that transmitting paperwork electronically is more convenient than copying and mailing documents to CICRF. Submission of the needed income and expense documentation with the application will shorten the review time by CICRF to determine eligibility for reimbursement, and families will know more quickly if they qualify for financial assistance. CICRF will develop a communication plan to build awareness of the transition to the new online application. The online application will be translated into English and Spanish initially, and CICRF will engage with families to both test and provide ongoing feedback during the transition from paper to electronic application process.

Division of Sexual and Domestic Violence Prevention and Services (DSDVPS)

DSDVPS-funded sexual and domestic violence agencies will continue to work to prevent and mitigate the impacts of sexual violence and IPV through a variety of strategies, including supporting families to access concrete supports and helping IPV survivors attain safety and well-being. DSDVPS-funded agencies will provide emergency shelter services, transitional housing services, shelter advocacy to help clients find emergency shelter, housing advocacy to help clients find and/or apply for housing, and economic advocacy.

Childhood Lead Poisoning Prevention Program (CLPPP)

CLPPP will continue delivering full case management services to lead poisoned children (blood lead levels [BLL] \geq 10 mcg/dL venous) and pilot select services with families of children with BLLs between 3.5–9.9 mcg/dL in high-risk communities. This is in line with the CDC's updated Blood Lead Reference Value of 3.5 mcg/dL and will include training and licensing of local health department staff to provide limited environmental investigations and code enforcement for families living in rental property. It will also include support from CHWs who will help coordinate service delivery for communities that are part of the pilot projects. Continued emphasis will be placed on restoring

screening rates to 2019 levels. Working with local health departments and clinicians, CLPPP primary prevention and clinical care staff will develop strategies to increase screening rates in rural communities that have traditionally seen much lower screening rates compared to urban communities and to the state.

During the first half of FY23, CLPPP completed in-services with all five Early Education and Care (EEC) regions to discuss CLPPP services, lead screening, and environmental regulations. In FY24, CLPPP will continue to build this relationship with EEC, focusing on screening rate compliance and increasing referrals to EEC programs such as Head Start. CLPPP will also work with EI on a data sharing agreement to explore the adoption of a policy that would make lead poisoning an automatic eligibility for EI services.

CLPPP will also convene the Massachusetts' Governor's Advisory Committee (GAC). The GAC advises the CLPPP Director on matters of policy before the issuance of rules and regulations. The GAC comprises a range of stakeholders that includes two parents of children aged less than 6 years from low-income communities. CLPPP will work with the Bureau of Family Health and Nutrition to ensure these parents are compensated for their participation in the GAC. The group will discuss changes to federal regulations, which include CDC's lowered blood lead reference value and EPA's lead dust hazard and clearance standards.

Care Coordination

The Care Coordination program for children and youth with special health needs will continue to support enrolled families with medically complex children with financial resources through its Family Support Fund. The Care Coordination program will provide resources, knowledge, and referrals to help families of children and youth with medical complexity address basic needs, housing, immigration, and other barriers to emotional, social, health, and economic well-being.

F.O.R. Families (Follow-Up Outreach Referral)

The FOR Families program will continue to assist families transitioning from homelessness to stable housing with securing basic needs such as healthcare, housing opportunities, childcare services, and financial resources. Home Visitors will educate participants and shelter staff about eligibility for entitlement programs. FOR Families will prioritize families with the most complex medical, mental health, substance use, safety, and child welfare concerns for weekly in-person visits.

MA Maternal Infant and Early Childhood Home Visiting (MA MIECHV)

MA MIECHV will continue to provide TA to local agencies on strategies to support families affected by homelessness, such as designing visits to be held in community settings, supporting continuity of services where possible for families relocating, and exploring state and local resources that provide eviction prevention services. In addition, MA MIECHV will continue to explore state level partnerships to support families experiencing homelessness.

Lawrence Telehealth Kiosk/Cabina Video Salud

In FY24 Title V staff will continue to support the implementation, marketing, data collection, program improvement, and scalability of the Kiosk/Cabina Video Salud. A community meeting will be held in the summer of 2023 to convene original community-partners involved in the development of the kiosk to visit it, get updates on progress thus far, and discuss findings and recommendations from the TIER Community Evaluator project. The goal of the meeting is to collectively plan next steps based on evaluation findings and recommendations, including marketing and outreach strategies, understanding utilization, and considering purchasing and installing another kiosk in the city of Lawrence.

Priority: Support equitable healing centered systems and approaches to mitigate the effects of trauma,

including racial, historical, structural, community, family, and childhood trauma.

Objective 1 (SPM 6). By 2025, increase by 10% above baseline (to be established) the percent of agency/Bureau staff that report a workplace culture that reflects a safe and supportive environment to mitigate primary and secondary trauma.

Title V Healing-Centered Systems Implementation Team

Title V staff will continue to convene an implementation team to advance action plan activities for this priority that mitigate the effects of trauma, including racial, historical, structural, community, family, and childhood trauma. A priority is to conduct the agency wide Racial Equity Survey (See Objective 1, Racial Equity Movement) including questions on workplace culture, trauma, and healing to serve as a data source for this SPM.

BFHN and BCHAP staff will continue to build an understanding of healing-centered engagement strategies and champion frameworks that foster racial equity and cultivate healing work environments. In collaboration with the agency's Racial Equity Movement and staff responsible for agency-level strategic planning, implementation team members will help to ensure that the implementation of the strategic planning moves towards its vision of health equity for all by grounding the process in racial equity and healing centered engagement.

Objective 2. By 2025, develop a data dashboard that measures community, family and child factors that reflect equitable healing-centered systems of care that mitigate trauma at multiple levels.

In addition to efforts to improve internal policies, practices, and culture, another objective to measure progress on this priority is the development of a data dashboard that measures community, family and child factors that reflect equitable healing centered systems of care.

The PACE:D2A grant will continue developing an Adverse Childhood Experiences (ACEs)/Positive Childhood Experiences (PCEs) surveillance system to analyze indicators of resilience and healing and ACEs among the MCH population. The PACE:D2A Surveillance Team will continue to work closely with the Office of Population Health and MA DESE to establish a public-facing dashboard within the Population Health Information Tool (PHIT) that would allow communities to access ACEs/PCEs data to inform strategies to implement healing-centered approaches that promote PCEs and mitigate ACEs.

The PACE:D2A team will also continue partnering with MA DESE to explore the expansion of the YRBS sampling methodology to include alternative schools that are not traditionally a part of the sample population. Additionally, a new question will be included on the YRBS that assesses youth's involvement with state agencies, such as the MA Department of Children and Families and the MA Department of Mental Health, to understand the prevalence of ACEs and PCEs in those population groups. These efforts are to ensure that our samples of youth are truly representative of all youth in the Commonwealth.

Division of Sexual and Domestic Violence Prevention and Services (DSDVPS)

DSDVPS epidemiologists will analyze statewide data from the four indicators of resilience identified in the 2021 MA High School Youth Health Survey (YHS): percentage of youth who report that their neighborhood is safe or very safe; percentage of youth who report talking to an adult when they felt they needed to; percentage of youth who report being engaged in volunteer activities; and percentage of youth who report being involved in organized group activities (sports, youth clubs, etc.). The epidemiologists will create reports from these analyses for DSDVPS staff to inform training and TA and share them with community providers to inform work with MCH populations.

Additional activities to support equitable healing-centered approaches to address trauma

Additional efforts to address this priority that do not relate directly to the performance measure or other objectives

are described below.

Division of Sexual and Domestic Violence Prevention and Services

DSDVPS programs will continue to incorporate trauma-informed approaches and healing-centered care into all aspects of their service provision. Because individual or community history of trauma is sometimes not explicitly known, trauma-informed approaches assume that every person may have been exposed to trauma, a practice like the concept of “universal precautions” in healthcare.

MDPH-funded sexual and domestic violence agencies will continue to provide and track the number of sexual and intimate partner violence (IPV) clients who receive individual-level services. Through contract monitoring, DSDVPS will focus on program service data specific to populations known to be at heightened risk of victimization and/or to historically have experienced inequitable access to or quality of service. These data will inform training and TA plans at the individual agency level, at the statewide provider network level, and cross-program internal training with other MDPH programs. MDPH-funded agencies will continue to provide and track group services to survivors, including subpopulations who identify with specific racial/ethnic backgrounds, have disabilities, are homeless, are incarcerated, are from rural communities, identify as LGBTQ+, are experiencing substance addiction, or are teens.

DSDVPS will continue implementing learning collaboratives comprised of professionals from the SDV fields that deepen professional learning around trauma-informed/healing-centered practice.

DSVPS-funded SDV agencies and TA providers will continue to gather and use data to inform the development of healing-centered practices. Surveys and community input meetings will be used to design TA and culturally tailored programming for high-risk groups to help mitigate the effects of trauma. In the FY22-25 grant cycle, survey findings will inform sexual and domestic violence services in LGBTQ communities.

DSDVPS plans to continue its close collaboration with OHE to increase access to SDV services for people with disabilities. DSDVPS and the OHE will implement a disability access online training that is being developed by the Massachusetts-based Institute on Human Centered Design. Both the online tool and the training video will be used to complete a detailed assessment of the physical accessibility of buildings and services for all MDPH-funded agencies across the entire Department. The tool cites both federal ADA standards for accessible design as well as, when applicable, more stringent requirements of the Massachusetts Architectural Access Board.

Division for Children and Youth with Special Health Needs

The Division will continue to build upon the professional development provided to staff on trauma-informed/healing-centered work practices by the Health Equity Manager through the sustainability materials they developed and provided. Emphasis will be placed on practical tools that can be immediately applied to combat burnout and compassion fatigue.

The Division’s new CCATER Center will include trauma-informed/healing-centered care in its training curriculum and TA services for participating MassHealth “CARES for Kids” total case management providers. CCATER will also operationalize and train provider care coordination and family support teams about the domains in the Blueprint for Change for CYSHCN, as well as other best practices such as Got Transition, Charting the Life Course, and the MA Family Engagement Framework.

Child and Youth Violence Prevention Programs

The Child and Youth Violence Prevention Unit continues to support programs in incorporating trauma-informed practices into their work. This includes providing trauma- and resilience-informed services, making the link between personal experiences of trauma and systemic oppression, and emphasizing collaboration, network-building, and

action to address upstream drivers of trauma such as community engagement and mobilization activities.

[1] [SMARTIE Goals Worksheet - The Management Center](#).

III.F. Public Input

The Massachusetts Title V program is committed to strong and effective engagement with the public in ongoing needs assessment efforts, development of the Application/Annual Report, and implementation of the state action plan. In addition to efforts to engage the public described in the *Needs Assessment Summary, Family Partnership, and Crosscutting Domain State Action Plan* sections, MDPH also convenes a Title V Advisory Committee, leads and participates in stakeholder meetings, and leverages the Title V website and social media. The purpose of the public input process is not to receive feedback on the written Application/Annual Report document, but rather, to seek ongoing input into the strategies and approaches contained within the state action plan.

Title V Advisory Committee

The purpose of the Title V Advisory Committee is to provide ongoing guidance and support to Title V and MCH initiatives in Massachusetts, inform strategies and measures for the Title V state action plan, identify and respond to emerging MCH issues, and support ongoing needs assessment efforts and public input. The Committee meets two to three times per year, including during the development of the Annual Report/Application in the spring and in the fall to reflect on feedback from the federal review and begin planning for the next year. Topics discussed in 2022- 2023 included: an overview of the Massachusetts Title V structure, planning for the transition of Baker/Polito administration, alignment with the priorities of the new Healy/Driscoll administration, and the emerging housing and refugee crisis, with a focus on supporting birthing people, CYSHN and families.

The Advisory Committee members include five family and youth representatives, as well as individuals from the following organizations:

- Parenting Journey
- Justice Center of Southeast Massachusetts
- MERGE for Equality
- Alternative Living Center
- Federation for Children with Special Needs
- Leadership Education in Adolescent Health
- Winchester Hospital/Boston Children's Hospital
- Harvard/MGH
- Department of Children and Families
- MassHealth
- HHS Office of Minority Health
- Boston Public Health Commission
- Massachusetts Department of Public Health

The Committee continues to meet virtually to maximize accessibility and participation by all members. Virtual platforms have provided more equitable access to Advisory Committee meetings by eliminating concerns over one's geographic location, access to transportation, or disability and have improved attendance and participation as a result.

Stakeholder Committees, Meetings and Presentations

Title V staff routinely attend stakeholder meetings and give presentations on the Title V program for the purpose of sharing information, soliciting input and feedback, and collaborating to achieve shared goals. They also participate on many external advisory committees and boards that inform MCH services and systems in Massachusetts.

Examples include:

- *Boston Healthy Start Community Action Network*: MDPH staff representing the Title V program, Early Intervention, and WIC are members of the Healthy Start Community Action Network (CAN) which meets quarterly. The CAN is a group of community residents, representatives from community-based organizations, healthcare, and other groups working together to reduce racial inequities in infant mortality and poor birth outcomes in Boston through policy and community level changes.
- *Boston University School of Public Health (BUSPH)*: The Title V, MCH, and CYSHN directors participate on the Advisory Board of the BUSPH Maternal and Child Health Center of Excellence, funded by HRSA/MCHB. They provide input into how to best train future MCH leaders, including practitioners, scientists, and activists. The Title V Director also serves as adjunct faculty with BUSPH, BUSPH Education Advisory Board, and MCH Diversity Scholars Mentor. In addition, the Title V Director, MCH Director, and Title V coordinator regularly present in MPH classes on the needs assessment, including goals, activities, challenges, and accomplishments, and how the needs assessment informs the development of the state action plan.
- *Leadership Education in Neurodevelopmental and Related Disabilities (LEND) program*: Title V has close ongoing communication with the two Massachusetts LEND programs (UMass Chan Medical School-E.K. Shriver Center and UMass Boston/Boston Children's Hospital/Institute for Community Inclusion). The Title V CYSHN Director is a longstanding faculty member of the Shriver Center LEND program and participates on the Consumer Advisory Councils of the UMB-BCH-ICI LEND program. The Advisory Groups meet quarterly and MDPH can share information about Title V, such as youth and young adult transition initiatives. Annually, the Title V Director and the CYSHN Director present about Title V in Massachusetts to the LEND fellows at Boston Children's Hospital. They provide an overview of Title V, a brief history of maternal and child health policy in the United States, the state action plan for the CYSHN domain, and discuss with the fellows the topics of racial equity, community engagement and family engagement.
- *Perinatal Neonatal Quality Improvement Network (PNQIN)*: Title V works collaboratively with PNQIN through the leadership of Dr. Hafsatou Diop, the Director of BFHN's Division of Maternal and Child Health Research and Analysis and the SSDI Director, as well as Dr. Elaine Fitzgerald Lewis, Title V Director and BFHN Bureau Director. Dr. Diop is the Principal Investigator of PNQIN and on the Advisory Committee and works collaboratively with obstetricians, neonatologists and other clinical stakeholders. Dr. Fitzgerald Lewis also serves on the Advisory Committee and chairs the Community and Patient Committee. Through this collaboration, she receives input into Title V activities and has effectively aligned PNQIN's priorities with Title V priorities.

Attachment 4: Partnerships, Collaboration, and Coordination provides a more detailed list of key external partners with which the Title V program collaborates.

Title V Website and Social Media

MDPH maintains key documents on the [Title V Block Grant webpage](#) to keep the public informed of progress on the implementation of the state action plan, including the application and annual report, factsheets, profiles, and a link to the interactive Title V Information System (TVIS) webpage. In FY22, there were 525 page views to the Title V website, plus an additional 86,280 views on the following MCH webpages: BFHN, Center for Birth Defects Research and Prevention, Division for Children and Youth with Special Health Needs, Early Intervention, Division for Pregnancy, Infancy, and Early Childhood, Office of Data Translation, WIC, Child and Youth Violence Prevention, Injury Surveillance, School Based Health Centers, School Health Services, and Sexual and Reproductive Health Program.

Many MCH programs that are part of the Title V federal-state partnership, including MA MIECHV, Division for Children and Youth with Special Health Needs, Newborn Hearing Screening Program, and WIC, have active

Facebook, Twitter, Instagram, and/or Pinterest pages to engage families and consumers, share events and resources, and seek feedback. In FY22, there were 19,308 “likes” (Facebook) and “followers” (Twitter/Pinterest) on these social media pages.

Gathering public input on Title V priorities and activities is a continuous process. MDPH is committed to ensuring a feedback loop with all families and stakeholders who contribute to the ongoing needs assessment activities, development and implementation of the state action plan, and the Application/Annual Report.

III.G. Technical Assistance

The Massachusetts Title V program may request technical assistance from HRSA on 1) addressing mental health needs of families and caregivers of CYSHN, 2) collaborating with tribal and Indigenous populations, 3) breastfeeding strategic planning, and 4) partnering with Medicaid for reimbursement of home visiting services.

Mental health of families and caregivers of CYSHN

The COVID-19 pandemic has taken a tremendous toll on the mental health of parents, families, and youth. This has been especially acute for families of children and youth with special health needs. According to the Massachusetts COVID-19 Community Impact Survey (CCIS), almost 1 in 2 caregivers of persons with special needs and parents of children with special healthcare needs are experiencing high rates of poor mental health. Parents of CYSHN are 60% more likely to report poor mental health compared to parents of children without a special health need. Parents of CYSHN who do not have access to respite care outside of the home to support their children may have little time to work, perform household tasks, or rest. The Division for Children and Youth with Special Health Needs could benefit from technical assistance to understand how other state Title V programs are addressing this urgent issue.

Collaborating with tribal and Indigenous populations

An area of improvement noted during the federal review was to strengthen collaboration with tribal and Indigenous populations in our MCH programs, services, and systems. Recognizing that this is a population that has experienced significant structural trauma and harm, MDPH could benefit from training or technical assistance on best practices for engaging with Tribal and Indigenous populations in an authentic, culturally appropriate, and sustainable way, especially as planning for the 5 year needs assessment begins in fall 2023.

Breastfeeding strategic planning

The Nutrition Division is conducting a needs assessment to strengthen breastfeeding services in the state, including the unique challenges families faced during the COVID-19 pandemic and opportunities to improve or expand support services. The findings will be used to share recommendations with hospitals, WIC, and lactation services available in MA communities to better meet the needs of families in the Commonwealth. The Nutrition Division would benefit from technical assistance on leveraging needs assessment findings to inform strategic planning.

