Promising Practices in MCH Needs Assessment: A Guide Based on a National Study

U. S. Department of Health and Human Services
HRSA
Health Resources and Services Administration

www.hrsa.gov
December 2004

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CHAPTER I
BACKGROUND AND INTRODUCTION

The Title V Needs Assessment, a requirement of the Maternal and Child Health (MCH) Block Grant, is a critical element of the MCH program planning process. Although it is often completed by States primarily for the purpose of fulfilling the Block Grant requirement, it can also serve a number of essential functions for MCH programs. The assessment of needs and capacity can help to direct State officials to the areas of greatest need and opportunities for intervention, and the list of MCH priorities generated as a result of the assessment can guide the planning of programs and allocation of resources.

Despite this potential, States vary widely in the rigor, comprehensiveness, and clarity of their needs assessments, as well as the extent to which they find the needs assessment an effective tool for guiding future program planning and targeting of resources to address the priority MCH needs. To gain a better understanding of this variation and to identify promising approaches among the States, the Maternal and Child Health Bureau (MCHB) conducted an analysis and evaluation of the States' Title V needs assessment processes.
This analysis included several components:

- A review and abstraction of selected States' 2000 needs assessments
- A review and abstraction of these States' Block Grant applications and annual reports, to assess the services currently provided by Title V programs and compare the needs assessment findings and priorities to the services provided
- In-depth interviews with State Title V officials on the process and implementation of the 2000 needs assessment, and new approaches they were planning for the 2005 needs assessment.

Based on these analyses, we identified promising practices being used in 15 study States. This guide is based on the findings of this study. These examples have been drawn to provide planners with options and ideas for various aspects of the needs assessment process.

In order to make the needs assessment a more valuable tool, the following subjects are covered: planning the needs assessment; assessing MCH needs (including information on quantitative and qualitative analysis, capacity assessment, and priority-

setting); and putting findings into practice. All of these components can help make the needs assessment a useful process and a comprehensive document that can be effectively utilized to guide planning and policymaking.

CHAPTER II
PLANNING THE NEEDS ASSESSMENT PROCESS

The core elements of a comprehensive needs assessment document are a strong substantive analysis of needs and system capacity, and a clear linkage of priorities to those needs. However, the key to a successful outcome that creates support for MCH priorities is a well-defined process for carrying out the needs assessment. In other words, the process is as important as the product itself. By keeping this focus throughout, the resulting needs assessment document will be succinct but comprehensive, and will likely be accepted by all of the stakeholders involved. Proper planning will assure that the document is well laid out and inclusive of all the appropriate information, while also saving time and effort. Taking the time to include the community and other organizations involved in MCH will result in a document that is seen as legitimate by interested parties.

Through an analysis of the needs assessment process in several States, a number of important elements in that process have been identified. These process elements can make needs assessment findings more comprehensive, applicable, and acceptable to the families and communities that they will ultimately affect. The following checklist describes these elements and offers examples of how they have been implemented in the States in our study.

- *Clear leadership, responsibility, and oversight.* The needs assessment should be guided by a clear vision that encompasses the full scope of the needs assessment process, including the identification of indicators, data collection and analysis, and the application of findings. The leader or leadership team should also possess the ability to command resources and to assemble data from both public and private-sector resources. Examples of leadership structures include:
  - An MCH/Children with Special Health Care Needs (CSHCN) Leadership Team
  - The Management Team of the Office of Family Health Services
  - A Needs Assessment Coordinator to manage the planning and coordination of the process, and an Needs Assessment Planning Team comprising Bureau of Family and Community Health and DPH Regional Office staff to refine the needs assessment design, review and rework a needs assessment interview, and field-test the interview.

- *Expertise.* The needs assessment should involve internal staff or external consultants with appropriate expertise in data analysis and epidemiology. Examples of sources of this expertise include:

  - An MCH Information Specialist
  - A State Center for Health Statistics
  - An MCH Consortium Data Work Group
  - Outside consultants

- *Community involvement.* The findings of a needs assessment are more likely to be accepted by those it affects directly (such as consumers, providers, and other stakeholders) if these constituents are involved in its development. Major avenues for stakeholder involvement include focus groups and surveys, task forces on emerging MCH issues, community/regional meetings, advisory groups, and steering committees. Examples of this involvement include:

