

TITLE V MATERNAL AND CHILD HEALTH SERVICES BLOCK GRANT TO STATES PROGRAM

GUIDANCE AND FORMS
FOR THE
TITLE V APPLICATION/ANNUAL REPORT

APPENDIX OF SUPPORTING DOCUMENTS

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APPENDIX A: HISTORY AND ADMINISTRATIVE BACKGROUND

As one of the largest Federal block grant programs, Title V is a key source of support for promoting and improving the health of all the nation's mothers and children. When Congress passed the Social Security Act in 1935, it contained the initial key landmark legislation which established Title V. This legislation is the origin of the federal government's pledge of support to states and their efforts to extend and improve health and welfare services for mothers and children throughout the nation. To date, the Title V federal-state partnership continues to provide a dynamic program to improve the health of all mothers and children, including children with special health care needs (CSHCN).

The Maternal and Child Health Bureau

The Maternal and Child Health Bureau (MCHB) is the principal focus within Health Resources and Services Administration (HRSA) for all Maternal and Child Health (MCH) activities within the Department of Health and Human Services (HHS). MCHB's mission is to improve the health of America's mothers, children and families. We envision an America where all children and families are healthy and thriving. To achieve its mission, MCHB directs resources towards a combination of integrated public health services and coordinated systems of care for the MCH population.

Within the MCHB, the Division of State and Community Health (DSCH) has the administrative responsibility for the *Title V MCH Services Block Grant to States Program* (hereafter referred to as the MCH Block Grant). DSCH is committed to being the Bureau's main line of communication with states and communities, in order to consult and work closely with both of these groups and others who have an interest in and contribute to the provision of a wide range of MCH programs and community-based service systems.

Maternal and Child Health Services Block Grant (Title V)

Under Title V, MCHB administers a Block Grant and competitive Discretionary Grants. The purpose of the MCH Block Grant is to create federal/state partnerships in 59 states and jurisdictions for developing service systems that address MCH challenges, such as:

- Significantly reducing infant mortality;
- Providing comprehensive care for all women before, during, and after pregnancy and childbirth;
- Providing preventive and primary care services for infants, children, and adolescents;
- Providing comprehensive care for children and adolescents with special health care needs;
- Immunizing all children;
- Reducing adolescent pregnancy;

- Preventing injury and violence;
- Putting into community practice national standards and guidelines for prenatal care, for healthy and safe childcare, and for the health supervision of infants, children, and adolescents;
- Assuring access to care for all mothers and children; and
- Meeting the nutritional and developmental needs of mothers, children and families.

Under Title V, MCHB also administers two types of Federal Discretionary Grants, Special Projects of Regional and National Significance (SPRANS) and Community Integrated Service Systems (CISS) grants. SPRANS funds projects (through grants, contracts, and other mechanisms) in research, training, genetic services and newborn screening/follow-up, sickle cell disease, hemophilia, and MCH improvement. CISS projects (through grants, contracts, and other mechanisms) seek to increase the capacity for service delivery at the local level and to foster formation of comprehensive, integrated, community level service systems for mothers and children.

In addition to SPRANS and CISS grants, the MCHB also administers the following categorical programs:

- Emergency Medical Services for Children;
- Sickle Cell Disease Treatment Demonstration Program;
- Healthy Start Initiative;
- Universal Newborn Hearing Screening;
- Heritable Disorder Program
- Autism;
- Maternal, Infant, and Early Childhood Home Visiting Program; and
- Family to Family Health Information Centers.

In recent years, some state Title V programs have begun to utilize the life course model as an organizing framework for addressing identified MCH needs. The life course approach points to broad social, economic, and environmental factors as underlying contributors to health and social outcomes. This approach also focuses on persistent inequalities in the health and well-being of individuals and how the interplay of risk and protective factors at critical points of time can influence an individual's health across his/her lifespan and potentially across generations.

Maternal and Child Health Block Grant (State Formula Grants)

Since its original authorization in 1935, Title V of the Social Security Act has been amended several times to reflect the increasing national interest in maternal and child health and well-being. One of the first changes occurred when Title V was converted to a block grant program as part of the Omnibus Budget Reconciliation Act (OBRA) of 1981. This change resulted in the consolidation of seven categorical programs into a single block grant. These

programs included:

- Maternal and Child Health and Services for Children with Special Health Care Needs;
- Supplemental Security Income for children with disabilities;
- Lead-based paint poisoning prevention programs;
- Genetic disease programs;
- Sudden infant death syndrome programs;
- Hemophilia treatment centers; and
- Adolescent pregnancy grants.

Another significant change in the Title V MCH Block Grant came as a result of the Omnibus Budget Reconciliation Act (OBRA) of 1989, which specified new requirements for accountability. The amendments enacted under OBRA introduced stricter requirements for the use of federal funds and for state planning and reporting. Congress sought to balance the flexibility of the block grant with greater accountability, by requiring State Title V programs to report their progress on key MCH indicators and other program information. Thus, the block grant legislation emphasizes accountability while providing states with appropriate flexibility to respond to state-specific MCH needs and to develop targeted interventions and solutions for addressing them. This theme of assisting states in the design and implementation of MCH programs to meet state and local needs, while at the same time asking them to account for the use of federal/state Title V funds, was embodied in the requirements contained in the Guidance documents for the state MCH Block Grant Applications/Annual Reports.

In 1993 the Government Performance and Results Act (GPRA), Public Law 103-62, required federal agencies to establish measurable goals that could be reported as part of the budgetary process. For the first time, funding decisions were linked directly with performance. Among its purposes, GPRA is intended to "...improve Federal program effectiveness and public accountability by promoting a new focus on results, service quality, and customer satisfaction." GPRA requires each federal agency to develop comprehensive strategic plans, annual performance plans with measurable goals and objectives, and annual reports on actual performance compared to performance goals. The MCHB effort to respond to GPRA requirements coincided with other planned improvements to the MCH Block Grant Guidance. As a result, the MCH Block Grant Application/Annual Report and forms contained in the 1997 edition of the *Maternal and Child Health Services Title V Block Grant Program - Guidance and Forms for the Title V Application/Annual Report* served to ensure that the states and jurisdictions could clearly, concisely, and accurately tell their MCH "stories." This Application/Annual Report became the basis by which MCHB met its GPRA reporting requirements for the MCH Block Grant to States Program.

In 1996, the MCHB began a process of programmatic assessments and planning activities aimed at improving the Title V MCH Block Grant Application/Annual Report Guidance document for states. Since that time, the *Maternal and Child Health Services Title V Block*

Grant Program - Guidance and Forms for the Title V Application/Annual Report (Guidance) has been revised seven times. Updated Guidance documents are submitted to and approved by the Office of Management and Budget (OMB) prior to their release. Revisions to each subsequent edition of the Guidance have considered changes in MCH priorities, availability of new national data sources and opportunities for refining and streamlining the Application/Annual Report preparation and submission process for states. The reduced burden that resulted from this latter commitment was largely achieved through efficiencies that were created by the electronic reporting vehicle for the state MCH Block Grant Applications/Annual Reports, specifically the Title V Information System (TVIS.)

Title V Information System

The development of an electronic reporting package in 1996 was a significant milestone for the State MCH Block Grants. Advances in technology allowed for the development of an electronic information system (TVIS) within the next several years. The TVIS is designed to capture the performance data and other program and financial information contained in the state Applications/Annual Reports. While descriptive information is available on state Title V-supported efforts, state MCH partnership efforts and other program-specific initiatives of the state in meeting its MCH needs, TVIS primarily serves as an online, Web-accessible interface for the submission of the 59 state and jurisdictional Title V MCH Block Grant Applications/Annual Reports each year by July 15th. Developed in conjunction with the program requirements outlined in the Title V MCH Block Grant Application/Annual Report Guidance, the TVIS is available to the public on the World Wide Web at: <https://mchdata.hrsa.gov/TVISReports/>. Over the years, the TVIS has increasingly become recognized as a powerful and useful tool for a number of audiences. The transformational changes to the MCH Block Grant outlined in this revised Application/Annual Report Guidance mandate the development of a new data collection and web report system for the TVIS. HRSA is providing funding support for a contract to develop, implement and operate this new information system.

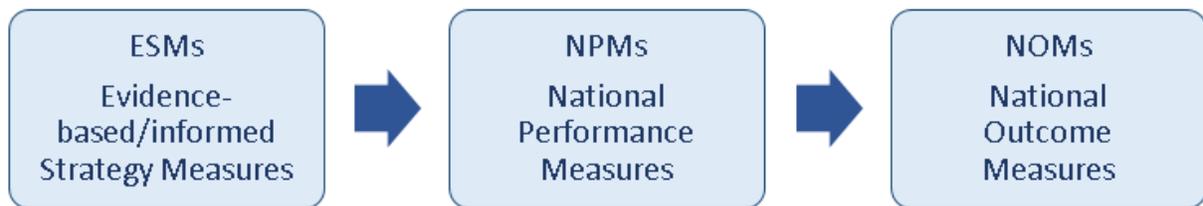
Integrated with HRSA's grants management system (i.e., the HRSA Electronic Handbooks (EHB),) the TVIS makes available to the public through its web reports the key financial, program, performance, and health indicator data reported by states in their yearly MCH Block Grant Applications/Annual Reports. Examples of the data that are collected include: information on populations served; budget and expenditure breakdowns by source of funding, service and program; program data, such as individuals served and breakdowns of MCH populations; other state data (OSD); and performance and outcome measure data for the national and state measures. Reporting on performance relative to the national measures is used to assess national progress in key MCH priority areas and to facilitate the Bureau's annual GPRA reporting.

APPENDIX B: PERFORMANCE MEASURE FRAMEWORK

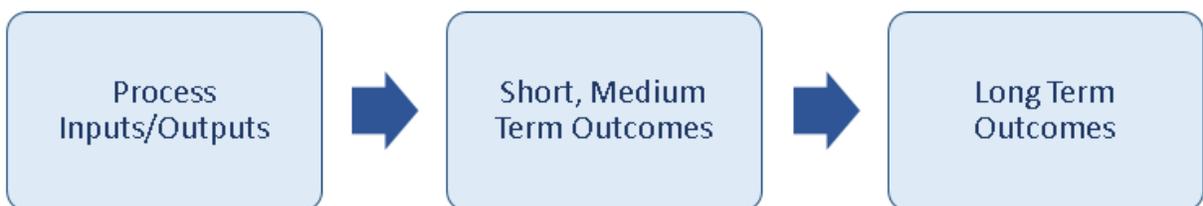
Overview of the Framework

The national performance measure framework is based on a three-tiered performance measure system: National Outcome Measures (NOMs), National Performance Measures (NPMs), and Evidence-based or -informed Strategy Measures (ESMs). In brief, NOMs are the ultimate health outcomes that Title V is attempting to improve. The NPMs are considered to be more directly modifiable by state Title V program efforts, and influence NOMs. ESMs are developed by states to capture their evidence-based or informed programmatic efforts to affect NPMs and in turn NOMs. The framework is intended to better highlight the impact of Title V investments and provides states with flexibility in selecting NPMs and developing state performance measures (SPMs) and ESMs to address the state's priority needs. This guidance reduces the minimum number of required NPM selections to five; at least one in each population domain. It also increases flexibility for states to select as many NPMs and SPMs as needed to reflect priority needs identified from the five-year needs assessment.

Title V Performance Measure Framework



Evaluation Logic Model



Measures were considered as NOMs, which primarily reflect ultimate or longer-term indicators of population health status or quality systems of care, if they met one or more of the following criteria: it was mandated by the Title V legislation that the data be collected; it was considered a sentinel health marker for women, infants, or children; it was a major focus of either the Title V legislation or Title V activities; it was considered an important health condition to monitor because the prevalence was increasing, but the reasons for the increase were unclear; or there was a recognized need to move the MCH field forward in this area, even if there was not yet a consensus on how to measure the construct. The latter were considered

developmental outcome measures. A total of 25 NOMs were selected with three new additions in the updated guidance: teen births, postpartum depression, and forgone health care.

Measures were considered as NPMs, or short/medium term indicators of health behaviors or health care access/quality, if they met one or more of the following criteria: there was a large investment of resources as determined by the state narratives; it was considered modifiable through Title V activities; a state could delineate measurable activities to address the performance measures; significant disparities existed among population groups; research had indicated that the condition or activity had large societal costs; or research had indicated that the promotion of certain behaviors, practices or policies had improved outcomes. There also had to be evidence that an NPM was associated with at least one of the NOMs (see Table 2 in this Appendix) for evidence-based or informed linkages between NPMs and NOMs). However, it is important to recognize that NOMs are multifactorial and improvement in a given NPM may not necessarily result in improvement of the associated NOM. Fifteen NPMs were identified for the Title V MCH Services Block Grant. In this updated guidance, two additional indicators of a safe sleep environment will be tracked for states that select this NPM.

The ESMs are the key to understanding how a State Title V program tracks programmatic investments or inputs designed to impact the NPMs. In the framework, states select evidence-based or evidence-informed strategies and activities designed to impact the NPMs; States then create ESMs to track State Title V strategies and inputs contained in the State Action Plan. The development of ESMs is guided through an examination of evidenced-based or evidence-informed strategies, and determining what components are practical, meaningful, measurable, and achievable. The main criteria for ESMs are being meaningfully related to the selected NPM through scientific evidence or theory and being measurable by the state with improvement achievable in multiple years of the five-year reporting cycle. States can determine the number of ESMs that they will use for addressing the selected NPMs but there is a required minimum of one ESM for each NPM. States may also add, modify, replace, or retire ESMs over the five-year reporting cycle, as new strategies or measurement methods emerge, objectives are achieved without further room for improvement, or the strategy did not produce intended results.

The 15 NPMs address key national MCH priority areas in five MCH population health domains: 1) Women/Maternal Health; 2) Perinatal/Infant Health; 3) Child Health; 4) CSHCN; and 5) Adolescent Health. The five MCH population health domains are contained within the three legislatively-defined MCH populations [Section 505(a)(1).] The first two domains are included under “preventive and primary care services for pregnant women, mothers and infants up to age one,” which is the first of the three defined MCH populations. Child and adolescent health are included in the second defined MCH population, specifically “preventive and primary care services for children.” Services for CSHCN is the third legislatively-defined MCH population. Presented in the table below are the 15 NPMs and the corresponding MCH Population domain(s) and applicable subgroup options for ESMs.

Table 1. NPMs and MCH Population Domains

NPM #	National Performance Measures	MCH Population Domains	ESM Subgroup Options (if applicable)
1	Well-woman visit	Women/Maternal Health	
2	Low-risk cesarean delivery	Women/Maternal Health	
3	Risk-appropriate perinatal care	Perinatal/Infant Health	
4	Breastfeeding	Perinatal/Infant Health	
5	Safe sleep	Perinatal/Infant Health	
6	Developmental screening	Child Health	
7	Injury hospitalization	Child Health and/or Adolescent Health	Children 0 through 9 Adolescents 10 through 19 All Children 0 through 19
8	Physical activity	Child Health and/or Adolescent Health	Children 6 through 11 Adolescents 12 through 17 All Children 6 through 17
9	Bullying	Adolescent Health	
10	Adolescent well-visit	Adolescent Health	
11	Medical home	Children with Special Health Care Needs (CSHCN), Child and Adolescent Health	CSHCN CSHCN and non-CSHCN
12	Transition	Children with Special Health Care Needs (CSHCN) and Adolescent Health	CSHCN CSHCN and non-CSHCN
13	Preventive dental visit – Pregnancy Preventive dental visit – Child/Adolescent	Women/Maternal Health, Child Health, and/or Adolescent Health	Pregnant women Children 0 through 5 Children 6 through 11 Adolescents 12 through 17 All Children 0 through 17
14	Smoking – Pregnancy Smoking – Household	Women/Maternal Health, Child Health, and/or Adolescent Health	Pregnant women Children 0 through 5 Children 6 through 11 Adolescents 12 through 17 All Children 0 through 17
15	Adequate insurance	Child Health, Adolescent Health, and/or Children with Special Health Care Needs (CSHCN)	All Children CSHCN

The NPMs incorporate two significant concepts: first, Title V is responsible for promoting the health of all mothers and children, which includes an emphasis on CSHCN and their families; and second, the development of life course theory has indicated that there are critical stages, beginning before a child is born and continuing throughout life, which can influence lifelong health and wellbeing (see Table 3 in this Appendix for a crosswalk of NPM/NOMs and AMCHP Lifecourse Indicators).

In implementing this framework, states will choose a minimum five out of 15 NPMs for its Title V program to address during the current five-year needs assessment cycle, at least one in each MCH population domain. To promote flexibility, each MCH population domain contains at least three NPM options. The same measure selected in multiple domains (NPM #7, NPM #8,

NPM #11, NPM #12, NPM #13, NPM #14 and NPM #15) will only count once toward the minimum of five. There are no mandatory NPMs and no maximum for the number of NPMs that a state can select. Thus, a state is not required to make any changes to its current NPM selections and the state may continue to implement the State Action Plan that was established for the current reporting cycle.

For example, if a state selects a compound measure such as NPM #14 in Women/Maternal Health and Child Health, it would only count once towards the minimum of five NPMs, and another measure would need to be selected in either Women/Maternal or Child Health to satisfy the requirement of one measure in each population domain. Injury hospitalization, physical activity, medical home, preventive dental visit, household smoking, and adequate insurance can be selected for either the Child or the Adolescent Health domains, or both, because the age ranges span both domains. It is recognized that the strategies and accompanying ESMs may be different, depending on the children's ages, for injury hospitalization, physical activity, preventive dental visit, and household smoking; therefore, these measures have various subgroup options for specifying the focus of ESMs. Given their particular importance for CSHCN, medical home and transition must include a focus on CSHCN, even if they are selected within the Child and/or Adolescent Health domain.

When selecting NPMs it is important that the alignment of the NPMs to the state identified priorities is clear. If the priority does not align with a NPM, the state should develop a state performance measure (SPM). The minimum of five NPMs allows states flexibility, and ensures that the selected NPMs and chosen SPMs together reflect the state's identified priority needs. While the SPM is not part of the national performance measurement framework, it is a critical component in addressing priorities. States can select as many SPMs as they need to address their MCH priority needs.

A sixth domain, Cross-Cutting/Systems Building, refers to public health system issues that impact all MCH population groups. This domain does not contain any NPMs but allows states to develop unique SPMs to address priority areas that cut across all population health domains. Example SPM topics may include but are not limited to:

- Family partnership activities across all population health domains;
- Social determinants of health;
- Workforce development; and
- Enhancement of data infrastructure.

Implementation of Measurement

National Outcome Measures

NOMs are longer-term and/or legislatively required indicators, many of which may be influenced by NPMs (see Table 2) and are important to monitor and assess as a core function of

public health that may stimulate program and policy action. Thus, NOMs should be tracked to understand the MCH population's health, and are important for the development of the needs assessment and selection of NPMs. Changes in NOM indicators, which may result from improvement in NPMs, can be discussed in the appropriate population domain section of the narrative, but there is not a reporting requirement for this discussion. Data for NOMs will be prepopulated, where possible. States do not provide performance objectives for NOMs.

National Performance Measures

Once NPMs are selected, a state will track the five NPMs throughout the five-year reporting cycle. States are encouraged not to change the selected NPMs during the five-year reporting cycle. If a state determines that a NPM needs to be changed, clear justification must be provided. In an effort to reduce state burden, annual performance data (indicator/numerator/denominator) for the NOMs and the NPMs will be prepopulated by MCHB from national data sources, as available, and provided to the states for their use in preparing the yearly Title V MCH Block Grant Applications/Annual Reports. Data will be provided overall by year to facilitate objective-setting and performance monitoring, as well as by various demographic stratifiers (e.g. age, race/ethnicity, education, urban/rural residence) to identify priority populations for targeting strategies and programmatic interventions. If a state selects a NPM which is not part of the national data source, the state can develop its own detail sheet and report its data for the measure. However, the definition and data that are collected must match the definition and measure of the national data source.

In the first reporting year of this Guidance, a state will select a minimum of five NPMs to complete the current five-year needs assessment cycle ending in FY 2020. States will continue using the determined performance objectives from the previous guidance until FY 2020. Performance objectives for future years can be changed for individual NPMs based on ongoing needs assessment efforts and performance monitoring.

Other Guidelines for NPMs

Use of Provisional Data: States may, but are not required to, include more timely provisional data if they choose. Providing this data will not replace the prepopulated final data provided for the measures.

Lacking a National Data Source: States can choose a measure if they do not have the data source noted on the detail sheet, as long as they provide the indicator, numerator and denominator data as defined on the detail sheet. For Pregnancy Risk Assessment Monitoring System (PRAMS), states will be able to submit their PRAMS or PRAMS-like data to TVIS following the same definition for a given measure if CDC cannot furnish it. The same situation may apply to other data sources; for example, not all states with hospital discharge data furnish it to AHRQ. If a state provides its own data from a different source, this should be annotated in a field note.

Integrated Measures (NPM #13 and NPM #14): The integrated measures of preventive dental visit and smoking have two distinct measures, one in pregnancy and one for children/adolescents. States may select these NPMs for one or more of the following MCH population domains: Women/Maternal Health; Child Health; Adolescent Health. If a state selects one of these NPMs for Women/Maternal Health (#13.1 and NPM #14.1) and also for Child and/or Adolescent Health (NPM #13.1 and NPM #14.1), states will be expected to develop multiple ESMs, at least one for each measure.

Evidence-based or -informed Strategy Measures

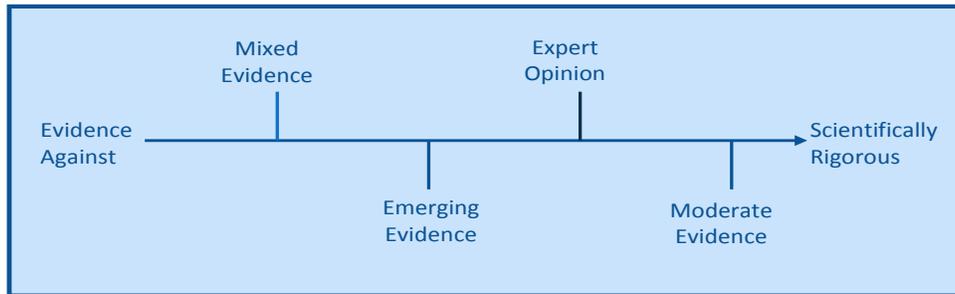
Developed by the state, ESMs are measures that quantify and assess the outputs of State Title V strategies and inputs identified in the State Action Plan. The development of ESMs is guided through an examination of evidenced-based or evidence-informed strategies, and determining which components are meaningful, measurable, and achievable. The main criteria for ESMs is that they are meaningfully related to the selected NPM through scientific evidence or theory, and they are measurable by the state with improvement achievable in multiple years or throughout the five-year reporting cycle. Most issues in MCH are multifactorial; therefore, states are strongly encouraged to develop multiple strategies, each with a related ESM, to impact a selected NPM. Given that ESMs capture state programmatic efforts, it is recommended that states develop corresponding ESMs for strategies in which they are investing the most activity and/or funding. However, states are only required to have at least one active ESM for each of the NPMs selected.

The key for selecting an effective strategy to impact an NPM is identifying evidence-based or –informed practices. Since the initiation of the MCH Block Grant transformation in 2015, MCHB has supported a variety of technical assistance efforts to support States in the identification and implementation of evidence-based or -informed MCH program strategies and measures. For example, MCHB funded the Strengthen the Evidence Base for MCH Programs initiative at The Johns Hopkins University (<http://semch.org/about.html>). This partnership initiative promotes an “evidence-informed” approach, which the McMaster group defines as “the purposeful and systematic use of the best available evidence to inform the assessment of various options and related decision making in practice, program development, and policy making.”¹ Consistent with this approach, the initiative has developed a continuum of evidence model that helps states to use the best available MCH science while also encouraging innovation in evidence-informed programming (<http://www.semch.org/rating-the-evidence.html>). Evidence-based strategies are generally those that have either moderate evidence or are scientifically rigorous, while evidence-informed are those that have emerging evidence or are based on expert opinion. “Evidence-informed” is meant to convey that there is information suggesting that a

¹ McMaster University. Health Evidence Glossary. Available <http://www.healthevidence.org/glossary.aspx#E>, Accessed 9/9/15

certain strategy could be effective in addressing a NPM. These are strategies that have not yet been rigorously tested or evaluated but that incorporate a theoretical model from other effective public health practices or apply a novel approach grounded in scientific theory. This continuum and its rationale is shown in the following figure.