IV. Title V-Medicaid IAA/MOU

The Title V-Medicaid IAA/MOU is uploaded as a PDF file to this section - [Fully Executed DPH-MH Title V ISA.PDF](#)

V. Supporting Documents

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

Supporting Document #01 - [Attachment 1_FY22 Program Service Numbers_Final for TVIS.pdf](#)

Supporting Document #02 - [Attachment 2_Staff Bios_Final for TVIS.pdf](#)

Supporting Document #03 - [Attachment 3_Partnerships Tables_Final for TVIS.pdf](#)

Supporting Document #04 - [Attachment 4_Glossary_Final for TVIS.pdf](#)

VI. Organizational Chart

The Organizational Chart is uploaded as a PDF file to this section - [DPH High Level Org Chart_7.13.23.pdf](#)

VII. Appendix

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Form 2
MCH Budget/Expenditure Details

State: Massachusetts

| | FY 24 Application Budgeted | |
|---|----------------------------|---------|
| 1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year) | \$ 11,459,304 | |
| A. Preventive and Primary Care for Children | \$ 3,646,549 | (31.8%) |
| B. Children with Special Health Care Needs | \$ 4,443,796 | (38.7%) |
| C. Title V Administrative Costs | \$ 729,873 | (6.4%) |
| 2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others) | \$ 8,820,218 | |
| 3. STATE MCH FUNDS (Item 18c of SF-424) | \$ 70,318,762 | |
| 4. LOCAL MCH FUNDS (Item 18d of SF-424) | \$ 0 | |
| 5. OTHER FUNDS (Item 18e of SF-424) | \$ 0 | |
| 6. PROGRAM INCOME (Item 18f of SF-424) | \$ 0 | |
| 7. TOTAL STATE MATCH (Lines 3 through 6) | \$ 70,318,762 | |
| A. Your State's FY 1989 Maintenance of Effort Amount \$ 23,499,343 | | |
| 8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7) | \$ 81,778,066 | |
| 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) | \$ 141,137,197 | |
| 11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal) | \$ 222,915,263 | |

| OTHER FEDERAL FUNDS | FY 24 Application Budgeted |
|--|----------------------------|
| Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP) | \$ 1,049,815 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Birth Defects and Developmental Disabilities | \$ 1,220,633 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs | \$ 160,000 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Essentials for Childhood | \$ 383,546 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Injury Prevention and Control | \$ 267,969 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > National Asthma Control Program (NACP) | \$ 651,916 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS) | \$ 194,346 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State-Based Perinatal Quality Collaboratives (PQCs) Cooperative Agreement | \$ 151,822 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants | \$ 6,834,154 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention | \$ 235,000 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Ryan White | \$ 504,320 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI) | \$ 146,038 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Oral Health | \$ 469,248 |
| US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC) | \$ 107,727,355 |
| US Department of Education > Office of Special Education Programs > Early Identification and Intervention for Infants and Toddlers with Disabilities (Part C of IDEA) | \$ 8,671,216 |

| OTHER FEDERAL FUNDS | FY 24 Application Budgeted |
|--|----------------------------|
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Preventing Maternal Deaths: Supporting Maternal Mortality Review Committees | \$ 375,000 |
| Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning | \$ 5,896,000 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Maternal Health Innovation Program | \$ 1,000,000 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Pediatric Mental Health Care Access Program | \$ 300,000 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Innovation Grants | \$ 2,000,000 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) American Rescue Plan (ARP) | \$ 1,006,623 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Transforming Pediatrics for childhood | \$ 1,000,000 |
| US Department of Education > Office of Special Education Programs > Individual with Disabilities Education Act/ American Rescue Plan Act of 201 | \$ 311,192 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > MA Perinatal Neonatal Quality Improvement Network ARPA | \$ 44,089 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Birth Defects study to Evaluate Pregnancy Exposures | \$ 49,891 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > ARPA Pediatric Mental Health Care Access New Area Expansion | \$ 487,024 |

| | FY 22 Annual Report Budgeted | | FY 22 Annual Report Expended | |
|---|--|---------|---------------------------------|---------|
| 1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year) | \$ 11,137,523 (FY 22 Federal Award: \$ 11,005,539) | | \$ 11,124,939 | |
| A. Preventive and Primary Care for Children | \$ 3,422,514 | (30.7%) | \$ 3,453,901 | (31%) |
| B. Children with Special Health Care Needs | \$ 4,463,960 | (40.1%) | \$ 4,374,529 | (39.3%) |
| C. Title V Administrative Costs | \$ 994,568 | (8.9%) | \$ 442,534 | (4%) |
| 2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others) | \$ 8,881,042 | | \$ 8,270,964 | |
| 3. STATE MCH FUNDS (Item 18c of SF-424) | \$ 75,600,803 | | \$ 71,020,897 | |
| 4. LOCAL MCH FUNDS (Item 18d of SF-424) | \$ 0 | | \$ 0 | |
| 5. OTHER FUNDS (Item 18e of SF-424) | \$ 0 | | \$ 0 | |
| 6. PROGRAM INCOME (Item 18f of SF-424) | \$ 0 | | \$ 0 | |
| 7. TOTAL STATE MATCH (Lines 3 through 6) | \$ 75,600,803 | | \$ 71,020,897 | |
| A. Your State's FY 1989 Maintenance of Effort Amount \$ 23,499,343 | | | | |
| 8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7) | \$ 86,738,326 | | \$ 82,145,836 | |
| 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) | \$ 100,165,704 | | \$ 103,347,859 | |
| 11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal) | \$ 186,904,030 | | \$ 185,493,695 | |

| OTHER FEDERAL FUNDS | FY 22 Annual Report Budgeted | FY 22 Annual Report Expended |
|--|---------------------------------|---------------------------------|
| Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP) | \$ 1,051,000 | \$ 734,511 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Birth Defects and Developmental Disabilities | \$ 1,312,610 | \$ 1,017,228 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs | \$ 183,355 | \$ 114,650 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Essentials for Childhood | \$ 459,878 | \$ 226,780 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Injury Prevention and Control | \$ 77,331 | \$ 268,792 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > National Asthma Control Program (NACP) | \$ 625,000 | \$ 583,442 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS) | \$ 145,303 | \$ 175,073 |
| Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State-Based Perinatal Quality Collaboratives (PQCs) Cooperative Agreement | \$ 223,243 | \$ 178,837 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Early Childhood Comprehensive Systems (ECCS): Building Health Through Integration | \$ 423,851 | \$ 79,588 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Early Hearing Detection and Intervention (EHDI) State Programs | \$ 235,000 | \$ 240,065 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants | \$ 6,889,147 | \$ 5,024,011 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Ryan White | \$ 500,115 | \$ 480,454 |

| OTHER FEDERAL FUNDS | FY 22 Annual Report Budgeted | FY 22 Annual Report Expended |
|---|------------------------------|------------------------------|
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI) | \$ 87,099 | \$ 147,051 |
| Department of Health and Human Services (DHHS) > Office of Adolescent Health > Support for Pregnant and Parenting Teens | \$ 888,662 | \$ 0 |
| US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC) | \$ 78,985,267 | \$ 85,519,487 |
| US Department of Education > Office of Special Education Programs > Early Identification and Intervention for Infants and Toddlers with Disabilities (Part C of IDEA) | \$ 7,489,843 | \$ 7,983,912 |
| Department of Health and Human Services (DHHS) > Substance Abuse and Mental Health Services Administration > Youth Suicide Prevention | \$ 164,000 | \$ 8,872 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Oral Health | \$ 425,000 | \$ 274,909 |
| Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Emergency Medical Services for Children (EMSC) | | \$ 290,197 |

Form Notes for Form 2:

None

Field Level Notes for Form 2:

| | | |
|----|---------------------|--|
| 1. | Field Name: | 1. FEDERAL ALLOCATION |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | Based on the assumption of continued funding at estimated final FFY23 award level. |
| 2. | Field Name: | Federal Allocation, C. Title V Administrative Costs |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | <p>The Department uses the same definitions and procedures for determining "administrative costs" for the MCH Block Grant as it originally applied to the Alcohol and Drug Abuse and Mental Health Services (ADAMHA, now SAMHSA) Block Grant. Using this definition, no more than 10% of the Commonwealth's federal MCH funds are budgeted for administrative costs for FY23. This definition has not changed from previous years. It includes funds expended for the Department's Central Administration (e.g. accounting, regional office operations and infrastructure, and other administrative support needs) and personnel in BCHAP working entirely on fiscal management and operations.</p> <p>The amount shown is the percentage of the FY24 award budgeted for administrative costs. This is the amount excluded from the total on Form 3a for FY24.</p> |
| 3. | Field Name: | 3. STATE MCH FUNDS |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | <p>See our Budget Narrative in Section III for more details about the state funding streams that comprise the "State MCH Funds" amount of \$70,318,762. This total excludes those portions of our MCH Partnership state accounts that are being used for claiming or match for other federal programs, including CHIP and discretionary grants. Our total state match remains much higher than \$3 for every \$4 federal; the ratio is actually over \$4 state for every \$1 new federal funds. Amounts for state accounts are based on the initial state budget load. Any additions or changes in the final state budget may not be known by the TVIS submission date and cannot be adjusted later in the FY24 Application 424 form. Any changes will be adjusted for and noted in the FY24 Expenditures data and narrative.</p> |
| 4. | Field Name: | 1.FEDERAL ALLOCATION |
| | Fiscal Year: | 2022 |
| | Column Name: | Annual Report Expended |

Field Note:

The allocation amount shown in the Expended Column of \$11,124,939 represents the total federal funds expended from the FFY21 award over the two year period of its availability (10/1/2020 – 9/30/2022). Virtually all funds were expended. The total includes \$203,823 that was paid directly to CDC from our award for an MCH Epidemiologist assignee, and \$10,921,116 provided to MDPH.

5. **Field Name:** **Federal Allocation, C. Title V Administrative Costs:**

Fiscal Year: **2022**

Column Name: **Annual Report Expended**

Field Note:

The amount shown in the Expended Column of \$442,534 is 40% less than the amount of \$729,873 originally budgeted for FY23. The difference represents savings to the MCH Block Grant that occurred from some administrative staff vacancies, as well as some transferring administrative staff and costs to other accounts over the course of the fiscal year. We are always looking for ways to decrease costs in this category and have great cooperation from the Department in identifying potential areas for savings.

6. **Field Name:** **3. STATE MCH FUNDS**

Fiscal Year: **2022**

Column Name: **Annual Report Expended**

Field Note:

See the Expenditures Narrative in Section III for more details on the state funding streams that comprise this total. The total excludes portions of MCH Partnership state accounts used for claiming or match for other federal programs and discretionary grants.

Our total state match remains much higher than \$3 for every \$4 federal; the ratio is actually approximately \$6.14 state for every \$1 federal.

Data Alerts: None

Form 3a
Budget and Expenditure Details by Types of Individuals Served
State: Massachusetts

I. TYPES OF INDIVIDUALS SERVED

| IA. Federal MCH Block Grant | FY 24 Application Budgeted | FY 22 Annual Report Expended |
|-------------------------------------|----------------------------|------------------------------|
| 1. Pregnant Women | \$ 1,980,739 | \$ 1,869,330 |
| 2. Infants < 1 year | \$ 519,534 | \$ 813,350 |
| 3. Children 1 through 21 Years | \$ 3,646,549 | \$ 3,453,901 |
| 4. CSHCN | \$ 4,443,796 | \$ 4,374,529 |
| 5. All Others | \$ 138,813 | \$ 171,295 |
| Federal Total of Individuals Served | \$ 10,729,431 | \$ 10,682,405 |

| IB. Non-Federal MCH Block Grant | FY 24 Application Budgeted | FY 22 Annual Report Expended |
|---|----------------------------|------------------------------|
| 1. Pregnant Women | \$ 1,405,665 | \$ 1,212,492 |
| 2. Infants < 1 year | \$ 429,471 | \$ 538,120 |
| 3. Children 1 through 21 Years | \$ 18,137,588 | \$ 9,918,559 |
| 4. CSHCN | \$ 42,969,286 | \$ 52,639,333 |
| 5. All Others | \$ 7,368,677 | \$ 6,705,865 |
| Non-Federal Total of Individuals Served | \$ 70,310,687 | \$ 71,014,369 |
| Federal State MCH Block Grant Partnership Total | \$ 81,040,118 | \$ 81,696,774 |

Form Notes for Form 3a:

None

Field Level Notes for Form 3a:

| | | |
|----|---------------------|---|
| 1. | Field Name: | IA. Federal MCH Block Grant, 1. Pregnant Women |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | This category includes funding for the EI Parenting Partnerships Program (EIPP) and for a number of public health services and systems addressing the needs of pregnant women. |
| 2. | Field Name: | IA. Federal MCH Block Grant, 2. Infant < 1 Year |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | This category includes funding for the following programs: SIDS, Newborn Hearing Screening, and EI Parenting Partnerships Program. It also includes funding for a number of public health services and systems addressing the needs of infants. Funding for infants with identified special health needs who were served by Care Coordination is captured in row 4. |
| 3. | Field Name: | IA. Federal MCH Block Grant, 3. Children 1 through 21 years |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | This category includes funding for the following programs: EI Parenting Partnerships Program, Childhood Lead Poisoning Prevention Program (CLPPP), and the Regional Poison Center. It also includes funding for public health services and systems addressing the needs of children and youth. |
| 4. | Field Name: | IA. Federal MCH Block Grant, 4. CSHCN |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | This category includes funding for the following programs: Care Coordination, CLPPP medical case management, SIDS, MASSTART, and Hearing Aids. It also includes funding for a number of public health services and systems addressing the needs of children and youth with special health care needs, including CYSHCN Family Initiatives and SSI/Public Benefits training. |
| 5. | Field Name: | IA. Federal MCH Block Grant, 5. All Others |
| | Fiscal Year: | 2024 |

| | | |
|-----|---------------------|--|
| | Column Name: | Application Budgeted |
| | Field Note: | This category includes funding for EIPP (postpartum women) and some public health services and systems addressing the needs of other MCH populations. |
| 6. | Field Name: | IB. Non-Federal MCH Block Grant, 1. Pregnant Women |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | This category includes funding for the Massachusetts WIC Program and state funding for the Perinatal Quality Improvement Network as part of a consolidated account. |
| 7. | Field Name: | IB. Non-Federal MCH Block Grant, 2. Infant < 1 Year |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | This category includes funding for the following programs: Newborn Hearing Screening, the WIC Program and state funding for Perinatal Quality Improvement Network. Funding for infants with identified special health needs who were served by Early Intervention, Pediatric Palliative Care, Catastrophic Illness in Children Relief Fund, and the Growth and Nutrition Program is captured in row 4. |
| 8. | Field Name: | IB. Non-Federal MCH Block Grant, 3. Children 1 through 21 years |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | This category includes funding for the following programs: WIC, Regional Poison Center, School-Based Health Centers (SBHC), Essential School Health Services (ESHS), Sexual and Reproductive Health Service (under age 23), Youth Violence Prevention, and Adolescent Sexuality Education. |
| 9. | Field Name: | IB. Non-Federal MCH Block Grant, 4. CSHCN |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | This category includes funding for the following programs: Early Intervention, Growth and Nutrition Clinics, Catastrophic Illness Trust Fund, PKU Special Foods, and Pediatric Palliative Care. |
| 10. | Field Name: | IB. Non-Federal MCH Block Grant, 5. All Others |
| | Fiscal Year: | 2024 |

| | | |
|-----|---------------------|---|
| | Column Name: | Application Budgeted |
| | Field Note: | This category includes funding for the following programs: Sexual and Reproductive Health programs (age 23 and over), and WIC (postpartum and breastfeeding women). |
| 11. | Field Name: | IA. Federal MCH Block Grant, 1. Pregnant Women |
| | Fiscal Year: | 2022 |
| | Column Name: | Annual Report Expended |
| | Field Note: | This category includes funding for the EI Parenting Partnerships Program (EIPP) and for a number of public health services and systems addressing the needs of pregnant women. |
| 12. | Field Name: | IA. Federal MCH Block Grant, 2. Infant < 1 Year |
| | Fiscal Year: | 2022 |
| | Column Name: | Annual Report Expended |
| | Field Note: | This category includes funding for the following programs: SIDS, Newborn Hearing Screening, and EI Parenting Partnerships Program. It also includes funding for a number of public health services and systems addressing the needs of infants. Funding for infants with identified special health needs who were served by Care Coordination is captured in row 4. |
| 13. | Field Name: | IA. Federal MCH Block Grant, 3. Children 1 through 21 years |
| | Fiscal Year: | 2022 |
| | Column Name: | Annual Report Expended |
| | Field Note: | This category includes funding for the following programs: EI Parenting Partnerships Program, Childhood Lead Poisoning Prevention Program (CLPPP), and the Regional Poison Center. It also includes funding for public health services and systems addressing the needs of children and youth. |
| 14. | Field Name: | IA. Federal MCH Block Grant, 4. CSHCN |
| | Fiscal Year: | 2022 |
| | Column Name: | Annual Report Expended |
| | Field Note: | This category includes funding for the following programs: Care Coordination, CLPPP medical case management, SIDS, MASSTART, and Hearing Aids. It also includes funding for a number of public health services and systems addressing the needs of children and youth with special health care needs, including CYSHCN Family Initiatives and SSI/Public Benefits training. |

| | | |
|-----|---------------------|--|
| 15. | Field Name: | IA. Federal MCH Block Grant, 5. All Others |
| | Fiscal Year: | 2022 |
| | Column Name: | Annual Report Expended |
| | Field Note: | This category includes funding for EIPP (postpartum women) and some public health services and systems addressing the needs of other MCH populations. |
| 16. | Field Name: | IB. Non-Federal MCH Block Grant, 1. Pregnant Women |
| | Fiscal Year: | 2022 |
| | Column Name: | Annual Report Expended |
| | Field Note: | This category includes funding for the Massachusetts WIC Program and state funding for the Perinatal Quality Improvement Network as part of a consolidated account. |
| 17. | Field Name: | IB. Non-Federal MCH Block Grant, 2. Infant < 1 Year |
| | Fiscal Year: | 2022 |
| | Column Name: | Annual Report Expended |
| | Field Note: | This category includes funding for the following programs: Newborn Hearing Screening, the WIC Program and state funding for Perinatal Quality Improvement Network. Funding for infants with identified special health needs who were served by Early Intervention, Pediatric Palliative Care, Catastrophic Illness in Children Relief Fund, and the Growth and Nutrition Program is captured in row 4. |
| 18. | Field Name: | IB. Non-Federal MCH Block Grant, 3. Children 1 through 21 years |
| | Fiscal Year: | 2022 |
| | Column Name: | Annual Report Expended |
| | Field Note: | This category includes funding for the following programs: WIC, Regional Poison Center, School-Based Health Centers (SBHC), Essential School Health Services (ESHS), Sexual and Reproductive Health Service (under age 23), Youth Violence Prevention, and Adolescent Sexuality Education. |
| 19. | Field Name: | IB. Non-Federal MCH Block Grant, 4. CSHCN |
| | Fiscal Year: | 2022 |
| | Column Name: | Annual Report Expended |

Field Note:

This category includes funding for the following programs: Early Intervention, Growth and Nutrition Clinics, Catastrophic Illness Trust Fund, PKU Special Foods, and Pediatric Palliative Care.

20. **Field Name:** **IB. Non-Federal MCH Block Grant, 5. All Others**

Fiscal Year: **2022**

Column Name: **Annual Report Expended**

Field Note:

This category includes funding for the following programs: Sexual and Reproductive Health programs (age 23 and over), and WIC (postpartum and breastfeeding women).