  - A survey of advocates on MCH priorities.
  - Focus groups with adolescents and the families of CSHCN.
  - The establishment of workgroups or task forces to address emerging issues.
  - The use of listening sessions, including representatives from State and Regional Health Departments, WIC, grantees, coalitions, and other interested parties to identify emerging needs and priorities and to collect information on potential resources.
  - The use of Advisory Councils on health programs for women and children, for advice in selecting measures, and determining priorities. Alaska, for example, formed an 18-member Maternal, Child, and Family Health Advisory Committee, which included both parents and professionals, to oversee the needs assessment. Iowa's well-established MCH Advisory Council includes representatives from medical and child care provider organizations, voluntary health associations, consumers, as well as public officials, who meet quarterly to reassess MCH priorities and evaluate progress on existing priorities.

- *Creating a local-level process to inform the State-level assessment.* Since much of the States' Title V and other MCH funds and many services are administered at the local level, local health authorities and communities are often best equipped with the information to assess local needs and to plan local systems of care. Several avenues for local involvement include MCH Consortia, local health departments, and Title V contractors. For example:

  - Title V contractors can help lead a participatory and comprehensive local needs assessment process. The contractors can partner with a variety of local stakeholders, and as part of the assessment each locality can identify MCH-related priorities.

- Local perinatal consortia provide an opportunity to establish local-level coalitions. The coalition can comprise consumers, providers, and other stakeholders and can be responsible for developing local MCH leadership and systems planning.
- Regional Councils or Consortia can be used to conduct needs assessments to document the demographics of the MCH population, service capacity, health risk and outcome indicators, and community-level qualitative data.
- Data and technical assistance in needs assessment (including a detailed guidance document, such as those provided by Iowa and California) can be provided to the State's local health jurisdictions.

- *Coordination with other systems.* The Title V Block Grant cannot fund all of the programs and services necessary to meet the needs of pregnant women, children, and families. Therefore, it is critical that the Title V agency work closely with other agencies and systems that serve these populations, such as Medicaid and SCHIP, the education system, early intervention, juvenile justice, and welfare and other family support services. Examples of interagency collaboration on needs assessment include:

  - In Rhode Island, the director of the Title V agency participates in an executive-level interagency body called the Children's Cabinet, which is composed of directors of each State agency serving children and families and a representative of the State's largest private children's advocacy organization.
  - In Iowa, the MCH needs assessment process is tied to the goals and action steps outlined in *Healthy Iowans 2010* and includes the range of agencies involved in that plan.
  - Virginia's Title V agency works collaboratively in a State-level interagency planning committee focused on MCH issues. Included in the committee are representatives of the State Medicaid agency, the Title V agency, Social Services and Mental Health.

Maintaining an open and inclusive process for the needs assessment may seem arduous; indeed, it requires consistent attention to the needs and interests of internal and external stakeholders. However, this effort is vitally important to assure that the assessment of needs and capacity fully reflects the knowledge and opinions of those it most directly affects. It is also an effective way to garner support for MCH goals and the priorities identified through the needs assessment process.

CHAPTER III
COMPONENTS OF THE NEEDS ASSESSMENT

A thorough needs assessment has two major components: an assessment of population needs, and an analysis of the capacity of systems to meet these needs. This chapter reviews the rationale for each of these components and offers tools and examples to help State officials to conduct these assessments.

A. Assessing MCH Needs

The first component of a successful needs assessment is the collection and analysis of information on the health status of MCH populations using data from a variety of sources. The data should be drawn from a range of health indicators, and ideally such indicators should include both quantitative and qualitative measures, State-level data, and more targeted data that are based either on geographic or demographic sub-populations. Several types of data analysis are useful in needs assessment, including both point-in-time analysis (to provide a snapshot of the current health status of MCH populations) and trend analysis (to capture the progress and challenges of the public health field over time).

1. Data Collection

The primary step in needs assessment is the collection of data, both qualitative and quantitative. Qualitative data are descriptive and are produced by instruments such as interviews and focus groups, while quantitative data are numerical in nature and are generated through surveys and questionnaires as well as surveillance data, vital records, and program data. Both have advantages and disadvantages, as described below.

Quantitative data are an important component of any needs assessment. These data have a number of qualities that are useful in needs assessment, including:

- In general, quantitative data are most appropriate for describing the incidence and prevalence of health conditions. For this reason, quantitative statistics tend to carry credibility as a concrete and reliable source of information. Most needs assessment readers will feel comfortable with this type of data and will feel that they impart a scientific aspect to the work.