The Evidence Continuum



For each category of evidence noted above, the table below provides a descriptive statement and criteria.

Evidence Ratings (Adapted from RWJ *What Works for Health*)²

Rating	Explanation
Scientifically Rigorous	Strategies with this rating are most likely to make a difference. These strategies have been tested in many robust studies with consistently positive results.
Moderate Evidence	Strategies with this rating are likely to work, but further research is needed to confirm effects. These strategies have been tested more than once and results trend positive overall.
Expert Opinion	Strategies with this rating are recommended by credible, impartial experts and are consistent with accepted theoretical frameworks. However, the strategies have limited research documenting effects; further research, often with stronger designs, is needed to confirm effects.
Emerging Evidence	Strategies with this rating have limited research documenting effects. These strategies need further research, often with stronger designs, to confirm effects.
Mixed Evidence	Strategies with this rating have been tested more than once and results are inconsistent or trend negative; further research is needed to confirm effects.
Evidence Against	Strategies with this rating are not good investments. These strategies have been tested in many robust studies, are not effective and sometimes produce harmful results.

Beyond scientific evidence of effectiveness, additional considerations of reach, feasibility, sustainability, and transferability should be considered in terms of likely impact. It is important

² Adapted from the Robert Wood Johnson *What Works for Health* project. Available at: <http://www.countyhealthrankings.org/roadmaps/what-works-for-health>, accessed 9/9/15

to note that there may be a need for states to adapt strategies based on differences in populations and settings, available resources and other considerations. The checklist below may be helpful in identifying a meaningful strategy and operationalizing the output as a measure. A given strategy should be based on, or informed by, evidence of effective practice in direct relation to improving the NPM rather than a strategy that has an indirect relationship. An example of an indirect relation are efforts to improve the content or quality of well-woman or adolescent visits as a strategy for improving access or utilization. While the ESMs may be either directly or indirectly related to the NPM, states/jurisdictions are encouraged to select at least one ESM that directly corresponds to the selected NPM. The strategy should be relevant to state priorities and tailored or adapted for contextual settings and population groups where applicable. It is similarly critical for the strategy to be feasible for the state to implement within the five-year cycle and involve stakeholder input or buy-in from partners who may be instrumental in successfully executing the strategy or tracking output. The strategy should also have potential for improvement (i.e. not already or nearly accomplished).

ESM Checklist	Check if Answer is Yes
1: The strategy is meaningful	
The strategy is evidence-based/informed in direct relation to the NPM	<input type="checkbox"/>
The strategy is relevant to state priorities and context	<input type="checkbox"/>
The strategy is feasible and involved stakeholder input or buy-in	<input type="checkbox"/>
The strategy has potential for improvement	<input type="checkbox"/>
2: The strategy output is measurable as an ESM	
The ESM is a number, %, rate, count, yes/no*	<input type="checkbox"/>
The ESM is well-defined and specific	<input type="checkbox"/>
Data are available to measure and track the ESM over time	<input type="checkbox"/>
The ESM can show incremental change over time	<input type="checkbox"/>
3: Improvement in the ESM is achievable	
Improvement attainable over multiple assessments	<input type="checkbox"/>
Sensitive to change within a defined time period	<input type="checkbox"/>

*Quantitative measures are recommended over qualitative yes/no measures to quantify strategy outputs and show improvement over time in relation to the NPM.

Once the state identifies a strategy it intends to use, the state will develop and operationalize the outputs of this strategy as a measure or ESM. Given that ESMs are intended to measure progress over time, they should be quantifiable (e.g., number, percent, rate, count), well-defined and specific (i.e., specifically defined indicator, numerator, and denominator), and there should be data available to measure and track the ESM with incremental change over time. The setting of improvement objectives marks the final phase of ESM development and offers an important check that improvement in the ESM is expected and attainable over

multiple assessments within a reasonable time period. Objectives should reflect an improvement goal over multiple years of the five-year reporting cycle rather than a static objective over time. Sample strategies, measures, and objectives for NPM #5 are provided within the publication by Kogan et al (2015).³

While yes/no measures are acceptable, quantitative measures are preferred to capture greater detail on strategy outputs and show more than a single improvement over time. A yes/no indicator tends to either capture a single activity toward a broader strategy that is achieved in one year and lacks future opportunity for improvement over multiple assessments or a very broad policy change that may not show progress for many years. In both cases, multi-year improvement in the ESM is not attainable due to a yes/no specification. Ideally, there should be annual and incremental improvements shown over time in an ESM that can be examined in relation to changes in the corresponding NPM.

For example, a state may select an evidence-informed strategy of improving provider training on a particular topic. This could be broken down into smaller activities, such as identifying or developing a training curriculum and then administering or promoting the training, but these activities are part of a broader strategy that could be tracked consistently over time with an indicator of the number or percentage of providers who received training. Activities may be discussed in the narrative section to provide context to any ESM. To further strengthen incremental improvement potential, the ESM could reference the receipt of training within the past 3 to 5 years since the number trained in a given year may not increase over time and lack an appropriate improvement objective.

Another example involves a strategy of implementing a policy or program. Similar to the example above, a yes/no measure lacks potential to show improvement over multiple assessments and, in this case, progress may or may not be achievable in a reasonable period. When a yes/no option is being considered, it is best to identify and track fidelity to the policy/program goal through a quantitative measure with potential for incremental improvement through additional activities or to assure intended results after implementation. For example, a strategy for a policy change to increase Medicaid eligibility may not be achievable for many years but the goal of the strategy to improve Medicaid enrollment (#/% enrolled) could be directly assessed and show progress over multiple years through additional activities, such as outreach and enrollment, both before and after a Medicaid policy or procedural change.

States have provided strong examples of well-defined and well-written ESMs, which demonstrate that states have examined the evidence-base for a strategy, determined the appropriate way to measure the strategy, and developed improvement objectives.

³ : Kogan MD, Dykton C, Hirai AH, Strickland BB, Bethell CD, Naqvi I, Cano CE, Downing-Futrell SL, Lu MC. A new performance measurement system for maternal and child health in the United States. *Matern Child Health J.* 2015 May;19(5):945-57. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4428536>

For the annual reports covered under this Guidance, as new ESMs are introduced, states will develop a detail sheet for each ESM, which they will submit as part of their Application/Annual Report. On the detail sheet, states will define the: (1) measures; (2) goal; (3) indicator, numerator, and denominator; (4) data source; and (5) significance. States will track performance for the ESMs that were established for this five-year needs assessment cycle. States will determine performance objectives for each of the ESMs for application years FY 2019 - FY 2020. These objectives can be revised, as needed, for future reporting years. Data for the ESMs (i.e., numerator/denominator) will be entered annually by the state. During the five-year reporting cycle, ESMs may be added, modified, replaced, or retired, as new strategies or measurement methods emerge, objectives are achieved without further room for improvement, or the strategy did not produce intended results.

States should work closely with family partnerships as they revise/develop the ESMs for their selected NPMs. For purposes of the MCH Block Grant, family partnership is defined as patients, families, their representatives, and health professionals working in active partnership at various levels across the health care system - direct care, organizational design, governance and policy making - to improve health and health care.⁴ This partnership is accomplished through the intentional practice of working with families for the ultimate goal of positive outcomes in all areas through the life course. Relevant resources include, but are not limited to, the *National Consensus Standards for Systems of Care for Children and Youth with Special Health Care Needs*, authored by the Association of Maternal and Child Health Programs (AMCHP, 2014) and available at: http://www.lpfch.org/sites/default/files/field/publications/developing_structure_and_process_-_white_paper_and_standards.pdf; a series of reports and case studies entitled, *Sustaining and Diversifying Family Engagement in Title V MCH and CYSHCN Programs* (AMCHP, 2016); and other resources that are available through *Family Voices*.

Working with the Measures States Currently Have

As noted, this Guidance reduces the minimum number of required NPM selections to five, with at least one in each population domain. States have the option to continue using measures selected in the previous guidance, provided the NPMs selected in multiple domains (NPM #7, NPM #8, NPM #11, NPM #12, NPM #13, NPM #14 and NPM #15) only count once toward the minimum of five. With a reduced number of NPMs, states have increased flexibility and may choose to retire up to three NPMs (out of the eight selected NPMs) from the previous Guidance to better address the state's priorities. If retiring measures, the state should provide reasoning in their FY 2019 application for the retired measure.

Selecting New Measures

The reduced number of NPMs allows states more flexibility in developing SPMs that align with the state's priorities. States also have the opportunity to develop SPMs that will specifically

⁴ Carman K., Dardess, P., Maurer, M., Sofaer, S., Adams, K., Bechtel, C., Sweeney, J. "Patient and Family Engagement: A framework for understanding the elements and developing interventions and policies." *Health Affairs*. 2013; 32:223-231.

impact infrastructure through the Cross-cutting/Systems Building domain to improve the areas impacting multiple population domains like family partnership and data infrastructure.

When selecting new measures it is important that the following checklist items have been satisfied.

Measure Checklist	Check if Answer is Yes
A minimum of 5 NPMs is selected	<input type="checkbox"/>
There is at least one NPM selected for each population health domain <i>*NPM #7, #8, #11, #12, #13, #14, #15 selected in multiple domains count once toward the minimum of five</i>	<input type="checkbox"/>
There is a NPM/SPM for each state priority	<input type="checkbox"/>
All selected NPMs/SPMs have clear alignment with the state priorities	<input type="checkbox"/>

State Performance and Outcome Measures

To address state priorities not addressed by the National Performance Measures, the State Performance Measures (SPMs) can be developed. There is no minimum or maximum number of SPMs required. As mentioned earlier, the combination of NPMs with state-developed SPMs allows the state flexibility to reflect its priority needs from the most recent Five-Year Needs Assessment. For the developed SPMs, states will continue with the performance objectives for five years (FY 2018-FY 2022) for each of the measures. States may revise their SPM objectives in future years' Applications/Annual Reports. The development of the SPMs coincides with the selection of NPMs and the development of the state ESMs.

States will also develop detail sheets on these measures, which will define the: (1) measure; (2) goal; (3) indicator, numerator, and denominator; (4) data source; and (5) significance. States will track their developed SPMs throughout the five-year reporting cycle. Data for the SPMs (i.e., indicator/numerator/denominator) will be entered annually by the state. A state can retire a SPM during the five-year reporting cycle and replace it with another SPM based on its MCH priority needs. States are not required to develop ESMs for SPMs.

A state may also develop (but is not required to develop) one or more State Outcome Measures (SOMs) based on its MCH priorities, as determined by the findings of the Five-Year Needs Assessment, provided that none of the NOMs address the same priority area for the state. A SOM should be linked with a performance measure to show the impact of performance on the intended outcome. States will track the SOMs during the five-year reporting cycle and the SOM can be retired if the state chooses. Data for the SOMs (i.e., indicator/numerator/ denominator) will be entered annually by the state.

Table 2. Evidence-based/informed National Performance and Outcome Measure Linkages*

National Outcome Measure		National Performance Measure														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
#	Short Title	Well-woman visit	Low-risk cesarean delivery	Risk-appropriate perinatal care	Breastfeeding	Safe sleep	Developmental screening	Injury hospitalization	Physical activity	Bullying	Adolescent well-visit	Medical home	Transition	Preventive dental visit	Smoking	Adequate insurance
1	Early prenatal care															
2	Severe maternal morbidity	x	x												x	
3	Maternal mortality	x	x												x	
4	Low birth weight	x													x	
5	Preterm birth	x													x	
6	Early term birth	x													x	
7	Early elective delivery															
8	Perinatal mortality	x		x											x	
9.1	Infant mortality	x		x	x	x									x	
9.2	Neonatal mortality	x		x											x	
9.3	Postneonatal mortality	x			x	x									x	
9.4	Preterm-related mortality	x		x											x	
9.5	SUID mortality				x	x									x	
10	Drinking during pregnancy	x														
11	Neonatal abstinence syndrome	x														
12	Newborn screening timely follow-up															
13	School readiness						x									
14	Tooth decay/cavities													x		
15	Child mortality							x								
16.1	Adolescent mortality							x		x	x					
16.2	Adolescent motor vehicle death							x			x					
16.3	Adolescent suicide							x		x	x					
17.1	CSHCN															
17.2	CSHCN systems of care											x	x			x
17.3	Autism															
17.4	ADD/ADHD															
18	Mental health treatment										x	x				x
19	Overall health status						x		x		x	x		x	x	x
20	Obesity								x		x					
21	Uninsured															
22.1	Child vaccination															x
22.2	Flu vaccination										x					x
22.3	HPV vaccination										x					x
22.4	Tdap vaccination										x					x
22.5	Meningitis vaccination										x					x
23	Teen births	x									x					
24	Postpartum depression	x														
25	Forgone health care											x				x

* Includes linkages based on expert opinion or theory in the absence of empirical scientific evidence. Associations with available empirical scientific evidence that is mixed or inconclusive are not included. This table is subject to revision as new scientific evidence becomes available. By definition, NPMs must be linked to at least one NOM; however, not all NOMs must have linked NPMs, as they may be important to monitor as sentinel health indicators regardless.

References for Table 2

NPM-1 Well-Woman Visit

American Congress of Obstetricians and Gynecologists (ACOG). Well-Woman Recommendations. <http://www.acog.org/wellwoman>

Centers for Disease Control and Prevention (CDC). Preconception Health and Health Care. <https://www.cdc.gov/preconception/careforwomen>

NPM-2 Low-Risk Cesarean Delivery

Safe prevention of the primary cesarean delivery. Obstetric Care Consensus No. 1. American College of Obstetricians and Gynecologists. Obstet Gynecol 2014;123:693–711. <http://www.acog.org/Resources-And-Publications/Obstetric-Care-Consensus-Series/Safe-Prevention-of-the-Primary-Cesarean-Delivery>

NPM-3 Risk-Appropriate Perinatal Care

American Academy of Pediatrics Committee on Fetus And Newborn. Levels of neonatal care. Pediatrics. 2012 Sep;130(3):587-97. <http://pediatrics.aappublications.org/content/130/3/587>

NPM-4 Breastfeeding

Victora CG, Bahl R, Barros AJ, França GV, Horton S, Krasevec J, Murch S, Sankar MJ, Walker N, Rollins NC; Lancet Breastfeeding Series Group. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet. 2016 Jan 30;387(10017):475-90. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(15\)01024-7/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)01024-7/fulltext)

American Academy of Pediatrics Section on Breastfeeding. Breastfeeding and the use of human milk. Pediatrics. 2012 Mar;129(3):e827-41. <http://pediatrics.aappublications.org/content/early/2012/02/22/peds.2011-3552>

Kramer MS, Kakuma R. Optimal duration of exclusive breastfeeding. Cochrane Database Syst Rev. 2012 Aug 15;(8):CD003517. <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD003517.pub2/full>

NPM-5 Safe Sleep

Taskforce on Sudden Infant Death Syndrome. SIDS and Other Sleep-Related Infant Deaths: Updated 2016 Recommendations for a Safe Infant Sleeping Environment. Pediatrics. 2016 Nov;138(5). <http://pediatrics.aappublications.org/content/138/5/e20162938>

Taskforce on Sudden Infant Death Syndrome. SIDS and other sleep-related infant deaths: expansion of recommendations for a safe sleeping environment. *Pediatrics*. 2011; 128(5) e1341-e1367. <http://pediatrics.aappublications.org/content/128/5/1030>

NPM-6 Developmental Screening

Council on Children With Disabilities; Section on Developmental Behavioral Pediatrics; Bright Futures Steering Committee; Medical Home Initiatives for Children With Special Needs Project Advisory Committee. Identifying infants and young children with developmental disorders in the medical home: an algorithm for developmental surveillance and screening. *Pediatrics*. 2006 Jul;118(1):405-20. <http://pediatrics.aappublications.org/content/118/1/405>

Hagan, JF, Shaw JS, Duncan PM. Bright Futures: guidelines for health supervision of infants, children and adolescents. Fourth Edition. Elk Grove Village, IL: American Academy of Pediatrics. 2017.

NPM-7 Injury Hospitalization

Centers for Disease Control and Prevention (CDC). VitalSigns: Child Injury. April 2012. <https://www.cdc.gov/vitalsigns/childinjury/>

Centers for Disease Control and Prevention (CDC). Suicide: Facts at a Glance. <https://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.pdf>

Centers for Disease Control and Prevention (CDC). Youth Violence: Facts at a Glance. <https://www.cdc.gov/violenceprevention/pdf/yv-datasheet.pdf>

NPM-8 Physical Activity

U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans <https://health.gov/paguidelines/guidelines/>

NPM-9 Bullying

Holt MK, Vivolo-Kantor AM, Polanin JR, Holland KM, DeGue S, Matjasko JL, Wolfe M, Reid G. Bullying and suicidal ideation and behaviors: a meta-analysis. *Pediatrics*. 2015 Feb;135(2):e496-509. <http://pediatrics.aappublications.org/content/135/2/e496>

NPM-10 Adolescent Well-Visit

National Adolescent and Young Adult Health Information Center (2016). Summary of Recommended Guidelines for Clinical Preventive Services for Adolescents up to age 18. San Francisco, CA: National Adolescent and Young Adult Health Information Center, University of California, San Francisco. Retrieved from <http://nahic.ucsf.edu/adolescent-guidelines>

NPM-11 Medical Home

Hadland SE, Long WE. A systematic review of the medical home for children without special health care needs. *Matern Child Health J.* 2014 May;18(4):891-8.

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NPM-12 Transition

American Academy of Pediatrics, American Academy of Family Physicians, and American College of Physicians, Transitions Clinical Report Authoring Group. Clinical Report – Supporting the Health Care Transition from Adolescence to Adulthood in the Medical Home. *Pediatrics.* 2011: 128; 182-2000.

American Academy of Pediatrics; American Academy of Family Physicians; American College of Physicians-American Society of Internal Medicine. A consensus statement on health care transitions for young adults with special health care needs. *Pediatrics.* 2002 Dec;110(6 Pt 2):1304-6. http://pediatrics.aappublications.org/content/110/Supplement_3/1304

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Gabriel P, McManus M, Rogers K, White P. Outcome Evidence for Structured Pediatric to Adult Health Care Transition Interventions: A Systematic Review. *J Pediatr.* 2017 Sep;188:263-269.e15. [http://www.jpeds.com/article/S0022-3476\(17\)30759-X/fulltext](http://www.jpeds.com/article/S0022-3476(17)30759-X/fulltext)

NPM-13 Preventive Dental Visit

American Academy of Pediatric Dentistry. Guideline on Perinatal and Infant Oral Health Care. *Pediatr Dent.* 2016 Oct;38(6):150-154.

http://www.aapd.org/media/Policies_Guidelines/G_PerinatalOralHealthCare3.pdf

American College of Obstetricians and Gynecologists Women's Health Care Physicians; Committee on Health Care for Underserved Women. Committee Opinion No. 569: oral health

care during pregnancy and through the lifespan. *Obstet Gynecol.* 2013 Aug;122(2 Pt 1):417-22.
<http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Health-Care-for-Underserved-Women/Oral-Health-Care-During-Pregnancy-and-Through-the-Lifespan>

American Academy of Pediatric Dentistry. Guideline on periodicity of examination, preventive dental services, anticipatory guidance/counseling, and oral treatment for infants, children, and adolescents. *Pediatr Dent.* 2013 Sep-Oct;35(5):E148-56.
http://www.aapd.org/media/Policies_Guidelines/G_Periodicity7.pdf

NPM-14 Smoking

The Health Consequences of Smoking—50 Years of Progress. A Report of the Surgeon General. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/index.html>

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NPM-15 Adequate Insurance

Kogan MD, Newacheck PW, Blumberg SJ, Ghandour RM, Singh GK, Strickland BB, van Dyck PC. Underinsurance among children in the United States. *N Engl J Med.* 2010 Aug 26;363(9):841-51.
<http://www.nejm.org/doi/full/10.1056/NEJMsa0909994>

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Table 3. National Performance and Outcome Measure Crosswalk to AMCHP Life Course Indicators

National Performance or Outcome Measure		AMCHP Life Course Indicators			
#	Short Title	Identifier	Thematic Category	Indicator Name	Brief Description
National Performance Measure					
4B	Breastfeeding	LC-27*	Family Wellbeing	Exclusive Breastfeeding at 3 Months	Percent of children exclusively breastfed through 3 months
6	Developmental screening	LC-19**	Early Life Services	Early Childhood Health Screening - EPSDT	Percent of Medicaid-enrolled children who received at least one initial or periodic screen in past calendar year
8.2	Physical activity	LC-33 *	Family Wellbeing	Physical Activity Among High School Students	Proportion of high school students who are physically active for at least 60 minutes per day on five or more of the past seven days.
9.1	Bullying	LC-12	Discrimination and Segregation	Bullying	Percent of 9-12th graders who reported being bullied on school property or electronically bullied
11	Medical home	LC-37	Health Care Access and Quality	Medical Home for Children	Proportion of families who report their child received services in a medical home
13.2	Preventive dental visit	LC-41	Health Care Access and Quality	Oral Health Preventive Visit for Children	Percent of children who received a preventive dental visit in the past 12 months
14.2	Smoking	LC-28	Family Wellbeing	Exposure to Second Hand Smoke in the Home	Percent of children living in a household where smoking occurs inside home
National Outcome Measure					
5	Preterm birth	LC-55	Reproductive Life Experiences	Preterm Birth	Percent of live births born < 37 weeks gestation
12	Newborn screening timely follow-up	LC-17**	Early Life Services	Early Intervention	Proportion of children aged 0-3 years who received EI services of all children aged 0-3 years
16.3	Adolescent suicide	LC-45*	Mental Health	Suicide	Suicides per 100,000 population
17.1	CSHCN	LC-25	Family Wellbeing	Children with Special Health Care Needs	Percent of children (0-17 years) with a special health care need
20.2	Obesity	LC-32A	Family Wellbeing	Obesity	Percent of children who are currently overweight or obese
22.1	Child vaccination	LC-35	Health Care Access and Quality	Children Receiving Age Appropriate Immunizations	Percent of children ages 19-35 receiving age-appropriate immunizations according to the Advisory Committee for Immunization Practices (ACIP) guidelines and HP 2020 Goal.
22.3	HPV vaccination	LC-36A*	Health Care Access and Quality	Human Papillomavirus (HPV) Immunization	The proportion of adolescents ages 13-17 who receive the evidence-based clinical preventive service HPV vaccine

Table 3. National Performance and Outcome Measure Crosswalk to AMCHP Life Course Indicators (Continued)

National Performance or Outcome Measure		AMCHP Life Course Indicators			
#	Short Title	Identifier	Thematic Category	Indicator Name	Brief Description
National Outcome Measure					
23	Teen births	LC-54*	Reproductive Life Experiences	Teen Births	Number of live births born to women aged 10-19 years per 1,000 women aged 10-19 years
24	Postpartum depression	LC-44	Mental Health	Postpartum Depression	Percent of women who have recently given birth who reported experiencing postpartum depression following a live birth
25	Forgone health care	LC-39*	Health Care Access and Quality	Inability or Delay in Obtaining Necessary Medical Care or Dental Care	Percent of parents reporting their child was not able to obtain necessary medical care or dental care.