Data Alerts: None

Form 3b
Budget and Expenditure Details by Types of Services

State: Massachusetts

II. TYPES OF SERVICES

| IIA. Federal MCH Block Grant | FY 24 Application Budgeted | FY 22 Annual Report Expended |
|---|----------------------------|------------------------------|
| 1. Direct Services | \$ 19,021 | \$ 35,752 |
| 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 | \$ 19,021 | \$ 35,752 |
| 2. Enabling Services | \$ 3,078,856 | \$ 2,288,660 |
| 3. Public Health Services and Systems | \$ 8,361,427 | \$ 8,800,527 |
| 4. Select the types of Federally-supported "Direct Services", as reported in II.A.1. Provide the total amount of Federal MCH Block Grant funds expended for each type of reported service | | |
| Pharmacy | | \$ 0 |
| Physician/Office Services | | \$ 0 |
| Hospital Charges (Includes Inpatient and Outpatient Services) | | \$ 0 |
| Dental Care (Does Not Include Orthodontic Services) | | \$ 0 |
| Durable Medical Equipment and Supplies | | \$ 35,752 |
| Laboratory Services | | \$ 0 |
| Direct Services Line 4 Expended Total | | \$ 35,752 |
| Federal Total | \$ 11,459,304 | \$ 11,124,939 |

| IIB. Non-Federal MCH Block Grant | FY 24 Application Budgeted | FY 22 Annual Report Expended |
|---|----------------------------|------------------------------|
| 1. Direct Services | \$ 30,526,748 | \$ 40,700,659 |
| 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 | \$ 30,526,748 | \$ 40,700,659 |
| 2. Enabling Services | \$ 27,520,664 | \$ 22,989,880 |
| 3. Public Health Services and Systems | \$ 12,271,349 | \$ 7,330,358 |
| 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) | | \$ 0 |
| Dental Care (Does Not Include Orthodontic Services) | | \$ 0 |
| Durable Medical Equipment and Supplies | | \$ 0 |
| Laboratory Services | | \$ 0 |
| Other | | |
| Early Intervention Services for Children Birth - 3 | | \$ 40,700,659 |
| Direct Services Line 4 Expended Total | | \$ 40,700,659 |
| Non-Federal Total | \$ 70,318,761 | \$ 71,020,897 |

Form Notes for Form 3b:

None

Field Level Notes for Form 3b:

| | | |
|----|---------------------|---|
| 1. | Field Name: | IIA. Federal MCH Block Grant, 1. Direct Services |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | The Federal MCH Block Grant funds for Direct Services are only for Children with Special Health Care Needs and reflect minor funding for Hearing Aids and Hearing Evaluations as needed for low income children without insurance or other payment sources. They do not relate directly to NPMs or SPMs in our State Action Plan. |
| 2. | Field Name: | IIA. Federal MCH Block Grant, 2. Enabling Services |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | The federal MCH Block Grant funds for Enabling Services address several NPMs and SPMs that are part of our State Action Plan: NPM 12, SPM 3, SPM 4 and SPM 5. |
| 3. | Field Name: | IIA. Federal MCH Block Grant, 3. Public Health Services and Systems |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | All of our NPMs and SPMs are supported by both federal and state funding for Public Health Services and Systems. In particular, NPM 14A, SPMs 1 - 4 and SPM 6 are primarily supported through this category of funding. |
| 4. | Field Name: | IIB. Non-Federal MCH Block Grant, 1. Direct Services |
| | Fiscal Year: | 2024 |
| | Column Name: | Application Budgeted |
| | Field Note: | The non-Federal funds for Direct Services are also for Children with Special Health Care Needs and reflect our significant state funding for Early Intervention Services. They are not directly related to the measures in our State Action Plan but represent our major contribution to overall infant and toddler health and development. |
| 5. | Field Name: | IIB. Non-Federal MCH Block Grant, 2. Enabling Services |

Fiscal Year: 2024

Column Name: Application Budgeted

Field Note:

The non-Federal (State) funds for Enabling Services also address numerous NPMs and SPMs that are part of our State Action Plan: NPM 4A and B, NPM 10, NPM 12, SPM 2, and SPM 5.

6. **Field Name:** IIB. Non-Federal MCH Block Grant, 3. Public Health Services and Systems

Fiscal Year: 2024

Column Name: Application Budgeted

Field Note:

All of our NPMs and SPMs are supported by both federal and state funding for Public Health Services and Systems. In particular, NPM 14A, SPMs 1 - 4 and SPM 6 are primarily supported through this category of funding.

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

State: Massachusetts

Total Births by Occurrence: 69,479

Data Source Year: 2022

1. Core RUSP Conditions

| Program Name | (A) Aggregate Total Number Receiving at Least One Valid Screen | (B) Aggregate Total Number of Out-of-Range Results | (C) Aggregate Total Number Confirmed Cases | (D) Aggregate Total Number Referred for Treatment |
|----------------------|---|---|---|--|
| Core RUSP Conditions | 69,467 (100.0%) | 3,443 | 152 | 151 (99.3%) |

| 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 | Cystic Fibrosis |
| Glutaric Acidemia Type I | 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, βeta-Thalassemia | S,C Disease | S,S Disease (Sickle Cell Anemia) | Severe Combined Immunodeficiencies |
| β-Ketothiolase Deficiency | Trifunctional Protein Deficiency | Tyrosinemia, Type I | Very Long-Chain Acyl-Coa Dehydrogenase Deficiency | |

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 |
|---|--|---|----------------------------------|---|
| Secondary RUSP Conditions, mandated by MA | 69,467 (100.0%) | 1,711 | 11 | 10 (90.9%) |
| Other Secondary RUSP Conditions, considered as Metabolic Pilots by MA | 42,446 (61.1%) | 16 | 0 | 0 (0%) |
| CORE RUSP Conditions, considered as Pilots by MA | 62,533 (90.0%) | 58 | 5 | 5 (100.0%) |

3. Screening Programs for Older Children & Women

None

4. Long-Term Follow-Up

Massachusetts does not have a specific policy. The New England Newborn Screening Program (NENSP) confirms that a baby is engaged with a metabolic specialist. Further follow-up is not built into the mission or budget of NENSP. Conditions being piloted get periodic checks with the specialty provider to compile outcome information useful in determining how the babies detected fare clinically, and whether a pilot should be mandated or discontinued.

The NENSP collaborates with the Universal Newborn Hearing Screening Program and the Children and Youth with Special Health Care Needs staff to ensure families and providers are educated about state resources and programs available to identified infants and their families.

Systematic long-term follow-up of children diagnosed with hearing loss includes dedicated staff resources and tracking. Further discussion on more systematic follow-up or tracking for metabolic conditions will continue.

Form Notes for Form 4:

Data are from the New England Newborn Screening Program (NENSP) at the University of Massachusetts Medical School, which collects and reports on metabolic disorders. Newborn hearing screening and critical congenital heart defect (CCHD) screening are also on the recommended uniform screening panel. These programs are overseen by MDPH, and screening numbers are reported elsewhere in the application, including Form 5b and Attachment 1. CCHD reporting is voluntary, so the data are limited.

NENSP data are for calendar year 2022. Obtaining follow-up from providers has been challenging during the COVID-19 pandemic; therefore, some numbers for cases may still be incomplete as of June 2023.

Field Level Notes for Form 4:

| | | |
|----|---------------------|---|
| 1. | Field Name: | Core RUSP Conditions - Total Number Receiving At Least One Screen |
| | Fiscal Year: | 2022 |
| | Column Name: | Core RUSP Conditions |
| | Field Note: | Three CORE RUSP conditions included in this group are considered to be by-products of a Mandated Screen by Massachusetts: - 3-Methylcrotonyl-CoA carboxylase deficiency - Holocarboxylase synthase deficiency - Trifunctional protein deficiency |
| 2. | Field Name: | Core RUSP Conditions - Total Number Referred For Treatment |
| | Fiscal Year: | 2022 |
| | Column Name: | Core RUSP Conditions |
| | Field Note: | Due to follow-up challenges in this year of the COVID-19 pandemic, some case identifications may not yet have been reported back to us at the time of data entry and may therefore be incomplete. |
| 3. | Field Name: | Secondary RUSP Conditions, mandated by MA - Total Number Receiving At Least One Screen |
| | Fiscal Year: | 2022 |
| | Column Name: | Other Newborn |

Field Note:

Six Secondary RUSP conditions are part of mandated screening in MA and are reported here as a group:

- Carbamoylphosphate synthetase def
- Argininemia
- Congenital toxoplasmosis
- Ornithine transcarbamylase def
- Methylmalonic acidemia w/ homocystinuria
- Carnitine acylcarnitine translocase def

In addition, 20 Secondary RUSP conditions considered by-products of mandated screening are included:

- Isobutyrylglycinuria
- 2-Methylbutyrylglycinuria
- 3-Methylglutaconic aciduria
- 2-Methyl-3-hydroxybutyric aciduria
- Short-chain acyl-CoA dehydrogenase def
- Glutaric acidemia type II
- Medium-chain ketoacyl-CoA thiolase def
- Carnitine palmitoyltransferase type I def
- Citrullinemia, type II
- Hypermethioninemia
- Benign hyperphenylalaninemia
- Biopterin defects in cofactor biosynthesis and regeneration
- Tyrosinemia types II and III
- Other hemoglobinopathies
- Galactosepimerase def
- Galactokinase def
- Carnitine palmitoyltransferase type II def
- T-cell related lymphocyte def

4. **Field Name:** **Secondary RUSP Conditions, mandated by MA - Total Number Referred For Treatment**

Fiscal Year: **2022**

Column Name: **Other Newborn**

Field Note:

Due to follow-up challenges in this year of the COVID-19 pandemic, some case identifications may not yet have been reported back to us at the time of data entry and may therefore be incomplete.

5. **Field Name:** **Other Secondary RUSP Conditions, considered as Metabolic Pilots by MA - Total Number Receiving At Least One Screen**

Fiscal Year: **2022**

Column Name: **Other Newborn**

Field Note:

Three secondary RUSP conditions, listed below, are part of the Massachusetts Metabolic Pilot. Because screening is optional for parents, the number screened is slightly less than for the mandated screens and the screening is reported separately here.

- Malonic academia
 - Medium/short-chain L-3-hydroxyacyl-CoA dehydrogenase deficiency
 - 2,4 dienoyl-CoA reductase deficiency
-

6. **Field Name:** **CORE RUSP Conditions, considered as Pilots by MA - Total Number Receiving At Least One Screen**

Fiscal Year: **2022**

Column Name: **Other Newborn**

Field Note:

Four CORE RUSP conditions, listed below, are considered pilots by MA. Because screening is optional for parents, the number screened is slightly less than for the mandated screens and it is reported separately here.

- Mucopolysaccharidosis type I (MPS-I)
- Pompe Disease
- X-linked adrenoleukodystrophy (X-ALD)
- Spinal Muscular Atrophy (SMA)

Data Alerts: None

Form 5
Count of Individuals Served by Title V & Total Percentage of Populations Served by Title V

State: Massachusetts

Annual Report Year 2022

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 | 7,680 | 73.3 | 0.0 | 17.8 | 8.2 | 0.7 |
| 2. Infants < 1 Year of Age | 39,562 | 31.0 | 0.0 | 67.5 | 1.0 | 0.5 |
| 3. Children 1 through 21 Years of Age | 907,555 | 31.4 | 0.0 | 41.6 | 1.4 | 25.6 |
| 3a. Children with Special Health Care Needs 0 through 21 years of age^ | 225,495 | 34.9 | 0.0 | 34.4 | 1.1 | 29.6 |
| 4. Others | 71,941 | 56.8 | 0.0 | 31.9 | 10.8 | 0.5 |
| Total | 1,026,738 | | | | | |

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 | 69,137 | Yes | 69,137 | 100.0 | 69,137 | 7,680 |
| 2. Infants < 1 Year of Age | 70,076 | Yes | 70,076 | 99.1 | 69,445 | 39,562 |
| 3. Children 1 through 21 Years of Age | 1,705,985 | Yes | 1,705,985 | 65.0 | 1,108,890 | 907,555 |
| 3a. Children with Special Health Care Needs 0 through 21 years of age^ | 414,731 | Yes | 414,731 | 65.0 | 269,575 | 225,495 |
| 4. Others | 5,212,370 | Yes | 5,212,370 | 1.6 | 83,398 | 71,941 |

^Represents a subset of all infants and children.

Form Notes for Form 5:

See also in Attachment 1 Table entitled "Massachusetts Program Service Numbers by MCH Population, FY22." This table summarizes the number of people served by MCH population groups, for each MCH-related program. It has more detail by program and includes numerous public health services and systems and indirect services/activities (e.g., training, technical assistance, outreach) that are not included in Form 5, or are only referenced in the form notes. The table also includes service numbers for numerous MCH-related programs funded by other federal discretionary grants; these services are not included in Form 5a but may be referenced in the Form 5b notes.

The Massachusetts SCHIP program has been implemented in large part through expanded MassHealth (Medicaid) eligibility. At the service delivery end (where our insurance data come from), the distinction between Title XIX and Title XXI cannot be made. All of these clients are included in the Title XIX column in Form 5a.

Field Level Notes for Form 5a:

| | | |
|----|---------------------|---|
| 1. | Field Name: | Pregnant Women Total Served |
| | Fiscal Year: | 2022 |
| | Field Note: | <p>This category includes pregnant women served by the Massachusetts WIC Program (3,624), EI Parenting Partnerships Program (EIPP) (90), Comprehensive School Health Services (CSHS) (28), and the Sexual and Reproductive Health Program (SRHP) (4,056). Because nearly all EIPP and CSHS clients also receive WIC and/or SRHP services, the total has been adjusted to eliminate duplication.</p> <p>WIC is included in Form 5a because a state nutrition account, which supports approximately 1/3 of local WIC program contracts, is used as part of our state match for Title V. We are therefore only counting 1/3 of pregnant people served by WIC.</p> |
| 2. | Field Name: | Infants Less Than One Year Total Served |
| | Fiscal Year: | 2022 |
| | Field Note: | <p>This total reflects infants with and without special health needs served by WIC (9,345), Childhood Lead Screening (27,160), Poison Control Center (1,519), Early Intervention (15,684), Pediatric Palliative Care (47), Care Coordination (19), EIPP (383), Catastrophic Illness in Children Relief Fund (CICRF) (1), and the Growth and Nutrition Program (186), and Childhood Lead Poisoning Prevention Program (CLPPP) case management (71).</p> <p>The total is adjusted to account for estimated duplication in the following ways: 1) 85% of clients are in both WIC and CLPPP, 2) 40% of infants that participated in EI are also WIC participants, and 3) nearly 100% of infants served by EIPP, CICRF, Care Coordination, Pediatric Palliative Care, and Growth and Nutrition are also in EI.</p> <p>State WIC funds support approximately 1/3 of local WIC program contracts, so we are counting 1/3 of the total WIC infants served in Form 5a.</p> |
| 3. | Field Name: | Children 1 through 21 Years of Age |
| | Fiscal Year: | 2022 |

Field Note:

This total includes children with and without special health needs served by the following programs: CLPPP (164,169), WIC (34,630), School-Based Health Centers (SBHC) (11,129), CSHS (484,913), SRHP (under age 25) (32,836), Adolescent Sexuality Education (3,635), the Poison Control Center (19,012), Early Intervention (26,127), Care Coordination (1,026), Growth and Nutrition (882), MASSTART (248), CICRF (159), Pediatric Palliative Care (654), Metabolic Food and Formula Program (45), and the Hearing Aid program (14).

Adjusted to account for estimated duplication in the following ways: 1) 100% of SBHC clients are in CSHS, 2) 50% of clients in SRHP/Adolescent Sexuality Education programs are in CSHS, 3) 85% of clients are in both WIC and CLPPP, 4) 15-25% of Care Coordination and Growth and Nutrition clients are in EI, 5) 100% of clients in SBHC, Metabolic Food and Formula Program, Care Coordination, and MASSTART are in CSHS, and 6) 24% of infants in EI are WIC participants.

The percent estimated to have Unknown coverage is high because 34% of students in the large CSHS database have missing insurance information. Most have some form of insurance, but we do not have that information.

State WIC funds support approximately 1/3 of local WIC program contracts, so we are counting 1/3 of the total WIC children served in Form 5a.

4. **Field Name:** **Children with Special Health Care Needs 0 through 21 Years of Age**

Fiscal Year: **2022**

Field Note:

This category includes a subset of infants and children age 0-22 with special health needs. The total is an unduplicated count served by the following programs named above: EI (26,127), Care Coordination (1,026), Growth and Nutrition (882), MASSTART (248), CICRF (159), Pediatric Palliative Care (654), Metabolic Food and Formula Program (45), Hearing Aid program (14), CLPPP medical case management (789), SBHCs (with long-term health problems) (571), Comprehensive School Health Services (with Individual Health Care Plans) (193,379).

The total is adjusted to account for estimated duplication between CSHS students receiving other services and EI-enrolled children receiving other services.

The percent estimated to have Unknown coverage is high because 34% of students in the large CSHS database have missing insurance information. Most have some form of insurance, but we do not have that information.

5. **Field Name:** **Others**

Fiscal Year: **2022**

Field Note:

This category includes people served by the following programs: Sexual and Reproductive Health Program (48,686 participants age 25 and over); WIC (13,753 postpartum women), EIPP (376 postpartum women); Poison Control Center calls from adults/unknown age (9,102). and SIDS counseling (400 individuals). The total has been adjusted to eliminate duplication between WIC and EIPP clients.

State WIC funds support approximately 1/3 of local WIC program contracts, so we are counting 1/3 of all postpartum women served by WIC in Form 5a.

Field Level Notes for Form 5b:

| | | |
|----|---------------------|---|
| 1. | Field Name: | Pregnant Women Total % Served |
| | Fiscal Year: | 2022 |
| | Field Note: | The percentage reported here is 100% because the Title V program and our partners address all pregnancies and deliveries through the Commonwealth's perinatal regionalization regulations. In addition to the programs and service numbers included in Form 5a and listed in the notes to that form, other related efforts include breastfeeding outreach to all birth hospitals and 304 pregnant women served by Massachusetts Maternal, Infant and Early Childhood Home Visiting Initiative (MA MIECHV), as federal funds support MDPH staff who administer MIECHV. |
| 2. | Field Name: | Infants Less Than One Year Total % Served |
| | Fiscal Year: | 2022 |
| | Field Note: | Ninety-nine percent of newborns received hearing screening prior to hospital discharge (excluding those who died prior to discharge). In addition to the programs and service numbers included in Form 5a and listed in the notes to that form, other related efforts for this age group include PNQIN initiatives with birth hospitals and MA MIECHV (2,904 infants). |
| 3. | Field Name: | Children 1 through 21 Years of Age Total % Served |
| | Fiscal Year: | 2022 |
| | Field Note: | The percent served represents the number of WIC clients ages 1-6 years plus enrollment in public and private schools covered by state school health regulations (such as school sports concussion guidelines) and receiving monitoring and support from MDPH, which is part of our state Partnership match. In addition to the programs and service numbers included in Form 5a and listed in the notes to that form, other related efforts for this age group include: primary youth violence prevention programs (2,776 children and youth aged 10-24 receiving direct programming/group sessions), MA Pregnant and Parenting Teen Initiative (977 children and youth up to age 24), and the Personal Responsibility Education Program (251 children and youth up to age 24). |
| 4. | Field Name: | Children with Special Health Care Needs 0 through 21 Years of Age Total % Served |
| | Fiscal Year: | 2022 |
| | Field Note: | The total number served is the same as Form 5a. See the notes for that form for details on the programs and service numbers that make up this total, which has been reduced to remove known duplicates. Other related programs that also serve some of these children include the Community Support Line (221), Family Support Fund (508), Medical Review Team (57), and MassCARE (26). Based on the population estimates provided from NSCH, this would represent 54% of CSHCN in Massachusetts, which is lower than the percentage of all children age 0-22 served. Therefore, we are reporting the same percentage served for all children, since CSHCN are not excluded from population-based services. |
| 5. | Field Name: | Others Total % Served |
| | Fiscal Year: | 2022 |

Field Note:

The total shown includes those listed for Form 5a. See the notes for that form for details on the programs and service numbers that make up this total, which has been reduced to remove known duplicates.

The total also includes adults served by the following programs that are either part of the Title V state partnership or with which Title V meaningfully collaborates: FOR Families (465), MA MIECHV and Welcome Family (2,906), Rape Crisis Centers hotline callers (8,541), and SSI & Public Benefits training participants (172). We are unable to remove possible duplicates from this larger group.