- Most quantitative data can be boiled down or simplified. This can be useful for creating fact sheets, advertisements, and soundbites, and for use in grant applications.

- A large body of quantitative data already exists that can be analyzed for a State's specific purposes. These data exist at the national, State, and local levels. Local-level data usually come from State-level sources that evaluate the needs of more specific populations, such as residents of a particular geographic area. Table 1, Table 2 and Table 3 include possible sources of quantitative data for each MCH population, listed by indicator type. These examples are primarily drawn from the 15 survey States' needs assessments. Using these examples as a starting point, it is useful to brainstorm other significant indicators and other possible sources of data that are available within a State.

Although quantitative data are useful in needs assessment, these data also have a number of limitations. These can include:

- While quantitative data can describe the magnitude of a problem, they cannot explain *why* a problem exists or describe the impact of the issue on children and families. Complementing quantitative statistics with qualitative information can help to round out the picture.

- Quantitative data can be expensive and time-consuming to collect and analyze. Since data collection

TABLE 1 – Sample Quantitative Indicators & Data Sources: Pregnant Women and Infants

INDICATOR	POSSIBLE SOURCES
Demographic Measures	
▪ Female population by age and race/ethnicity ▪ Poverty rate	▪ Census
▪ Medicaid Eligibility	▪ State Medicaid Office
▪ WIC Enrollment	▪ State WIC Office
▪ Insured Rate ▪ Fertility Rate	▪ CPS
▪ Live Birth Rate	▪ Vital Records
Health Status Measures	
▪ Rate of LBW/VLBW births	▪ PRAMS ▪ Vital Records
▪ Overweight/Obesity ▪ Alcohol, tobacco, or drug use during pregnancy ▪ Domestic violence before or during pregnancy ▪ Adequacy of weight gain during pregnancy ▪ Breastfeeding ▪ Nutritional Intake	▪ PRAMS
▪ Rate of Birth Defects (Especially neural tube defects)	▪ Birth Defects Monitoring Systems
▪ Preventive health screenings	▪ Medicaid/SCHIP claims
▪ Adolescent Pregnancy	▪ Vital Records
Outcome Measures	
▪ Infant mortality rate, SIDS rate ▪ Maternal mortality rate ▪ Perinatal mortality rate	▪ Vital Records

TABLE 2 – Sample Quantitative Indicators & Data Sources: Children

INDICATOR	POSSIBLE SOURCES
Demographic Measures	
▪ Children by age group ▪ Poverty rate among children	▪ Census
▪ SCHIP eligibility ▪ Insured rate	▪ CPS
▪ Head Start enrollment	▪ State Head Start Office
Health Status Measures	
▪ Alcohol, tobacco, and drug use among youth	▪ YRBS ▪ National Youth Tobacco Survey
▪ Prevalence of weapons and violence in schools ▪ Nutritional intake ▪ Use of dental care ▪ Overweight/obesity	▪ YRBS
▪ Hospitalizations (and related causes) ▪ Use of safety devices (such as seatbelts and helmets)	▪ Hospital Data
▪ Cases of vaccine-preventable illness	▪ Surveillance Data
Outcome Measures	
▪ Child and teen death rate ▪ Injury-related death rate ▪ Motor vehicle crash death rate ▪ Drowning death rate ▪ Adolescent homicide rate	▪ Vital Records

requires such steps as sampling and statistical analysis, it can take a good deal of time and effort to produce useful statistics.

TABLE 3 – Sample Quantitative Indicators & Data Sources: CSHCN

INDICATOR	POSSIBLE SOURCES
Demographic Measures	
▪ Number of CSHCN	▪ National Survey of CSHCN
Health Status Measures	
▪ Severity/impact of conditions ▪ Ability to perform age-appropriate activities	▪ National Survey of CSHCN
▪ Children born with birth defects or congenital anomalies	▪ Birth Defects Monitoring Systems
▪ Asthma hospitalizations	▪ Hospital Data
Outcome Measures	
▪ Asthma death rate ▪ Infant mortality rate due to birth defects	▪ Vital Records

Qualitative data can also serve several purposes in needs assessment:

- Qualitative information can reinforce quantitative data that have been collected. In this sense, qualitative findings can provide examples or personal stories of situations that have been identified through quantitative data, which can add to the richness and thoroughness of a needs assessment.