*NPM or NOM similar to AMCHP indicator (different age range or definition)

**NPM or NOM conceptually related to AMCHP indicator

Source: <http://www.amchp.org/programsandtopics/data-assessment/Pages/LifeCourseIndicators.aspx>

APPENDIX C: DETAIL SHEETS FOR THE NATIONAL OUTCOME MEASURES AND NATIONAL PERFORMANCE MEASURES

- A. National Outcome Measure
- B. National Performance Measures

A.National Outcome Measures

No.	Title V MCH Services Block Grant - National Outcome Measures
1	Percent of pregnant women who receive prenatal care beginning in the first trimester
2	Rate of severe maternal morbidity per 10,000 delivery hospitalizations
3	Maternal mortality rate per 100,000 live births
4	Percent of low birth weight deliveries (<2,500 grams)
5	Percent of preterm births (<37 weeks gestation)
6	Percent of early term births (37,38 weeks gestation)
7	Percent of non-medically indicated early elective deliveries
8	Perinatal mortality rate per 1,000 live births plus fetal deaths
9.1	Infant mortality rate per 1,000 live births
9.2	Neonatal mortality rate per 1,000 live births
9.3	Postneonatal mortality rate per 1,000 live births
9.4	Preterm-related mortality rate per 100,000 live births
9.5	Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births
10	Percent of infants born with fetal alcohol exposure in the last 3 months of pregnancy
11	The rate of infants born with neonatal abstinence syndrome per 1,000 hospital births
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)
13	Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)
14	Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year
15	Child mortality rate, ages 1 through 9, per 100,000
16.1	Adolescent mortality rate, ages 10 through 19, per 100,000
16.2	Adolescent motor vehicle mortality rate ages 15 through 19 per 100,000
16.3	Adolescent suicide rate ages 15 through 19 per 100,000
17.1	Percent of children with special health care needs (CSHCN), ages 0 through 17
17.2	Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system
17.3	Percent of children, ages 3 through 17, diagnosed with an autism spectrum disorder
17.4	Percent of children, ages 3 through 17, diagnosed with Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)
18	Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling
19	Percent of children, ages 0 through 17, in excellent or very good health
20	Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)
21	Percent of children, ages 0 through 17, without health insurance
22.1	Percent of children, ages 19 through 35 months, who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4)
22.2	Percent of children, 6 months through 17 years, who are vaccinated annually against seasonal influenza
22.3	Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine
22.4	Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine
22.5	Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine
23	Teen birth rate, ages 15 through 19, per 1,000 females
24	Percent of women who experience postpartum depressive symptoms following a recent live birth
25	Percent of children, ages 0 through 17, who were not able to obtain needed health care in the last year

OUTCOME MEASURE 1 - Percent of pregnant women who receive prenatal care beginning in the first trimester

GOAL

To ensure early entrance into prenatal care to enhance pregnancy outcomes.

DEFINITION

Numerator: Number of live births with reported first prenatal visit during the first trimester (before 13 weeks' gestation) in the calendar year

Denominator: Number of live births

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) 10.1. Increase the proportion of pregnant women who receive prenatal care beginning in the first trimester. (Baseline: 70.8 % of females delivering a live birth received prenatal care beginning in the first trimester in 2007, Target: 77.9%)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

SIGNIFICANCE

Early prenatal care is essential for identification of maternal disease and risks for complications of pregnancy or birth. This can help ensure that women with complex problems, chronic illness, or other risks are seen by specialists. Early prenatal care can also provide important education and counseling on modifiable risks in pregnancy, including smoking, drinking, and inadequate or excessive weight gain. Although early high-quality prenatal care is essential, particularly for women with chronic conditions or other risk factors, it may not be sufficient to assure optimal pregnancy outcomes. Efforts to improve pregnancy outcomes and the health of mothers and infants should begin prior to conception, whether before a first or subsequent pregnancy. As many women are not aware of being pregnant at first, it is important to establish healthy behaviors and achieve optimal health well before pregnancy.

Centers for Disease Control and Prevention. Pregnancy and prenatal care.

<https://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/PregnancyPrenatalCare.html>

Centers for Disease Control and Prevention. Recommendations to improve preconception health and health care—United States. MMWR Recommendations and Reports. 2006;55(RR-06):1–23.

<https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5506a1.htm>

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

GOAL

To reduce life-threatening maternal illness and complications.

DEFINITION

Numerator: Number of delivery hospitalizations with an indication of severe morbidity from ICD-10 diagnosis or procedure codes (e.g. heart or kidney failure, stroke, embolism, hemorrhage).

Denominator: Number of delivery hospitalizations

Units: 10,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) 5. Reduce the rate of maternal mortality. (Baseline: 12.7 maternal deaths per 100,000 live births in 2007, Target: 11.4 maternal deaths per 100,000 live births)

Related to Maternal, Infant, and Child Health (MICH) 6. Reduce maternal illness and complications due to pregnancy (complications during hospitalized labor and delivery). (Baseline: 31.1%, Target: 28%)

DATA SOURCES and DATA ISSUES

Healthcare Cost and Utilization Project (HCUP) - State Inpatient Database (SID)

SIGNIFICANCE

Severe maternal morbidity is more than 100 times as common as pregnancy-related mortality—affecting about 52,000 women annually—and it is estimated to have increased by 75 percent over the past decade. Rises in chronic conditions, including obesity, diabetes, hypertension, and cardiovascular disease, are likely to have contributed to this increase. Minority women and particularly non-Hispanic black women have higher rates of severe maternal morbidity. Non-Hispanic Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native women had 2.1, 1.3, 1.2, and 1.7 times, respectively, higher rates of severe morbidity compared with non-Hispanic white women.

Callaghan WM, Creanga AA, Kuklina EV. Severe maternal morbidity among delivery and postpartum hospitalizations in the United States. *Obstet Gynecol.* 2012 Nov;120(5):1029-36. <https://www.ncbi.nlm.nih.gov/pubmed/23090519>

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OUTCOME MEASURE 3 - Maternal mortality rate per 100,000 live births

GOAL

To reduce the maternal mortality rate.

DEFINITION

Numerator: Number of deaths related to or aggravated by pregnancy, but not due to accidental or incidental causes, and occurring within 42 days of the end of a pregnancy (follows WHO definition)

Denominator: Number of live births

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) 5. Reduce the rate of maternal mortality. (Baseline: 12.7 maternal deaths per 100,000 live births in 2007, Target: 11.4 maternal deaths per 100,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS) for states and territories

United Nations Maternal Mortality Estimation Interagency Group for the Freely Associated States in the Pacific Basin

SIGNIFICANCE

Maternal mortality is a sentinel indicator of health and health care quality worldwide. After a century of general improvement, the U.S. maternal mortality rate more than doubled over the past decade. Although most of this increase was likely due to changes in the ascertainment and identification of maternal deaths, at least part of the increase appears to be real and may be attributable to increases in chronic health conditions, such as cardiovascular disease and diabetes. There are also significant racial disparities with Black women having rates of maternal mortality at least 3 times that of White women. Maternal deaths can be prevented or reduced both by improving underlying maternal health as well as health care quality for leading causes of maternal death, such as hemorrhage and preeclampsia.

MacDorman MF, Declercq E, Cabral H, Morton C. Recent Increases in the U.S. Maternal Mortality Rate: Disentangling Trends From Measurement Issues. *Obstet Gynecol.* 2016 Sep;128(3):447-55. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5001799/>

CDC Pregnancy Mortality Surveillance System. Division of Reproductive Health. National Center for Chronic Disease Prevention and Health Promotion. 2017. <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.html>

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

GOAL

To reduce the percent of low birth weight deliveries

DEFINITION

Numerator: Number of live births weighing less than 2,500 grams

Denominator: Number of live births

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 8.1: Reduce low birth weight (LBW). (Baseline: 8.2% in 2007, Target 7.8%)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

SIGNIFICANCE

Low birth weight infants include pre-term infants and infants with intrauterine growth retardation. Some risk factors for low birth weight babies include: chronic health conditions, inadequate weight gain, both young and old maternal age, poverty, smoking, substance abuse, and multiple births. Low birth weight infants are more likely than normal weight infants to die in the first year of life and to experience long-range physical and developmental health problems. In 2013, 65% of all infant deaths occurred to the 8% of low birth weight infants and over half (53%) of all infant deaths occurred to the 1.4% of very low birth weight infants. Infants born to non-Hispanic Black women have the highest rates of low birth weight, particularly very low birth weight, with levels that are about two or more times greater than for infants born to women of other race and ethnic groups.

March of Dimes. Low Birthweight. 2014 October. <http://www.marchofdimes.org/baby/low-birthweight.aspx>

Mathews TJ, MacDorman MF, Thoma ME. Infant Mortality Statistics From the 2013 Period Linked Birth/Infant Death Data Set. National Vital Statistics Reports. 2015 August 6. 64(9). https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_09.pdf

Martin JA, Hamilton BE, Osterman MJK, et al. Births: Final data for 2015. National vital statistics report; vol 66, no 1. Hyattsville, MD: National Center for Health Statistics. 2017. https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_01.pdf

OUTCOME MEASURE 5 - Percent of preterm births (<37 weeks)

GOAL

To reduce the percent of all preterm, early term, and early elective deliveries.

DEFINITION

Numerator: Number of live births before 37 weeks of complete gestation

Denominator: Number of live births

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 9.1: Reduce total preterm births (PTB). (Baseline:10.4% in 2007, Target 9.4%)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

SIGNIFICANCE

Babies born preterm, before 37 completed weeks of gestation, are at greater risk of immediate life-threatening health problems, as well as long-term complications and developmental delays. Currently, about 1 in every 10 infants are born prematurely. Preterm birth is a leading cause of infant death and childhood disability, accounting for at least a third of all infant deaths. Although the risk of complications is greatest among those babies who are born the earliest, even those babies born "late preterm" (34 to 36 weeks' gestation) and "early term" (37, 38 weeks' gestation) are more likely than full-term babies to experience morbidity and mortality. Infants born to non-Hispanic Black women have the highest rates of preterm birth, particularly early preterm birth, with levels that are at least 1.5 times those for infants born to women of other race and ethnic groups. Risk factors include chronic conditions, obesity, substance use, poverty, short birth intervals, and multiple births.

Centers for Disease Control and Prevention. Preterm birth.

<https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm>

Mathews TJ, MacDorman MF, Thoma ME. Infant Mortality Statistics From the 2013 Period Linked Birth/Infant Death Data Set. National Vital Statistics Reports. 2015 August 6. 64(9).

https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_09.pdf

Martin JA, Hamilton BE, Osterman MJK, et al. Births: Final data for 2015. National vital statistics report; vol 66, no 1. Hyattsville, MD: National Center for Health Statistics. 2017.

https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_01.pdf

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

GOAL

To reduce the percent of all preterm, early term, and early elective deliveries.

DEFINITION

Numerator: Number of live births born at 37,38 weeks of completed gestation

Denominator: Number of live births

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

SIGNIFICANCE

Although the risk is less than for preterm babies, those born “early term” at 37 or 38 completed weeks of gestation, are still at greater risk of immediate health problems and long-term complications compared to “full term” (39, 40 weeks completed gestation) infants. In 2015, 25% of all births were early term.

Complications during the newborn period include respiratory distress and neurological disorder, while long-term complications can include learning and behavioral problems.

Martin JA, Hamilton BE, Osterman MJK et al. Births: Final Data for 2015. National Vital Statistics Reports. 2017 January 5. 66(1). https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_01.pdf

Gyamfi-Bannerman C. The scope of the problem: the epidemiology of late preterm and early-term birth. Semin Perinatol. 2011 Oct;35(5):246-8. <https://www.ncbi.nlm.nih.gov/pubmed/21962621>

OUTCOME MEASURE 7 - Percent of non-medically indicated early elective deliveries

GOAL

To reduce the percent of all preterm, early term, and early elective deliveries.

DEFINITION

Numerator: Number of inductions or cesareans without labor or spontaneous rupture of membranes among deliveries at 37, 38 weeks' gestation without conditions possibly justifying elective delivery <39 weeks according to The Joint Commission

Denominator: Number of deliveries at 37, 38 weeks' gestation without conditions possibly justifying elective delivery <39 weeks according to The Joint Commission

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

DATA SOURCES and DATA ISSUES

CMS Hospital Compare

SIGNIFICANCE

Non-medically indicated early term births (37,38 weeks) present avoidable risks of neonatal morbidity and costly NICU admission. Early elective delivery prior to 39 weeks is an endorsed perinatal quality measure by the Joint Commission, National Quality Forum, ACOG/NCQA, Leapfrog Group, and CMS/CHIPRA.

Tita AT, Landon MB, Spong CY et al. Timing of Elective Repeat Cesarean Delivery at Term and Neonatal Outcomes. N Engl J Med. 2009 Jan 8. 360(2): 111-20.

<http://www.nejm.org/doi/full/10.1056/NEJMoa0803267>

Clark SL, Miller DD, Belfort MA et al. Neonatal and Maternal Outcomes Associated with Elective Term Delivery. Am J Obstet Gynecol. 2009 February. 200(2):156.e1-4.

<https://www.ncbi.nlm.nih.gov/pubmed/19110225>

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

GOAL

To reduce the rate of perinatal deaths.

DEFINITION

Numerator: Number of fetal deaths 28 weeks or more gestation plus early neonatal deaths occurring under 7 days

Denominator: Number of live births plus fetal deaths at 28 weeks or more gestation

Units: 1,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 1.2: Reduce the rate of fetal and infant deaths during the perinatal period (28 weeks of gestation to 7 days after birth). (Baseline: 6.6 fetal and infant deaths per 1,000 live births and fetal deaths occurred during the perinatal period, 28 weeks gestation to 7 days after birth, in 2005; Target: 5.9 perinatal deaths per 1,000 live births and fetal deaths)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

SIGNIFICANCE

Perinatal mortality is a reflection of the health of the pregnant woman and newborn as well as the quality of perinatal care. Risk factors for perinatal mortality include smoking during pregnancy, maternal obesity, uncontrolled hypertension or diabetes, infections and previous poor pregnancy outcome. In 2013, the rate of perinatal mortality was 6.24 perinatal deaths per 1,000 live births and fetal deaths. The perinatal mortality rate is particularly high for non-Hispanic Black women. In 2013, the rate for non-Hispanic black women (10.75) was the highest among the racial and ethnic groups, and was more than twice the rate for non-Hispanic white women (5.25).

MacDorman MF, Gregory ECW. Fetal and Perinatal Mortality: United States, 2013. National Vital Statistics Reports. 2015 July 23. 64(8). https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_08.pdf

OUTCOME MEASURE 9.1 - Infant mortality rate per 1,000 live births

GOAL

To reduce the rate of infant death.

DEFINITION

Numerator: Number of deaths to infants from birth through 364 days of age

Denominator: Number of live births

Units: 1,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 1.3: Reduce the rate of all infant deaths (within 1 year). (Baseline: 6.7 infant deaths per 1,000 live births within the first year of life in 2006, Target: 6.0 infant deaths per 1,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS) for states and territories
United Nations Interagency Group for Child Mortality Estimation for the Freely Associated States in the Pacific Basin

SIGNIFICANCE

Infant mortality, or the death of a child within the first year of life, is a sentinel measure of population health that reflects the underlying well-being of mothers and families, as well as the broader community and social environment that cultivate health and access to health-promoting resources. After a period of stagnation from 2000 to 2005, the U.S. infant mortality rate has continued to decline to record low levels below 6 per 1,000 live births. However, significant disparities continue to persist between racial groups, especially for infants born to non-Hispanic black, American Indian/Alaskan Native, and Puerto Rican women. The infant mortality rate among non-Hispanic blacks is more than twice that of non-Hispanic whites. Leading causes of infant mortality include prematurity, birth defects, and sudden unexpected infant deaths. Infant mortality continues to be an extremely complex health issue with many medical, social, and economic determinants.

U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. Child Health USA 2014. Rockville, Maryland: U.S. Department of Health and Human Services, 2014. <https://mchb.hrsa.gov/chusa14/health-status-behaviors/infants/infant-mortality.html>

Mathews TJ, Driscoll AK. Trends in infant mortality in the United States, 2005–2014. NCHS data brief, no 279. Hyattsville, MD: National Center for Health Statistics. 2017. <https://www.cdc.gov/nchs/products/databriefs/db279.htm>

OUTCOME MEASURE 9.2 - Neonatal mortality rate per 1,000 live births

GOAL

To reduce the rate of neonatal deaths.

DEFINITION

Numerator: Number of deaths to infants under 28 days

Denominator: Number of live births

Units: 1,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 1.4: Reduce the rate of neonatal deaths (within the first 28 days of life). (Baseline: 4.5 neonatal deaths per 1,000 live births occurred within the first 28 days of life in 2006, Target: 4.1 neonatal deaths per 1,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS) for states and territories
United Nations Interagency Group for Child Mortality Estimation for the Freely Associated States in the Pacific Basin

SIGNIFICANCE

Neonatal deaths, within the first month of life, account for approximately two-thirds of all infant deaths in the U.S. Neonatal mortality is related to gestational age, low birth weight, congenital malformations and health problems originating in the perinatal period, such as infections or birth trauma. A significant disparity exists in neonatal deaths between racial groups, especially for infants born to Black women. Non-Hispanic black women had the highest neonatal mortality rate in 2013 at 7.46, 2.2 times that for non-Hispanic white women (3.34). Neonatal mortality rates were also higher for Puerto Rican (4.23), American Indian/Alaska Native (4.11), and Mexican women (3.51) than for non-Hispanic white women.

Mathews TJ, MacDorman MF, Thoma ME. Infant Mortality Statistics From the 2013 Period Linked Birth/Infant Death Data Set. National Vital Statistics Reports. 2015 August 6. 64(9).

https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_09.pdf

OUTCOME MEASURE 9.3 - Postneonatal mortality rate per 1,000 live births

GOAL

To reduce the rate of postneonatal deaths.

DEFINITION

Numerator: Number of deaths to infants 28 through 364 days of age

Denominator: Number of live births

Units: 1,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 1.5: Reduce the rate of postneonatal deaths (between 28 days and 1 year). (Baseline: 2.2 postneonatal deaths per 1,000 live births occurred between 28 days and 1 year of life in 2006, Target: 2.0 postneonatal deaths per 1,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

SIGNIFICANCE

Postneonatal deaths, which occur from one month up to one year after birth, account for approximately one-third of all infant deaths in the U.S. Postneonatal mortality is generally related to Sudden Unexpected Infant Death (SUID)/Sudden Infant Death Syndrome (SIDS), unintentional injuries and congenital malformations. Similar to overall infant mortality, infants of non-Hispanic black (3.65) and ASIAN (3.5) women had the highest postneonatal mortality rates of any group—more than twice those for non-Hispanic white women (1.71) in 2013.

Mathews TJ, MacDorman MF, Thoma ME. Infant Mortality Statistics From the 2013 Period Linked Birth/Infant Death Data Set. National Vital Statistics Reports. 2015 August 6. 64(9).

https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_09.pdf

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

GOAL

To reduce the rate of preterm-related death.

DEFINITION

Numerator: Number of deaths due to preterm-related causes. Causes are defined as preterm-related if 75% or more of infants whose deaths were attributed to that cause were born at at less than 37 weeks of gestation, and the cause of death was a direct consequence of preterm birth based on a clinical evaluation and review of the literature. This includes low birth weight, several maternal complications, respiratory distress, bacterial sepsis, etc. To be included as a preterm-related death, the infant must have been born preterm (<37 completed weeks of gestation) with the underlying cause of death assigned to one of the following ICD-10 categories: K550, P000, P010, P011, P015, P020, P021, P027, P070–P073, P102, P220–229, P250–279, P280, P281, P360–369, P520–523, and P77.

Denominator: Number of live births

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 1.3: Reduce the rate of all infant deaths (within 1 year). (Baseline: 6.7 infant deaths per 1,000 live births within the first year of life in 2006, Target: 6.0 infant deaths per 1,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

SIGNIFICANCE

Preterm birth is a leading cause of infant mortality, accounting for approximately one-third of all infant deaths. Preterm-related mortality can be prevented both by reducing preterm birth as well as improving access to risk-appropriate perinatal care for infants born prematurely. Similar to preterm birth and overall infant mortality, there are significant racial/ethnic disparities in preterm-related mortality. In 2013, the preterm-related mortality rates were highest for infants born to non-Hispanic black and Puerto Rican women (3 and 1.5 times higher than non-Hispanic white women). Preterm-related deaths account for over half of the overall infant mortality gap between non-Hispanic blacks and non-Hispanic whites and almost all of the gap between Puerto-Ricans and non-Hispanic whites.

Mathews TJ, MacDorman MF, Thoma ME. Infant Mortality Statistics From the 2013 Period Linked Birth/Infant Death Data Set. National Vital Statistics Reports. 2015 August 6. 64(9).

https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_09.pdf

OUTCOME MEASURE 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

GOAL

To reduce the rate sleep-related SUIDs

DEFINITION

Numerator: Number of sleep-related SUID deaths, including SIDS (R95), unknown cause (R99), and accidental suffocation and strangulation in bed (W75)

Denominator: Number of live births

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 1.9: Reduce the rate of infant deaths from sudden unexpected infant deaths (includes SIDS, Unknown Cause, Accidental Suffocation, and Strangulation in Bed). (Baseline: .93 per 1,000 live births in 2006, Target: .84 infant deaths per 1,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

SIGNIFICANCE

Sleep-related SUIDs are the leading cause of death in infants from one month up to one year (postneonatal deaths) and account for approximately 15% of all infant deaths. SUID rates vary greatly by race and ethnicity. In 2013, SUID rates were highest for infants born to non-Hispanic black mothers and American Indian/Alaska Native (173 and 170 SUIDs per 100,000 live births, respectively); these rates were more than twice the rate among infants born to non-Hispanic whites (85 SUIDs per 100,000 live births). SUIDs account for 33% of the overall infant mortality gap between American Indian/Alaska Native and non-Hispanic whites and 15% of the gap between non-Hispanic blacks and non-Hispanic whites. To reduce SUIDs, the American Academy of Pediatrics recommends safe sleep practices, such as placing babies to sleep on their backs on a separate firm sleep surface without soft objects or loose bedding, as well as other protective practices such as breastfeeding and smoking cessation.

Mathews TJ, MacDorman MF, Thoma ME. Infant Mortality Statistics From the 2013 Period Linked Birth/Infant Death Data Set. National Vital Statistics Reports. 2015 August 6. 64(9).

https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_09.pdf

Taskforce on Sudden Infant Death Syndrome. SIDS and Other Sleep-Related Infant Deaths: Updated 2016 Recommendations for a Safe Infant Sleeping Environment. Pediatrics. 2016 Nov;138(5).

<http://pediatrics.aappublications.org/content/138/5/e20162938>

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

GOAL

To reduce the percent of infants born with fetal alcohol exposure

DEFINITION

Numerator: Number of women who report drinking alcohol in the last 3 months of pregnancy

Denominator: Number of live births

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) 11.1. Increase abstinence from alcohol among pregnant women. (Baseline: 89.4 percent of pregnant females ages 15 to 44 years reported abstaining from alcohol in the past 30 days in 2007–08, Target: 98.3%)

Related to Maternal, Infant, and Child Health (MICH) 25. Reduce the occurrence of fetal alcohol syndrome. (Baseline: 3.6 cases of fetal alcohol syndrome per 10,000 live births in 2006 were suspected or confirmed among children born in 2001–04, Target: Not Applicable)

DATA SOURCES and DATA ISSUES

Pregnancy Risk Assessment Monitoring System (PRAMS)

SIGNIFICANCE

Fetal alcohol spectrum disorders (FASDs), which result in life-long physical and cognitive or behavioral problems, are caused by drinking during pregnancy. Fetal alcohol syndrome (FAS) represents the severe end of FASDs, and is characterized by abnormal facial features (e.g., smooth ridge between nose and upper lip), lower than average height or weight, and central nervous system problems that create deficits in learning, memory, attention, communication, vision, and/or hearing. FASDs are preventable through abstinence from alcohol among pregnant women. Early diagnosis and intervention programs are critical to improve developmental outcomes for children with FAS.