Data Alerts: None

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

State: Massachusetts

Annual Report Year 2022

I. Unduplicated Count by Race/Ethnicity

| | (A) Total | (B) Non- Hispanic White | (C) Non- Hispanic Black or African American | (D) Hispanic | (E) Non- Hispanic American Indian or Native Alaskan | (F) Non- Hispanic Asian | (G) Non- Hispanic Native Hawaiian or Other Pacific Islander | (H) Non- Hispanic Multiple Race | (I) Other & Unknown |
|------------------------------|--------------|-------------------------------|---|-----------------|--|-------------------------------|---|--|---------------------------|
| 1. Total Deliveries in State | 69,479 | 38,823 | 7,093 | 15,176 | 68 | 5,726 | 4 | 907 | 1,682 |
| Title V Served | 13,010 | 3,916 | 2,120 | 5,901 | 25 | 556 | 12 | 311 | 169 |
| Eligible for Title XIX | 21,880 | 6,272 | 4,076 | 9,422 | 35 | 1,071 | 3 | 269 | 732 |
| 2. Total Infants in State | 70,150 | 40,630 | 6,667 | 15,474 | 72 | 5,553 | 5 | 861 | 888 |
| Title V Served | 46,840 | 16,172 | 6,109 | 16,312 | 77 | 1,766 | 45 | 1,532 | 4,827 |
| Eligible for Title XIX | 20,808 | 6,507 | 3,565 | 9,194 | 34 | 969 | 0 | 286 | 253 |

Form Notes for Form 6:

MDPH 2022 and 2021 Birth Files are the data source for deliveries, estimated number of infants, and deliveries eligible for Medicaid (based on designation of prenatal care payment source in the birth file). MDPH program databases provide the estimates of deliveries and infants served by Title V.

Because the birth files and the program service delivery data systems differ in how they collect and code race/ethnicity, there are discrepancies in the rows. For example, coding protocol differences likely contribute to the higher number of Native Hawaiian/Pacific Islander pregnant women and infants served by Title V programs compared to the small number of births in this racial group that are recorded on birth certificates. Furthermore, some program data include any Native Hawaiian/Pacific Islander persons in the "Asian" category and not all programs report data for the category of "more than one race."

Field Level Notes for Form 6:

| | | |
|----|---------------------|---|
| 1. | Field Name: | 1. Total Deliveries in State |
| | Fiscal Year: | 2022 |
| | Column Name: | Total |
| | Field Note: | Defined as all deliveries (occurrence births) in 2022. |
| 2. | Field Name: | 1. Title V Served |
| | Fiscal Year: | 2022 |
| | Column Name: | Total |
| | Field Note: | Included in this total are pregnant women served by WIC, EIPP, Sexual and Reproductive Health Services, and Comprehensive School Health Services. |
| 3. | Field Name: | 1. Eligible for Title XIX |
| | Fiscal Year: | 2022 |
| | Column Name: | Total |
| | Field Note: | Defined as having Medicaid coverage, as measured by data from Birth Certificate on payment source for prenatal care. Excludes births for which source of payment data was missing. Data are for 2022. |
| 4. | Field Name: | 2. Total Infants in State |
| | Fiscal Year: | 2022 |
| | Column Name: | Total |
| | Field Note: | Number of infants is estimated based on 2021 occurrence births. |
| 5. | Field Name: | 2. Title V Served |
| | Fiscal Year: | 2022 |

| | |
|---------------------|--------------|
| Column Name: | Total |
|---------------------|--------------|

Field Note:

Included in this total are infants served by WIC, CLPPP, and the Poison Control Center, as well as those with identified special health needs who were served by Early Intervention, Care Coordination, Pediatric Palliative Care, Catastrophic Illness in Children Relief Fund, MassCARE, and the Growth and Nutrition Program.

This is a significantly lower number of infants served compared to previous years, since the Universal Newborn Hearing Screening Program, which serves nearly all infants in Massachusetts, is no longer categorized as a direct or enabling service.

| | | |
|----|--------------------|----------------------------------|
| 6. | Field Name: | 2. Eligible for Title XIX |
|----|--------------------|----------------------------------|

| | |
|---------------------|-------------|
| Fiscal Year: | 2022 |
|---------------------|-------------|

| | |
|---------------------|--------------|
| Column Name: | Total |
|---------------------|--------------|

Field Note:

Estimated based on Medicaid as the source of payment for deliveries in 2021. Using this data source enables us to report race/ethnicity detail that is comparable to that used for estimating the total number of infants in the state, although it may somewhat underestimate the number of infants eligible for Medicaid.

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

State: Massachusetts

| A. State MCH Toll-Free Telephone Lines | 2024 Application Year | 2022 Annual Report Year |
|--|------------------------------|--------------------------------|
| 1. State MCH Toll-Free "Hotline" Telephone Number | (800) 882-1435 | (800) 882-1435 |
| 2. State MCH Toll-Free "Hotline" Name | Community Support Line | Community Support Line |
| 3. Name of Contact Person for State MCH "Hotline" | Touria Hafsi | Touria Hafsi |
| 4. Contact Person's Telephone Number | (617) 624-5553 | (617) 624-5553 |
| 5. Number of Calls Received on the State MCH "Hotline" | | 766 |

| B. Other Appropriate Methods | 2024 Application Year | 2022 Annual Report Year |
|--|--|--|
| 1. Other Toll-Free "Hotline" Names | Family TIES (Together in Enhancing Support) & Early Intervention Parent Leadership Program | Family TIES (Together in Enhancing Support) & Early Intervention Parent Leadership Program |
| 2. Number of Calls on Other Toll-Free "Hotlines" | | 1,065 |
| 3. State Title V Program Website Address | https://www.mass.gov/title-v-maternal-and-child-health-block-grant | https://www.mass.gov/the-maternal-and-child-health-block-grant-also-known-as-title-v |
| 4. Number of Hits to the State Title V Program Website | | 336 |
| 5. State Title V Social Media Websites | https://facebook.com/MDPH.CYSHCN.Program ; https://www.facebook.com/EI-ParentLeadershipProject/ ; https://twitter.com/EIPLP ; https://www.instagram.com/ei-plp/?hl=en ; https://www.facebook.com/MassNewbornHearingScreening ; https://facebook.com/MA.HomeVisi | https://facebook.com/MDPH.CYSHCN.Program ; https://www.facebook.com/EI-ParentLeadershipProject/ ; https://twitter.com/EIPLP ; https://www.instagram.com/ei-plp/?hl=en ; https://www.facebook.com/MassNewbornHearingScreening ; https://facebook.com/MA.HomeVisi |
| 6. Number of Hits to the State Title V Program Social Media Websites | | 19,308 |

Form Notes for Form 7:

The Community Support Line is the entry point and general resource for families for MCH needs and programs, especially for CYSHN. It is staffed by Community Resource Specialists (including bilingual staff). In FY22, 766 calls were recorded from parents of CSHCN (221), providers (404) and others (141).

The other toll-free hotline, Family TIES, is managed through the Federation for Children with Special Needs and support staff. The line also serves as the Central Directory for Early Intervention services and information.

In addition to the MCH Block Grant website, in FY22 there were 86,280 hits to the following MCH webpages: BFHN, Center for Birth Defects Research and Prevention, DCYSHN, EI Division, Pregnancy, Infancy, and Early Childhood Division, Division of Maternal and Child Health Research and Analysis, WIC, Child and Youth Violence Prevention, Injury Surveillance, School Based Health Centers, School Health Services, and Sexual and Reproductive Health Program. About 40% were to the WIC webpage. The number of hits to the WIC webpage are not comparable to previous years. Starting in FY22 WIC began driving traffic to their online application page, rather than <https://www.mass.gov/wic-information-for-participants> because it is less clicks to actually sign up for the program.

Social media pages do not record "hits" but rather "Likes" (Facebook) and "Followers" (Twitter, Instagram, and Pinterest). We report a total of likes and followers for FY22.

MA MIECHV social media channels (i.e., Facebook, Pinterest, Twitter) were paused due to the retirement in December 2021 of the Bureau of Family Health and Nutrition's (BFHN) Communications Director who managed the channels. MA MIECHV continues to elevate the visibility of home visiting by reaching providers and partners through email updates and resource sharing. The numbers reported in the MCH social media tab for MA MIECHV are as of September 29, 2021.

Form 8
State MCH and CSHCN Directors Contact Information

State: Massachusetts

| 1. Title V Maternal and Child Health (MCH) Director | |
|--|---|
| Name | Elaine Fitzgerald Lewis |
| Title | Director, Bureau of Family Health and Nutrition |
| Address 1 | 250 Washington St |
| Address 2 | 5th floor |
| City/State/Zip | Boston / MA / 02108 |
| Telephone | (781) 400-9001 |
| Extension | |
| Email | Elaine.L.FitzgeraldLewis@mass.gov |

| 2. Title V Children with Special Health Care Needs (CSHCN) Director | |
|--|---|
| Name | Elaine Gabovitch |
| Title | Director, Division for Children and Youth with Special Health Needs |
| Address 1 | 250 Washington St |
| Address 2 | 5th Floor |
| City/State/Zip | Boston / MA / 02108 |
| Telephone | (857) 360-1973 |
| Extension | |
| Email | elaine.gabovitch@mail.mass.gov |

3. State Family Leader (Optional)

| | |
|----------------|--|
| Name | |
| Title | |
| Address 1 | |
| Address 2 | |
| City/State/Zip | |
| Telephone | |
| Extension | |
| Email | |

4. State Youth Leader (Optional)

| | |
|----------------|--|
| Name | |
| Title | |
| Address 1 | |
| Address 2 | |
| City/State/Zip | |
| Telephone | |
| Extension | |
| Email | |

Form Notes for Form 8:

None

Form 9
List of MCH Priority Needs

State: Massachusetts

Application Year 2024

| No. | Priority Need |
|-----|---|
| 1. | Eliminate institutional and structural racism in internal Department of Public Health programs, policies, and practices to improve maternal and child health. |
| 2. | Eliminate health inequities caused by unjust social, economic, and environmental systems, policies and practices. |
| 3. | Support equitable healing centered systems and approaches to mitigate the effects of trauma, including racial, historical, structural, community, family, and childhood trauma. |
| 4. | Engage families, fathers and youth with diverse life experiences through shared power and leadership to improve maternal, child, and family health services. |
| 5. | Prevent the use of substances, including alcohol, tobacco, marijuana and opioids, among youth and pregnant people. |
| 6. | Strengthen the capacity of the health system to promote mental health and emotional well-being. |
| 7. | Promote equitable access to sexuality education and sexual and reproductive health services. |
| 8. | Foster healthy nutrition and physical activity through equitable system and policy improvements. |
| 9. | Reduce rates of and eliminate inequities in maternal morbidity and mortality. |
| 10. | Support effective health-related transition to adulthood for adolescents with special health needs. |

Form Notes for Form 9:

None

Field Level Notes for Form 9:

None

Form 9 State Priorities – Needs Assessment Year – Application Year 2021

| No. | Priority Need | Priority Need Type (New, Revised or Continued Priority Need for this five-year reporting period) |
|------------|---|---|
| 1. | Eliminate institutional and structural racism in internal Department of Public Health programs, policies, and practices to improve maternal and child health. | Revised |
| 2. | Eliminate health inequities caused by unjust social, economic, and environmental systems, policies and practices. | New |
| 3. | Support equitable healing centered systems and approaches to mitigate the effects of trauma, including racial, historical, structural, community, family, and childhood trauma. | New |
| 4. | Engage families, fathers and youth with diverse life experiences through shared power and leadership to improve maternal and child health services. | New |
| 5. | Prevent the use of substances, including alcohol, tobacco, marijuana and opioids, among youth and pregnant women. | Revised |
| 6. | Strengthen the capacity of the health system to promote mental health and emotional well-being. | Revised |
| 7. | Promote equitable access to sexuality education and sexual and reproductive health services. | Revised |
| 8. | Foster healthy nutrition and physical activity through equitable system and policy improvements. | Revised |
| 9. | Reduce rates of and eliminate inequities in maternal morbidity and mortality. | New |
| 10. | Support effective health-related transition to adulthood for adolescents with special health needs. | Continued |

**Form 10
National Outcome Measures (NOMs)**

State: Massachusetts

Form Notes for Form 10 NPMs, NOMs, SPMs, SOMs, and ESMs.

None

NOM 1 - Percent of pregnant women who receive prenatal care beginning in the first trimester

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 85.1 % | 0.1 % | 57,905 | 68,073 |
| 2020 | 84.7 % | 0.1 % | 55,690 | 65,759 |
| 2019 | 83.9 % | 0.1 % | 57,013 | 67,956 |
| 2018 | 83.4 % | 0.1 % | 56,869 | 68,182 |
| 2017 | 82.7 % | 0.1 % | 57,714 | 69,773 |
| 2016 | 84.4 % | 0.1 % | 58,911 | 69,780 |
| 2015 | 85.0 % | 0.1 % | 59,373 | 69,828 |
| 2014 | 84.6 % | 0.1 % | 58,124 | 68,684 |
| 2013 | 82.9 % | 0.2 % | 55,568 | 67,059 |
| 2012 | 82.1 % | 0.1 % | 57,334 | 69,794 |

Legends:

 Indicator has a numerator <10 and is not reportable

 Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 1 - Notes:

None

Data Alerts: None

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

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2020 | 107.2 | 4.1 | 691 | 64,460 |
| 2019 | 100.1 | 3.9 | 668 | 66,714 |
| 2018 | 105.2 | 4.0 | 696 | 66,187 |
| 2017 | 89.5 | 3.7 | 606 | 67,714 |
| 2016 | 88.4 | 3.6 | 604 | 68,321 |
| 2015 | 74.3 | 3.8 | 381 | 51,306 |
| 2014 | 68.3 | 3.2 | 464 | 67,887 |
| 2013 | 63.7 | 3.1 | 437 | 68,568 |
| 2012 | 60.6 | 3.0 | 420 | 69,296 |
| 2011 | 58.0 | 2.9 | 407 | 70,126 |
| 2010 | 56.2 | 2.9 | 388 | 69,013 |
| 2009 | 51.7 | 2.7 | 366 | 70,778 |
| 2008 | 49.1 | 2.6 | 363 | 73,929 |

Legends:

-  Indicator has a numerator ≤10 and is not reportable
-  Indicator has a numerator <20 and should be interpreted with caution

NOM 2 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2017_2021 | 14.2 | 2.0 | 49 | 344,493 |
| 2016_2020 | 14.1 | 2.0 | 49 | 346,673 |
| 2015_2019 | 12.2 | 1.9 | 43 | 351,737 |
| 2014_2018 | 12.1 | 1.9 | 43 | 354,528 |

Legends:

- Indicator has a numerator <10 and is not reportable
- Indicator has a numerator <20 and should be interpreted with caution

NOM 3 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 7.5 % | 0.1 % | 5,148 | 68,415 |
| 2020 | 7.4 % | 0.1 % | 4,883 | 66,059 |
| 2019 | 7.6 % | 0.1 % | 5,257 | 68,867 |
| 2018 | 7.6 % | 0.1 % | 5,237 | 68,946 |
| 2017 | 7.5 % | 0.1 % | 5,260 | 70,575 |
| 2016 | 7.5 % | 0.1 % | 5,330 | 71,141 |
| 2015 | 7.5 % | 0.1 % | 5,312 | 71,279 |
| 2014 | 7.5 % | 0.1 % | 5,351 | 71,633 |
| 2013 | 7.7 % | 0.1 % | 5,505 | 71,539 |
| 2012 | 7.6 % | 0.1 % | 5,478 | 72,265 |
| 2011 | 7.6 % | 0.1 % | 5,481 | 71,932 |
| 2010 | 7.7 % | 0.1 % | 5,634 | 72,786 |
| 2009 | 7.8 % | 0.1 % | 5,802 | 74,577 |

Legends:

■ Indicator has a numerator <10 and is not reportable

⚡ Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 4 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 9.0 % | 0.1 % | 6,176 | 68,618 |
| 2020 | 8.8 % | 0.1 % | 5,811 | 66,175 |
| 2019 | 9.0 % | 0.1 % | 6,196 | 68,964 |
| 2018 | 8.9 % | 0.1 % | 6,172 | 69,049 |
| 2017 | 8.9 % | 0.1 % | 6,272 | 70,646 |
| 2016 | 8.7 % | 0.1 % | 6,168 | 71,200 |
| 2015 | 8.4 % | 0.1 % | 6,002 | 71,410 |
| 2014 | 8.6 % | 0.1 % | 6,177 | 71,705 |
| 2013 | 8.8 % | 0.1 % | 6,315 | 71,455 |
| 2012 | 8.7 % | 0.1 % | 6,269 | 72,239 |
| 2011 | 8.6 % | 0.1 % | 6,141 | 71,779 |
| 2010 | 8.6 % | 0.1 % | 6,237 | 72,794 |
| 2009 | 8.8 % | 0.1 % | 6,529 | 74,605 |

Legends:

■ Indicator has a numerator <10 and is not reportable

⚡ Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 5 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 26.1 % | 0.2 % | 17,910 | 68,618 |
| 2020 | 24.8 % | 0.2 % | 16,418 | 66,175 |
| 2019 | 24.6 % | 0.2 % | 16,960 | 68,964 |
| 2018 | 23.4 % | 0.2 % | 16,170 | 69,049 |
| 2017 | 23.2 % | 0.2 % | 16,380 | 70,646 |
| 2016 | 22.8 % | 0.2 % | 16,209 | 71,200 |
| 2015 | 22.5 % | 0.2 % | 16,084 | 71,410 |
| 2014 | 21.7 % | 0.2 % | 15,537 | 71,705 |
| 2013 | 21.0 % | 0.2 % | 15,035 | 71,455 |
| 2012 | 21.5 % | 0.2 % | 15,549 | 72,239 |
| 2011 | 21.8 % | 0.2 % | 15,636 | 71,779 |
| 2010 | 21.1 % | 0.2 % | 15,365 | 72,794 |
| 2009 | 20.8 % | 0.2 % | 15,531 | 74,605 |

Legends:

 Indicator has a numerator <10 and is not reportable

 Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 6 - Notes:

None

Data Alerts: None

NOM 7 - Percent of non-medically indicated early elective deliveries

Data Source: CMS Hospital Compare

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------------|------------------|----------------|-----------|-------------|
| 2021/Q1-2021/Q4 | 1.0 % | | | |
| 2020/Q4-2021/Q3 | 1.0 % | | | |
| 2020/Q3-2021/Q1 | 1.0 % | | | |
| 2019/Q4-2020/Q3 | 1.0 % | | | |
| 2019/Q1-2019/Q4 | 1.0 % | | | |
| 2018/Q4-2019/Q3 | 1.0 % | | | |
| 2018/Q3-2019/Q2 | 1.0 % | | | |
| 2018/Q2-2019/Q1 | 1.0 % | | | |
| 2018/Q1-2018/Q4 | 1.0 % | | | |
| 2017/Q4-2018/Q3 | 1.0 % | | | |
| 2017/Q3-2018/Q2 | 1.0 % | | | |
| 2017/Q2-2018/Q1 | 1.0 % | | | |
| 2017/Q1-2017/Q4 | 1.0 % | | | |
| 2016/Q4-2017/Q3 | 1.0 % | | | |
| 2016/Q3-2017/Q2 | 1.0 % | | | |
| 2016/Q2-2017/Q1 | 1.0 % | | | |
| 2016/Q1-2016/Q4 | 1.0 % | | | |
| 2015/Q4-2016/Q3 | 2.0 % | | | |
| 2015/Q3-2016/Q2 | 2.0 % | | | |
| 2015/Q2-2016/Q1 | 2.0 % | | | |
| 2015/Q1-2015/Q4 | 2.0 % | | | |
| 2014/Q4-2015/Q3 | 2.0 % | | | |
| 2014/Q3-2015/Q2 | 2.0 % | | | |