- Qualitative data can be used to fill in gaps where no quantitative data are available. If there is an identified need but no quantitative studies to demonstrate that need, then interviews or focus groups with people who are familiar with the issue can be used to confirm its importance.

- Finally, one of the most important ways in which qualitative data can be used is to discover needs that weren't previously recognized. Because quantitative data often have a time lag, emerging needs may not be recognized until years after they have arisen. Qualitative data can be of use in this instance because interviews or focus groups with people who are intensely involved in MCH may reveal these issues sooner than quantitative analysis alone.

Table 4 shows some of the indicators and qualitative methods used by States.

Table 4 - Sample Qualitative Data Used in Title V Needs Assessment

INDICATOR	DATA COLLECTION METHOD
▪ Factors affecting poor pregnancy outcomes ▪ Medical reasons for racial disparities in infant mortality	▪ Consumer focus group ▪ Vital records, fetal and infant mortality reviews
▪ Stability of CSHCN health ▪ Overall rating of the health status of CSHCN	▪ Consumer survey
▪ General State MCH needs	▪ Key informant interviews with State officials and advocates
▪ Health care access, child care availability, dental access for children and the increasing number of CSHCN	▪ Key informant interviews with county health and tribal health center directors or individual providers ▪ Focus groups with families and providers
▪ Children's mental health care needs	▪ Focus groups with families and providers
▪ Transition services for youth with special health care needs	▪ Interviews and focus groups
▪ Important issues in the health of MCH populations in local communities	▪ District and local MCH staff interviews

2. Data Analysis

Both quantitative and qualitative data collection ultimately require data analysis. Although most Title V agencies have access to State epidemiologists, there are still a number of factors to consider during the data analysis phase of needs assessment. These include identifying critical stratification variables, utilizing trend analysis, and combining quantitative and qualitative analysis.

a. Identifying Critical Stratification Variables

Analysis of needs assessment data requires identifying which stratification variables are of the greatest interest. Since each State is different, some of the more traditional or common stratification variables won't be meaningful in every State. For instance, in a State without much racial diversity in the MCH population, analysis by race/ethnicity may not yield very interesting or applicable results. However, if that same State had a large population of single mothers, analysis by family type might produce meaningful results. Following are some stratification variables to consider in analysis:

- Race/ethnicity
- Age group
- Residence (urban, rural, suburban)
- Family type/living situation
- Nativity (immigration) status
- Language spoken at home
- Income, education, insurance type, or other measure of socioeconomic status

b. Trend Analysis

Although point-in-time analyses are useful in needs assessment, trend analysis should not be overlooked. The importance of trend analysis lies in its ability to describe the change in an indicator over time. For instance, a point-in-time analysis of teenage pregnancy may show high rates that may appear alarming to many and would lead them to encourage a change in programming. Employing trend analysis in this case might demonstrate that in fact the rate of teenage pregnancy, although high, has been in decline for a number of years. This would lead

to a conclusion that current programming is working, and perhaps should even be strengthened. Two different measures of the same indicator lead to two different conclusions about the situation and the programming addressing those needs.

A number of existing survey instruments allow for the analysis of trends among MCH populations. All that is required is a comparable measurement of the same indicator over a number of years. Several data sources, such as Vital Records, the Youth Risk Behavior Survey, and the Pregnancy Risk Assessment and Monitoring System (PRAMS) provide State-level data on a regular basis to allow for trend analysis. Others, such as the National Survey of CSHCN, have only been conducted once but will be repeated to allow for analysis of trends.

c. Combining Qualitative and Quantitative Data

Although qualitative and quantitative data each have their own strengths, they are most compelling when used together. Due to their respective strengths and weaknesses, combining qualitative and quantitative data makes needs assessments more comprehensive and coherent. There are several basic formats for combining the two:

- *Using qualitative to support quantitative.* In this case, the main component of the assessment is based on quantitative data, while the qualitative data lend support and depth. The qualitative data are used to confirm the quantitative findings or to provide personal stories that enrich the assessment. For instance, an assessment can provide statistics about a given indicator, such as teen pregnancy, then use quotes from key informant surveys to reinforce the assertion and to provide a realistic example of that need in the community. If the two different types of data yield different results, it is important to explain why such a difference might exist; possibilities include a lag in the quantitative data or a difference between real and perceived needs.