Centers for Disease Control and Prevention. Fetal Alcohol Spectrum Disorder (FASDs). 2015 April 16. <https://www.cdc.gov/ncbddd/fasd/facts.html>

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

GOAL

To reduce the rate of infants born with drug dependency

DEFINITION

Numerator: Number of infants born with neonatal abstinence syndrome

Denominator: Number of hospital births

Units: 1,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Maternal, Infant, and Child Health Objective 11.4. Increase abstinence from illicit drugs among pregnant women. (Baseline: 94.8 percent of pregnant females ages 15 to 44 years reported abstaining from illicit drugs in the past 30 days in 2007–08; Target 100%)

DATA SOURCES and DATA ISSUES

Healthcare Cost and Utilization Project (HCUP) - State Inpatient Database (SID)

SIGNIFICANCE

Neonatal drug dependency or withdrawal symptoms, known as neonatal abstinence syndrome (NAS), occur from maternal use of opiates such as heroin, methadone, and prescription pain medications. Symptoms of NAS include fever, diarrhea, irritability, trembling, and increased muscle tone. Along with a rise in prescription drug abuse, the incidence of NAS nearly tripled over the past decade with substantial increases in health care costs. Prevention strategies exist along the continuum from preconception, prenatal, postpartum, and infant/childhood stages to help avert substance-exposed pregnancies and improve outcomes for infants born with NAS.

Patrick SW, Shumacher RE, Benneyworth BD et al. Neonatal Abstinence Syndrome and Associated Health Care Expenditures, 2000-2009. *JAMA*. 2012 May 9. 307(18):1934-40.
<http://jamanetwork.com/journals/jama/fullarticle/1151530>

Association of State and Territorial Health Officials (ASTHO). Neonatal Abstinence Syndrome: How States Can Help Advance the Knowledge Base for Primary Prevention and Best Practices of Care. 2014.
<http://www.astho.org/prevention/nas-neonatal-abstinence-report/>

Ko JY, Wolicki S, Barfield WD, et al. CDC Grand Rounds: Public Health Strategies to Prevent Neonatal Abstinence Syndrome. *MMWR Morb Mortal Wkly Rep* 2017;66:242–245. DOI:
<http://dx.doi.org/10.15585/mmwr.mm6609a2>

OUTCOME MEASURE 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)

GOAL

To increase the percent of eligible newborns screened for heritable disorders with on-time physician notification for out of range screens and timely follow up.

DEFINITION

Numerator: Number 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. UNDER DEVELOPMENT

Denominator: Number of live eligible births

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 32: Increase appropriate newborn blood-spot screening and follow-up testing (Baseline: 98.3% of screen-positive children received follow-up testing within the recommended time period in 2003–06, Target: 100%).

DATA SOURCES and DATA ISSUES

The American Public Health Laboratories (APHL) data set

SIGNIFICANCE

Newborn screening detects thousands of babies each year with potentially devastating, but treatable disorders. The benefits of newborn screening depend upon timely collection of the newborn blood-spots or administration of a point-of-care test (pulse oximeter for critical congenital heart disease (CCHD)), receipt of the newborn blood spot at the laboratory, testing of the newborn blood spot, and reporting out of all results. Timely detection prevents death, mental retardation, and other significant health complications.

Centers for Disease Control and Prevention. CDC Grand Rounds: Newborn Screening and Improved Outcomes. Morbidity and Mortality Weekly Report. 2012 June 1. 61(21): 390-93.

<https://www.cdc.gov/mmwr/pdf/wk/mm6121.pdf>

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

GOAL

To increase the percent of children ready for school.

DEFINITION

Numerator: Under development

Denominator: Under development

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Early and Middle Childhood (EMC) 1. (Developmental) Increase the proportion of children who are ready for school in all five domains of healthy development: physical development, social-emotional development, approaches to learning, language, and cognitive development.

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH).

SIGNIFICANCE

The early years are a critical period where experiences impact structural development of the brain and neurobiological pathways for functional development. Although early experiences do not determine children's ongoing development, interventions around school readiness and early childhood education can act as a protective factor against the future onset of adult disease and disability. Studies have shown that children's literacy and numeracy skills at school entry are a good predictor of later academic achievement, high levels of education and secure employment. Social gradients in language and literacy, communication and socioemotional functioning emerge early for children across socioeconomic backgrounds, and these differences persist into the school years. There are also disparities in the US as to who participates in an early childhood program. Children at risk of poor developmental and educational outcomes benefit from attending high-quality education and care programs in the years before school.

Centers for Disease Control and Prevention. Early Childhood Education. 2016 August 5. <https://www.cdc.gov/policy/hst/hi5/earlychildhoodeducation/>

Child Trends: Data Bank. Early School Readiness. 2015 July. https://www.childtrends.org/wp-content/uploads/2015/07/07_School_Readiness.pdf

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

GOAL

To reduce the percent of children and adolescents who have dental caries or decayed teeth.

DEFINITION

Numerator: Number of children ages 1 through 17 who have decayed teeth or cavities in the past year

Denominator: Number of children, ages 1 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Oral Health of Children and Adolescents (OH) Objectives 1.1: Reduce the proportion of children ages 3-5 who have dental caries experience in their primary or permanent teeth, (Baseline: 33.3%, Target: 30.0%), 1.2: Reduce the proportion of children ages 6-9 who have dental caries experience in their primary or permanent teeth (Baseline: 54.4%, Target: 49.0%) and 1.3: Reduce the proportion of adolescents aged 13 to 15 years with dental caries experience in their permanent teeth (Baseline: 53.7%, Target: 48.3%).

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

SIGNIFICANCE

Tooth decay (cavities) is among the most common chronic conditions of childhood. Untreated tooth decay can lead to pain and infections which may result in problems with eating, speaking, learning and playing. Children with poor oral health tend to miss more school and get lower grades than those who do not. Tooth decay can be prevented through recommended preventive dental care, including fluoride varnish and dental sealants, community water fluoridation, and oral hygiene practices, including brushing and flossing.

Centers for Disease Control and Prevention. Children's Oral Health. 2016 November 15.
<https://www.cdc.gov/oralhealth/basics/childrens-oral-health/index.html>

OUTCOME MEASURE 15 - Child mortality rate, ages 1 through 9, per 100,000

GOAL

To reduce the death rate of children ages 1 through 9.

DEFINITION

Numerator: Number of deaths among children ages 1 through 9 years

Denominator: Number of children ages 1 through 9 years

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 3.1: Reduce the rate of child deaths aged 1 to 4 years. (Baseline: 29.4 deaths among children aged 1 to 4 years per 100,000 population occurred in 2007, Target: 26.5 deaths per 100,000 population)

Related to Objective Maternal, Infant, and Child Health (MICH) 3.2: Reduce the rate of child deaths aged 5 to 9 years. (Baseline: 13.8 deaths among children aged 5 to 9 years per 100,000 population occurred in 2007, Target: 12.4 deaths per 100,000 population)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

Population estimates come from the U.S. Census Bureau

SIGNIFICANCE

Although the risk of death for children declines sharply beyond infancy, there were still over 6,000 deaths among U.S. children ages 1 through 9 in 2014. Unintentional injury continues to be the leading cause of death in children 1 to 9 years. Other leading causes include congenital malformations, malignant neoplasms, and homicide.

Heron M. Deaths: Leading Causes for 2014. National Vital Statistics Reports. 2016 June 30. 65(5). https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_05.pdf

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

GOAL

To reduce the death rate of adolescents ages 10 through 19.

DEFINITION

Numerator: Number of deaths among adolescents ages 10 through 19 years

Denominator: Number of adolescents ages 10 through 19 years

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Objective Maternal, Infant, and Child Health (MICH) 4.1: Reduce the rate of adolescent deaths aged 10 to 14 years. (Baseline: 16.5 deaths among adolescents aged 10 to 14 years per 100,000 population occurred in 2007, Target: 14.8 deaths per 100,000)

Related to Objective Maternal, Infant, and Child Health (MICH) 4.2: Reduce the rate of adolescent deaths aged 15 to 19 years. (Baseline: 60.3 deaths among adolescents aged 15 to 19 years per 100,000 population occurred in 2007, Target: 54.3 deaths per 100,000)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

Population estimates come from the U.S. Census Bureau

SIGNIFICANCE

Although the risk of death declines sharply in early childhood, mortality rates begin to increase again in adolescence. Over 12,000 deaths occurred among U.S. children ages 10 through 19 in 2014. The leading causes of illness and death among adolescents and young adults are largely preventable. Unintentional injury continues to be the leading cause of death in adolescents 10 to 19 years, accounting for 36% percent of all deaths, followed by suicide (18%), homicide (13%), and malignant neoplasms (8%).

Heron M. Deaths: Leading Causes for 2014. National Vital Statistics Reports. 2016 June 30. 65(5). https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_05.pdf

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

GOAL

To reduce the death rate of adolescents ages 15 through 19 from motor vehicle crashes

DEFINITION

Numerator: Number of deaths to adolescents ages 15 through 19 years caused by motor vehicle crashes. This includes all occupant, pedestrian, motorcycle, bicycle, etc. deaths caused by motor vehicles.

Denominator: Number of adolescents ages 15 through 19 years

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Objective IVP-13: Reduce motor vehicle crash-related deaths. (Baseline: 13.8 motor vehicle traffic-related deaths per 100,000 population occurred in 2007, Target: 12.4 deaths per 100,000 population)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)
Population estimates come from the U.S. Census Bureau

SIGNIFICANCE

More than one-third of all teen deaths are the result of a motor vehicle crash. Teenage drivers have crash rates that are nearly three times those of drivers older than 20 years. Factors related to lack of driving experience and maturity contribute to motor vehicle mortality, such as driving too fast, violating traffic signals, alcohol use and presence of other teenage passengers. Motor vehicle death rates greatly increase during the teen years and stay high into early adulthood. Males are nearly twice as likely as females to die in motor vehicle accidents. Non-Hispanic white male and American Indian/Alaskan male adolescents have the highest motor vehicle mortality rate among 15-19 year olds.

Child Trends: Data Bank. Motor Vehicle Deaths-Indicators on Children and Youth. 2015 December.
https://www.childtrends.org/wp-content/uploads/2012/11/77_Vehicle_Deaths.pdf

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

GOAL

To eliminate self-induced, preventable morbidity and mortality.

DEFINITION

Numerator: Number of deaths attributed to suicide among adolescents ages 15 through 19 years

Denominator: Number of adolescents ages 15 through 19 years

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Mental Health and Mental Disorders (MHMD) Objective 1: Reduce the suicide rate. (Baseline: 11.3 suicides per 100,000 in 2007, Target: 10.2 suicides per 100,000)

Related to Mental Health and Mental Disorders (MHMD) Objective 2: Reduce suicide attempts by adolescents. (Baseline: 1.9 suicide attempts per 100 occurred in 2009, Target: 1.7 suicide attempts per 100)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)
Population estimates come from the U.S. Census Bureau

SIGNIFICANCE

Suicide is the second leading cause of death for adolescents ages 15 through 19 years. In 2014, there were over 2,000 deaths due to suicide among adolescents ages 15 to 19 years, or 9.8 deaths per 100,000. Suicide and suicidal ideation is often indicative of mental health problems and stressful or traumatic life events. In 2015, 18 percent of high school students reported they had thought seriously about committing suicide in the past year. While females are more likely to report considering suicide, males are more likely to succeed in committing suicide. The suicide mortality rate for males is nearly three times that of females.

Heron M. Deaths: Leading Causes for 2014. National Vital Statistics Reports. 2016 June 30. 65(5).
https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_05.pdf

Child Trends: Data Bank. Suicidal Teens-Indicators of Child and Youth Well-Being. 2016 December.
https://www.childtrends.org/wp-content/uploads/2016/12/34_Suicidal_Teens.pdf

OUTCOME MEASURE 17.1 - Percent of children with special health care needs (CSHCN), ages 0 through 17

GOAL

To track the percent of children and youth with special health care needs, autism spectrum disorder (ASD), and attention deficit disorder/attention deficit hyperactivity disorder (ADD/ADHD).

DEFINITION

Numerator: Number of children, ages 0 through 17, who met the criteria for having a special health care need based on the CSHCN screener

Denominator: Number of children, ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

SIGNIFICANCE

Children are considered to have a special health care need if, in addition to a chronic medical, behavioral, or developmental condition that has lasted or is expected to last 12 months or longer, they experience either service-related or functional consequences, including the need for or use of prescription medications and/or specialized therapies. The percent of children with special health care needs has been increasing since 2001. About 1 in 5 of all US children are considered to have special health care needs. However, they account for almost half of all health care expenditures for children.

U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *Child Health USA 2014*. Rockville, Maryland: U.S. Department of Health and Human Services, 2014. <https://mchb.hrsa.gov/chusa14/population-characteristics/children-special-health-care-needs.html>

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

GOAL

To ensure access to needed and continuous systems of care for children and youth with special health care needs.

DEFINITION

Numerator: Number of CSHCN ages 0 through 17 that received all components of a well-functioning system (family partnership, medical home, early screening, adequate insurance, easy access to services, and preparation for adult transition)

Denominator: Number of CSHCN ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objectives 30.1: Increase the proportion of children who have access to a medical home, (Baseline: 57.5%, Target: 63.3%) and 30.2: Increase the proportion of children with special health care needs who have access to a medical home. (Baseline: 49.8%, Target: 54.8%)

Related to Objective Maternal, Infant, and Child Health (MICH) 31: Increase the proportion of children with special health care needs who receive their care in family-centered, comprehensive, coordinated systems. (Baseline: 20.4% for children aged 0-11 Target: 22.4% Baseline: 13.8%, for children aged 12 through 17, Target: 15.2%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

SIGNIFICANCE

According to the 2009-10 NS-CSHCN, only 17.6% of CSHCN receive services in a well-functioning system of services. The Omnibus Budget Reconciliation Act of 1989 requires Title V to provide and promote family-centered, community-based, coordinated care and facilitate the development of community-based systems of services for children with special health care needs and their families. To address this requirement a minimum of 30 percent of the Title V Block Grant funding is allocated for this purpose, and HP 2020 Objective MICH-31 establishes the goal to increase the proportion of children with special health care needs who receive their care in family-centered, comprehensive, and coordinated systems.

Strickland BB, Jones JR, Newacheck PW, Bethell CD, Blumberg SJ, Kogan MD. Assessing systems quality in a changing health care environment: the 2009-10 national survey of children with special health care needs. *Matern Child Health J.* 2015 Feb;19(2):353-61.
<https://www.ncbi.nlm.nih.gov/pubmed/24912943>

OUTCOME MEASURE 17.3 - Percent of children, ages 3 through 17, diagnosed with an autism spectrum disorder

GOAL

To track the percent of children and youth with special health care needs, autism spectrum disorder (ASD), and attention deficit disorder/attention deficit hyperactivity disorder (ADD/ADHD).

DEFINITION

Numerator: Number of children, ages 3 through 17, reported by their parents to have been diagnosed by a health care provider with ASD and to currently have the condition

Denominator: Number of children, ages 3 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

SIGNIFICANCE

Autism spectrum disorder (ASD) is a developmental disability that can cause significant social, communication and behavioral challenges. The prevalence of ASD has risen sharply over the last two decades. However, the average age at diagnosis for ASD is 4 years old, while the American Academy of Pediatrics recommends screening beginning at nine months. Interventions for ASD are more effective when they're started earlier.

<https://www.cdc.gov/ncbddd/autism/index.html>

OUTCOME MEASURE 17.4 - Percent of children, ages 3 through 17, diagnosed with Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)

GOAL

To track the percent of children and youth with special health care needs, autism spectrum disorder (ASD), and attention deficit disorder/attention deficit hyperactivity disorder (ADD/ADHD).

DEFINITION

Numerator: Number of children, ages 3 through 17, reported by their parents to have been diagnosed by a health care provider with ADD/ADHD and to currently have the condition

Denominator: Number of children, ages 3 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

SIGNIFICANCE

Attention-deficit/hyperactivity disorder (ADHD) is one of the most common neurobehavioral disorders of childhood. The prevalence has been increasing over the last decade for reasons that are not yet clear. It is sometimes referred to as Attention Deficit Disorder (ADD). It is usually first diagnosed in childhood and often lasts into adulthood. Children with ADHD may have trouble paying attention, controlling impulsive behaviors, or be overly active.

<https://www.cdc.gov/ncbddd/adhd/index.html>

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

GOAL

To increase the percent of children with a mental/behavioral condition who receive treatment or counseling.

DEFINITION

Numerator: Number of children, ages 3 through 17, reported by their parents to have been diagnosed by a health care provider with a mental/behavioral condition (depression, anxiety problems, or behavioral or conduct problems) who currently have the condition and received treatment or counseling in the last year

Denominator: Number of children, ages 3 through 17, reported by their parents to have been diagnosed by a health care provider with a mental/behavioral condition (depression, anxiety problems, or behavioral or conduct problems) who currently have the condition

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Mental Health and Mental Disorders Objective 6: Increase the proportion of children with mental health problems who receive treatment (Baseline: 68.9% in 2008, Target: 75.0%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

SIGNIFICANCE

The prevalence of mental/behavioral health conditions has been increasing among children and has been found to vary by geographic and sociodemographic factors. However, a significant portion of children diagnosed with a mental health condition do not receive treatment. Further, the receipt of treatment is generally dependent on sociodemographic and health-related factors. Adequate insurance and access to a patient-centered medical home may improve mental health treatment.

Ghandour RM, Kogan MD, Blumberg SJ, Jones JR, Perrin JM. Mental health conditions among school-aged children: geographic and sociodemographic patterns in prevalence and treatment. *J Dev Behav Pediatr.* 2012 Jan;33(1):42-54. <https://www.ncbi.nlm.nih.gov/pubmed/22218014>

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

GOAL

To improve the health status of children.

DEFINITION

Numerator: Number of children ages 0 through 17 reported by their parents to be in excellent or very good health

Denominator: Number of children ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Health-Related Quality of Life and Well-being Objective 1.1: Increase the proportion of adults who self-report good or better physical health (Baseline: 78.8%.Target: 79.8%) and Objective 1.2: Increase the proportion of adults who self-report good or better mental health (Baseline: 79.1%.Target: 80.1%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

SIGNIFICANCE

Overall health status for children provides a global, summary measure of children's health and well-being. Children reported to be in excellent or very good health are more likely to thrive in a variety of health dimensions, including physical and mental health. Self or proxy-reported health status is an indicator of health-related quality of life that is often more predictive of morbidity and mortality than objective measures of health.

Centers for Disease Control and Prevention. Health-Related Quality of Life.
<https://www.cdc.gov/hrqol/concept.htm>

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

GOAL

To reduce the percent of children and adolescents who are considered obese.

DEFINITION

Numerator: Number of children ages 2 through 4 who are obese (WIC)
Number of adolescents ages 10 through 17 who are obese (NSCH)
Number of adolescents in grades 9 through 12 who are obese (YRBSS)

Denominator: Number of children ages 2 through 4 (WIC)
Number of adolescents ages 10 through 17 (NSCH)
Number of adolescents in grades 9 through 12 (YRBSS)

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Nutrition and Weight Status (NWS) 10.4. Reduce the proportion of children and adolescents aged 2 to 19 years who are considered obese. (Baseline: 16.1% in 2005-2008, Target: 14.5%).

Related to NWS 11. (Developmental) Prevent inappropriate weight gain in youth and adults

DATA SOURCES and DATA ISSUES

Children 2 through 4 years: Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

Adolescents 10 through 17 years (parent report): National Survey of Children's Health (NSCH)

Adolescents grades 9 through 12 (adolescent report): Youth Risk Behavior Surveillance System (YRBSS)

SIGNIFICANCE

Childhood obesity is a serious health problem in the United States, that has tripled in prevalence since the 1970s. Currently, about 1 in 5 school-aged children are obese. Childhood obesity is associated with a variety of adverse consequences, including an increased risk of cardiovascular disease, type 2 diabetes, asthma, social stigmatization, low self-esteem, and adult obesity. Obesity in adulthood is linked to cardiovascular disease, type 2 diabetes, and cancer, and obese children are likely to have more severe obesity and attendant health problems in adulthood.

<https://www.cdc.gov/healthyschools/obesity/facts.htm>

OUTCOME MEASURE 21 - Percent of children, ages 0 through 17, without health insurance

GOAL

To ensure access to needed health care services for children.

DEFINITION

Numerator: Number of children ages 0 through 17 who are not currently covered by any private or public health insurance

Denominator: Number of children ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Access to Health Services Objective 1: Increase the proportion of persons with health insurance. (Baseline: 83.2% persons had medical insurance in 2008, Target: 100%)

DATA SOURCES and DATA ISSUES

American Community Survey (ACS) and/or National Survey of Children's Health (NSCH)

SIGNIFICANCE

There is a well documented benefit for children in having health insurance. Research has shown that children who acquire health insurance are more likely to have access to a usual source of care, receive well child care and immunizations, to have developmental milestones monitored, and receive prescriptions drugs, appropriate care for asthma and basic dental services. Serious childhood problems are more likely to be identified early in children with insurance, and insured children with special health care needs are more likely to have access to specialists. Insured children not only receive more timely diagnosis of serious health care conditions but experience fewer avoidable hospitalizations, improved asthma outcomes and fewer missed school days.

IOM (Institute of Medicine). 2009. America's Uninsured Crisis: Consequences for Health and Health Care. Washington, DC: National Academies Press.
<http://www.nationalacademies.org/hmd/Reports/2009/Americas-Uninsured-Crisis-Consequences-for-Health-and-Health-Care.aspx>

OUTCOME MEASURE 22.1 - Percent of children, ages 19 through 35 months, who have completed the combined 7-vaccine series

(4:3:1:3*:3:1:4)

GOAL

To increase the percent of children and adolescents who have completed recommended vaccines.

DEFINITION

Numerator: Number of children, ages 19 through 35 months, who have completed the combined 7-vaccine series of routinely recommended vaccinations (4:3:1:3*:3:1:4)

Denominator: Number of children, ages 19 through 35 months

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Immunization and Infectious Disease (IID) 8.0: Increase the percentage of children aged 19 to 35 months who receive the recommended doses of DTaP, polio, MMR, Hib, hepatitis B, varicella and pneumococcal conjugate vaccine (PCV) (Baseline in 2009 of 44.3%, Target of 80.0%)

DATA SOURCES and DATA ISSUES

National Immunization Survey (NIS)

SIGNIFICANCE

Vaccination is one of the greatest public health achievements of the 20th century, resulting in dramatic declines in morbidity and mortality for many infectious diseases. Childhood vaccination in particular is considered among the most cost-effective preventive services available, as it averts a potential lifetime lost to death and disability. Currently, there are 12 different vaccines recommended by the Centers for Disease Control and Prevention from birth through age 18, many of which require multiple doses for effectiveness as well as boosters to sustain immunity.

<https://www.cdc.gov/vaccines/index.html>

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

GOAL

To increase the percent of children and adolescents who have completed recommended vaccines.

DEFINITION

Numerator: Number of children 6 months through 17 years who are vaccinated annually against seasonal influenza

Denominator: Number of children, ages 6 months through 17 years

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Immunization and Infectious Disease (IID) 12.11. Increase the percentage of children aged 6 months through 17 years who are vaccinated annually against seasonal influenza (Baseline of 46.9% in 2010-11 flu season, Target of 70%)

DATA SOURCES and DATA ISSUES

National Immunization Survey - Flu (NIS-Flu)

SIGNIFICANCE

Vaccination is one of the greatest public health achievements of the 20th century, resulting in dramatic declines in morbidity and mortality for many infectious diseases. Childhood vaccination in particular is considered among the most cost-effective preventive services available, as it averts a potential lifetime lost to death and disability. Currently, there are 12 different vaccines recommended by the Centers for Disease Control and Prevention from birth through age 18, many of which require multiple doses for effectiveness as well as boosters to sustain immunity.

<https://www.cdc.gov/vaccines/index.html>

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

GOAL

To increase the percent of children and adolescents who have completed recommended vaccines.