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------------|------------------|----------------|-----------|-------------|
| 2014/Q2-2015/Q1 | 2.0 % | | | |
| 2014/Q1-2014/Q4 | 2.0 % | | | |
| 2013/Q4-2014/Q3 | 2.0 % | | | |
| 2013/Q3-2014/Q2 | 2.0 % | | | |
| 2013/Q2-2014/Q1 | 2.0 % | | | |

Legends:

NOM 7 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2020 | 4.7 | 0.3 | 310 | 66,576 |
| 2019 | 4.5 | 0.3 | 313 | 69,277 |
| 2018 | 5.0 | 0.3 | 346 | 69,270 |
| 2017 | 4.3 | 0.3 | 302 | 70,858 |
| 2016 | 5.0 | 0.3 | 354 | 71,498 |
| 2015 | 5.6 | 0.3 | 403 | 71,694 |
| 2014 | 5.4 | 0.3 | 392 | 72,099 |
| 2013 | 5.1 | 0.3 | 365 | 71,964 |
| 2012 | 4.6 | 0.3 | 333 | 72,601 |
| 2011 | 5.6 | 0.3 | 408 | 73,376 |
| 2010 | 5.1 | 0.3 | 372 | 73,033 |
| 2009 | 6.1 | 0.3 | 459 | 75,229 |

Legends:

-  Indicator has a numerator <10 and is not reportable
-  Indicator has a numerator <20 and should be interpreted with caution

NOM 8 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2020 | 3.9 | 0.2 | 262 | 66,428 |
| 2019 | 3.7 | 0.2 | 258 | 69,117 |
| 2018 | 4.2 | 0.3 | 289 | 69,109 |
| 2017 | 3.7 | 0.2 | 259 | 70,702 |
| 2016 | 3.9 | 0.2 | 281 | 71,317 |
| 2015 | 4.3 | 0.3 | 309 | 71,492 |
| 2014 | 4.3 | 0.3 | 311 | 71,908 |
| 2013 | 4.2 | 0.2 | 300 | 71,788 |
| 2012 | 4.2 | 0.2 | 305 | 72,439 |
| 2011 | 4.3 | 0.2 | 311 | 73,166 |
| 2010 | 4.4 | 0.3 | 320 | 72,865 |
| 2009 | 5.1 | 0.3 | 382 | 75,016 |

Legends:

 Indicator has a numerator <10 and is not reportable

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

NOM 9.1 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2020 | 2.8 | 0.2 | 189 | 66,428 |
| 2019 | 2.7 | 0.2 | 189 | 69,117 |
| 2018 | 3.2 | 0.2 | 224 | 69,109 |
| 2017 | 2.5 | 0.2 | 178 | 70,702 |
| 2016 | 3.0 | 0.2 | 212 | 71,317 |
| 2015 | 3.3 | 0.2 | 238 | 71,492 |
| 2014 | 3.2 | 0.2 | 232 | 71,908 |
| 2013 | 3.1 | 0.2 | 222 | 71,788 |
| 2012 | 3.0 | 0.2 | 214 | 72,439 |
| 2011 | 3.2 | 0.2 | 231 | 73,166 |
| 2010 | 3.3 | 0.2 | 241 | 72,865 |
| 2009 | 3.9 | 0.2 | 292 | 75,016 |

Legends:

 Indicator has a numerator <10 and is not reportable

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

NOM 9.2 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2020 | 1.1 | 0.1 | 73 | 66,428 |
| 2019 | 1.0 | 0.1 | 69 | 69,117 |
| 2018 | 0.9 | 0.1 | 65 | 69,109 |
| 2017 | 1.1 | 0.1 | 81 | 70,702 |
| 2016 | 1.0 | 0.1 | 69 | 71,317 |
| 2015 | 1.0 | 0.1 | 71 | 71,492 |
| 2014 | 1.1 | 0.1 | 79 | 71,908 |
| 2013 | 1.1 | 0.1 | 78 | 71,788 |
| 2012 | 1.3 | 0.1 | 91 | 72,439 |
| 2011 | 1.1 | 0.1 | 80 | 73,166 |
| 2010 | 1.1 | 0.1 | 79 | 72,865 |
| 2009 | 1.2 | 0.1 | 90 | 75,016 |

Legends:

 Indicator has a numerator <10 and is not reportable

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

NOM 9.3 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2020 | 147.5 | 14.9 | 98 | 66,428 |
| 2019 | 157.7 | 15.1 | 109 | 69,117 |
| 2018 | 186.7 | 16.5 | 129 | 69,109 |
| 2017 | 125.9 | 13.4 | 89 | 70,702 |
| 2016 | 189.3 | 16.3 | 135 | 71,317 |
| 2015 | 211.2 | 17.2 | 151 | 71,492 |
| 2014 | 194.7 | 16.5 | 140 | 71,908 |
| 2013 | 189.4 | 16.3 | 136 | 71,788 |
| 2012 | 173.9 | 15.5 | 126 | 72,439 |
| 2011 | 166.7 | 15.1 | 122 | 73,166 |
| 2010 | 215.5 | 17.2 | 157 | 72,865 |
| 2009 | 226.6 | 17.4 | 170 | 75,016 |

Legends:

🚫 Indicator has a numerator <10 and is not reportable

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

NOM 9.4 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2020 | 49.7 | 8.7 | 33 | 66,428 |
| 2019 | 43.4 | 7.9 | 30 | 69,117 |
| 2018 | 40.5 | 7.7 | 28 | 69,109 |
| 2017 | 55.2 | 8.8 | 39 | 70,702 |
| 2016 | 43.5 | 7.8 | 31 | 71,317 |
| 2015 | 57.3 | 9.0 | 41 | 71,492 |
| 2014 | 61.2 | 9.2 | 44 | 71,908 |
| 2013 | 50.1 | 8.4 | 36 | 71,788 |
| 2012 | 69.0 | 9.8 | 50 | 72,439 |
| 2011 | 50.6 | 8.3 | 37 | 73,166 |
| 2010 | 57.6 | 8.9 | 42 | 72,865 |
| 2009 | 80.0 | 10.3 | 60 | 75,016 |

Legends:

-  Indicator has a numerator <10 and is not reportable
-  Indicator has a numerator <20 and should be interpreted with caution

NOM 9.5 - Notes:

None

Data Alerts: None

NOM 10 - Percent of women who drink alcohol in the last 3 months of pregnancy

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2015 | 11.8 % | 1.1 % | 7,984 | 67,916 |
| 2014 | 12.5 % | 1.2 % | 8,527 | 68,324 |
| 2013 | 12.3 % | 1.2 % | 8,387 | 68,107 |
| 2012 | 11.0 % | 1.1 % | 7,535 | 68,619 |
| 2011 | 10.9 % | 1.1 % | 7,529 | 69,099 |
| 2010 | 10.8 % | 1.2 % | 7,402 | 68,712 |
| 2009 | 8.9 % | 1.1 % | 6,269 | 70,362 |
| 2008 | 11.0 % | 1.1 % | 8,014 | 72,615 |
| 2007 | 11.6 % | 1.2 % | 8,386 | 72,621 |

Legends:

 Indicator has an unweighted denominator <30 and is not reportable

 Indicator has an unweighted denominator between 30 and 59 or confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

NOM 10 - Notes:

None

Data Alerts: None

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

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2020 | 9.0 | 0.4 | 590 | 65,646 |
| 2019 | 10.0 | 0.4 | 683 | 67,991 |
| 2018 | 12.1 | 0.4 | 822 | 68,167 |
| 2017 | 13.9 | 0.5 | 968 | 69,433 |
| 2016 | 14.2 | 0.5 | 991 | 69,734 |
| 2015 | 14.7 | 0.5 | 746 | 50,878 |
| 2014 | 14.4 | 0.5 | 1,005 | 69,695 |
| 2013 | 14.5 | 0.5 | 1,019 | 70,074 |
| 2012 | 12.7 | 0.4 | 896 | 70,811 |
| 2011 | 11.0 | 0.4 | 790 | 71,517 |
| 2010 | 10.2 | 0.4 | 715 | 70,120 |
| 2009 | 8.5 | 0.4 | 616 | 72,234 |
| 2008 | 6.9 | 0.3 | 517 | 75,373 |

Legends:

-  Indicator has a numerator ≤10 and is not reportable
-  Indicator has a numerator <20 and should be interpreted with caution

NOM 11 - Notes:

None

Data Alerts: None

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

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

NOM 12 - Notes:

None

Data Alerts: None

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

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

NOM 13 - Notes:

None

Data Alerts: None

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

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

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2020_2021 | 9.2 % | 1.0 % | 115,798 | 1,262,626 |
| 2019_2020 | 10.4 % | 1.2 % | 132,981 | 1,282,893 |
| 2018_2019 | 10.1 % | 1.2 % | 129,668 | 1,284,705 |
| 2017_2018 | 9.8 % | 1.4 % | 126,988 | 1,291,357 |
| 2016_2017 | 9.4 % | 1.3 % | 121,970 | 1,290,988 |
| 2016 | 8.9 % | 1.3 % | 115,666 | 1,292,745 |

Legends:

🚫 Indicator has an unweighted denominator <30 and is not reportable

⚡ Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 14 - Notes:

None

Data Alerts: None

NOM 15 - Child Mortality rate, ages 1 through 9, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 8.9 | 1.2 | 58 | 650,677 |
| 2020 | 7.1 | 1.0 | 46 | 650,844 |
| 2019 | 11.0 | 1.3 | 72 | 655,021 |
| 2018 | 12.7 | 1.4 | 84 | 659,384 |
| 2017 | 12.0 | 1.4 | 79 | 659,364 |
| 2016 | 11.2 | 1.3 | 74 | 662,758 |
| 2015 | 12.4 | 1.4 | 83 | 667,509 |
| 2014 | 13.3 | 1.4 | 89 | 669,177 |
| 2013 | 11.2 | 1.3 | 75 | 672,151 |
| 2012 | 10.5 | 1.3 | 71 | 676,072 |
| 2011 | 11.9 | 1.3 | 80 | 674,304 |
| 2010 | 11.4 | 1.3 | 78 | 681,340 |
| 2009 | 10.9 | 1.3 | 74 | 680,643 |

Legends:

-  Indicator has a numerator <10 and is not reportable
-  Indicator has a numerator <20 and should be interpreted with caution

NOM 15 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 21.1 | 1.6 | 180 | 852,355 |
| 2020 | 18.9 | 1.5 | 156 | 824,777 |
| 2019 | 17.3 | 1.4 | 144 | 832,419 |
| 2018 | 16.1 | 1.4 | 136 | 844,548 |
| 2017 | 23.0 | 1.7 | 194 | 845,307 |
| 2016 | 21.4 | 1.6 | 182 | 849,401 |
| 2015 | 20.9 | 1.6 | 178 | 852,361 |
| 2014 | 20.1 | 1.5 | 172 | 855,359 |
| 2013 | 19.6 | 1.5 | 168 | 855,542 |
| 2012 | 19.4 | 1.5 | 167 | 862,720 |
| 2011 | 20.3 | 1.5 | 175 | 861,449 |
| 2010 | 20.7 | 1.6 | 180 | 868,369 |
| 2009 | 21.7 | 1.6 | 190 | 874,688 |

Legends:

-  Indicator has a numerator <10 and is not reportable
-  Indicator has a numerator <20 and should be interpreted with caution

NOM 16.1 - Notes:

None

Data Alerts: None

NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2019_2021 | 4.6 | 0.6 | 62 | 1,352,118 |
| 2018_2020 | 4.5 | 0.6 | 61 | 1,350,636 |
| 2017_2019 | 4.6 | 0.6 | 62 | 1,360,197 |
| 2016_2018 | 5.7 | 0.7 | 78 | 1,366,964 |
| 2015_2017 | 5.6 | 0.6 | 76 | 1,367,989 |
| 2014_2016 | 5.1 | 0.6 | 70 | 1,370,228 |
| 2013_2015 | 4.6 | 0.6 | 63 | 1,370,806 |
| 2012_2014 | 5.1 | 0.6 | 70 | 1,377,392 |
| 2011_2013 | 6.0 | 0.7 | 83 | 1,379,819 |
| 2010_2012 | 6.3 | 0.7 | 87 | 1,385,396 |
| 2009_2011 | 6.4 | 0.7 | 89 | 1,389,616 |
| 2008_2010 | 6.7 | 0.7 | 94 | 1,399,541 |
| 2007_2009 | 9.4 | 0.8 | 132 | 1,405,763 |

Legends:

-  Indicator has a numerator <10 and is not reportable
-  Indicator has a numerator <20 and should be interpreted with caution

NOM 16.2 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2019_2021 | 4.8 | 0.6 | 65 | 1,352,118 |
| 2018_2020 | 5.0 | 0.6 | 68 | 1,350,636 |
| 2017_2019 | 5.4 | 0.6 | 73 | 1,360,197 |
| 2016_2018 | 6.1 | 0.7 | 84 | 1,366,964 |
| 2015_2017 | 6.4 | 0.7 | 88 | 1,367,989 |
| 2014_2016 | 6.2 | 0.7 | 85 | 1,370,228 |
| 2013_2015 | 6.7 | 0.7 | 92 | 1,370,806 |
| 2012_2014 | 6.5 | 0.7 | 89 | 1,377,392 |
| 2011_2013 | 6.4 | 0.7 | 88 | 1,379,819 |
| 2010_2012 | 6.0 | 0.7 | 83 | 1,385,396 |
| 2009_2011 | 5.4 | 0.6 | 75 | 1,389,616 |
| 2008_2010 | 4.8 | 0.6 | 67 | 1,399,541 |
| 2007_2009 | 4.1 | 0.5 | 57 | 1,405,763 |

Legends:

-  Indicator has a numerator <10 and is not reportable
-  Indicator has a numerator <20 and should be interpreted with caution

NOM 16.3 - Notes:

None

Data Alerts: None

NOM 17.1 - Percent of children with special health care needs (CSHCN), ages 0 through 17

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

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2020_2021 | 23.4 % | 1.4 % | 314,479 | 1,341,206 |
| 2019_2020 | 23.2 % | 1.4 % | 313,499 | 1,353,276 |
| 2018_2019 | 21.1 % | 1.5 % | 287,959 | 1,362,262 |
| 2017_2018 | 20.3 % | 1.7 % | 278,043 | 1,367,634 |
| 2016_2017 | 20.5 % | 1.5 % | 281,558 | 1,375,951 |
| 2016 | 20.8 % | 1.6 % | 286,606 | 1,380,191 |

Legends:

 Indicator has an unweighted denominator <30 and is not reportable

 Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.1 - Notes:

None

Data Alerts: None

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

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

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2020_2021 | 13.4 % | 2.0 % | 42,186 | 314,479 |
| 2019_2020 | 16.2 % | 2.5 % | 50,698 | 313,499 |
| 2018_2019 | 17.4 % | 2.9 % | 50,070 | 287,959 |
| 2017_2018 | 22.0 % | 4.4 % | 61,186 | 278,043 |
| 2016_2017 | 23.0 % | 4.2 % | 64,693 | 281,558 |
| 2016 | 14.4 % | 2.8 % | 41,337 | 286,606 |

Legends:

 Indicator has an unweighted denominator <30 and is not reportable

 Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.2 - Notes:

None

Data Alerts: None

NOM 17.3 - Percent of children, ages 3 through 17, diagnosed with an autism spectrum disorder

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

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2020_2021 | 3.9 % | 0.7 % | 43,840 | 1,135,444 |
| 2019_2020 | 4.3 % | 0.9 % | 49,482 | 1,154,897 |
| 2018_2019 | 4.6 % | 1.1 % | 52,046 | 1,135,941 |
| 2017_2018 | 3.9 % | 1.0 % | 44,825 | 1,135,483 |
| 2016_2017 | 3.5 % | 0.8 % | 41,037 | 1,163,635 |
| 2016 | 3.5 % | 0.8 % | 41,581 | 1,171,962 |

Legends:

🚫 Indicator has an unweighted denominator <30 and is not reportable

⚡ Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.3 - Notes:

None

Data Alerts: None

NOM 17.4 - Percent of children, ages 3 through 17, diagnosed with Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)

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

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2020_2021 | 10.0 % | 0.9 % | 113,778 | 1,132,372 |
| 2019_2020 | 11.1 % | 1.2 % | 126,662 | 1,144,747 |
| 2018_2019 | 10.5 % | 1.2 % | 118,136 | 1,128,214 |
| 2017_2018 | 8.9 % | 1.3 % | 100,579 | 1,132,342 |
| 2016_2017 | 10.0 % | 1.3 % | 114,531 | 1,150,256 |
| 2016 | 10.9 % | 1.5 % | 124,871 | 1,146,464 |

Legends:

 Indicator has an unweighted denominator <30 and is not reportable

 Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.4 - Notes:

None

Data Alerts: None

NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling

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

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2020_2021 | 58.1 % | 3.9 % | 117,222 | 201,745 |
| 2019_2020 | 55.5 % | 4.3 % | 116,763 | 210,404 |
| 2018_2019 | 50.5 % | 4.9 % | 94,105 | 186,262 |
| 2017_2018 | 52.7 % ⚡ | 5.6 % ⚡ | 92,223 ⚡ | 175,082 ⚡ |
| 2016_2017 | 55.2 % ⚡ | 5.6 % ⚡ | 93,559 ⚡ | 169,576 ⚡ |
| 2016 | 55.2 % ⚡ | 6.2 % ⚡ | 100,807 ⚡ | 182,550 ⚡ |

Legends:

🚫 Indicator has an unweighted denominator <30 and is not reportable

⚡ Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 18 - Notes:

None

Data Alerts: None

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

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

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2020_2021 | 92.1 % | 1.0 % | 1,230,238 | 1,336,372 |
| 2019_2020 | 92.4 % | 1.0 % | 1,246,120 | 1,348,985 |
| 2018_2019 | 92.9 % | 1.0 % | 1,263,534 | 1,359,890 |
| 2017_2018 | 92.5 % | 1.3 % | 1,264,431 | 1,367,634 |
| 2016_2017 | 91.3 % | 1.3 % | 1,255,180 | 1,374,866 |
| 2016 | 90.0 % | 1.4 % | 1,240,712 | 1,378,021 |

Legends:

 Indicator has an unweighted denominator <30 and is not reportable

 Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 19 - Notes:

None

Data Alerts: None

NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)

Data Source: WIC

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2020 | 17.1 % | 0.2 % | 4,870 | 28,562 |
| 2018 | 16.3 % | 0.2 % | 6,189 | 37,993 |
| 2016 | 16.4 % | 0.2 % | 6,838 | 41,740 |
| 2014 | 16.6 % | 0.2 % | 7,347 | 44,350 |
| 2012 | 16.9 % | 0.2 % | 7,186 | 42,632 |
| 2010 | 17.1 % | 0.2 % | 8,418 | 49,178 |
| 2008 | 17.8 % | 0.2 % | 7,738 | 43,455 |

Legends:

■ Indicator has a denominator <20 and is not reportable

⚡ Indicator has a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

Data Source: Youth Risk Behavior Surveillance System (YRBSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 13.6 % | 0.9 % | 33,853 | 248,521 |
| 2019 | 14.2 % | 1.5 % | 37,521 | 264,811 |
| 2017 | 11.7 % | 1.0 % | 32,045 | 273,154 |
| 2015 | 11.0 % | 0.8 % | 29,906 | 272,396 |
| 2013 | 10.2 % | 0.9 % | 27,181 | 267,383 |
| 2011 | 9.9 % | 0.8 % | 27,534 | 277,821 |
| 2009 | 10.8 % | 0.9 % | 29,648 | 275,318 |
| 2007 | 10.9 % | 0.8 % | 31,008 | 283,752 |
| 2005 | 11.1 % | 1.0 % | 30,045 | 270,348 |