- *Using quantitative to support qualitative.* Some States choose qualitative data as their primary needs assessment tool. Although not common, this approach can be especially useful in States with significant emerging needs or insufficient capacity to implement quantitative data collection. In this situation, data can be presented in a fashion similar to the one above; however, basic quantitative data are used to reinforce rich descriptions of needs by primary stakeholders for each indicator. As mentioned above, if the two data types indicate different needs then it is important to explain the possible reasons for the discrepancy.

- *Using qualitative and quantitative separately.* Whenever possible, the two approaches above should be used. However, in many cases the type of data available depends on the indicator, and both types of data may not be available for every indicator. If the needs assessment is organized by population (pregnant women and infants, children, and CSHCN) this allows for similar indicators to be discussed together, regardless of data source.

However the various data sources are used, the analysis of each MCH population's needs tells only half of the needs assessment story. The remainder is provided by the capacity assessment, as described in the following section.

B. Assessing MCH Capacity

Capacity assessment is the second major element of needs assessment and a necessary complement to the process of assessing MCH needs described in Section A above. The purpose of capacity assessment in public health is to evaluate the ability of the existing system to provide and support needed health care and related services. The capacity assessment must include services at every level of the MCH pyramid and look beyond individual services to organizational capacity and to actual and potential partnerships for MCH systems building. The four steps of capacity assessment for MCH are:

1. Assessment of the capacity to provide direct and enabling services
2. Assessment of the capacity to provide population-based services
3. Assessment of the infrastructure-building capacity within the Title V agency to build and support a quality MCH system
4. Assessment of individual and organizational assets available to support and improve the MCH system.

Within each of these steps the assessment must not only inventory what resources are available, but, more importantly, the capacity assessment should gather and evaluate quantitative and qualitative indicators to assess the following three major dimensions of service or system capacity:

- *Accessibility.* Access to services or resources may be assessed using indicators such as: the percent of a target population in need who received the appropriate level of services; the length of waiting lists for needed care; the geographic distribution of available

providers or services; and the availability of bilingual staff or translators in public education programs and health care facilities providing services to low-income women, children and families.

- *Quality.* Quality of services may be assessed using both quantitative and qualitative measures including those that assess the coordination of care, client or caregiver satisfaction, and cultural competence. The quality of assets can be assessed by determining the strength of each asset's interest in MCH issues and the asset's potential to help build and promote MCH systems of care. If data are available, the assessment should also include information on how *effective* the services are in producing the desired outcomes.

- *Affordability.* For the assessment of direct and enabling services, affordability of services is a critical dimension to the capacity assessment. This can be measured using indicators of the ability of the population to pay for the services, such as noninsurance rates and the adequacy of private insurance coverage for high-risk persons and those with special needs, such as CSHCN. Another measure of affordability is the extent to which public and private providers provide needed services to the uninsured and underinsured.

These dimensions of capacity apply not only to the three major MCH target populations, but also to subgroups, such as ethnic/racial minorities, non-English speaking groups, and low-income women and families living in urban or rural communities.

Step One: Assessment of Direct and Enabling Service Capacity

The assessment of direct and enabling services necessarily begins with an inventory or listing of existing resources that are available to serve the MCH population and its needs. However, because this list could include hundreds of services that directly and indirectly influence MCH, before embarking on an assessment of direct and enabling services, the needs assessment team should determine the specific range of health and related services that it will focus on for its capacity assessment. This list should be broad enough to include a range of key services that includes both health care and related human or social services, but be focused on those services that are a part of the Title V system of care as defined by the State.

While inventorying available services and providers is an important first step, the goals of capacity assessment cannot be achieved if the assessment only includes a listing and description of the resources. The second essential—and more time-consuming—component of capacity assessment is the compilation of data to evaluate the capacity of these resources.

Historically, many State Title V agencies have limited the indicators of direct service capacity in their needs assessment to annual program participation data or participation trend data. However, though these figures may be easy to obtain, they are not instructive for identifying specific strengths and weaknesses or gaps in individual programs or the system as a whole, nor do they help identify specific areas where change or improvement is needed. Capacity of direct and enabling services can be reflected more completely using a range of indicators to measure the accessibility, affordability and quality of these key MCH resources.