DEFINITION

Numerator: Number of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine

Denominator: Number of adolescents, ages 13 through 17 years

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Immunization and Infectious Disease (IID) 11.4 Increase the vaccination coverage level of 3 doses of human papillomavirus (HPV) vaccine for females by age 13 to 15 years (Baseline in 2008 of 16.6%, Target of 80%)

DATA SOURCES and DATA ISSUES

National Immunization Survey - Teen (NIS-Teen)

SIGNIFICANCE

Vaccination is one of the greatest public health achievements of the 20th century, resulting in dramatic declines in morbidity and mortality for many infectious diseases. Childhood vaccination in particular is considered among the most cost-effective preventive services available, as it averts a potential lifetime lost to death and disability. Currently, there are 12 different vaccines recommended by the Centers for Disease Control and Prevention from birth through age 18, many of which require multiple doses for effectiveness as well as boosters to sustain immunity.

<https://www.cdc.gov/vaccines/index.html>

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

GOAL

To increase the percent of children and adolescents who have completed recommended vaccines.

DEFINITION

Numerator: Number of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine

Denominator: Number of adolescents, ages 13 through 17 years

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Immunization and Infectious Disease (IID) 11.1. Increase the vaccination coverage level of 1 dose of tetanus-diphtheria-acellular pertussis (Tdap) booster vaccine for adolescents by age 13 to 15 years (Baseline 46.7% in 2008; Target of 80%)

DATA SOURCES and DATA ISSUES

National Immunization Survey - Teen (NIS-Teen)

SIGNIFICANCE

Vaccination is one of the greatest public health achievements of the 20th century, resulting in dramatic declines in morbidity and mortality for many infectious diseases. Childhood vaccination in particular is considered among the most cost-effective preventive services available, as it averts a potential lifetime lost to death and disability. Currently, there are 12 different vaccines recommended by the Centers for Disease Control and Prevention from birth through age 18, many of which require multiple doses for effectiveness as well as boosters to sustain immunity.

<https://www.cdc.gov/vaccines/index.html>

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

GOAL

To increase the percent of children and adolescents who have completed recommended vaccines.

DEFINITION

Numerator: Number of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine

Denominator: Number of adolescents, ages 13 through 17 years

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Immunization and Infectious Disease (IID) 11.3. Increase the vaccination coverage level of 1 dose meningococcal conjugate vaccine for adolescents by age 13 to 15 years (Baseline 43.9% in 2008; Target 80%)

DATA SOURCES and DATA ISSUES

National Immunization Survey - Teen (NIS-Teen)

SIGNIFICANCE

Vaccination is one of the greatest public health achievements of the 20th century, resulting in dramatic declines in morbidity and mortality for many infectious diseases. Childhood vaccination in particular is considered among the most cost-effective preventive services available, as it averts a potential lifetime lost to death and disability. Currently, there are 12 different vaccines recommended by the Centers for Disease Control and Prevention from birth through age 18, many of which require multiple doses for effectiveness as well as boosters to sustain immunity.

<https://www.cdc.gov/vaccines/index.html>

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

GOAL

To reduce pregnancies to teenagers.

DEFINITION

Numerator: Number of births to adolescents, ages 15 through 19 years

Denominator: Number of adolescent females, ages 15 through 19 years

Units: 1,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Family Planning (FP) 8.1: Reduce pregnancies among adolescent females aged 15 to 17 years (Baseline 40.2 per 1,000 in 2005; Target 36.2 per 1,000) and FP 8.2: Reduce pregnancies among adolescent females aged 17 to 19 years (Baseline 116.2 per 1,000 in 2005; Target 105.9 per 1,000)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS) for states and territories

Population estimates come from the U.S. Census Bureau

United Nations Population Division for the Freely Associated States in the Pacific Basin

SIGNIFICANCE

Teen pregnancy and childbearing have substantial social and economic costs for both teens and their children. Teen mothers are less likely to complete high school and further education which may reduce earning potential and contribute to intergenerational poverty. Although teen pregnancy and birth rates have declined substantially over the past two decades, rates are still higher than in many other industrialized countries and large racial/ethnic disparities persist. Birth rates for non-Hispanic Black and Hispanic teens are more than double that of non-Hispanic White teens.

<https://www.cdc.gov/teenpregnancy/about/index.htm>

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

GOAL

To reduce the prevalence of postpartum depression

DEFINITION

Numerator: Number of women who report postpartum depressive symptoms following a recent live birth (defined as reporting always/often feeling down, depressed, hopeless or always/often having little interest or little pleasure in doing things)

Denominator: Number of women with a recent live birth

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) 34: Decrease the proportion of women delivering a live birth who experience postpartum depressive symptoms (Developmental)

DATA SOURCES and DATA ISSUES

Pregnancy Risk Assessment Monitoring System (PRAMS)

SIGNIFICANCE

Postpartum depression is common, affecting as many as 1 in 7 mothers. It occurs when brief “baby blue” symptoms of crying, sadness, and irritability become severe and result in depressed mood and loss of interest in activities for more than two weeks. Postpartum depression is associated with poor maternal-infant bonding and may negatively influence child development. Universal screening and treatment for pregnant and postpartum women is recommended by the American College of Obstetricians and Gynecologists (ACOG), the American Academy of Pediatrics (AAP), and the U.S. Preventive Services Task Force.

Pearlstein T, Howard M, Salisbury A, Zlotnick C. Postpartum depression. American Journal of Obstetrics & Gynecology. 2009;200(4):357-364. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3918890/>

Screening for perinatal depression. Committee Opinion No. 630. American College of Obstetricians and Gynecologists. Obstet Gynecol 2015;125:1268–71. <http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Screening-for-Perinatal-Depression>

OUTCOME MEASURE 25 - Percent of children, ages 0 through 17, who were not able to obtain needed health care in the last year

GOAL

To ensure access to needed health care services for children.

DEFINITION

Numerator: Number of children, ages 0 through 17 years, who were reported by a parent to not able to obtain needed health care in the last year

Denominator: Number of children, ages 0 through 17 years

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Access to Health Services (AHS) 6.1: Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care, dental care, or prescription medicines (Baseline 10% in 2007; Target 9%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

SIGNIFICANCE

Improving access to quality health services is essential for optimal health in both preventing and treating health conditions. When needed care is not received, health may suffer and conditions may not be prevented or may grow in severity. Common barriers to care include cost, language, logistical, and structural factors, such as not having transportation or scheduling difficulties. Adequate insurance and access to a patient-centered medical home can reduce unmet needs for health care.

Kogan MD, Newacheck PW, Blumberg SJ, Ghandour RM, Singh GK, Strickland BB, van Dyck PC. Underinsurance among children in the United States. *N Engl J Med.* 2010Aug 26;363(9):841-51. <http://www.nejm.org/doi/full/10.1056/NEJMsa0909994>

Strickland BB, Jones JR, Ghandour RM, Kogan MD, Newacheck PW. The medical home: health care access and impact for children and youth in the United States. *Pediatrics.* 2011 Apr;127(4):604-11.

B. National Performance Measures

Title V MCH Services Block Grant National Performance Measures	
No.	National Performance Measure
1	Percent of women, ages 18 through 44, with a preventive medical visit in the past year
2	Percent of cesarean deliveries among low-risk first births
3	Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)
4	A) Percent of infants who are ever breastfed and B) Percent of infants breastfed exclusively through 6 months
5	A) Percent of infants placed to sleep on their backs, B) Percent of infants placed to sleep on a separate approved sleep surface, C) Percent of infants placed to sleep without soft objects or loose bedding
6	Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year
7	7.1 Rate of hospitalization for non-fatal injury per 100,000 children, ages 0 through 9; and 7.2 Rate of hospitalization for non-fatal injury per 100,000 adolescents, ages 10 through 19
8	8.1 Percent of children, ages 6 through 11, who are physically active at least 60 minutes per day; and 8.2 Percent of adolescents, ages 12 through 17, who are physically active at least 60 minutes per day
9	Percent of adolescents, ages 12 through 17, who are bullied or who bully others
10	Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year
11	Percent of children with and without special health care needs, ages 0 through 17, who have a medical home
12	Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care
13	13.1 Percent of women who had a dental visit during pregnancy; and 13.2 Percent of children, ages 1 through 17, who had a preventive dental visit in the past year
14	14.1 Percent of women who smoke during pregnancy; and 14.2 Percent of children, ages 0 through 17, who live in households where someone smokes
15	Percent of children, ages 0 through 17, who are continuously and adequately insured

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

GOAL

To increase the percent of women who have an annual preventive medical visit.

DEFINITION

Numerator: Number of women, ages 18 through 44, who had a preventive medical visit in the past year

Denominator: Number of women, ages 18 through 44

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Developmental Objective 16.1: Increase the percentage of women delivering a live birth who discussed preconception health with a health care worker prior to pregnancy

Related to Access to Health Services (AHS) Developmental Objective 7.0: Increase the proportion of persons who receive appropriate clinical preventive services

DATA SOURCES and DATA ISSUES

Behavioral Risk Factor Surveillance System (BRFSS)

MCH POPULATION DOMAIN

Women/Maternal Health

SIGNIFICANCE

A well-woman or preconception visit provides a critical opportunity to receive recommended clinical preventive services, including screening, counseling, and immunizations, which can lead to appropriate identification, treatment, and prevention of disease to optimize the health of women before, between, and beyond potential pregnancies. For example, screening and management of chronic conditions such as diabetes, and counseling to achieve a healthy weight and smoking cessation, can be advanced within a well woman visit to promote women's health prior to and between pregnancies and improve subsequent maternal and perinatal outcomes. The annual well-woman visit is recommended by the American College of Obstetrics and Gynecologists (ACOG). <http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Gynecologic-Practice/Well-Woman-Visit>

PERFORMANCE MEASURE 2 - Percent of cesarean deliveries among low-risk first births

GOAL

To reduce the percent of cesarean deliveries among low-risk first births.

DEFINITION

Numerator: Number of cesarean delivery among term (37+ weeks), singleton, vertex births to nulliparous women

Denominator: Number of term (37+ weeks), singleton, vertex births to nulliparous women

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 7.1. Reduce cesarean births among low-risk women with no prior cesarean (Baseline: 26.5%, Target: 23.9%)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

MCH POPULATION DOMAIN

Women/Maternal Health

SIGNIFICANCE

Cesarean delivery can be a life-saving procedure for certain medical indications. However, for most low-risk pregnancies, cesarean delivery poses avoidable maternal risks of morbidity and mortality, including hemorrhage, infection, and blood clots—risks that compound with subsequent cesarean deliveries. Much of the temporal increase in cesarean delivery (over 50% in the past decade), and wide variation across states, hospitals, and practitioners, can be attributed to first-birth cesareans. Moreover, cesarean delivery in low-risk first births may be most amenable to intervention through quality improvement efforts. This low-risk cesarean measure, also known as nulliparous term singleton vertex (NTSV) cesarean, is endorsed by the American College of Obstetrician's and Gynecologists (ACOG), The Joint Commission (PC-02), National Quality Forum (#0471), Center for Medicaid and Medicare Services (CMS) – CHIPRA Child Core Set of Maternity Measures, and the American Medical Association-Physician Consortium for Patient Improvement. <http://www.acog.org/Resources-And-Publications/Obstetric-Care-Consensus-Series/Safe-Prevention-of-the-Primary-Cesarean-Delivery>

PERFORMANCE MEASURE 3 - Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

GOAL

To ensure that higher risk mothers and newborns deliver at appropriate level hospitals.

DEFINITION

Numerator: Number of VLBW infants born in a hospital with a level III or higher NICU

Denominator: Number of VLBW infants (< 1500 grams)

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 33: Increase the proportion of VLBW infants born at level III hospitals or subspecialty perinatal centers (Baseline: 75%, Target: 83.7%)

DATA SOURCES and DATA ISSUES

Linked birth certificate and hospital data on NICU levels from American Academy of Pediatrics (AAP)

MCH POPULATION DOMAIN

Perinatal/Infant Health

SIGNIFICANCE

Very low birth weight infants (<1,500 grams or 3.25 pounds) are the most fragile newborns. Although they represented less than 2% of all births in 2010, VLBW infants accounted for 53% of all infant deaths, with a risk of death over 100 times higher than that of normal birth weight infants ($\geq 2,500$ grams or 5.5 pounds). VLBW infants are significantly more likely to survive and thrive when born in a facility with a level-III Neonatal Intensive Care Unit (NICU), a subspecialty facility equipped to handle high-risk neonates. In 2012, the AAP provided updated guidelines on the definitions of neonatal levels of care to include Level I (basic care), Level II (specialty care), and Levels III and IV (subspecialty intensive care) based on the availability of appropriate personnel, physical space, equipment, and organization. Given overwhelming evidence of improved outcomes, the AAP recommends that VLBW and/or very preterm infants (<32 weeks' gestation) be born in only level III or IV facilities.

American Academy of Pediatrics Committee on Fetus And Newborn. Levels of neonatal care. Pediatrics. 2012 Sep;130(3):587-97. <http://pediatrics.aappublications.org/content/130/3/587>

PERFORMANCE MEASURE 4 -

A) Percent of infants who are ever breastfed and

B) Percent of infants breastfed exclusively through 6 months

GOAL

To increase the proportion of infants who are breastfed and who are breastfed at six months

DEFINITION

Numerator:

- A) Number of infants who were ever breastfed
- B) Number of infants breastfed exclusively through 6 months

Denominator:

- A) Number of infants born in a calendar year
- B) Number of infants born in a calendar year

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 21.1: Increase the proportion of children who are ever breastfed (Baseline: 74% in 2006, Target: 81.9%)

Related to Maternal, Infant, and Child Health (MICH) Objective 21.5: Increase the proportion of children who are breastfed exclusively at (Baseline: 14.1% in 2006, Target: 25.5%)

DATA SOURCES and DATA ISSUES

- A) National Immunization Survey (NIS)
- B) National Immunization Survey (NIS)

MCH POPULATION DOMAIN

Perinatal/Infant Health

SIGNIFICANCE

The American Academy of Pediatrics (AAP) recommends all infants (including premature and sick newborns) exclusively breastfeed for about six months as human milk supports optimal growth and development by providing all required nutrients during that time. Breastfeeding strengthens the immune system, reduces respiratory infections, gastrointestinal illness, and SIDS, and promotes neurodevelopment. Breastfed children may also be less likely to develop diabetes, childhood obesity, and asthma. Maternal benefits include reduced postpartum blood loss due to oxytocin release and possible protective effects against breast and ovarian cancer.

American Academy of Pediatrics Section on Breastfeeding. Breastfeeding and the use of human milk. Pediatrics. 2012 Mar;129(3):e827-41. <http://pediatrics.aappublications.org/content/early/2012/02/22/peds.2011-3552>

PERFORMANCE MEASURE 5 -

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

GOAL

To increase the percent of infants placed to sleep on their backs, on a separate approved sleep surface, without soft objects or loose bedding

DEFINITION

Numerator:

- A) Number of mothers reporting that they most often place their baby to sleep on their back only
- B) Number of mothers reporting that their baby always or often sleeps alone, usually in a crib, bassinet, or pack and play, and not usually in a standard bed, couch, sofa, armchair, car seat, or swing
- C) Number of mothers reporting that their baby *does not* usually sleep with blankets, toys, cushions, pillows, or crib bumper pads

Denominator:

- A) Number of live births
- B) Number of live births
- C) Number of live births

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 20: Increase the proportion of infants placed to sleep on their backs (Baseline: 69.0%, Target: 75.9%)

DATA SOURCES and DATA ISSUES

Pregnancy Risk Assessment Monitoring System (PRAMS)

MCH POPULATION DOMAIN

Perinatal/Infant Health

SIGNIFICANCE

Sleep-related infant deaths, also called Sudden Unexpected Infant Deaths (SUID), are the leading cause of infant death after the first month of life and the third leading cause of infant death overall. Sleep-related SUIDs include Sudden Infant Death Syndrome (SIDS), unknown cause, and accidental suffocation and strangulation in bed. Due to heightened risk of SIDS when infants are placed to sleep in side (lateral) or stomach (prone) sleep positions, the American Academy of Pediatrics (AAP) has long recommended the back (supine) sleep position. In 2011, AAP expanded its recommendations to help reduce the risk of all sleep-related deaths through a safe sleep environment that includes use of the back-sleep position, on a separate firm sleep surface (room-sharing without bed sharing), and without loose bedding. <http://pediatrics.aappublications.org/content/128/5/1030>

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

GOAL

To increase the percent of children who receive a developmental screening

DEFINITION

Numerator: Number of children, ages 9 through 35 months (2 years), whose parents completed a Standardized Developmental Screening tool in the past year

Denominator: Number of children, ages 9 through 35 months

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 29-1: Increase the proportion of children (aged 10-35 months) who have been screened for an Autism Spectrum Disorder and other developmental delays. (Baseline: 22.6%, Target: 24.9%)

DATA SOURCES and DATA ISSUES

The National Survey of Children's Health (NSCH).

MCH POPULATION DOMAIN

Child Health

SIGNIFICANCE

Early identification of developmental disorders is critical to the well-being of children and their families. It is an integral function of the primary care medical home. The percent of children with a developmental disorder has been increasing, yet overall screening rates have remained low. The American Academy of Pediatrics (AAP) recommends screening tests begin at the nine month visit. The developmental screening measure is endorsed by the National Quality Forum and is part of the Core Set of Children's Health Care Quality Measures for Medicaid and CHIP.

Council on Children With Disabilities; Section on Developmental Behavioral Pediatrics; Bright Futures Steering Committee; Medical Home Initiatives for Children With Special Needs Project Advisory Committee. Identifying infants and young children with developmental disorders in the medical home: an algorithm for developmental surveillance and screening. *Pediatrics*. 2006 Jul;118(1):405-20.

<http://pediatrics.aappublications.org/content/118/1/405>

PERFORMANCE MEASURE 7 -

7.1 Rate of hospitalization for non-fatal injury per 100,000 children, ages 0 through 9

7.2 Rate of hospitalization for non-fatal injury per 100,000 adolescents, ages 10 through 19

GOAL

To decrease the number of hospital admissions for non-fatal injury among children ages 0 through 19.

DEFINITION

Numerator:

7.1 Number of hospital admissions with a primary diagnosis of unintentional or intentional injury among children ages 0 through 9 (excludes in-hospital deaths)

7.2 Number of hospital admissions with a primary diagnosis of unintentional or intentional injury among adolescents, ages 10 through 19 (excludes in-hospital deaths)

Denominator:

7.1 Number of children, ages 0 through 9

7.2 Number of adolescents, ages 10 through 19

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Injury and Violence Prevention (IVP) Objective 1.2: Reduce hospitalizations for nonfatal injuries. (Baseline: 617.6 per 100,000. Target: 555.8 per 100,000.)

DATA SOURCES and DATA ISSUES

Healthcare Cost and Utilization Project (HCUP) - State Inpatient Database (SID)
Population estimates come from the U.S. Census Bureau

MCH POPULATION DOMAIN

Child Health and/or Adolescent Health

SIGNIFICANCE

Unintentional injury is the leading cause of child and adolescent mortality, from age 1 through 19. Homicide and suicide, violent or intentional injury, are the second and third leading causes of death for adolescents ages 15 through 19. For those who suffer non-fatal severe injuries, many will become children with special health care needs. Effective interventions to reduce injury exist but are not fully implemented in systems of care that serve children and their families. Reducing the burden of nonfatal injury can greatly improve the life course trajectory of infants, children, and adolescents resulting in improved quality of life and cost savings.

Heron M. Deaths: Leading Causes for 2014. National Vital Statistics Reports. 2016 June 30. 65(5).
https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_05.pdf

CDC. VitalSigns: Child Injury. April 2012. <https://www.cdc.gov/vitalsigns/childinjury/>

CDC. National Action Plan for Injury Prevention. April 2012. <https://www.cdc.gov/safecchild/nap/index.html>

PERFORMANCE MEASURE 8 -

8.1 Percent of children, ages 6 through 11, who are physically active at least 60 minutes per day

8.2 Percent of adolescents, ages 12 through 17 who are physically active at least 60 minutes per day

GOAL

To increase the number of children and adolescents who are physically active.

DEFINITION

Numerator:

8.1 Number of children, ages 6 through 11, who are reported by their parents to be physically active at least 60 minutes per day in the past week (NSCH)

8.2 Number of adolescents, ages 12 through 17, who are reported by their parents to be physically active at least 60 minutes per day in the past week (NSCH)

Number of adolescents in grades 9 through 12 who report being physically active at least 60 minutes per day in the past week (YRBSS)

Denominator:

8.1 Number of children ages 6 through 11 (NSCH)

8.2 Number of adolescents ages 12 through 17 (NSCH)

Number of adolescents in grades 9 through 12 (YRBSS)

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Physical Activity (PA) Objective 4.1: Increase the proportion of the Nation's public and private elementary schools that require daily physical education for all students. (Baseline: 3.8%, Target: 4.2%)

Related to Physical Activity (PA) Objective 3: Increase the proportion of adolescents who meet current Federal physical activity guidelines for aerobic physical activity and for muscle-strengthening activity. (Baseline: 18.4%, Target: 20.2% for adolescents to meet current physical activity guidelines for aerobic physical activity)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

Youth Risk Behavior Surveillance System (YRBSS)

MCH POPULATION DOMAIN

Child Health and/or Adolescent Health

SIGNIFICANCE

Regular physical activity can improve the health and quality of life of Americans of all ages, regardless of the presence of a chronic disease or disability. Physical activity in children and adolescents reduces the risk of early life risk factors for cardiovascular disease, hypertension, Type II diabetes, and osteoporosis. In addition to aerobic and muscle-strengthening activities, bone-strengthening activities are especially

important for children and young adolescents because the majority of peak bone mass is obtained by the end of adolescence.

U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans
<https://health.gov/paguidelines/guidelines/>

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

GOAL

To reduce the percent of adolescents who are bullied or who bully others.

DEFINITION

Numerator:

Number of adolescents in grades 9 through 12 who report that they are bullied on school property or electronically in the past year (YRBSS)
Number of adolescents ages 12 through 17 who are reported by a parent/guardian to be bullied (NSCH)
Number of adolescents ages 12 through 17 who are reported by a parent/guardian to bully others (NSCH)

Denominator:

Number of adolescents in grades 9 through 12 (YRBSS)
Number of adolescents ages 12 through 17 (NSCH)

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Injury and Violence Prevention (IVP) Objective 35: Reduce bullying among adolescents. (Baseline: 19.9%, Target: 17.9%)

DATA SOURCES and DATA ISSUES

Youth Risk Behavior Surveillance System (YRBSS)
National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Adolescent Health

SIGNIFICANCE

Bullying, particularly among school-age children, is a major public health problem. Estimates suggest nearly 30% of American adolescents reported at least moderate bullying experiences as the bully, the victim, or both. Bullying experiences are associated with a number of behavioral, emotional, and physical adjustment problems. Adolescents who bully others tend to exhibit other defiant and delinquent behaviors, have poor school performance, be more likely to drop-out of school, and are more likely to bring weapons to school. Victims of bullying tend to report feelings of depression, anxiety, low self-esteem, and isolation; poor school performance; suicidal ideation; and suicide attempts. Bullying victims who also perpetrate bullying (i.e., bully-victims) may exhibit the poorest functioning, in comparison with either victims or bullies. Emotional and behavioral problems experienced by victims, bullies, and bully-victims may continue into adulthood and produce long-term negative outcomes, including low self-esteem and self-worth, depression, antisocial behavior, vandalism, drug use and abuse, criminal behavior, gang membership, and suicidal ideation. www.stopbullying.gov.

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

GOAL

To increase the percent of adolescents who have a preventive medical visit.