Legends:

🚫 Indicator has an unweighted denominator <100 and is not reportable

⚡ Indicator has a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

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

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2020_2021 | 13.8 % | 1.9 % | 81,119 | 588,764 |
| 2019_2020 | 12.2 % | 1.6 % | 75,249 | 617,409 |
| 2018_2019 | 11.8 % | 1.9 % | 71,365 | 603,325 |
| 2017_2018 | 14.4 % | 2.7 % | 82,991 | 577,612 |
| 2016_2017 | 15.0 % | 2.4 % | 91,185 | 607,950 |
| 2016 | 15.0 % | 2.5 % | 92,818 | 619,104 |

Legends:

🚫 Indicator has an unweighted denominator <30 and is not reportable

⚡ Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 20 - Notes:

None

Data Alerts: None

NOM 21 - Percent of children, ages 0 through 17, without health insurance

Data Source: American Community Survey (ACS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 1.1 % | 0.1 % | 14,593 | 1,361,814 |
| 2019 | 1.4 % | 0.2 % | 18,868 | 1,350,229 |
| 2018 | 1.1 % | 0.2 % | 15,312 | 1,365,750 |
| 2017 | 1.3 % | 0.2 % | 18,178 | 1,370,264 |
| 2016 | 0.9 % | 0.1 % | 13,002 | 1,377,484 |
| 2015 | 1.2 % | 0.2 % | 16,085 | 1,385,627 |
| 2014 | 1.7 % | 0.2 % | 22,818 | 1,386,772 |
| 2013 | 1.5 % | 0.2 % | 20,502 | 1,389,956 |
| 2012 | 1.4 % | 0.2 % | 18,870 | 1,401,515 |
| 2011 | 1.6 % | 0.2 % | 22,053 | 1,403,102 |
| 2010 | 1.4 % | 0.1 % | 19,758 | 1,416,775 |
| 2009 | 1.7 % | 0.2 % | 24,006 | 1,432,754 |

Legends:

 Indicator has an unweighted denominator <30 and is not reportable

 Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 21 - Notes:

None

Data Alerts: None

NOM 22.1 - Percent of children who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4) by age 24 months

Data Source: National Immunization Survey (NIS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2018 | 77.1 % | 3.7 % | 55,000 | 71,000 |
| 2017 | 80.9 % | 3.2 % | 59,000 | 73,000 |
| 2016 | 83.9 % | 3.4 % | 62,000 | 73,000 |
| 2015 | 80.2 % | 3.4 % | 58,000 | 72,000 |
| 2014 | 76.9 % | 3.7 % | 56,000 | 73,000 |
| 2013 | 77.5 % | 3.4 % | 56,000 | 73,000 |
| 2012 | 69.1 % | 3.9 % | 50,000 | 72,000 |
| 2011 | 75.2 % | 4.2 % | 55,000 | 73,000 |

Legends:

- 🚫 Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate >1.2
- ⚡ Estimates with 95% confidence interval widths >20 or that are inestimable might not be reliable

NOM 22.1 - Notes:

None

Data Alerts: None

NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza

Data Source: National Immunization Survey (NIS) – Flu

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2021_2022 | 77.7 % | 1.3 % | 970,651 | 1,249,247 |
| 2020_2021 | 83.6 % | 1.3 % | 1,066,372 | 1,275,564 |
| 2019_2020 | 76.6 % | 1.2 % | 990,510 | 1,293,094 |
| 2018_2019 | 81.1 % | 1.7 % | 1,048,768 | 1,292,541 |
| 2017_2018 | 73.8 % | 1.7 % | 950,326 | 1,287,296 |
| 2016_2017 | 71.9 % | 1.8 % | 928,878 | 1,292,442 |
| 2015_2016 | 75.1 % | 1.6 % | 986,288 | 1,312,775 |
| 2014_2015 | 76.1 % | 1.7 % | 1,001,808 | 1,316,609 |
| 2013_2014 | 71.9 % | 1.7 % | 944,113 | 1,312,436 |
| 2012_2013 | 75.3 % | 1.7 % | 995,266 | 1,321,138 |
| 2011_2012 | 63.4 % | 2.3 % | 853,775 | 1,346,433 |
| 2010_2011 | 64.9 % | 2.4 % | 861,419 | 1,327,302 |
| 2009_2010 | 57.6 % | 3.2 % | 754,736 | 1,310,305 |

Legends:

■ Estimate not reported because unweighted sample size for the denominator < 30 or because the relative standard error is >0.3.

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

NOM 22.2 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 89.3 % | 2.6 % | 349,797 | 391,702 |
| 2020 | 87.4 % | 2.0 % | 346,316 | 396,036 |
| 2019 | 87.9 % | 2.4 % | 351,497 | 400,019 |
| 2018 | 85.2 % | 2.7 % | 342,810 | 402,171 |
| 2017 | 81.9 % | 2.3 % | 332,612 | 406,334 |
| 2016 | 71.4 % | 2.8 % | 291,401 | 408,137 |
| 2015 | 68.1 % | 3.2 % | 279,791 | 410,784 |

Legends:

🚫 Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate > 1.2

⚡ Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

NOM 22.3 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 94.3 % | 2.2 % | 369,419 | 391,702 |
| 2020 | 93.0 % | 1.7 % | 368,305 | 396,036 |
| 2019 | 95.7 % | 1.6 % | 382,889 | 400,019 |
| 2018 | 91.2 % | 2.1 % | 366,780 | 402,171 |
| 2017 | 96.2 % | 1.1 % | 390,886 | 406,334 |
| 2016 | 96.7 % | 0.9 % | 394,560 | 408,137 |
| 2015 | 91.2 % | 2.1 % | 374,559 | 410,784 |
| 2014 | 93.2 % | 1.7 % | 383,093 | 411,163 |
| 2013 | 94.9 % | 1.3 % | 392,557 | 413,843 |
| 2012 | 95.7 % | 1.2 % | 396,484 | 414,154 |
| 2011 | 91.6 % | 1.8 % | 383,866 | 419,096 |
| 2010 | 82.4 % | 2.7 % | 340,420 | 413,313 |
| 2009 | 62.7 % | 2.9 % | 263,891 | 420,968 |

Legends:

■ Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate > 1.2

⚡ Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

NOM 22.4 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 91.8 % | 2.4 % | 359,777 | 391,702 |
| 2020 | 96.4 % | 1.2 % | 381,804 | 396,036 |
| 2019 | 96.2 % | 1.3 % | 384,908 | 400,019 |
| 2018 | 94.7 % | 1.7 % | 381,040 | 402,171 |
| 2017 | 94.0 % | 1.4 % | 382,103 | 406,334 |
| 2016 | 90.5 % | 1.8 % | 369,154 | 408,137 |
| 2015 | 89.5 % | 2.3 % | 367,476 | 410,784 |
| 2014 | 92.1 % | 1.7 % | 378,850 | 411,163 |
| 2013 | 89.6 % | 1.9 % | 370,929 | 413,843 |
| 2012 | 89.2 % | 1.9 % | 369,249 | 414,154 |
| 2011 | 84.4 % | 2.7 % | 353,564 | 419,096 |
| 2010 | 82.9 % | 2.7 % | 342,604 | 413,313 |
| 2009 | 74.0 % | 2.6 % | 311,571 | 420,968 |

Legends:

■ Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate >1.2

⚡ Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

NOM 22.5 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 5.7 | 0.2 | 1,309 | 227,907 |
| 2020 | 6.1 | 0.2 | 1,354 | 222,547 |
| 2019 | 6.9 | 0.2 | 1,538 | 224,448 |
| 2018 | 7.2 | 0.2 | 1,638 | 226,640 |
| 2017 | 8.1 | 0.2 | 1,827 | 226,569 |
| 2016 | 8.5 | 0.2 | 1,932 | 227,247 |
| 2015 | 9.4 | 0.2 | 2,140 | 227,564 |
| 2014 | 10.5 | 0.2 | 2,404 | 228,247 |
| 2013 | 11.9 | 0.2 | 2,734 | 229,235 |
| 2012 | 14.0 | 0.3 | 3,220 | 229,974 |
| 2011 | 15.1 | 0.3 | 3,478 | 231,071 |
| 2010 | 17.0 | 0.3 | 3,909 | 230,067 |
| 2009 | 19.5 | 0.3 | 4,482 | 229,808 |

Legends:

-  Indicator has a numerator <10 and is not reportable
-  Indicator has a numerator <20 and should be interpreted with caution

NOM 23 - Notes:

None

Data Alerts: None

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

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|------|------------------|----------------|-----------|-------------|
| 2021 | 10.4 % | 1.1 % | 6,789 | 65,443 |
| 2020 | 10.0 % | 1.0 % | 6,314 | 62,857 |
| 2019 | 10.2 % | 0.9 % | 6,732 | 65,699 |
| 2018 | 10.3 % | 1.0 % | 6,699 | 65,220 |
| 2017 | 10.8 % | 1.0 % | 7,231 | 67,197 |
| 2016 | 11.1 % | 1.1 % | 7,474 | 67,639 |
| 2015 | 10.3 % | 1.0 % | 6,899 | 67,154 |
| 2014 | 10.3 % | 1.0 % | 6,951 | 67,709 |
| 2013 | 12.0 % | 1.2 % | 8,149 | 68,114 |
| 2012 | 12.1 % | 1.1 % | 8,189 | 67,828 |

Legends:

🚫 Indicator has an unweighted denominator <30 and is not reportable

⚡ Indicator has an unweighted denominator between 30 and 59 or a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

NOM 24 - Notes:

None

Data Alerts: None

NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year

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

Multi-Year Trend

| Year | Annual Indicator | Standard Error | Numerator | Denominator |
|-----------|------------------|----------------|-----------|-------------|
| 2020_2021 | 2.7 % | 0.5 % | 36,325 | 1,334,553 |
| 2019_2020 | 2.0 % | 0.4 % | 27,490 | 1,352,826 |
| 2018_2019 | 2.8 % | 0.7 % | 38,679 | 1,361,812 |
| 2017_2018 | 2.7 % | 0.7 % | 36,439 | 1,355,999 |
| 2016_2017 | 2.5 % | 0.6 % | 33,694 | 1,361,597 |
| 2016 | 3.5 % | 1.0 % | 47,441 | 1,374,755 |

Legends:

 Indicator has an unweighted denominator <30 and is not reportable

 Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 25 - Notes:

None

Data Alerts: None

Form 10
National Performance Measures (NPMs)
State: Massachusetts

NPM 4A - Percent of infants who are ever breastfed

| Federally Available Data | | | | | |
|---|--------|--------|--------|--------|--------|
| Data Source: National Immunization Survey (NIS) | | | | | |
| | 2018 | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | 89.2 | 89.3 | 84.6 | 84.9 | 85.2 |
| Annual Indicator | 87.4 | 84.3 | 80.7 | 84.8 | 80.0 |
| Numerator | 62,315 | 52,061 | 52,151 | 56,660 | 49,214 |
| Denominator | 71,304 | 61,736 | 64,642 | 66,828 | 61,531 |
| Data Source | NIS | NIS | NIS | NIS | NIS |
| Data Source Year | 2015 | 2016 | 2017 | 2018 | 2019 |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 85.5 | 85.8 | 86.0 |

Field Level Notes for Form 10 NPMs:

None

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

| Federally Available Data | | | | | |
|---|--------|--------|--------|--------|--------|
| Data Source: National Immunization Survey (NIS) | | | | | |
| | 2018 | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | 30 | 30.5 | 23.5 | 23.8 | 24.6 |
| Annual Indicator | 26.6 | 23.2 | 23.9 | 24.5 | 29.2 |
| Numerator | 18,276 | 13,946 | 14,451 | 15,899 | 17,375 |
| Denominator | 68,687 | 60,086 | 60,423 | 64,937 | 59,420 |
| Data Source | NIS | NIS | NIS | NIS | NIS |
| Data Source Year | 2015 | 2016 | 2017 | 2018 | 2019 |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 29.3 | 29.4 | 29.5 |

Field Level Notes for Form 10 NPMs:

None

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

| Federally Available Data | | | | |
|--|-----------|-----------|-----------|-----------|
| Data Source: National Survey of Children's Health (NSCH) | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 40 | 53 |
| Annual Indicator | 37.3 | 50.2 | 52.3 | 44.7 |
| Numerator | 59,973 | 80,602 | 76,477 | 62,384 |
| Denominator | 161,003 | 160,418 | 146,192 | 139,643 |
| Data Source | NSCH | NSCH | NSCH | NSCH |
| Data Source Year | 2017_2018 | 2018_2019 | 2019_2020 | 2020_2021 |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 55.0 | 57.0 | 60.0 |

Field Level Notes for Form 10 NPMs:

None

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

| Federally Available Data | | | | | |
|--|-----------|-----------|---------|-----------|-----------|
| Data Source: National Survey of Children's Health (NSCH) | | | | | |
| | 2018 | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | 90.1 | 91 | 91 | 91.5 | 88 |
| Annual Indicator | 90.9 | 90.9 | 86.9 | 84.3 | 81.7 |
| Numerator | 434,586 | 434,586 | 448,029 | 420,459 | 393,034 |
| Denominator | 478,159 | 478,159 | 515,782 | 498,941 | 480,952 |
| Data Source | NSCH | NSCH | NSCH | NSCH | NSCH |
| Data Source Year | 2016_2017 | 2016_2017 | 2019 | 2019_2020 | 2020_2021 |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 90.0 | 91.0 | 93.0 |

Field Level Notes for Form 10 NPMs:

None

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services to prepare for the transition to adult health care - Children with Special Health Care Needs

| Federally Available Data | | | | | |
|--|------------|------------|------------|------------|------------|
| Data Source: National Survey of Children's Health (NSCH) - CSHCN | | | | | |
| | 2018 | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | 15.8 | 18.3 | 18.6 | 31.5 | 33.8 |
| Annual Indicator | 17.9 | 30.5 | 37.2 | 26.3 | 24.2 |
| Numerator | 20,928 | 30,134 | 46,964 | 41,653 | 37,020 |
| Denominator | 116,869 | 98,859 | 126,255 | 158,326 | 152,992 |
| Data Source | NSCH-CSHCN | NSCH-CSHCN | NSCH-CSHCN | NSCH-CSHCN | NSCH-CSHCN |
| Data Source Year | 2016_2017 | 2017_2018 | 2018_2019 | 2019_2020 | 2020_2021 |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 35.1 | 37.4 | 40.3 |

Field Level Notes for Form 10 NPMs:

None

NPM 14.1 - Percent of women who smoke during pregnancy

| Federally Available Data | | | | |
|--|--------|--------|--------|--------|
| Data Source: National Vital Statistics System (NVSS) | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 4.1 | 3.4 |
| Annual Indicator | 4.3 | 3.9 | 3.5 | 2.8 |
| Numerator | 2,950 | 2,701 | 2,348 | 1,908 |
| Denominator | 69,078 | 69,085 | 66,398 | 69,127 |
| Data Source | NVSS | NVSS | NVSS | NVSS |
| Data Source Year | 2018 | 2019 | 2020 | 2021 |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 2.6 | 2.3 | 2.0 |

Field Level Notes for Form 10 NPMs:

None

**Form 10
State Performance Measures (SPMs)**

State: Massachusetts

SPM 1 - Percent of cases reviewed by the Massachusetts Maternal Mortality and Morbidity Review Committee within two years of maternal death

| Measure Status: | | Active | | |
|------------------------|------|---|---|---|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 10 | 20 |
| Annual Indicator | | 0 | 0 | 14.3 |
| Numerator | | 0 | 0 | 2 |
| Denominator | | 9 | 7 | 14 |
| Data Source | | Maternal Mortality Review Information Application | Maternal Mortality Review Information Application | Maternal Mortality Review Information Application |
| Data Source Year | | FY20 | FY21 | FY22 |
| Provisional or Final ? | | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 30.0 | 40.0 | 50.0 |

Field Level Notes for Form 10 SPMs:

1. **Field Name:** 2020

Column Name: State Provided Data

Field Note:

Progress on this objective was delayed due to the COVID-19 pandemic. MDPH is seeking funding to hire staff to support this goal.

2. **Field Name:** 2021

Column Name: State Provided Data

Field Note:

Progress on this objective was delayed due to the COVID-19 pandemic. MDPH has hired a staff person to support this goal.

SPM 2 - Rate of teen births per 1,000 Latinx adolescents aged 15-19

| Measure Status: | | | Active | |
|------------------------|---|---|---|---|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 24 | 22 |
| Annual Indicator | 26 | 26 | 24.8 | 21.1 |
| Numerator | | | | |
| Denominator | | | | |
| Data Source | MA Registry of Vital Records and Statistics |
| Data Source Year | 2018 | 2018 | 2019 | 2021 |
| Provisional or Final ? | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 20.0 | 18.0 | 16.0 |

Field Level Notes for Form 10 SPMs:

None

SPM 3 - Percent of Bureau staff who have used any racial equity tool or resource in their work

| Measure Status: | | Active | | |
|------------------------|----------------------|----------------------|----------------------|---------------------------|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 71 | 77 |
| Annual Indicator | 65.9 | 65.9 | 65.9 | 65.9 |
| Numerator | 110 | 110 | 110 | 110 |
| Denominator | 167 | 167 | 167 | 167 |
| Data Source | Internal MDPH survey | Internal MDPH survey | Internal MDPH survey | MDPH Racial Equity Survey |
| Data Source Year | 2019 | 2019 | 2019 | 2019 |
| Provisional or Final ? | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 83.0 | 89.0 | 95.0 |

Field Level Notes for Form 10 SPMs:

- Field Name:** 2021

Column Name: State Provided Data

Field Note:
MDPH plans to administer this survey every two years. The 2021 survey administration was delayed due to competing priorities with COVID-19 and a request from Executive leadership to coordinate the survey across the entire Department, rather than only BFHN and BCHAP.
- Field Name:** 2022

Column Name: State Provided Data

Field Note:
MDPH plans to administer this survey every two years. Survey administration has been delayed due to competing priorities with COVID-19 and a request from Executive leadership to coordinate the survey across the entire Department, rather than only BFHN and BCHAP. The survey is expected to be administered in Fall/Winter 2023.

SPM 4 - Percent of Title V programs that offer compensated family engagement and leadership opportunities

| Measure Status: | | Active | | |
|------------------------|---|---|---|---|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 40 | 43 |
| Annual Indicator | 38.1 | 36.6 | 35.6 | 47.2 |
| Numerator | 16 | 15 | 16 | 25 |
| Denominator | 42 | 41 | 45 | 53 |
| Data Source | Title V Family Engagement Activities Form | Title V Family Engagement Activities Form | Title V Family Engagement Activities Form | Title V Family Engagement Activities Survey |
| Data Source Year | FY19 | FY20 | FY21 | FY22 |
| Provisional or Final ? | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 48.0 | 49.0 | 50.0 |

Field Level Notes for Form 10 SPMs:

| | | |
|----|---------------------|----------------------------|
| 1. | Field Name: | 2021 |
| | Column Name: | State Provided Data |

Field Note:

The decrease is due to a larger number of Title V programs being included in the denominator, as well as competing priorities for both families and MDPH staff during the COVID-19 pandemic.