DEFINITION

Numerator: Number of adolescents, ages 12 through 17, with a preventive medical visit in the past year

Denominator: Number of adolescents, ages 12 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Adolescent Health (AH) Objective 1: Increase the proportion of adolescents who have had a wellness checkup in the past 12 months. (Baseline: 68.7%, Target: 75.6%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Adolescent Health

SIGNIFICANCE

Adolescence is a period of major physical, psychological, and social development. As adolescents move from childhood to adulthood, they assume individual responsibility for health habits, and those who have chronic health problems take on a greater role in managing those conditions. Initiation of risky behaviors, such as unsafe sexual activity, unsafe driving, and substance use, is a critical health issue during adolescence, as adolescents try on adult roles and behaviors. An annual preventive well visit may help adolescents adopt or maintain healthy habits and behaviors, avoid health-damaging behaviors, manage chronic conditions, and prevent disease. The Bright Futures guidelines recommends that adolescents have an annual checkup from age 11 through 21. The visit should cover a comprehensive set of preventive services, such as a physical examination, immunizations, and discussion of health-related behaviors including healthy eating, physical activity, substance use, sexual behavior, violence, and motor vehicle safety. The adolescent well-care visit measure for health plans is part of the core measure sets for Medicaid and the National Committee for Quality Assurance.

National Adolescent and Young Adult Health Information Center (2016). Summary of Recommended Guidelines for Clinical Preventive Services for Adolescents up to age 18. <http://nahic.ucsf.edu/adolescent-guidelines>.

PERFORMANCE MEASURE 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home

GOAL

To increase the percent of children with and without special health care needs who have a medical home

DEFINITION

Numerator: Number of children with and without special health care needs, ages 0 through 17, who meet the criteria for having a medical home (personal doctor or nurse, usual source for care, and family-centered care; referrals or care coordination if needed)

Denominator: Number of children, ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objectives 30.1: Increase the proportion of children who have access to a medical home, (Baseline: 57.5%, Target: 63.3%) and 30.2: Increase the proportion of children with special health care needs who have access to a medical home. (Baseline: 49.8%, Target: 54.8%)

Related to Objective Maternal, Infant, and Child Health (MICH) Objective 31: Increase the proportion of children with special health care needs who receive their care in family-centered, comprehensive, coordinated systems. (Baseline: 20.4% for children aged 0-11, Target: 22.4%; Baseline: 13.8% for children aged 12 through 17, Target 15.2%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Children with Special Health Care Needs or All Children (CSHCN and non-CSHCN)

SIGNIFICANCE

The American Academy of Pediatrics (AAP) specifies seven qualities essential to medical home care, which include accessible, family-centered, continuous, comprehensive, coordinated, compassionate and culturally effective. Providing comprehensive and coordinated care to children in a medical home is the standard of pediatric practice. Research indicates that children with a stable and continuous source of health care are more likely to receive appropriate preventive care, are less likely to be hospitalized for preventable conditions, and are more likely to be diagnosed early for chronic or disabling conditions. The Maternal and Child Health Bureau uses the AAP definition of medical home.

www.medicalhomeinfo.aap.org

PERFORMANCE MEASURE 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care

GOAL

To increase the percent of adolescents with and without special health care needs who have received the services necessary to make transitions to adult health care.

DEFINITION

Numerator: Number of adolescents with and without special health care needs, ages 12 through 17, whose families report that they received the services necessary to transition to adult health care

Denominator: Number of adolescents, ages 12 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Disability and Health (DH) Objective 5: Increase the proportion of youth with special health care needs whose health care provider has discussed transition planning from pediatric to adult health care. (Baseline: 41.2%, Target: 45.3%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Children with Special Health Care Needs or All Adolescents (CSHCN and non-CSHCN)

SIGNIFICANCE

The transition of youth to adulthood, including the movement from a child to an adult model of healthcare, has become a priority issue nationwide as evidenced by the 2011 clinical report and algorithm developed jointly by the AAP, American Academy of Family Physicians and American College of Physicians to improve healthcare transitions for all youth and families. Poor health has the potential to impact negatively the youth and young adults' academic and vocational outcomes. Over 90 percent of children with special health care needs now live to adulthood, but are less likely than their non-disabled peers to complete high school, attend college or to be employed. Health and health care are cited as two of the major barriers to making successful transitions.

American Academy of Pediatrics; American Academy of Family Physicians; American College of Physicians-American Society of Internal Medicine. A consensus statement on health care transitions for young adults with special health care needs. *Pediatrics*. 2002 Dec;110(6 Pt 2):1304-6.

http://pediatrics.aappublications.org/content/110/Supplement_3/1304

PERFORMANCE MEASURE 13 -

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

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

GOAL

13.1 To increase the number of pregnant women who have a dental visit during pregnancy and

13.2 To increase the number of children, ages 1 through 17, who had a preventive dental visit in the past year

DEFINITION

Numerator:

13.1 Number of women who had a preventive dental visit during pregnancy

13.2 Number of infant or child, ages 1 through 17, who had a preventive dental visit in the past year

Denominator:

13.1 Number of live births

13.2 Number of children, ages 1 through 17\

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Oral Health (OH) Objective 7. Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year. (Baseline: 44.5%, Target: 49.0%)

Related to Oral Health (OH) Objective 8. Increase the proportion of low-income children and adolescents who receive any preventive dental service during the past year. (Baseline: 30.2%, Target: 33.2%)

DATA SOURCES and DATA ISSUES

13.1 Pregnancy Risk Assessment Monitoring System (PRAMS)

13.2 National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Women/Maternal Health, Child Health, and/or Adolescent Health

SIGNIFICANCE

Oral health is a vital component of overall health and oral health care remains the greatest unmet health need for children. Insufficient access to oral health care and effective preventive services affects children's health, education, and ability to prosper. To prevent tooth decay and oral infection, the American Academy of Pediatric Dentistry (AAPD) recommends preventive dental care for all children after the eruption of the first tooth or by 12 months of age, usually at intervals of every 6 months. Preventive dental care in pregnancy is also recommended by the American College of Obstetricians and Gynecologists (ACOG) to improve lifelong oral hygiene habits and dietary behavior for women and their families.

https://www.mchoralhealth.org/materials/consensus_statement.php

http://www.aapd.org/media/Policies_Guidelines/G_Periodicity7.pdf.

PERFORMANCE MEASURE 14 -

14.1 Percent of women who smoke during pregnancy and

14.2 Percent of children, ages 0 through 17, who live in households where someone smokes

GOAL

- 14.1 To decrease the number of women who smoke during pregnancy and
- 14.2 To decrease the number of households where someone smokes.

DEFINITION

Numerator:

- 14.1 Number of women who report smoking during pregnancy
- 14.2 Number of children, ages 0 through 17, who live in households where there is household member who smokes

Denominator:

- 14.1 Number of live births
- 14.2 Number of children, ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Tobacco Use (TU) Objective 6: Increase smoking cessation during pregnancy (Target: 30.0%) and related to Tobacco Use (TU) Objective 11.1: Reduce the proportion of children aged 3 to 11 years exposed to secondhand smoke. (Baseline: 52.2% , Target 47%)

DATA SOURCES and DATA ISSUES

- 14.1 National Vital Statistics System (NVSS)
- 14.2 National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Women/Maternal Health, Child Health, and/or Adolescent Health

SIGNIFICANCE

Women who smoke during pregnancy are more likely to experience a fetal death or deliver a low birth weight baby. Adverse effects of parental smoking on children have been a clinical and public health concern for decades. Children have an increased frequency of ear infections; acute respiratory illnesses and related hospital admissions during infancy; severe asthma and asthma-related problems; lower respiratory tract infections; and SIDS.

The Health Consequences of Smoking—50 Years of Progress. A Report of the Surgeon General. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/index.html>.

PERFORMANCE MEASURE 15 - Percent of children, ages 0 through 17, who are continuously and adequately insured

GOAL

To increase the percent of children who are adequately insured

DEFINITION

Numerator: Number of children, ages 0 through 17, who were reported to be continuously insured in the past year with adequate coverage, based on 3 criteria: whether their children's insurance covers needed services and providers, and reasonably covers costs. If a parent answered "always" or "usually" to all three dimensions of adequacy, then the child was considered to have adequate insurance coverage. (No out-of-pocket costs were considered to be "always" reasonable.)

Denominator: Number of children, ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2020 OBJECTIVE

Related to Access to Health Services (AHS) Objective 1: Increase the proportion of persons with health insurance

Related to Access to Health Services (AHS) Objective 6: Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care, dental care, or prescription medicines

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Child Health, Adolescent Health, and/or Children with Special Health Care Needs

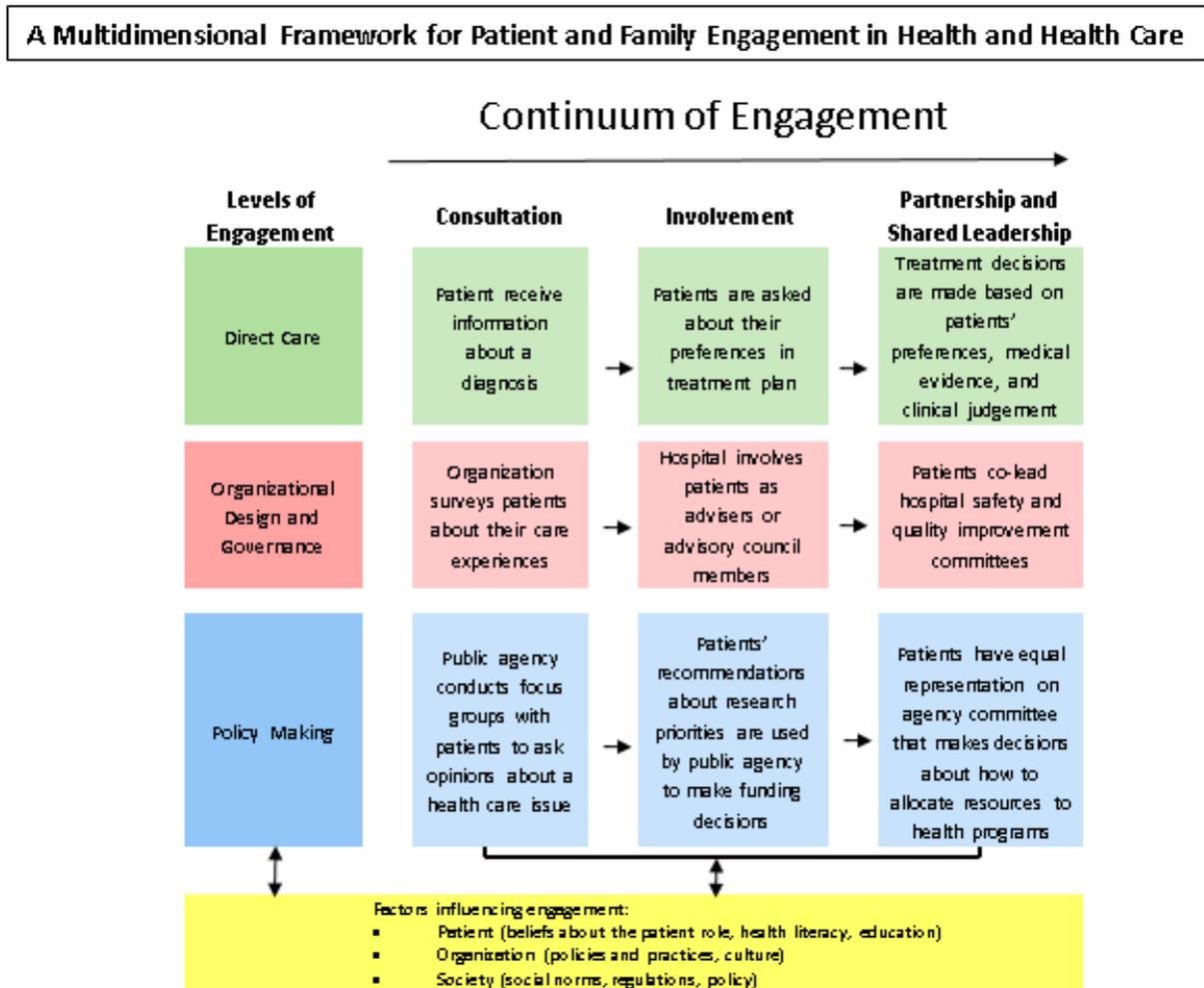
SIGNIFICANCE

Almost one-quarter of American children with continuous insurance coverage are not adequately insured. Inadequately insured children are more likely to have delayed or forgone care, lack a medical home, be less likely to receive needed referrals and care coordination, and receive family-centered care. The American Academy of Pediatrics (AAP) highlighted the importance of this issue with a policy statement. The major problems cited were cost-sharing requirements that are too high, benefit limitations, and inadequate coverage of needed services.

Kogan MD, Newacheck PW, Blumberg SJ, Ghandour RM, Singh GK, Strickland BB, van Dyck PC. Underinsurance among children in the United States. *N Engl J Med.* 2010Aug 26;363(9):841-51. <http://www.nejm.org/doi/full/10.1056/NEJMsa0909994>

APPENDIX D: FAMILY PARTNERSHIP CONTINUUM

Family partnership is defined as patients, families, their representatives, and health professionals working in active partnership at various levels across the health care system—direct care, organizational design and governance, and policy making—to improve health and health care.⁵ This partnership is accomplished through the intentional practice of working with families for the ultimate goal of positive outcomes in all areas through the life course. The Figure below represents a continuum of engagement with families and individuals at different levels in the health care system, from the consultation, involvement, and partnership stage.⁶



⁵ Carman K., Dardess, P., Maurer, M., Sofaer, S., Adams, K., Bechtel, C., Sweeney, J. Patient and Family Engagement: A framework for understanding the elements and developing interventions and policies. Health Affairs. 2013; 32:223-231

⁶ Ibid.

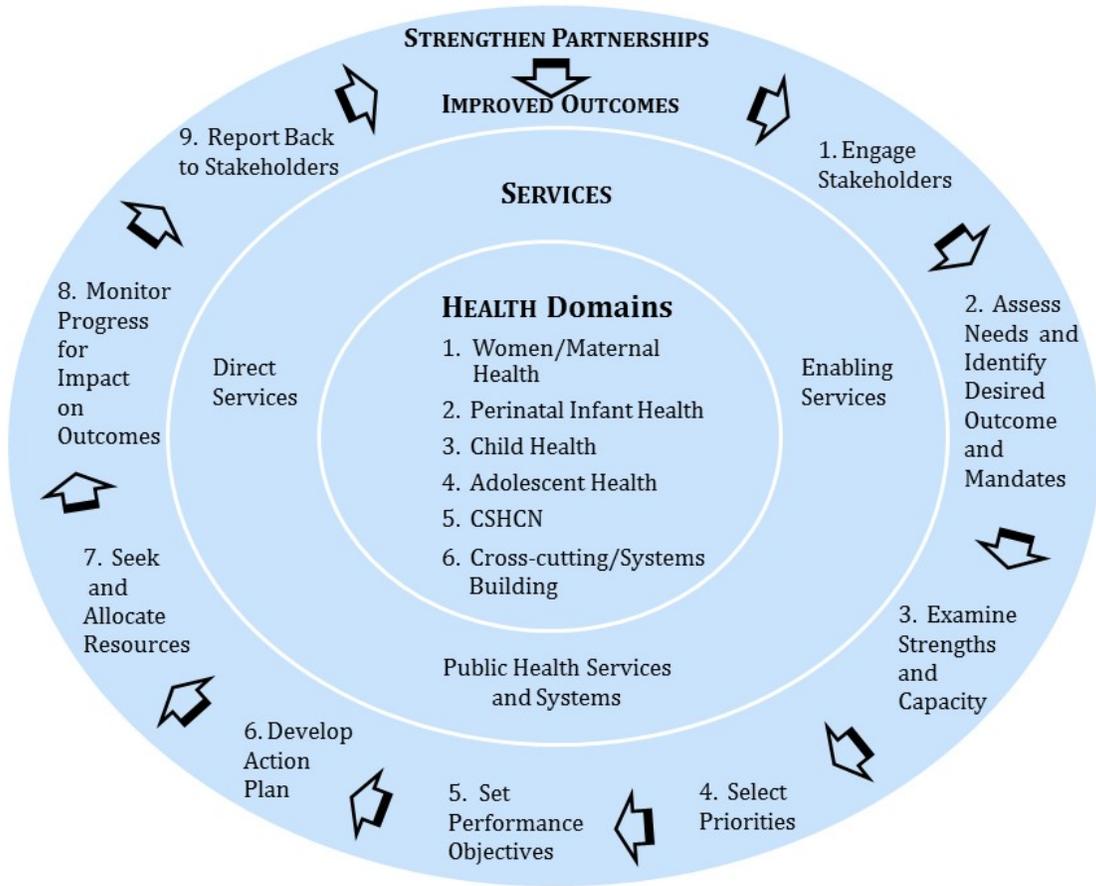
APPENDIX E: NEEDS ASSESSMENT – BACKGROUND AND CONCEPTUAL FRAMEWORK

Conducting a Needs Assessment is a systematic process to acquire an accurate, thorough picture of the strengths and weaknesses of a state’s public health system that can be used in response to the preventive and primary care services needs for ALL pregnant women, mothers, infants (up to age one), and children, including children with special health care needs [Section 505 (a)(1)]. The Needs Assessment process includes the collection and examination of information about the state’s capacity and infrastructure, needs and desired outcomes for the MCH population, and legislative mandates, etc. This information is utilized to determine priority goals, develop a plan of action, and to allocate funds and resources. The Needs Assessment is a collaborative process that should include the HRSA/MCHB, the state Department of Health, families, practitioners, the community, and other agencies and organizations within each state and jurisdiction that have an interest in the well-being of the MCH population.

Title V of the Social Security Act requires states to conduct a statewide Needs Assessment every five years. States will report on the next Five-year Needs Assessment in calendar year 2020 as part of the FY 2021 MCH Block Grant Application process. Rather than submitting a comprehensive “stand-alone document”, as was required prior to 2015, states now submit a Five-year Needs Assessment Summary that concisely describes the process and findings. As the Needs Assessment document may serve multiple purposes, a state may wish to develop a more comprehensive document to meet its broader needs. This document cannot be submitted in place of the required Five-year Needs Assessment Summary, but states may include a URL, if the document is posted online, in the Five-year Needs Assessment Summary or they may submit the document as an attachment to the Application/Annual Report in the electronic application system. Over the five-year reporting period, states are encouraged to continuously revisit the Five-Year Needs Assessment Summary and to provide updates, as needed, in the interim year Applications/Annual Reports. Furthermore, it is expected that states will have ongoing communication with stakeholders and partners throughout the Needs Assessment process and continue to engage with such partners during the interim reporting years.

The primary goal of the statewide Needs Assessment is to improve MCH outcomes and to strengthen its state, local and community partnerships for addressing the needs of its MCH population. The following figure illustrates the continuity of the Needs Assessment process and its relationship to the planning and monitoring functions of Title V and the population that it serves.

State MCH Block Grant Needs Assessment, Planning, Implementation and Monitoring Process



A brief description of the steps involved in the Public Health Planning Cycle to inform ongoing needs assessment is presented in the following sections.

1. Engage Stakeholders

As depicted, the starting point for the Needs Assessment process is to **engage stakeholders**. Engaging stakeholders and strengthening partnerships is a continuous and on-going activity. The state needs strong partnerships with its stakeholders throughout the Needs Assessment process. Effective coalitions can help the state to realistically assess needs and identify desired outcomes and mandates, assess

strengths and examine capacity, select priorities, seek resources, set performance objectives, develop an action plan, allocate resources, and monitor progress for impact on targeted outcomes.

2. Assess Needs and Identify Desired Outcomes and Mandates

The second stage in the process is to **assess needs** of the MCH population groups using the Title V National Outcome Measures (NOMs), national, state and strategy performance measures and other available state-level quantitative and qualitative data. States should assess MCH population needs based on the following five population health domains: 1) Women/Maternal Health; 2) Perinatal/Infant Health; 3) Child Health; 4) Adolescent Health; and 5) Children with Special Health Care Needs (CSHCN). These population health domains fall with the three MCH population groups that are defined in Section 505(a)(1) of the Title V legislation. The anticipated outcome of this assessment is to identify community/system needs and **desired outcomes** by specific MCH population groups. In addition, the state will need to identify needs and **desired outcomes** for cross-cutting and systems issues. The state will also need to **identify** legislative, political, community-driven, financial, and/or other internal and external **mandates** which may go beyond the findings identified through the Needs Assessment process but are priorities for implementation within the state.

3. Examine Strengths and Capacity

The third stage in the Needs Assessment process is **examining strengths and capacity**. This stage involves examining the state's capacity to engage in various activities, including conducting the statewide Five-year Needs Assessment and collecting/reporting annual performance data based on the five identified MCH population health domains and the types of MCH services provided.

This stage involves describing and assessing the state's current resources, activities, and services as well as the state's ability to continue to provide quality services by each of the three MCH service levels. These levels include 1) Direct Services; 2) Enabling Services; and 3) Public Health Services and Systems. The anticipated outcome is a better understanding of the relationship of the state's existing program/system capacity to its identified strengths and needs. This examination may reveal strengths and weaknesses in capacity not previously identified.

4. Select Priorities

In the **select priorities** stage, each state examines the identified needs and matches them to the desired outcomes, required mandates and level of existing capacity. As a result, states will select seven to ten priority areas for targeted focus in promoting

continued improvement and progress. Examples of inputs include: the Needs Assessment process, the opinions of stakeholders, the examination of program capacity and the political priorities within the state. The anticipated outcome is the development of a set of priority needs (between seven and ten), which are unique to the individual state based on its Needs Assessment findings. Priorities identified should address areas in which the state believes there is reasonable opportunity for a focused programmatic effort (e.g., new or enhanced interventions, initiatives, or systems of care) to lead to an improved outcome.

5. Set Performance Objectives

Setting performance objectives consists of two phases. In the first phase, each state will develop action strategies to address their identified priority needs. Based on the priority needs and program strategies developed, the state will select five National Performance Measures (NPMs), Evidence-based or –informed Strategy Measures (ESMs) for addressing each of the selected NPMs and State Performance Measures (SPMs). SPMs should be based on the state’s identified MCH priorities and target those priority needs that are not fully addressed by the selected NPMs and their related ESMs.

Secondly, the state will set five-year targets (i.e., performance objectives) for the five selected NPMs, the ESMs and the SPMs. The anticipated results of this stage are the identification of NOMs, NPMs, ESMs and SPMs that directly relate to the state priorities and establish a level of accountability for achieving measureable progress.

6. Develop an Action Plan

The next stage is to **develop an action plan**, which involves the planning and identification of specific activities for implementing the program strategies which were developed in Stage 5 to address the identified priority needs and selected national/state measures. In developing an Action Plan, states will create the Five-year State Action Plan Table. As a planning tool, states will have flexibility in how they format the Table provided that the information is organized around the five identified population health domains. At a minimum, the Five-year State Action Plan Table should include the relevant priority needs, key strategies and measures (i.e., NOMs, NPMs, SPMs and ESMs) for each of the MCH health domains. Based on the identified priorities, measures and strategies, the state will develop a five-year program plan that includes specific activities for achieving the targeted outcomes and performance specific to each health domain.

In developing the Action Plan, the state shall complete a Five-year State Action Plan Table as part of the first year Application/Annual Report in the five year cycle. This Table is a tool to assist states in aligning their program strategies, NPMs, SPMs and ESMs with the priority needs that were identified in the Five-year Needs Assessment.

Updates to the strategies, activities and measures will be provided by the state, as needed, in subsequent interim year Applications/Annual Reports. Figure 4 in Part Two, Section II of the Application/Annual Report Guidance depicts the steps involved in the development of, and the annual reporting on, the implementation of the Five-year State Action Plan.

7. Seek and Allocate Resources

Following the identification of program activities is the allocation of resources stage. In this stage, the focus is on the funding of planned activities to address state priorities. Inputs include the five-year State Action Plan, current budgets, political priorities, and partnerships. The anticipated outcome is the development of a program budget and plan that directs available resources towards the activities identified in Stage Six as the most important for addressing the state's priorities.

8. Monitor Progress for Impact on Outcomes

In **monitoring progress for impact on outcomes**, the states examine the results of their efforts to see if there has been improvement. Inputs include NOMs, NPMs, SPMs and ESMs, performance objectives and other quantitative and qualitative information. Potential outcomes may include altered activities and shifting of resource allocations to address current levels of performance and availability of resources. Feedback loops between various stages of the process allow for continuous input and re-evaluation of the outputs.