SPM 5 - Percent of families who have had difficulty since their child was born covering basics, like food or housing, on their income

| Measure Status: | | Active | | |
|------------------------|-----------|-----------|-----------|-----------|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 11 | 10.8 |
| Annual Indicator | 11.2 | 12.1 | 11.7 | 9.8 |
| Numerator | 149,357 | 161,483 | 154,136 | 128,459 |
| Denominator | 1,337,287 | 1,337,335 | 1,321,278 | 1,307,364 |
| Data Source | NSCH | NSCH | NSCH | NSCH |
| Data Source Year | 2018 | 2018-2019 | 2019-2020 | 2020-2021 |
| Provisional or Final ? | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 9.7 | 9.6 | 9.5 |

Field Level Notes for Form 10 SPMs:

None

SPM 6 - Percent of BFHN and BCHAP Title V staff that report a workplace culture that reflects a safe and supportive environment to mitigate primary and secondary trauma

| Measure Status: | | | Active | |
|------------------------|------|------|--|---------------------------|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 50 | 53 |
| Annual Indicator | | | 0 | 0 |
| Numerator | | | 0 | 0 |
| Denominator | | | 100 | 100 |
| Data Source | | | Trauma-informed and Healing Centered Organizationa | MDPH Racial Equity Survey |
| Data Source Year | | | 2021 | 2022 |
| Provisional or Final ? | | | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 55.0 | 57.0 | 60.0 |

Field Level Notes for Form 10 SPMs:

| | | |
|----|--------------------|-------------|
| 1. | Field Name: | 2021 |
|----|--------------------|-------------|

| | | |
|--|---------------------|----------------------------|
| | Column Name: | State Provided Data |
|--|---------------------|----------------------------|

Field Note:
 We have developed a Trauma-informed and Healing Centered Organizational Assessment that will be disseminated to MDPH staff. However, we have experienced significant delays in getting the Assessment approved by MDPH leadership in light of competing priorities with the COVID-19 pandemic. We are still pursuing approvals and hope to have baseline data for next year's report.

| | | |
|----|--------------------|-------------|
| 2. | Field Name: | 2022 |
|----|--------------------|-------------|

| | | |
|--|---------------------|----------------------------|
| | Column Name: | State Provided Data |
|--|---------------------|----------------------------|

Field Note:
 We had previously planned to administer a Trauma-informed and Healing Centered Organizational Assessment to MDPH staff. However, to reduce survey burden a decision was made to select key questions from the organizational assessment and include them in the planned MDPH Racial Equity Survey, which will be administered Department-wide in FY24. In the coming year we will continue to explore ways to measure progress on this priority. The denominator is listed as 100 because TVIS would only accept a number greater than zero.

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

State: Massachusetts

ESM 4.1 - Percent of WIC participants receiving services from a Breastfeeding Peer Counselor who exclusively breastfed for at least three months

| Measure Status: | | Active | | |
|------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 16 | 17.5 |
| Annual Indicator | 15.1 | 16 | 17.1 | 17.9 |
| Numerator | 2,650 | 1,776 | 2,284 | 3,153 |
| Denominator | 17,583 | 11,125 | 13,374 | 17,659 |
| Data Source | Massachusetts WIC participant data |
| Data Source Year | 2019 | 2020 | 2021 | 2022 |
| Provisional or Final ? | Provisional | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 18.0 | 19.0 | 20.0 |

Field Level Notes for Form 10 ESMs:

None

ESM 6.1 - Percent of infants and children enrolled in WIC who are monitored using the Learn the Signs Act Early checklist

| Measure Status: | | Active | | |
|------------------------|------|------------------------------------|------------------------------------|------------------------------------|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 27 | 29 |
| Annual Indicator | | 30.1 | 27.2 | 8.4 |
| Numerator | | 10,412 | 11,707 | 11,245 |
| Denominator | | 34,612 | 43,087 | 133,258 |
| Data Source | | Massachusetts WIC participant data | Massachusetts WIC participant data | Massachusetts WIC participant data |
| Data Source Year | | 2020 | FY21 | FY22 |
| Provisional or Final ? | | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 31.0 | 33.0 | 35.0 |

Field Level Notes for Form 10 ESMs:

| | | |
|----|---------------------|----------------------------|
| 1. | Field Name: | 2022 |
| | Column Name: | State Provided Data |

Field Note:

The denominator was significantly increased in FY22, resulting in a significantly lower indicator than in previous years. Prior to FY22, 7 WIC local WIC programs monitored development. In FY22, after a statewide training, all 31 programs had the ability to monitor child development. The denominator reflects the number of eligible infants and children, which increased when expanding the number of programs trained. Future year objectives have been updated to reflect this.

ESM 10.1 - Percent of School Based Health Center clients who are male

| Measure Status: | | | Active | |
|------------------------|-----------------------|-----------------------|-----------------------|--|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 45 | 46.9 |
| Annual Indicator | 42.7 | 40.6 | 45.3 | 42.7 |
| Numerator | 5,015 | 5,798 | 2,826 | 4,568 |
| Denominator | 11,748 | 14,286 | 6,243 | 10,705 |
| Data Source | SBHC program database | SBHC program database | SBHC program database | SBHC Electronic Health Records and Apex Data Hub |
| Data Source Year | 2019 | 2020 | 2021 | FY22 |
| Provisional or Final ? | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 48.3 | 49.0 | 50.0 |

Field Level Notes for Form 10 ESMs:

None

ESM 12.1 - Percent of youth ages 14 and older receiving services from the DPH Care Coordination Program who receive health transition information and support from their Care Coordinator

| Measure Status: | | Active | | | |
|------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| State Provided Data | | | | | |
| | 2018 | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | 50 | 60 | 70 | 75 | 80 |
| Annual Indicator | 50.5 | 64.9 | 57 | 37 | 58.3 |
| Numerator | 101 | 159 | 118 | 114 | 144 |
| Denominator | 200 | 245 | 207 | 308 | 247 |
| Data Source | MDPH Care Coordination database |
| Data Source Year | FY18 | FY19 | FY20 | FY21 | FY22 |
| Provisional or Final ? | Final | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 65.0 | 70.0 | 75.0 |

Field Level Notes for Form 10 ESMs:

| | | |
|----|---------------------|--|
| 1. | Field Name: | 2020 |
| | Column Name: | State Provided Data |
| | Field Note: | The list of clients who are of transition age (denominator) is run a few times a year, alerting Care Coordination staff to follow up with those families. Due to the timing of the shut down and no access to the data for a while, some clients who reached age 14 during this time period were not identified for this follow up in FY20. |
| 2. | Field Name: | 2021 |
| | Column Name: | State Provided Data |
| | Field Note: | This is a decrease from FY20 due to the COVID-19 pandemic and release of a newer version of the program's database. The list of clients who are of transition age (denominator) is usually run a few times a year, alerting Care Coordination staff to follow up with those families. In FY21, the list was run once due to significant time spent addressing data errors associated with the release of a newer version of the database and switching to paperless processes due to the pandemic. Since then, database issues have been resolved and processes streamlined to continue to provide transition services in a more coordinated manner. |
| 3. | Field Name: | 2022 |
| | Column Name: | State Provided Data |
| | Field Note: | The 5-year objective has been updated to reflect a more appropriate target based on Care Coordination Program protocols. |

ESM 14.1.1 - Percentage of women using the statewide smoking quitline who are pregnant

| Measure Status: | | Active | | |
|------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| State Provided Data | | | | |
| | 2019 | 2020 | 2021 | 2022 |
| Annual Objective | | | 2.2 | 3.2 |
| Annual Indicator | 1.2 | 0.6 | 0.8 | 0.9 |
| Numerator | 24 | 10 | 13 | 16 |
| Denominator | 1,933 | 1,627 | 1,537 | 1,770 |
| Data Source | Massachusetts smoking quitline data |
| Data Source Year | 2019 | FY20 | FY21 | FY22 |
| Provisional or Final ? | Final | Final | Final | Final |

| Annual Objectives | | | |
|-------------------|------|------|------|
| | 2023 | 2024 | 2025 |
| Annual Objective | 1.0 | 1.1 | 1.2 |

Field Level Notes for Form 10 ESMs:

| | | |
|----|---------------------|----------------------------|
| 1. | Field Name: | 2022 |
| | Column Name: | State Provided Data |

Field Note:

The 5-year objective has been updated to reflect a more realistic target based on recent years' data. We believe the decrease is largely due to the pandemic. There were fewer prenatal visits and therefore less screening and fewer referrals made by providers to the quitline.

Form 10
State Performance Measure (SPM) Detail Sheets

State: Massachusetts

SPM 1 - Percent of cases reviewed by the Massachusetts Maternal Mortality and Morbidity Review Committee within two years of maternal death

Population Domain(s) – Women/Maternal Health

| | | | | | | | | | |
|--------------------------------------|---|-------------------|------------|---------------------|-----|-------------------|--|---------------------|---|
| Measure Status: | Active | | | | | | | | |
| Goal: | Increase the percent of pregnancy-associated deaths that are reviewed within two years of occurrence from 0% to 50% | | | | | | | | |
| 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 pregnancy-associated deaths that are reviewed within 2 years of occurrence</td> </tr> <tr> <td>Denominator:</td> <td>Total number of pregnancy-associated deaths that are reviewed</td> </tr> </table> | Unit Type: | Percentage | Unit Number: | 100 | Numerator: | Number of pregnancy-associated deaths that are reviewed within 2 years of occurrence | Denominator: | Total number of pregnancy-associated deaths that are reviewed |
| Unit Type: | Percentage | | | | | | | | |
| Unit Number: | 100 | | | | | | | | |
| Numerator: | Number of pregnancy-associated deaths that are reviewed within 2 years of occurrence | | | | | | | | |
| Denominator: | Total number of pregnancy-associated deaths that are reviewed | | | | | | | | |
| Data Sources and Data Issues: | Maternal Mortality Review Information Application (MMRIA) | | | | | | | | |
| Significance: | Maternal death, a sentinel event, has dramatically decreased in Massachusetts over the last century. There is a long history of reviewing maternal deaths in Massachusetts which began as a systematic effort in 1941 when the Committee on Maternal Welfare of the Massachusetts Medical Society initiated case reviews of maternal deaths with the goal of improving maternal health. Since 1997, the Massachusetts Department of Public Health has convened the Maternal Mortality and Morbidity Review Committee to review maternal deaths, study the incidence of pregnancy complications, and make recommendations to improve maternal outcomes and eliminate preventable maternal death. Understanding the causes of these deaths provides insight into the factors that contributed to both maternal morbidity and mortality, which can inform strategies to reduce the incidence of these tragic events. | | | | | | | | |

SPM 2 - Rate of teen births per 1,000 Latinx adolescents aged 15-19
Population Domain(s) – Adolescent Health

| | | | | | | | | | |
|--------------------------------------|--|-------------------|------|---------------------|-------|-------------------|--|---------------------|-------------------------------------|
| Measure Status: | Active | | | | | | | | |
| Goal: | Reduce teen birth inequities between Latinx and white youth in Massachusetts. | | | | | | | | |
| Definition: | <table border="1"> <tr> <td>Unit Type:</td> <td>Rate</td> </tr> <tr> <td>Unit Number:</td> <td>1,000</td> </tr> <tr> <td>Numerator:</td> <td>Number of births among Latinx MA resident women aged 15-19</td> </tr> <tr> <td>Denominator:</td> <td>Latinx MA resident women aged 15-19</td> </tr> </table> | Unit Type: | Rate | Unit Number: | 1,000 | Numerator: | Number of births among Latinx MA resident women aged 15-19 | Denominator: | Latinx MA resident women aged 15-19 |
| Unit Type: | Rate | | | | | | | | |
| Unit Number: | 1,000 | | | | | | | | |
| Numerator: | Number of births among Latinx MA resident women aged 15-19 | | | | | | | | |
| Denominator: | Latinx MA resident women aged 15-19 | | | | | | | | |
| Data Sources and Data Issues: | MA Registry of Vital Records & Statistics birth file | | | | | | | | |
| Significance: | Nationally Massachusetts has the lowest teen birth rate. However, when the data is disaggregated by race it illuminates large inequities between different races. In recent years in Massachusetts, Latinx youth have been four to eight times more likely to give birth than their White peers. According to Our Opportunity Nation, nearly 10% of Massachusetts youth ages 16-24 years are not in school or working and only 6% of children born into low-income families will make it to the top of the income ladder. Unplanned adolescent births are associated with decreased socioeconomic opportunities for both the young parents and their children. Young parents more frequently report postpartum depression, have low levels of social and community support, have higher incidences of poor birth outcomes, and are more likely to have lower educational attainment and employment levels compared to older parents. Reducing the chances of an early and unintended pregnancy is one powerful way to increase life opportunities for young people and their families. This SPM helps track the sexuality education, access to clinical services, and youth development strategies for Latinx youth. | | | | | | | | |

SPM 3 - Percent of Bureau staff who have used any racial equity tool or resource in their work
Population Domain(s) – Cross-Cutting/Systems Building

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|--------------------------------------|--|-------------------|------------|---------------------|-----|-------------------|---|---------------------|--|
| Measure Status: | Active | | | | | | | | |
| Goal: | Increase the percent of Bureau staff who use racial equity tools or resources in their work. | | | | | | | | |
| 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 staff who report that they have used any racial equity tool or resource in their work (e.g. procurement guidance, reframing tool)</td> </tr> <tr> <td>Denominator:</td> <td>Number of staff who respond to the MDPH Racial Equity Survey</td> </tr> </table> | Unit Type: | Percentage | Unit Number: | 100 | Numerator: | Number of staff who report that they have used any racial equity tool or resource in their work (e.g. procurement guidance, reframing tool) | Denominator: | Number of staff who respond to the MDPH Racial Equity Survey |
| Unit Type: | Percentage | | | | | | | | |
| Unit Number: | 100 | | | | | | | | |
| Numerator: | Number of staff who report that they have used any racial equity tool or resource in their work (e.g. procurement guidance, reframing tool) | | | | | | | | |
| Denominator: | Number of staff who respond to the MDPH Racial Equity Survey | | | | | | | | |
| Data Sources and Data Issues: | The data source for this SPM is the MDPH Racial Equity Survey, a survey designed to measure knowledge, skills, and attitudes of staff related to the Racial Equity Movement. Administration of the survey has been paused for the past few years due to the COVID-19 pandemic. However, MDPH plans to administer the survey Department-wide in FY24. | | | | | | | | |
| Significance: | The Racial Equity Movement responds to the need to establish a foundational understanding of racism in public health and improve the workforce’s capacity to promote racial equity within MDPH, their programs, and the community. We are developing tools and resources to identify and address institutional racism within core elements of our work – such as program planning, community engagement, procurement, and data collection and analysis – and building staff capacity to use them in the implementation and monitoring of MDPH-funded programs. | | | | | | | | |

SPM 4 - Percent of Title V programs that offer compensated family engagement and leadership opportunities
Population Domain(s) – Cross-Cutting/Systems Building

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|--------------------------------------|---|-------------------|------------|---------------------|-----|-------------------|--|---------------------|---|
| Measure Status: | Active | | | | | | | | |
| Goal: | Increase compensated opportunities for families, fathers, and youth to inform to MCH programming. | | | | | | | | |
| 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 Title V programs who report having offered compensated family, father, or youth engagement opportunities in the previous fiscal year</td> </tr> <tr> <td>Denominator:</td> <td>Number of programs receiving funding from the Title V federal-state partnership</td> </tr> </table> | Unit Type: | Percentage | Unit Number: | 100 | Numerator: | Number of Title V programs who report having offered compensated family, father, or youth engagement opportunities in the previous fiscal year | Denominator: | Number of programs receiving funding from the Title V federal-state partnership |
| Unit Type: | Percentage | | | | | | | | |
| Unit Number: | 100 | | | | | | | | |
| Numerator: | Number of Title V programs who report having offered compensated family, father, or youth engagement opportunities in the previous fiscal year | | | | | | | | |
| Denominator: | Number of programs receiving funding from the Title V federal-state partnership | | | | | | | | |
| Data Sources and Data Issues: | MDPH-developed Title V Family Engagement Survey | | | | | | | | |
| Significance: | Family engagement in the design and delivery of programs is crucial for improving outcomes. Effective engagement acknowledges that the expertise and lived experience that families bring to the partnership is as valuable as the time of the professional partners, and families should be compensated in meaningful ways. This SPM tracks the proportion of programs funded through the Title V federal-state partnership that offer compensated engagement and leadership opportunities for families, fathers, and youth. | | | | | | | | |

SPM 5 - Percent of families who have had difficulty since their child was born covering basics, like food or housing, on their income

Population Domain(s) – Cross-Cutting/Systems Building

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|--------------------------------------|--|-------------------|------------|---------------------|-----|-------------------|---|---------------------|-------------------------|
| Measure Status: | Active | | | | | | | | |
| Goal: | Decrease the percent of families who have had difficulty since their child was born covering basics, like food or housing, on their income | | | | | | | | |
| 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>Children who lived in families in which it was very often hard to get by on family income and children who lived in families in which it was somewhat often hard to get by on family income</td> </tr> <tr> <td>Denominator:</td> <td>Children age 0-17 years</td> </tr> </table> | Unit Type: | Percentage | Unit Number: | 100 | Numerator: | Children who lived in families in which it was very often hard to get by on family income and children who lived in families in which it was somewhat often hard to get by on family income | Denominator: | Children age 0-17 years |
| Unit Type: | Percentage | | | | | | | | |
| Unit Number: | 100 | | | | | | | | |
| Numerator: | Children who lived in families in which it was very often hard to get by on family income and children who lived in families in which it was somewhat often hard to get by on family income | | | | | | | | |
| Denominator: | Children age 0-17 years | | | | | | | | |
| Data Sources and Data Issues: | National Survey of Children's Health | | | | | | | | |
| Significance: | The social, economic, behavioral, and physical factors that people experience where they work, live, and play make up the majority of what impacts health. Living in a household with poor economic resources is considered an adverse childhood experience (ACE) and can have lasting effects on health, well-being, and opportunity. It has significant effects at critical periods of development (e.g. infancy and parental socioeconomic position), across the lifespan through cumulative burden, and across generations. The importance of addressing the social determinants of health is emphasized in national initiatives, such as Healthy People 2020, the National Partnership for Action to End Health Disparities, and the National Prevention and Health Promotion Strategy. | | | | | | | | |

SPM 6 - Percent of BFHN and BCHAP Title V staff that report a workplace culture that reflects a safe and supportive environment to mitigate primary and secondary trauma
Population Domain(s) – Cross-Cutting/Systems Building

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|--------------------------------------|---|-------------------|------------|---------------------|-----|-------------------|--|---------------------|--|
| Measure Status: | Active | | | | | | | | |
| Goal: | Foster a workplace culture at MDPH that reflects a safe and supportive environment to mitigate primary and secondary trauma. | | | | | | | | |
| 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 respondents who agree that their workplace culture reflects a safe and supportive environment to mitigate trauma</td> </tr> <tr> <td>Denominator:</td> <td>Total number of responses to the MDPH Racial Equity Survey</td> </tr> </table> | Unit Type: | Percentage | Unit Number: | 100 | Numerator: | Number of respondents who agree that their workplace culture reflects a safe and supportive environment to mitigate trauma | Denominator: | Total number of responses to the MDPH Racial Equity Survey |
| Unit Type: | Percentage | | | | | | | | |
| Unit Number: | 100 | | | | | | | | |
| Numerator: | Number of respondents who agree that their workplace culture reflects a safe and supportive environment to mitigate trauma | | | | | | | | |
| Denominator: | Total number of responses to the MDPH Racial Equity Survey | | | | | | | | |
| Data Sources and Data Issues: | We had previously planned to administer a Trauma-informed and Healing Centered Organizational Assessment to MDPH staff. However, to reduce survey burden a decision was made to select key questions from the organizational assessment and include them in the planned MDPH Racial Equity Survey, which will be administered Department-wide in FY24. In the coming year we will continue to explore ways to measure progress on this priority. | | | | | | | | |
| Significance: | <p>Trauma is a pervasive public health issue that affects individuals, communities, and systems. MDPH is modeling its work on this priority after the San Francisco Department of Public Health Trauma Informed System Initiative, which states that “Trauma Informed Systems work is based on the understanding that our service delivery systems can inadvertently reinforce oppression and create harm. When our systems are traumatized, it prevents us from responding effectively to each other and the people we serve.” http://traumatransformed.org/wp-content/uploads/TIS-Program-Overview-11-15-17.pdf</p> <p>Furthermore, according to SAMHSA, “a program, organization, or system that is trauma-informed realizes the widespread impact of trauma and understands potential paths for recovery; recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; responds by fully integrating knowledge about trauma into policies, procedures, and practices; and seeks to actively resist re-traumatization.” https://www.samhsa.gov/nctic/trauma-interventions</p> <p>This performance measure tracks the Title V program’s efforts to improve policies, practices, and environmental conditions to move MDPH along a continuum to becoming a healing-centered organization.</p> | | | | | | | | |

Form 10
State Outcome Measure (SOM) Detail Sheets
State: Massachusetts

No State Outcome Measures were created by the State.

Form 10
Evidence-Based or –Informed Strategy Measures (ESM) Detail Sheets

State: Massachusetts

ESM 4.1 - Percent of WIC participants receiving services from a Breastfeeding Peer Counselor who exclusively breastfed for at least three months

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

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|--|--|-------------------|------------|---------------------|-----|-------------------|---|---------------------|--|
| Measure Status: | Active | | | | | | | | |
| Goal: | Increase the percent of WIC participants who breastfeed exclusively through six months | | | | | | | | |
| Definition: | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>Number of WIC participants receiving breastfeeding peer counselor services who were exclusively breastfeeding at 3 months</td> </tr> <tr> <td>Denominator:</td> <td>Number of WIC participants who receive breastfeeding peer counselor services</td> </tr> </table> | Unit Type: | Percentage | Unit Number: | 100 | Numerator: | Number of WIC participants receiving breastfeeding peer counselor services who were exclusively breastfeeding at 3 months | Denominator: | Number of WIC participants who receive breastfeeding peer counselor services |
| Unit Type: | Percentage | | | | | | | | |
| Unit Number: | 100 | | | | | | | | |
| Numerator: | Number of WIC participants receiving breastfeeding peer counselor services who were exclusively breastfeeding at 3 months | | | | | | | | |
| Denominator: | Number of WIC participants who receive breastfeeding peer counselor services | | | | | | | | |
| Data Sources and Data Issues: | Massachusetts WIC data system | | | | | | | | |
| Evidence-based/informed strategy: | <p>This ESM tracks the outcomes of breastfeeding peer counselor services offered to WIC participants. This ESM is supported by the findings of Chapman and Perez-Escamilla (2012) which found that peer counseling interventions greatly improved breastfeeding initiation, duration or exclusivity. (http://dx.doi.org/10.3945/an.111.001016) Chapman et al (2010) also found that breastfeeding incidence increased significantly more among mothers attending WIC clinics offering breastfeeding peer counselors. (http://dx.doi.org/10.1177/0890334410369481)</p> | | | | | | | | |
| Significance: | <p>According to the Surgeon General’s Call to Action to Support Breastfeeding “one of the most highly effective preventive measures a mother can take to protect the health of her infant and herself is to breastfeed. However, in the U.S., while 75% of mothers start out breastfeeding, only 13 percent of babies are exclusively breastfed at the end of six months...A mother’s ability to begin and to continue breastfeeding can be influenced by a host of community factors... programs such as the U.S. Department of Agriculture’s WIC program can expand the support that women ideally have received in the hospital and help extend the duration of breastfeeding.”</p> <p>It focuses on increasing exclusive breastfeeding at 3 months, which is a milestone towards reaching exclusive breastfeeding at 6 months and one that is more within the control of the WIC peer counselor program.</p> | | | | | | | | |

ESM 6.1 - Percent of infants and children enrolled in WIC who are monitored using the Learn the Signs Act Early checklist

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

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|--|---|-------------------|------------|---------------------|-----|-------------------|--|---------------------|--|
| Measure Status: | Active | | | | | | | | |
| Goal: | Increase developmental monitoring of children enrolled in WIC to ensure early identification of delays and facilitate connection to services when needed. | | | | | | | | |
| Definition: | <table border="1"> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>Number of children enrolled in WIC who had a completed Act Early checklist</td> </tr> <tr> <td>Denominator:</td> <td>Number of infants and children enrolled in WIC who are due for certification or mid-certification appointments</td> </tr> </table> | Unit Type: | Percentage | Unit Number: | 100 | Numerator: | Number of children enrolled in WIC who had a completed Act Early checklist | Denominator: | Number of infants and children enrolled in WIC who are due for certification or mid-certification appointments |
| Unit Type: | Percentage | | | | | | | | |
| Unit Number: | 100 | | | | | | | | |
| Numerator: | Number of children enrolled in WIC who had a completed Act Early checklist | | | | | | | | |
| Denominator: | Number of infants and children enrolled in WIC who are due for certification or mid-certification appointments | | | | | | | | |
| Data Sources and Data Issues: | Massachusetts WIC data system | | | | | | | | |
| Evidence-based/informed strategy: | <p>This ESM measures use of the Learn the Signs Act Early checklist to monitor infants and children enrolled in WIC. The WIC Developmental Milestones Program is based on the CDC's "Learn the Signs. Act Early." It was developed in Missouri to integrate LTSAE into WIC clinics, promote referral for early identification, and encourage children's healthy growth and development. Because of its initial success, the program was replicated and refined in four Missouri counties, then expanded statewide and nationally through support from the CDC and the Association of Public Health Nutritionists.</p> <p>https://health.mo.gov/living/families/wic/pdf/wic-developmental-milestones-executive-summary.pdf https://asphn.org/learn-the-signs-act-early/</p> | | | | | | | | |
| Significance: | Early identification of developmental disorders is critical to the well-being of children and their families. Children from low income groups, such as those served by WIC, may experience delays in access to screening and diagnostic services and miss the opportunity to benefit from early intervention services. | | | | | | | | |

ESM 10.1 - Percent of School Based Health Center clients who are male
NPM 10 – Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

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|--|--|-------------------|------------|---------------------|-----|-------------------|-------------------------------------|---------------------|--------------------------------------|
| Measure Status: | Active | | | | | | | | |
| Goal: | Increase the proportion of SBHC clients who are male to more closely reflect the overall student population in Massachusetts | | | | | | | | |
| 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 male clients at all SBHCs</td> </tr> <tr> <td>Denominator:</td> <td>Number of total clients at all SBHCs</td> </tr> </table> | Unit Type: | Percentage | Unit Number: | 100 | Numerator: | Number of male clients at all SBHCs | Denominator: | Number of total clients at all SBHCs |
| Unit Type: | Percentage | | | | | | | | |
| Unit Number: | 100 | | | | | | | | |
| Numerator: | Number of male clients at all SBHCs | | | | | | | | |
| Denominator: | Number of total clients at all SBHCs | | | | | | | | |
| Data Sources and Data Issues: | SBHC Electronic Health Records and Apex Data Hub | | | | | | | | |
| Evidence-based/informed strategy: | <p>This ESM reflects efforts by the SBHC program to foster welcoming, inclusive, and supportive environments for all students and their families as a strategy for increasing engagement in preventive visits. The following studies have shown that SBHCs increase access to care and quality of care for underserved adolescents:</p> <ul style="list-style-type: none"> - Allison, Mandy A., et al. "School-based health centers: improving access and quality of care for low-income adolescents." <i>Pediatrics</i> 120.4 (2007): e887-e894. - McNall, Miles A., Lauren F. Lichy, and Brian Mavis. "The impact of school-based health centers on the health outcomes of middle school and high school students." <i>American Journal of Public Health</i> 100.9 (2010): 1604-1610. | | | | | | | | |
| Significance: | <p>SBHCs offer comprehensive primary care within schools where young people spend most of their time, contributing to engagement in adolescent preventive care. SBHC clinicians are skilled in motivational interviewing and have extensive knowledge of critical issues impacting the students they serve. SBHC clinicians are well integrated within their schools and are knowledgeable about appropriate services within their communities to ensure that students are connected with a medical home. In addition, every effort is made by SBHC staff to help students develop the skills they will need to navigate the health care system upon graduation from high school. Because young men are less likely than women to receive care from SBHCs, this ESM is specifically tracking the percentage of clients who are male, with the goal of reaching a proportion more similar to the student population in the state.</p> | | | | | | | | |

ESM 12.1 - Percent of youth ages 14 and older receiving services from the DPH Care Coordination Program who receive health transition information and support from their Care Coordinator

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

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|--|---|-------------------|------------|---------------------|-----|-------------------|--|---------------------|--|
| Measure Status: | Active | | | | | | | | |
| Goal: | All families of youth with special health care needs (YSHCN) ages 14 and older who receive services from the DPH Care Coordination Program will receive the education and support necessary to assist and prepare their youth for successful health transi | | | | | | | | |
| 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 ages 14 and older who received services from the DPH Care Coordination Program that received health transition information and support</td> </tr> <tr> <td>Denominator:</td> <td>Number of YSHCN ages 14 and older who received services from the DPH Care Coordination Program</td> </tr> </table> | Unit Type: | Percentage | Unit Number: | 100 | Numerator: | Number of YSHCN ages 14 and older who received services from the DPH Care Coordination Program that received health transition information and support | Denominator: | Number of YSHCN ages 14 and older who received services from the DPH Care Coordination Program |
| Unit Type: | Percentage | | | | | | | | |
| Unit Number: | 100 | | | | | | | | |
| Numerator: | Number of YSHCN ages 14 and older who received services from the DPH Care Coordination Program that received health transition information and support | | | | | | | | |
| Denominator: | Number of YSHCN ages 14 and older who received services from the DPH Care Coordination Program | | | | | | | | |
| Data Sources and Data Issues: | Data will be accessed from the DPH Care Coordination database. Care Coordinators track service delivery and record in the database the types of services provided to each client who received CC services during the reporting period. The database will need to be modified to include a data element on provision of health transition information and support. Systems will need to be put in place to flag youth who should receive these services. | | | | | | | | |
| Evidence-based/Informed strategy: | This ESM measures the provision of health transition information and support to youth ages 14 and older receiving services from the DPH Care Coordination Program from their Care Coordinators. As stated in the Clinical Report, Supporting the Health Care Transition from Adolescence to Adulthood in the Medical Home, jointly authored by the American Academy of Pediatrics, American Academy of Family Physicians and American College of Physicians, care coordination is part of transition planning for CYSHCN and may be instrumental in supporting the transfer of care from pediatric to adult medical subspecialists. | | | | | | | | |
| Significance: | Got Transition’s Six Core Elements cites care coordinators as key members of the collaborative team to support health care transition to adulthood. By providing information and support, DPH Care Coordinators can assist and complement the medical home’s work on transition readiness. | | | | | | | | |

ESM 14.1.1 - Percentage of women using the statewide smoking quitline who are pregnant
NPM 14.1 – Percent of women who smoke during pregnancy

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|--|--|-------------------|------------|---------------------|-----|-------------------|---|---------------------|--|
| Measure Status: | Active | | | | | | | | |
| Goal: | Increase the percentage of women using the statewide smoking quitline who are pregnant | | | | | | | | |
| 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 pregnant women who contact the statewide smoking quitline</td> </tr> <tr> <td>Denominator:</td> <td>Number of women who contact the statewide smoking quitline</td> </tr> </table> | Unit Type: | Percentage | Unit Number: | 100 | Numerator: | Number of pregnant women who contact the statewide smoking quitline | Denominator: | Number of women who contact the statewide smoking quitline |
| Unit Type: | Percentage | | | | | | | | |
| Unit Number: | 100 | | | | | | | | |
| Numerator: | Number of pregnant women who contact the statewide smoking quitline | | | | | | | | |
| Denominator: | Number of women who contact the statewide smoking quitline | | | | | | | | |
| Data Sources and Data Issues: | Massachusetts smoking quitline data | | | | | | | | |
| Evidence-based/informed strategy: | <p>This ESM measures efforts to promote awareness of risks of nicotine use in all forms during pregnancy and promote resources for quitting. 1-800-QUIT-NOW quitlines provide free and confidential services in English and Spanish, and translation for other languages, by a trained quit coach to stop smoking. Quit coaches connect callers with quit-smoking resources through the caller’s community programs, and callers may be able to receive free nicotine replacement therapy. http://makesmokinghistory.org/quit-now/what-is-the-helpline/</p> <p>The Surgeon General’s report states that “...the evidence is sufficient to infer that proactive quitline counseling, when provided alone or in combination with cessation medications, increases smoking cessation...and the evidence is sufficient to infer that tobacco quitlines are an effective population-based approach to motivate quit attempts and increase smoking cessation.” https://www.hhs.gov/sites/default/files/2020-cessation-sgr-full-report.pdf</p> | | | | | | | | |
| Significance: | <p>According to the Surgeon General’s report, “Tobacco use remains the number one cause of preventable disease, disability, and death in the United States. Approximately 34 million American adults currently smoke cigarettes, with most of them smoking daily. Nearly all adult smokers have been smoking since adolescence. More than two-thirds of smokers say they want to quit, and every day thousands try to quit. But because the nicotine in cigarettes is highly addictive, it takes most smokers multiple attempts to quit for good...</p> <p>As of 2015, 17% of pregnant women who smoked reported quitting smoking during the first trimester of their pregnancy, according to the National Health Interview Survey. This proportion is short of the HP2020 target of 30%. https://www.healthypeople.gov/2020/data-search/Search-the-Data#objid=5364.</p> <p>Title V plays an important role in preventing substance use, including tobacco, during pregnancy, a critical period of development in the lifecourse. Smoking during pregnancy increases the risk of complications, such as preterm birth, and increases an infant’s risk for low birth weight and congenital heart defects.</p> | | | | | | | | |

**Form 11
Other State Data
State: Massachusetts**

The Form 11 data are available for review via the link below.

[Form 11 Data](#)

**Form 12
MCH Data Access and Linkages**

State: Massachusetts

Annual Report Year 2022

| Data Sources | Access | | | | Linkages | |
|------------------------|--|--|-----------------------------|---|---|--|
| | (A) State Title V Program has Consistent Annual Access to Data Source | (B) State Title V Program has Access to an Electronic Data Source | (C) Describe Periodicity | (D) Indicate Lag Length for Most Timely Data Available in Number of Months | (E) Data Source is Linked to Vital Records Birth | (F) Data Source is Linked to Another Data Source |
| 1) Vital Records Birth | Yes | Yes | Daily | 0 | | <ul style="list-style-type: none"> • Pregnancy to Early Life Longitudinal Data System • Public Health Data Warehouse • Massachusetts Immunization Information System • Universal Newborn Hearing Screening • Birth Defects Monitoring Program • Neonatal Abstinence Syndrome Surveillance • CLPPP • Welcome Family |

| 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 |
| 2) Vital Records Death | Yes | Yes | Daily | 0 | Yes | <ul style="list-style-type: none"> • Birth certificates • Fetal death reports • Pregnancy to Early Life Longitudinal Data System • Public Health Data Warehouse • Universal Newborn Hearing Screening • Birth Defects Monitoring Program |
| 3) Medicaid | Yes | Yes | Annually | 24 | No | <ul style="list-style-type: none"> • Public Health Data Warehouse |
| 4) WIC | Yes | Yes | Annually | 12 | Yes | <ul style="list-style-type: none"> • Pregnancy to Early Life Longitudinal Data System • Public Health Data Warehouse |
| 5) Newborn Bloodspot Screening | Yes | No | Annually | 12 | No | |

| 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 |
| 6) Newborn Hearing Screening | Yes | Yes | Annually | 12 | Yes | <ul style="list-style-type: none"> • Early Intervention • Birth certificates • Death certificates • Birth Defects Monitoring Program • SET-NET • Bureau of Infectious Diseases data |
| 7) Hospital Discharge | Yes | Yes | Annually | 24 | Yes | <ul style="list-style-type: none"> • Pregnancy to Early Life Longitudinal Data System • Public Health Data Warehouse |
| 8) PRAMS or PRAMS-like | Yes | Yes | Annually | 11 | Yes | <ul style="list-style-type: none"> • Pregnancy to Early Life Longitudinal Data System |

Other Data Source(s) (Optional)

| 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 |
| 9) Birth Defects Monitoring Program | Yes | Yes | Annually | 12 | Yes | <ul style="list-style-type: none"> • Pregnancy to Early Life Longitudinal Data System • SET-NET • Neonatal Abstinence Syndrome Surveillance • Universal Newborn Hearing Screening |
| 10) Early Intervention | Yes | Yes | Annually | 12 | Yes | <ul style="list-style-type: none"> • Pregnancy to Early Life Longitudinal Data System • Public Health Data Warehouse • Universal Newborn Hearing Screening • Early Childhood Integrated Data System |
| 11) All Payer Claims Database | Yes | Yes | Annually | 24 | Yes | <ul style="list-style-type: none"> • Public Health Data Warehouse |

| 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 |
| 12) Neonatal Abstinence Syndrome Surveillance System | Yes | Yes | Quarterly | 6 | Yes | <ul style="list-style-type: none"> • Birth Defects Monitoring Program |
| 13) SET-NET | Yes | Yes | Quarterly | 2 | Yes | <ul style="list-style-type: none"> • Bureau of Infectious Diseases case surveillance data • Birth Defects Monitoring Program • Massachusetts Immunization Information System • Universal Newborn Hearing Screening |
| 14) Fetal Death Reports | Yes | Yes | Monthly | 1 | Yes | <ul style="list-style-type: none"> • Pregnancy to Early Life Longitudinal Data System • Public Health Data Warehouse • SET-NET • Pregnancy Associated Deaths/MMRIA |

| 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 |
| 15) Pregnancy Associated Death Data | Yes | Yes | Monthly | 1 | Yes | <ul style="list-style-type: none"> • Pregnancy to Early Life Longitudinal Data System • SET-NET |

Form Notes for Form 12:

None

Field Level Notes for Form 12:

| | |
|--------------------------|--|
| Data Source Name: | 1) Vital Records Birth |
| | Field Note: The MDPH Bureau of Infectious Disease and Laboratory Sciences (BIDLS) does the linkage between the MIIS and birth certificate every 6-8 months and sends the linked file to Title V staff. |

| | |
|--------------------------|--|
| Data Source Name: | 7) Hospital Discharge |
| | Field Note: PELL links multiple data sources statewide using hospital discharge as one of three datasets to create a core triangulation between mother and child through mother's and child's hospitalization delivery/birth discharge and the child's birth certificate data. |

Other Data Source(s) (Optional) Field Notes:

| | |
|--------------------------|--|
| Data Source Name: | 11) All Payer Claims Database |
| | Field Note: Public Health Data Warehouse links multiple data sources statewide using the APCD as a spine for linkage, including Death file, Hospital Discharge, Prescription Drug Monitoring Program, Emergency Dept, Observational Stay, Ambulance Transport, and the Department of Mental Health treatment database. |

| | |
|--------------------------|---|
| Data Source Name: | 13) SET-NET |
| | Field Note: Surveillance for Emerging threats to Pregnant People and Infants Network (SET-NET). SET-NET has two components, COVID-19 Pregnancy Surveillance (led by BFHN/CBDRP) and Hepatitis C Pregnancy Surveillance (led by BIDLS). The SET-NET dataset is created by linking infectious disease case surveillance data to Vitals. |