9. Report Back to Stakeholders

This final step assures accountability to the stakeholders and partners who have worked with the MCH staff throughout the Needs Assessment process. It also assures the continued involvement of all stakeholders and partners in the ongoing Needs Assessment processes.

APPENDIX F: ASSURANCES AND CERTIFICATIONS

[View Burden Statement](#)

OMB Number: 4040-0007
Expiration Date: 06130/2014

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

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Prescribed by OMB Circular A-102

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.
19. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
APPLICANT ORGANIZATION	DATE SUBMITTED

CERTIFICATIONS

OMB Approval No. 0990-0317

1. CERTIFICATION REGARDING LOBBYING

Title 31, United States Code, Section 1352, entitled "Limitation on use of appropriated funds to influence certain Federal contracting and financial transactions," generally prohibits recipients of Federal grants and cooperative agreements from using Federal (appropriated) funds for lobbying the Executive or Legislative Branches of the Federal Government in connection with a SPECIFIC grant or cooperative agreement. Section 1352 also requires that each person who requests or receives a Federal grant or cooperative agreement must disclose lobbying undertaken with non-Federal (non-appropriated) funds. These requirements apply to grants and cooperative agreements EXCEEDING \$100,000 in total costs (45 CFR Part 93). By signing and submitting this application, the applicant is providing certification set out in Appendix A to 45 CFR Part 93.

2. CERTIFICATION REGARDING PROGRAM FRAUD CIVIL REMEDIES ACT (PFCRA)

The authorized official signing for the applicant organization certifies that the statements herein are true, complete, and accurate to the best of his or her knowledge, and that he or she is aware that any false, fictitious, or fraudulent statements or claims may subject him or her to criminal, civil, or administrative penalties. The official signing agrees that the applicant organization will comply with the HHS terms and conditions of award if a grant is awarded as a result of this application.

3. CERTIFICATION REGARDING ENVIRONMENTAL TOBACCO SMOKE

Public Law 103-227, also known as the Pro-Children Act of 1994 (Act), requires that smoking not be permitted in any portion of any indoor facility owned or leased or contracted for by an entity and used routinely or regularly for the provision of health, day care, early childhood development services, education or library services to children under the age of 18, if the services are funded by Federal programs either directly or through State or local governments, by Federal grant, contract, loan, or loan guarantee. The law also applies to children's services that are provided in indoor facilities that are constructed, operated, or maintained with such Federal funds. The law does not apply to children's services provided in private residence, portions of facilities used for inpatient drug or alcohol treatment, service providers whose sole source of applicable Federal funds is Medicare or Medicaid, or facilities where WIC coupons are redeemed.

Failure to comply with the provisions of the law may result in the imposition of a civil monetary penalty of up to \$1,000 for each violation and/or the imposition of an administrative compliance order on the responsible entity.

The authorized official signing for the applicant organization certifies that the applicant organization will comply with the requirements of the Act and will not allow smoking within any portion of any indoor facility used for the provision of services for children as defined by the Act. The applicant organization agrees that it will require that the language of this certification be included in any sub-awards which contain provisions for children's services and that all sub-recipients shall certify accordingly.

HHS strongly encourages all grant recipients to provide a smoke-free workplace and promote the non-use of tobacco products. This is consistent with the HHS mission to protect and advance the physical and mental health of the American people.

APPENDIX G: REQUIRED APPLICATION/ANNUAL REPORT COMPONENTS AND TIMELINE

Submission Date	Application Year	Annual Report Year
July 15, 2018	<p style="text-align: center;">Fiscal Year (FY) 2019 (Interim Year 04 Application of Five-year Reporting Cycle.)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Complete SF-424 <input type="checkbox"/> Update Executive Summary <input type="checkbox"/> Update Needs Assessment Summary <input type="checkbox"/> Add FY 2023 Performance Objective for each selected NPM, SPM, and ESM on Form #10A <input type="checkbox"/> Update State Action Plan as needed <input type="checkbox"/> Complete Narrative Sections of Application, including Presentation of the State’s Five-year Action Plan by MCH Health Domain <input type="checkbox"/> Enter Budgeted Data for Application Year on Forms #2, #3a and #3b <input type="checkbox"/> Update Listed Names of MCH Director, CSHSN Director and Family/Youth Leader on Form #8 <input type="checkbox"/> Review Other State Data (OSD) on Form #11 and Form #10A for National Outcome Measures (NOMs) 	<p style="text-align: center;">FY 2017 (Interim Year 02 of Previous Reporting Cycle)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Enter the FY 2017 Annual Indicator Data (specifically, the Numerator, Denominator, Data Source and Data Note) for the Selected NPMs, ESMs and SPMs. <input type="checkbox"/> Report on FY 2017 Program Activities and Analyze Performance, by MCH Health Domain, using New Narrative Format <input type="checkbox"/> Enter Expenditure Data on Forms #2, #3a, and #3b <input type="checkbox"/> Enter Required Data (i.e., Newborn and Others Screening, Unduplicated Count and Total Encounters of Individuals Served, Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX and State Toll-free Hotline and Other Appropriate Methods Data) on Forms #4, #5a, #5b, #6 and #7 for the Reporting Year.
July 15, 2019	<p style="text-align: center;">FY 2020 (Interim Year 05 Application of Five-year Reporting Cycle)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Complete SF-424 <input type="checkbox"/> Update Executive Summary <input type="checkbox"/> Update Needs Assessment Summary <input type="checkbox"/> Add FY 2024 Performance Objective for each selected NPM, SPM, and ESM on Form #10A <input type="checkbox"/> Update State Action Plan as needed 	<p style="text-align: center;">FY 2018 (Interim Year 03 of Previous Reporting Cycle)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Enter the FY 2018 Annual Indicator Data (specifically, the Numerator, Denominator, Data Source and Data Note) for the Selected NPMs, ESMs and SPMs <input type="checkbox"/> Report on FY 2018 Program Activities and Analyze Performance, by MCH Health Domain, using New Narrative Format <input type="checkbox"/> Enter Expenditure Data on Forms #2, #3a, and #3b

Submission Date	Application Year	Annual Report Year
	<p style="text-align: center;">FY 2020 (Continued)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Complete Narrative Sections of Application, including Presentation of the State’s Five-year Action Plan by MCH Health Domain <input type="checkbox"/> Enter Budgeted Data for Application Year on Forms #2, #3a and #3b <input type="checkbox"/> Update Listed Names of MCH Director, CSHSN Director and Family/Youth Leader on Form #8 <input type="checkbox"/> Review Other State Data (OSD) on Form #11 and Form #10A for NOMs 	<p style="text-align: center;">FY 2018 (Continued)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Enter Required Data (i.e., Newborn and Others Screening, Unduplicated Count and Total Encounters of Individuals Served, Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX and State Toll-free Hotline and Other Appropriate Methods Data) on Forms #4, #5a, #5b, #6 and #7 for the Reporting Year.
July 15, 2020	<p style="text-align: center;">FY 2021 (First Application Year of New Five-year Reporting Cycle)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Complete Application for Federal Assistance (Standard Form - 424) <input type="checkbox"/> Develop Executive Summary for Application <input type="checkbox"/> Include Needs Assessment Summary in the Application <input type="checkbox"/> Identify 7-10 Priority Needs (Form #9) <input type="checkbox"/> Select at least 5 National Performance Measures (NPMs) and Enter Five-year Performance Objectives on Form #10A <input type="checkbox"/> Develop Evidence-based or -informed Strategy Measures (ESMs) for Each Selected NPM; Prepare Detail Sheet for each ESM on Form #10C; and Enter Five-year Performance Objectives for Each ESM on Form #10A <input type="checkbox"/> Develop SPMs to Address Priority Needs Not Addressed Through the NPMs and ESMs; Prepare Detail Sheet for Each SPM on Form #10B; and Enter Five-year Performance Objectives for Each SPM on Form #10A <input type="checkbox"/> Prepare Five-Year State Action Plan Table 	<p style="text-align: center;">FY 2019 (Interim Year 04 of Previous Reporting Cycle)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Enter the FY 2019 Annual Indicator Data (specifically, the Numerator, Denominator, Data Source and Data Note) for the Selected NPMs, ESMs and SPMs <input type="checkbox"/> Report on FY 2019 Program Activities and Analyze Performance, by Population Health Domain, in the State Action Plan <input type="checkbox"/> Enter Expenditure Data on Forms #2, #3a, and #3b <input type="checkbox"/> Enter Required Data (i.e., Newborn and Others Screening, Unduplicated Count and Total Encounters of Individuals Served, Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX and State Toll-free Hotline and Other Appropriate Methods Data) on Forms #4, #5a, #5b, #6 and #7 for the Reporting Year

Submission Date	Application Year	Annual Report Year
	<p style="text-align: center;">FY 2021 (Continued)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Complete Narrative Sections of Application, including Presentation of the State’s Five-year Action Plan by MCH Health Domain <input type="checkbox"/> Enter Budgeted Data for Application Year on Forms #2, #3a and #3b <input type="checkbox"/> List Names of MCH Director, CSHSN Director and Family/Youth Leader on Form #8 <input type="checkbox"/> Review Other State Data (OSD) on Form #11 and Form #10A for National Outcome Measures (NOMs) 	

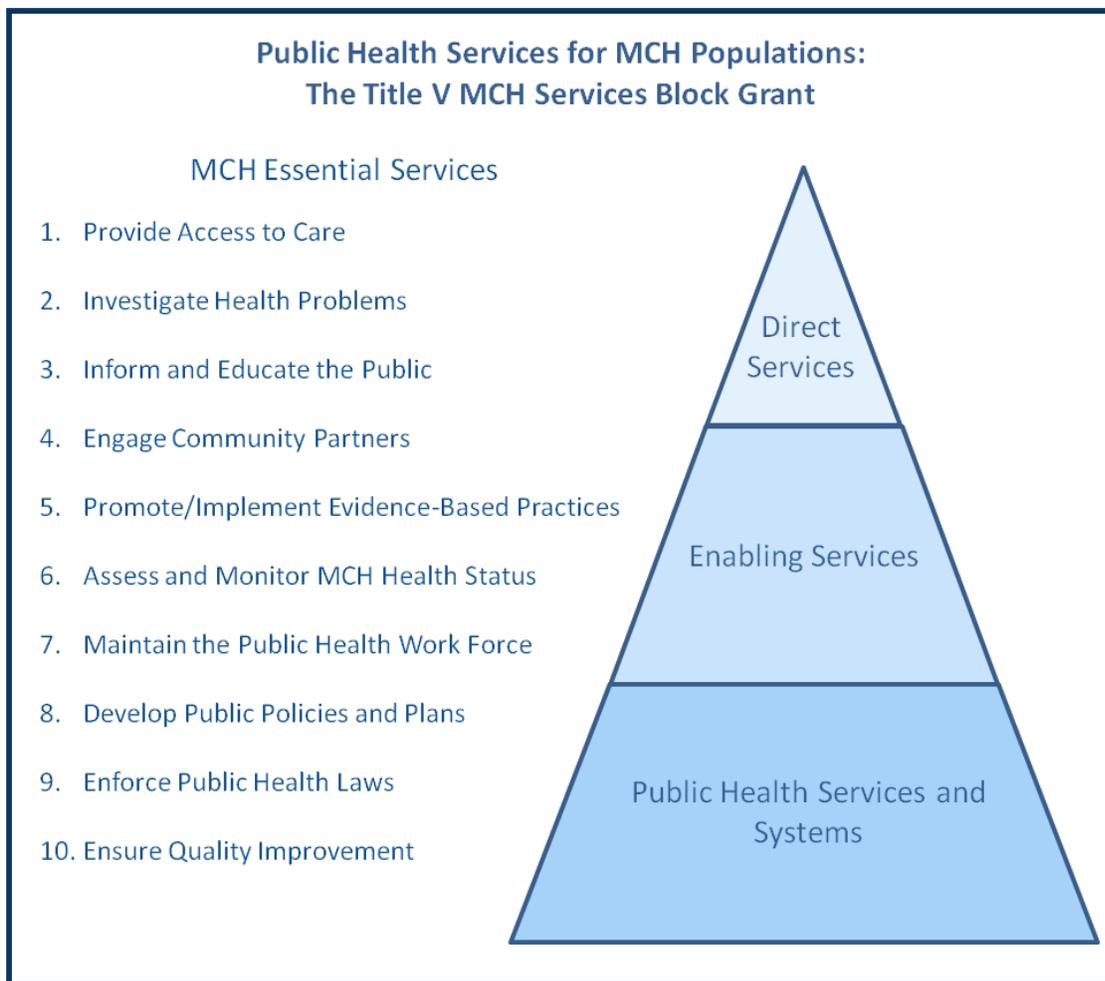
APPENDIX H: GLOSSARY

A comprehensive glossary of terms relevant to maternal and child health (MCH) practice, including services for children with special health care needs (CSHCN), is available on the MCH Navigator site. To access the Glossary, click on:

https://www.mchnavigator.org/documents/Glossary_of_MCH_Terms_and_Acronyms_2012-11-17.pdf. This project is administered by Georgetown University through funding provided by the Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB.) The MCH Navigator is a learning portal for MCH professionals, students, and others working to improve the health and well-being of women, children, adolescents, and families.

Definitions included in this Glossary are intended to supplement the broader set of terms that are included in the MCH Navigator Glossary. The following list of terms and their definitions have specific relevance to the State Title V MCH Block Grants.

MCH Working Framework: MCH Pyramid of Services



As depicted on the Revised MCH Pyramid, the working framework for the MCH Block Grant aligns with the 10 MCH Essential Services and consists of three levels. Definitions are provided below for each level of service. In developing systems of care, states should assure that they are family-centered, community-based and culturally competent.

Direct Services – Direct services are preventive, primary, or specialty clinical services to pregnant women and children, including children with special health care needs, where MCH Services Block Grant funds are used to reimburse or fund providers for these services through a formal process similar to paying a medical billing claim or managed care contracts. State reporting on direct services should not include the costs of clinical services which are delivered with Title V dollars but reimbursed by Medicaid, CHIP or other public or private payers. Examples include, but are not limited to, preventive, primary or specialty care visits, emergency department visits, inpatient services, outpatient and inpatient mental and behavioral health services, prescription drugs, occupational and physical therapy, speech therapy, durable medical equipment and medical supplies, medical foods, dental care, and vision care.

Enabling Services – Enabling services are non-clinical services (i.e., not included as direct or public health services) that enable individuals to access health care and improve health outcomes where MCH Services Block Grant funds are used to finance these services. Enabling services include, but are not limited to: case management, care coordination, referrals, translation/interpretation, transportation, eligibility assistance, health education for individuals or families, environmental health risk reduction, health literacy, and outreach. State reporting on enabling services should not include the costs for enabling services that are reimbursed by Medicaid, CHIP, or other public and private payers. This category may include salary and operational support to a clinic that enable individuals to access health care or improve health outcomes. Examples include the salary of a public health nurse who provides prenatal care in a local clinic or compensation provided to a specialist pediatrician who provides services for children with special health care needs.

Public Health Services and Systems – Public health services and systems are activities and infrastructure to carry out the core public health functions of assessment, assurance, and policy development, and the 10 essential public health services. Examples include the development of standards and guidelines, needs assessment, program planning, implementation, and evaluation, policy development, quality assurance and improvement, workforce development, and population-based disease prevention and health promotion campaigns for services such as newborn screening, immunization, injury prevention, safe-sleep education and anti-smoking. State reporting on public health services and systems should not include costs for direct clinical preventive services, such as immunization, newborn screening tests, or smoking cessation.

Number of Individuals and Percentage of Populations Served by Title V (Form 5)

Form 5a, Count of Individuals Served by Title V, enables the state to track and report on the number of who received an individually-delivered service funded in part or in full by the Title V

program within the top two levels of the MCH Pyramid (direct and enabling services). This includes individuals receiving services funded by total Federal and State dollars reported on line 8 of Form 2, and should align with the combined totals on Form 3a and 3b for direct and enabling services. Data sources are typically reimbursement or individual client records. Pregnant women may also receive non-pregnancy related services and be counted in other participant categories (i.e. children ages one (1) through 21 and others). All remaining categories are mutually exclusive with CSHCN reported as a subset of all children ages one (1) through 21. Within each reporting category, the count of individuals served should be unduplicated to the fullest extent possible. Examples of direct and enabling services by participant category that Title V may fund in part or in full are provided below.

Pregnant women (through 60 days postpartum) – payment for prenatal, delivery, or postpartum care, case management, insurance eligibility assistance.

Infants (less than age one) – payment for well child visits, immunization, case management.

Children ages one (1) through 21, including CSHCN – payment for well child visits, immunization, dental sealants, school-based health center services, specialty care services and care coordination.

Others (women and men over 21) – payment for well-woman visits, education or family-centered care provided to parents/guardians of children.

Form 5b, Total Percentage of Populations Served by Title V, enables the state to track and report on the total percentage who received a Title V-supported service within all levels of the MCH Pyramid (direct services, enabling services, and public health services and systems). The purpose of this form is to better capture the breadth of the State’s Title V program and its reach in serving the MCH population. Included in this reporting are all individuals and populations served by the total Federal and State dollars, as reported on line 8 of Form 2, and the combined totals on Form 3a and 3b for all service levels. Non-Title V programs that provide direct and enabling services (e.g., WIC and Home Visiting) may be included if Title V funds or staff time are used to promote or enhance services. (Individual services that are Title V-funded may also be counted in Form 5a.) To avoid duplication, numerators for the percentage estimate should focus on the programs and services that have the largest reach for a given population, which generally involves the public health services and systems level of the MCH Pyramid. Approximate denominators for each population group will be provided to facilitate percentage estimation. Within public health services and systems, only those reached by activities directly connected to promoting the access or quality of specific population-based services and systems should be counted. Examples of these public health services and systems activities, as well as direct/enabling service partnerships, are provided below by participant category.

Pregnant women (through 60 days postpartum)

- Develop and/or maintain a system of risk-appropriate perinatal care designations and transfer protocols (count 100%).

- Fund local health departments to engage provider groups and promote screening for perinatal depression, smoking or substance use (count number or percent of births in funded counties).
- Partner with Medicaid or other health plans to implement a policy/procedural change to reduce low-risk cesarean delivery or promote smoking cessation (count number or % served by Medicaid or other health plans).
- Outreach to hospitals to institute a safe sleep or baby friendly policy, distribute educational materials, or participate in a QI collaborative (count number or % of births in participating hospitals).
- Partner with WIC or home visiting programs to provide staff training or otherwise promote education, screening, or referrals on smoking cessation or preventive dental services (count number or % of pregnant/postpartum women served).

Infants (less than age one)

- Administer, develop guidelines/standards/policies, or otherwise assure the newborn screening program (count 100%).
- Develop and/or maintain a system of risk-appropriate perinatal care designations and transfer protocols (count 100%).
- Outreach to hospitals to institute a safe sleep or baby friendly policy, distribute educational materials, or participate in a QI collaborative (count number or % of infants served).
- Partner with WIC or home visiting programs to provide staff training or otherwise promote education/counseling on safe sleep practices (count number or % of pregnant/postpartum women served).
- Implement a statewide campaign to promote safe sleep practices (count number of Web hits).

Children ages one (1) through 21, including CSHCN

- Develop and maintain a statewide registry for developmental screening and follow-up (count number of children age one (1) through 5).
- Develop or promote school-based injury prevention, oral health, or physical activity programs (count number of children in participating schools).
- Partner with Medicaid, health plans, pediatric practices, or schools to implement a policy/procedural change, QI collaborative, or other campaign to promote the adolescent well visit (count number of adolescents enrolled or served by plan/practice/school).
- Fund local health departments to promote and advance the medical home model among all pediatric providers (count number of children in local counties).
- Develop and maintain a comprehensive system of services for CSHCN (count number of CSHCN served; if percentage served is lower than other population-based services for all children, report service percentage for all children as CSHCN are not excluded from general services).

Others (women and men over age 21)

- Implement a statewide campaign to promote the well-woman visit (count number of web hits)
- Partner with WIC or Home Visiting to improve screening/counseling for smoking cessation (count number of women with a child age one (1) or more to avoid duplication with pregnant women)
- Partner to promote family engagement services (count number of parents over 21 served)

Title V Program Administration

Administrative Title V Funds - The amount of funds the state uses for the management of the Title V allocation. This amount is limited by statute to 10 percent of the Federal Title V allotment.

Capacity – Program capacity includes delivery systems, workforce, policies, and support systems (e.g., training, research, technical assistance, and information systems) and other infrastructure needed to maintain service delivery and policy making activities. Program capacity results measure the strength of the human and material resources necessary to meet public health obligations. As program capacity sets the stage for other activities, program capacity results are closely related to the results for process, health outcome, and risk factors. Program capacity results should answer the question, “What does the state need to achieve the results we want?”

Budget Period – Grant period for which funds are available for use by the state. For the MCH Block Grant, the budget period is 24 months, beginning on October 1 of the federal fiscal year in which the funds are awarded and ending on September 30 of the following federal fiscal year.

Children – A child from age one (1) through 21 years.

Data Systems Development – Development of data management systems (electronic or other) or linking of existing databases to support states’ ability to collect, tabulate, analyze, and report data accurately.

Early Neonatal Period – Period covered by the first week after birth or an age of less than seven days.

Federal Allocation – The funding provided to the states under the Federal Title V Block Grant in any given fiscal year; applies specifically to the Application Face Sheet (SF-424) and Form 2.

Federal Fiscal Year: The federal government’s fiscal year begins on October 1 and ends on September 30 of the following year.

Government Performance and Results Act (GPRA) – Federal legislation enacted in 1993 that requires Federal agencies to develop strategic plans, prepare annual plans setting performance goals, and report annually on actual performance.

Infants – Children in their first year of life (<365 days).

Jurisdictions – The following nine jurisdictions receive Title V Maternal and Child Health Block Grant Program funding: the District of Columbia, the Republic of the Marshall Islands, the Federated States of Micronesia, the Republic of Palau and the U.S. territories of the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

Life Course Theory (LCT) – A conceptual framework that helps explain health and disease patterns, particularly health disparities, across populations and over time. Instead of focusing on differences in health patterns based on one disease or condition at a time, LCT points to broad social, economic and environmental factors as underlying causes of persistent inequalities in health for a wide range of diseases and conditions across population groups. LCT is population focused, and firmly rooted in social determinants and social equity models. Though not often explicitly stated, LCT is also community (or “place”) focused, since social, economic and environmental patterns are closely linked to community and neighborhood settings.⁷

Local – Funds derived from local health jurisdictions within the state, which are used for MCH program activities and reported on the Application Face Sheet (SF 424) and Form 2.

Low Income – An individual or family with an income that is determined to be below the income official federal poverty line, as defined by the Office of Management and Budget and revised annually in accordance with section 673(2) of the Omnibus Budget Reconciliation Act of 1981. [Title V, Sec. 501 (b)(2)]

Maintenance of Effort – State will maintain the level of funds being provided solely by such state for maternal and child health programs at a level at least equal to the level provided in FY 1989.

Needs Assessment – A process to understand the strengths and needs of the health service system within a community or population. For maternal and child health purposes, needs assessment efforts consider the following components: 1) health status, 2) health service utilization, 3) health systems capacity, and 4) population/ community characteristics and contextual characteristics.

Neonatal Period – period covered by the first month after birth or an age of less than 28 days.

⁷ <https://mchb.hrsa.gov/training/lifecourse.asp>

Newborn – A recently born infant, usually less than one month old.

Objectives – A statement of intention with which actual achievement and results can be measured and compared. SMART objectives are Specific, Measurable, Achievable, Relevant and Time-phased. See also Objectives and Performance Objectives within the Performance Measurement Section.

Other Federal Funds – Federal funds other than the Title V Block Grant that are under the control of the person responsible for administration of the Title V program and reported on the Application Face Sheet (SF 424) and Form 2. These funds may include, but are not limited to: WIC, EMSC, Healthy Start, SPRANS, HIV/AIDs monies, CISS funds, MCH targeted funds from CDC, MCH Education funds and Medicaid Federal Medical Assistance Percentage (FMAP).

Others (Class of Individuals) – Women and men, over age 21.

Perinatal – Period pertaining to immediately before and after birth. For example, the definition of perinatal mortality refers to fetal and early neonatal death between 28 weeks or more gestation through the first week of life (less than seven days after birth).

Postneonatal Period – Period of infant age from one month (28 days) up to one year (<365 days).

Pregnant Woman – A female from the time that she conceives to 60 days after birth, delivery, or expulsion of fetus.

Prenatal – Occurring or existing before birth, referring to both the care of the woman during pregnancy and the growth and development of the fetus.

Priority Needs – Title V legislation direct states to conduct a statewide, comprehensive MCH Needs Assessment every five years to identify the need for preventive and primary care services for pregnant women, mothers, infants, children and children with special health care needs. From this assessment, states select seven to ten priorities for focused programmatic efforts over the five-year reporting cycle.

Program Income – Funds collected by State MCH agencies from sources generated by the State's MCH program to include insurance payments, Medicaid reimbursements, HMO payments, etc., as reported on the Application Face Sheet [SF 424] and Form 2.

State – Terminology used in this Guidance to reference the 50 states and the nine jurisdictions. (See also "Jurisdictions")

State Funds – The state's required matching funds (including overmatch) in any given year, as reported on the Application Face Sheet [SF 424] and Form 2.

Strategies – General approaches taken to achieve objectives: activities are specific actions to implement the strategies. For example, a strategy may be to improve provider training with activities that could include developing a training module, delivering or promoting the training, and monitoring utilization and/or knowledge improvement. Program activities for implementing the identified program strategies are discussed and updated annually as part of the State Action Plan narrative.

Technical Assistance (TA) – The process of providing advice, assistance, and training by an expert with specific technical/content knowledge to address an identified need. Technical Assistance relationships are program-focused, and may use an interactive, on-site/hands-on approach as well as telephone or email assistance. Technical Assistance delivery is short in duration, customized to meet the needs of the client, and offers prescriptive solutions to a specific issue.

Title V of the Social Security Act – The authorizing legislation for the Maternal and Child Health Services Block Grant to States Program.

Title V Reporting Form 6, Deliveries to Pregnant Women Served by Title V – Unduplicated number of deliveries to pregnant women who were provided prenatal, delivery, or post-partum services through the Title V program during the reporting period.

Title V Reporting Form 6, Infants Served by Title V – The unduplicated count of infants provided a direct service by the State’s Title V program during the reporting period.

Title XIX of the Social Security Act – The authorizing legislation for the Medicaid program.

Title XIX Reporting on Form 6, Pregnant Women Eligible for Title XIX – The number of pregnant women who delivered during the reporting period and were eligible for the State’s Title XIX (Medicaid) program.

Title XIX Reporting on Form 6, Infants Eligible for Title XIX – The number of infants eligible for the State’s Title XIX (Medicaid) program.

Title XXI of the Social Security Act – Children’s Health Insurance Program (CHIP) financed via the Centers for Medicare and Medicaid Services (CMS). The purpose of this title is to provide funds to states to enable them to initiate and expand the provision of child health assistance to uninsured, low-income children in an effective and efficient manner that is coordinated with other sources of health benefits coverage for children. (Sec. 2101. [42 U.S.C. 1397aa])

Total MCH Funding – All of the MCH funds administered by a State MCH program. Included in this sum total are: 1) the *Federal* Title V Block grant allocation; 2) the *Applicant’s* funds, which consists of the unobligated balance from the previous year’s MCH Block Grant allocation, the *state’s* total matching funds for the Title V allocation (match and overmatch); 3) the *Local*

funds, which are the total amount of MCH dedicated funds from local government within the state); 4) *Other* Federal funds (monies other than the Title V Block Grant that are under the control of the person responsible for administration of the Title V program), and 5) *Program Income* (funds collected by State MCH agencies from insurance payments, Medicaid, HMO's, private grants, etc.)

Unobligated Balance – The amount of unexpended funds from the previous project period for Title V MCH Block Grant, as reported as *Applicant* funds on the Application Face Sheet [SF 424] and as *Unobligated Balance* on Form 2.

Performance Measurement

Evidence-based or –Informed Strategy Measure (ESM) –Developed by the state, ESMs assess the outputs of State Title V strategies and activities contained in the State Action Plan. The development of ESMs is guided through an examination of evidenced-based or evidence-informed strategies, and determining what components are meaningful, measurable, and achievable. The main criteria for ESMs are in being meaningfully related to the selected NPM through scientific evidence or theory and being measurable by the state with improvement achievable in multiple years of the five-year reporting cycle.

Evidence-based or –Informed Strategy Measure (ESM) Objectives – The objectives for activities and interventions that drive the achievement of higher-level objectives by the State Title V program.

Objectives – The yardsticks by which an agency can measure its efforts to accomplish a goal. (See also Performance Objectives)

Outcome Measure – The ultimate focus and desired result of any set of public health program activities and interventions is an improved health and well-being outcome. Health and well-being outcomes are usually longer term and tied to the ultimate program goal. Morbidity and mortality statistics are indicators of achievement of health outcomes. Other outcomes reflect commonly accepted indicators of a highly functioning system of care for children with special health care needs and their families, positive outcomes, outcomes which are legislatively mandated or are a legislative focus, outcomes where the prevalence is increasing, and developmental outcomes where a fully established measure does not exist.

Performance Indicator – The statistical or quantitative value that expresses the result of a performance objective.

Performance Measure – An intermediate outcome on the path toward a longer term outcome measure of health and well-being that is used to more directly assess the impact of a program. Positive health behaviors and access to quality health care are common intermediate outcomes that may lead to health, reduced morbidity and mortality, or highly functioning systems of care.

For example, to reduce infant mortality, State Title V programs may work to promote safe sleep practices or access to quality well-woman care. The performance measure is phrased as a quantitative indicator, such as a rate or percentage. For example, “Percentage of infants placed to sleep on their backs.”

Performance Measurement – The collection of data on, recording of, or tabulation of results or achievements, usually for comparison to a benchmark.

Performance Objectives – A statement of intention with which actual achievement and results can be measured and compared. Performance objective statements clearly describe what is to be achieved, when it is to be achieved, the extent of the achievement, and the target populations. For example: “Increase the percentage of infants placed to sleep on their backs in State X by 10% over the next 5 years.”

Risk Factors – Public health activities and programs that focus on reduction of scientifically established direct causes of, and contributors to, morbidity and mortality (i.e., risk factors) are essential steps toward achieving desired health outcomes. Changes in behavior or physiological conditions are the indicators of achievement of risk factor results. Results focused on risk factors tend to be intermediate term. Risk factor results should answer the question, “Why should the state address this risk factor (i.e., what health outcome will this result support)?”

Risk Factor Objectives – Objectives that describe an improvement in risk factors (usually behavioral or physiological) that are associated with morbidity and mortality.

Targets – An aspired outcome that is explicitly stated, e.g. “Attain 90% of timeliness in reporting” or “Achieve 100% completeness of reporting”, etc. In this Guidance, “Targets” is often used interchangeably with “Objectives.”

Collaborative Learning, Innovation and Quality Improvement

Aim Statement – A written measureable description of desired outcomes used in a quality improvement initiative. A strong AIM statement outlines what is to be accomplished, quantifies the changes that are to be achieved and sets a date by which the goals will be reached.

Blueprint for Change – A tool to help define action steps for a team’s strategic priorities.

CoIIN versus COIN – The Collaborative Improvement and Innovation Network (CoIIN) initiative extends the Collaboration Innovation Network (COIN) model to include the concept of *improvement* in recognition of the need to strengthen existing investments in maternal and infant health as well as to develop innovative, new approaches.

Collaborative Innovation Network (COIN) – A cyberteam of self-motivated people with a collective vision, enabled by the Web to collaborate in achieving a common goal by sharing ideas, information and work.⁸

Collaborative Learning – Projects using this model enable learners of different abilities and interests to work jointly in small groups to complete a project or solve a problem.

Collective Impact – A concept that provides a framework for bringing diverse people and organizations together in a structured way to achieve social change.⁹

Driver Diagram – A logic chart that organizes the different aspects of an improvement project so key interventions and relationships between these interventions may be clearly understood by all involved.

Infant Mortality CoIIN Framework – A framework that presents a theory of the relationships between (1) key domains of influence (e.g., engaged leadership or innovation), (2) the periods of engagement, and (3) the strategies priorities that will be employed to reduce infant mortality rates in the U.S.

Learning Collaborative – A group of individuals or organizations that come together for a defined period of time to work together to improve process relevant to a specific topic. Members of a learning collaborative generally agree upon a shared set of data to measure and meet regularly to learn from each other and project experts.

Learning Sessions – Members of learning collaboratives generally agree to a regular schedule of multi-day meetings throughout the collaborative. These meetings may be in person or virtual. The learning sessions allow Collaborative faculty and partners to share latest research or important information on the topic of the collaborative, and they allow participants to share their work and to learn from each other.

Perinatal Periods of Risk (PPOR) – Both a community approach and an analytic framework for investigating and addressing high infant mortality rates in urban settings. The overall intent of the PPOR approach is to develop a simple method that can be used by communities to mobilize and prioritize prevention efforts. PPOR brings community stakeholders together to build consensus, support and partnership around infant mortality rates.¹⁰

Primary Drivers – Found in the CoIIN framework and driver diagrams, drivers are system components, factors or broad improvement areas that contribute directly to achieving the stated outcome. For example, if the outcome is reducing infant mortality, a strategic

⁸ Gloor, Peter A. "Swarm Creativity." *Competitive Advantage through Collaborative Innovation Networks*. (2006)

⁹ <http://collectiveimpactforum.org/what-collective-impact>

¹⁰ <http://www.citymatch.org/projects/perinatal-periods-risk-ppor>

priority/primary driver might be to improve access to and quality of prenatal care for women. (See Strategic Priorities.)

Potential Action/Change Concept – Actionable steps for change targeted at improving specific processes, often originating from brainstorming sessions with the team and evidence-based best practices.

Quality Improvement in Public Health – The use of a deliberate and defined improvement process, which is focused on activities that are responsive to community needs and improving population health. This effort is continuous and ongoing to achieve measureable improvements in the efficiency, effectiveness, performance, accountability, outcomes and other indicators of quality in services or processes, which achieve equity and improve the health of the community.

Strategic Priorities – Found in the CoIIN framework and driver diagrams, these priorities are system components, factors or broad improvement areas that contribute directly to achieving the stated outcome. For example, if the outcome is reducing infant mortality, a strategic priority/primary driver might be to improve access to and quality of prenatal care for women.

Family Partnership

Cultural Competence – A set of values, behaviors, attitudes, and practices within a system, organization, program or among individuals and which enables them to work effectively cross culturally. Further, cultural competence refers to the ability to honor and respect the beliefs, language, inter-personal styles and behaviors of individuals and families receiving services, as well as staff who are providing such services.

Culturally Sensitive – The recognition and understanding that different cultures may have different concepts and practices with regard to health care; the respect of those differences and the development of approaches to health care with those differences in mind.

Family Partnership – For purposes of the MCH Block Grant, family partnership is defined as patients, families, their representatives, and health professionals working in active partnership at various levels across the health care system—direct care, organizational design and governance, and policy making—to improve health and health care.¹¹ This partnership is accomplished through the intentional practice of working with families for the ultimate goal of positive outcomes in all areas through the life course. Additional references include, but are not limited to, several comprehensive reports written by the Association of Maternal and Child Health Programs (AMCHP) that describe family engagement efforts in State Title V programs.

¹¹ Carman K., Dardess, P., Maurer, M., Sofaer, S., Adams, K., Bechtel, C., Sweeney, J. Patient and Family Engagement: A framework for understanding the elements and developing interventions and policies. Health Affairs. 2013; 32:223-231.

These references are available at: <http://www.amchp.org/programsandtopics/family-engagement/Pages/default.aspx>.

Patient- and Family-Centered Care – “An approach to the planning, delivery, and evaluation of health care that is grounded in a mutually beneficial partnership among patients, families, and providers that recognizes the importance of the family in the patient’s life.”¹² “This approach recognizes that the perspectives and information provided by families, children, and young adults are essential components of high-quality clinical decision-making, and that patients and family are integral partners with the health care team.”¹³

Children with Special Health Care Needs

Care Coordination Services – Services that promote the effective and efficient organization and utilization of resources to assure access to necessary comprehensive services for children with special health care needs and their families. [Title V Sec. 501(b)(3)] Pediatric care coordination is “patient and family centered, assessment driven, team based.”¹⁴ Care coordination services facilitate linkage of children and their families with appropriate services and resources that meet their health and social needs to achieve optimal health. This care is to be distinguished from case management which primarily focuses on the children’s medical issues.¹⁵

Case Management Services – Services that assure access to quality prenatal, delivery and postpartum care for pregnant women; and services that assure access to quality preventive and primary care services for infants up to age one (1). [Title V Sec. 501(b)(4)]

Children With Special Health Care Needs (CSHCN) – Children with special health care needs are those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.¹⁶ For Form 5 reporting, only CSHCN ages one (1) through 21 are captured separately as a subset of all children to avoid duplication with infants who are commonly served universally through newborn screening

Systems of Services for Children with Special Health Care Needs – A system of services for children with special health care needs is a “family-centered coordinated network of community-based services designed to promote the healthy development and well-being of

¹² Committee on Hospital Care and Institute for Patient- and Family-Centered Care. *Patient- and Family-Centered Care and the Pediatrician’s Role*. Pediatrics. 2012; 129: 394

¹³ Ibid.

¹⁴ Antonelli RC, McAllister J, Popp J. 2009. Developing Care Coordination as a critical component of a high performance pediatric health care system. Washington DC: The Commonwealth Fund

¹⁵ Turchi RM, Mann M. Building a medical home for children and youth with special health care needs. In: Hollar D, ed. Handbook of Children with Special Health care Needs. New York, NY: Springer-Verlag; 2013:399-418.

¹⁶ McPherson M., Arango P., Fox H. A new definition of children with special health care needs. Pediatrics. 1998; 102: 137-140.

children and their families”.¹⁷ Additionally, a “well-functioning system of services will coordinate and integrate the full range of needed child and family services, including health care, education, and social services, with the goal of optimizing outcomes for the children and families it serves.”¹⁸

Key frameworks describing the system of services for CSHCN:

- Six Core Outcomes for CSHCN^{19,20}
 - Family Professional Partnership
 - Medical Home
 - Adequate Health Insurance
 - Early and Continuous Screening and Surveillance
 - Easy to Use Services and Supports
 - Transition to Adult Health Care

- National Standards for Systems of Care for Children and Youth with Special Health Care Needs
 - The National Systems Standards describe the process and provide a framework necessary to build an effective system of services for CSHCN. The standards are

divided into ten core domains, and they are based on the six core outcomes listed above for CSHCN. Additional information is available at:

<http://www.amchp.org/AboutTitleV/Resources/Documents/Standards%20Chars%20FINAL.pdf>.

Additional MCH Terms

Acquired Brain Injury – Injury to the brain that is not hereditary, congenital, degenerative, or induced by birth trauma. Traumatic brain injury is a type of acquired brain injury.

Bullying – Unwanted, aggressive behavior among school aged children that involves a real or perceived power imbalance. The behavior is repeated, or has the potential to be repeated, over time. Additional guidance on bullying surveillance is available at:

<http://www.cdc.gov/violenceprevention/pdf/bullying-definitions-final-a.pdf>.

¹⁷ Perrin, J., Romm, D., Bloom, S., Homer, C., Kuhlthau, K., Cooley, C., Duncan, P., Roberts, R., Sloyer, P., Wells, N., Newacheck, P. A family-centered, community-based system of services for children and youth with special health care needs. 2007; 161 (10): 933-936.

¹⁸ Ibid.

¹⁹ National Agenda for Children with Special Health Care Needs: Achieving the Goals 2000. Washington, D.C.: Health Resources Services Administration; 1999.

²⁰ Strickland, B., van Dyck, P., Kogan, M., Lauver, C., Blumberg, S., Bethell, C., Newacheck, P. Assessing and ensuring a comprehensive system of services for children with special health care needs: a public health approach. 2011; 101 (2): 224-231.

Clinical Genetics – Clinical and laboratory services for individuals and families with, or at risk for, health problems with a heritable component. The application of the principles of genetics and genomics to predict, diagnose, and treat disease and improve health.

Community – A group of individuals living as a smaller social unit within the confines of a larger one due to common geographic boundaries, a common work environment, common interests and other uniting factors.

Community-based Care – Services provided within the context of a defined community.

Community-based Service System – An infrastructure that operates across service sectors that facilitates the integration of services in several dimensions, which includes organization, delivery, and financing.²¹

Genetic Counseling: The process of helping people to understand and adapt to the medical, psychological, and familial implications of genetic contributions to disease. This process integrates: interpretation of family and medical history to assess the chance of disease occurrence or recurrence; education about inheritance, testing, management, prevention, resources and research; counseling to promote informed choices; and adaptation to the risk or condition.

Health Care System – The entirety of the agencies, services, and providers involved or potentially involved in the health care of community members and the interactions among those agencies, services and providers.

Human Genetics: The science of genes, heredity and variation in human organisms

Health Care Transition – The process of moving from a child to an adult model of health care. The goal of health care transition (HCT) is to optimize health and assist youth in reaching their full potential, which requires an active process over time that addresses many aspects of a youth's life, including medical, psychosocial, educational, and vocational needs. This process also ensures continuity of developmental and age appropriate health care services. Successful transition involves the engagement and participation of the pediatric and adult medical home team, the family and other care givers, and the individual youth collaborating in a positive and mutually respectful relationship.²² For more information see <http://www.gottransition.org/>

Medical Home – An approach to providing comprehensive, high quality health care that is accessible, family-centered, continuous, comprehensive, coordinated and compassionate.²³

²¹ U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. The National Survey of Children with Special Health Care Needs Chartbook 2009–2010. Rockville, Maryland: U.S. Department of Health and Human Services, 2013.

²² American Academy of Pediatrics. American Academy of Family Physicians and American College of Physicians. Transitions Clinical Report Authoring Group. Supporting the health care transition from adolescence to adulthood in the medical home. Pediatrics. 2011;

²³ American Academy of Pediatrics. Organizational principles to guide and define the child health care system and/or improve

Care occurs in an environment of trust and mutual responsibility between the family, patient, and primary care provider. The principle of family-centered care defines the care to be received in a medical home while a team-based approach is central to delivering care in the medical home. Within the medical home, care coordination addresses interrelated medical, dental, mental and behavioral, social, educational, and financial needs to achieve optimal health and wellness outcomes. Additional information is available at: <https://medicalhomeinfo.aap.org/Pages/default.aspx>.

Morbidity – A general term for any health condition that encompasses diseases, injuries, and impairments in a population or group.

Mortality – A general term for the incidence of deaths in a population or group. The number of deaths may be reported by age, sex, race/ethnicity, geographic area, and cause of death.

Mortality Rate – The number of deaths occurring in a particular population during a specific time period, as calculated by the number of deaths in that group (numerator) divided by the total population (denominator) and expressed as per 1,000 live births (infant mortality rate only) or per 100,000 population, generally at mid-year.

National Improvement Partnership Network (NIPN) – A network of states who have an Improvement Partnership (IP), which is a durable collaborative of public and private partners that use the science of quality improvement and a systems approach to improve health care infrastructure and practice. Established in 2009, NIPN is led by the Vermont Child Health Improvement Program (VCHIP).

National Survey of Children’s Health (NSCH) – Sponsored by the Maternal and Child Health Bureau of the Health Resources and Services Administration, the NSCH examines the physical and emotional health status and health service needs and utilization patterns of children ages 0-17 years of age. Special emphasis is placed on factors that may relate to well-being of children, including medical homes, family interactions, parental health, school and after-school experiences, and safe neighborhoods. The NSCH was fielded three times as a telephone-based survey, in 2003, 2007 and 2011-2012, yielding both state- and nationally-representative data. In 2016, the NSCH underwent a significant redesign, becoming an annual address-based mailed survey with a web-based response option that merged content from the previous NSCH and National Survey of Children with Special Health Care Needs (NS-CSHCN). <https://mchb.hrsa.gov/data/national-surveys>

National Survey of Children with Special Health Care Needs (NS-CSHCN) – This survey was sponsored by the Maternal and Child Health Bureau of the Health Resources and Services Administration. The NS-CSHCN was conducted three times as a telephone-based survey, in 2001, 2005-2006 and 2009-2010, and yielded state- and nationally-representative data on the health care experiences of CSHCN and their families. In 2016, the NS-CSHCN was merged with

the NSCH to provide one unified survey administered annually by mail with a web-based response option. Additional information is available at: <https://mchb.hrsa.gov/data/national-surveys>.

Newborn Screening (NBS) – The process of testing newborn babies for some serious, but treatable, conditions. Four million newborns each year are tested for conditions on the Recommended Uniform Screening Panel (a set of conditions recommended by the Secretary of HHS for NBS) that are not apparent at birth but require early intervention and treatment to mitigate brain and organ damage, severe illness, and life-threatening complications associated with these conditions. NBS can include a heel stick, hearing screen, and pulse oximetry. The conditions that newborn babies are screened for varies by state. When a newborn screening result is out-of-range, further diagnostic testing is required to confirm or specify the results.

Newborn Screening Long-term Follow-up – Comprises the assurance and provision of ongoing quality chronic disease management, condition-specific treatment, and age-appropriate care throughout the lifespan of individuals identified with a condition included in newborn screening.

Newborn Screening Short-term Follow-up – The process of ensuring that all newborns are screened, that an appropriate follow-up caregiver is informed of results, that confirmatory testing has been completed, and that the infant has received a diagnosis and, if necessary, treatment is initiated.

Preventive Services – Activities aimed at reducing the incidence of health problems or disease prevalence in the community, or the personal risk factors for such diseases or conditions.

Preventive Oral Health Services – Activities that aim to improve and maintain good oral health and function by reducing the onset and/or development of oral diseases or deformities and the occurrence of oro-facial injuries. Examples of preventive oral health services include, but are not limited to, oral hygiene instructions, fluoride treatment, and Dental Sealants.

Primary Care/Primary Care Services – The provision of comprehensive personal health services that include health maintenance and preventive services, initial assessment of health problems, treatment of uncomplicated and diagnosed chronic health problems, and the overall management of an individual's or family's health care services.

Recommended Uniform Screening Panel (RUSP) – The RUSP is a list of disorders that are recommended by the Secretary of the Department of Health and Human Services (HHS) for states to screen as part of their state universal newborn screening (NBS) programs. Disorders on the RUSP are chosen based on evidence that supports the potential net benefit of screening, the ability of states to screen for the disorder, and the availability of effective treatments. It is recommended that every newborn be screened for all disorders on the RUSP. Most states screen for the majority of disorders on the RUSP; newer conditions are still in process of adoption. Some states also screen for additional disorders. Although states ultimately

determine what disorders their NBS program will screen for, the RUSP establishes a standardized list of disorders that have been supported by the Advisory Committee on Heritable Disorders in Newborns and Children and the Secretary of HHS.

Safe Infant Sleep Environment – Infant is placed to sleep on its back, in its own crib without blankets or soft items or bed-sharing. Additional information is available at:
<http://pediatrics.aappublications.org/content/early/2011/10/12/peds.2011-2284>

Sudden Unexpected Infant Deaths (SUID) - Deaths in infants less than one year of age that occur suddenly and unexpectedly, and in whom the cause of death is not immediately obvious prior to investigation.

Sudden Infant Death Syndrome (SIDS) – The sudden death of an infant less than one year of age that cannot be explained after a thorough investigation is conducted, including a complete autopsy, examination of the death scene, and review of the clinical history.

Systems Development – Activities involving the creation or enhancement of organizational infrastructures at the community level for the delivery of health services and other needed ancillary services to individuals in the community by improving the service capacity of health care service providers.

Traumatic Brain Injury – An alteration in brain function, or other evidence of brain pathology caused by an external force.