The MCHB's *National Performance Measures (NPM) and Health Systems Capacity Indicators (HSCI)* are a good starting point for a State's MCH capacity assessment because all States have information on these measures easily available from either National or State data sources. They also provide examples of model capacity indicators that States can use to identify other capacity indicators. Examples of NPMs and HSCIs that Title V agencies regularly monitor and that can be an integral component of a State's capacity assessment include the following.

MCHB Measures of Accessibility (Percentage)

- VLBW infants delivered at facilities for high-risk deliveries and neonates (NPM 17).
- Infants born to women receiving prenatal care beginning in the first trimester (NPM 18)
- Newborns who are screened and confirmed with metabolic conditions who receive appropriate follow-up (NPM 1).

MCHB Measures of Affordability (Percentage)

- Medicaid enrollees under age 1 who received at least one initial periodic screen (HSCI 2).
- EPSDT eligible children between the ages of 6 to 9 who have received any dental services during the year (HSCI 7).
- Children without health insurance (NPM 13).
- State SSI beneficiaries under age 16 who received rehabilitative services from the State CSHCN program (HSCI 8).
- CSHCN between the ages of 0 and 18 whose families have adequate private or public insurance to pay for the services they need–data available from the National Survey of CSCHN (NPM 4).

MCHB Measures of Quality (Percentage)

- Families of CSHCN who receive coordinated, ongoing, comprehensive care within a medical home (NPM 4)–data available from the National Survey of CSHCN.
- CSHCN between the ages of 0 to 18 whose families partner in decision making at all levels and are satisfied with the services they receive (NPM 2)–data available from the National Survey of CSHCN.
- CSHCN between the ages of 0 to 18 whose families report the community-based service systems are organized so they can use them easily (NPM 5)–data available from the National Survey of CSHCN.

a. Key Assessment Questions

The following are the key questions that should drive the selection of indicators for evaluating the capacity of direct and enabling services. They are divided along the three dimensions of accessibility, affordability and quality.

Defining Accessibility

- Are there shortages of providers or services in specific geographic areas or communities? (Underserved geographic areas could be illustrated by a map.)
- Are safety net, publicly subsidized services able to serve the underinsured or uninsured?
- Are there physical barriers to accessibility and which geographic areas are most affected?
- Are there language barriers and which demographic groups are most affected?
- Are the target populations obtaining the services they need?
- Are consumers or providers reporting unmet need for services or difficulty accessing the services they need? How does this vary across demographic groups?
- What is the proportion and location of sites serving low-income families not accessible by regular public transportation that do not provide transportation assistance?

Defining Affordability

- What proportion of women and children are uninsured and how does this vary across demographic groups?
- What are the State Medicaid and SCHIP eligibility guidelines for women, infants and children?

- What proportion of eligible populations are enrolled in Medicaid, SCHIP or other State insurance programs for women and children?
- What are barriers to enrolling in Medicaid or SCHIP for the eligible population?
- What needed benefits or services do Medicaid or SCHIP not cover?
- What percent of private providers accept Medicaid or SCHIP coverage?
- Do out-of-pocket costs pose a barrier to care for children?
- Do health plans limit access to needed specialty providers or enabling services?

Defining Quality and Effectiveness

- Is care coordinated?
- Is care for CSCHN family-centered?
- Are the MCH providers and service programs culturally competent?
- What do consumers and caregivers say about the quality and effectiveness of services they receive from MCH providers? (Indicators may include perceptions of provider communication skills, waiting times, adequacy of time spent with provider, respect for families, and expertise of provider)
- What do available quality assurance or quality improvement documents say about the quality of the services provided?
- What do evaluations document regarding the effectiveness of the programs in achieving their desired outcomes?

b. Organization of the Assessment

Table 5, Table 6 and Table 7 provide the structure for States to organize their indicators of direct and enabling service capacity and include sample indicators for each dimension. These examples are taken from our 15 study States. The indicators are organized according to the three MCH populations: (1) pregnant women, mothers and infants; (2) children; and (3) children with special health care needs (CSHCN). In this way, the results of the capacity assessment can best be matched to the indicators of MCH need that are also organized by population group.

c. Emerging Issues that May Impact Direct and Enabling Service Capacity

In addition to gathering information about the current capacity of direct and enabling services, it is important to identify the impact of emerging issues on the State's ability to provide or assure access to direct and enabling services. The following is a checklist of

categories of emerging issues to be considered for inclusion based on their relevance to a State:

Changes in Medicaid or SCHIP

Budgetary Issues

Public Health Emergencies (e.g., the impact of competing priorities such as bioterrorism or vaccine shortages)

Changes in State Demographics (e.g., the growth and changing nature of the immigrant populations)

New/Emerging State Policy Priorities or Mandates

Table 5. Sample Capacity Indicators for Pregnant Women and Infants

ACCESSIBILITY	AFFORDABILITY	QUALITY/EFFECTIVENESS
▪ Percentage of VLBW infants delivered at facilities for high-risk deliveries and neonates (MCHB NPM #17) ▪ Percentage of infants born to women receiving prenatal care beginning in first trimester (MCHB NPM #18) ▪ Percentage of women with a live birth scoring 80% or higher on the Kotelchuck Index for adequacy of prenatal care (MCHB HSCI #4) ▪ Percentage of women beginning prenatal care in third trimester ▪ Perception of importance of prenatal care by community members in areas with poor pregnancy outcomes (qualitative data) ▪ Number and geographic distribution of perinatal providers in public and private settings ▪ Number of mothers receiving case-management services as percentage of total births to low-income and other high risk women ▪ Percentage of eligible pregnant women served in WIC ▪ Number and geographic distribution of family planning providers/clinics serving teens and low-income women ▪ Number of total infant child care slots available relative to need	▪ Percentage of Medicaid enrollees under age one who received at least one initial periodic screen (MCHB HSCI#2) ▪ Percentage of SCHIP enrollees under age one who received at least one periodic screen (MCHB HSCI #3) ▪ Percentage of poverty level for pregnant women's eligibility in the State's Medicaid and SCHIP programs (MCHB HSCI #6) ▪ State eligibility guidelines for Medicaid coverage of family planning services ▪ Percentage of women in need of subsidized family planning services who receive them ▪ Medicaid coverage of mental health services for postpartum women ▪ Percentage of private maternity care providers willing to serve pregnant women who are enrolled in Medicaid ▪ Percentage of Medicaid-eligible pregnant women enrolled in Medicaid ▪ Percentage of eligible infants covered by Medicaid or SCHIP	▪ Reasons women of childbearing age cite for no regular source of medical care ▪ Percentage of OB-GYNs reporting that they routinely screen for domestic violence and provide referrals as appropriate ▪ Perceptions of discrimination by prenatal health care providers because of race/ethnicity ▪ Barriers to prenatal care experienced by low-income insured and uninsured pregnant women. ▪ Percentage of prenatal clients offered HIV testing ▪ Cultural competency of prenatal providers serving new immigrant populations and racial/ethnic minority groups

Table 6. Sample Capacity Indicators for Children

ACCESSIBILITY	AFFORDABILITY	QUALITY
▪ Number and location of medically underserved areas (MUAs) and Health Professional Shortage Areas (HPSAs) ▪ Number of active primary care physicians serving children (available on AAP Web site for States and local areas) ▪ Ratio of child population to number of clinically active pediatricians (available on AAP Web site) ▪ Number and geographic distribution of public clinics available to serve low-income and uninsured children and families. ▪ Percentage of caregivers reporting emergency rooms as usual source of sick care for their children ▪ Number and location of Dental HPSAs ▪ Number and geographic distribution of primary care clinics providing dental care to low-income or uninsured children ▪ Percentage of children who have not seen a dentist within the last 6 months/year (parental report) ▪ Percentage of children aged 5 who have never had a dental check-up ▪ Percentage of children who needed and sought dental care in the last year and weren't able to get it ▪ The percent of EPSDT eligible children aged six to nine who have received any dental services during the year (MCHB Health Services Capacity Indicator #7) ▪ Number and geographic distribution of mental health clinicians, day treatment programs, residential counseling centers, residential treatment, and psychiatric hospitalization services for children and youth. ▪ Percentage of eligible children served in WIC	▪ Percentage of uninsured children (MCHB NPM #13) ▪ Percentage of eligible children covered by Medicaid or SCHIP ▪ Number and geographic distribution of private pediatricians who accept Medicaid and SCHIP coverage ▪ Percentage of potentially Medicaid-eligible children who have received a service paid by the Medicaid Program. (MCHB National Performance Measure #14) ▪ Extent of dental health coverage in SCHIP insurance benefits for children ▪ Number of dentists willing accept Medicaid or SCHIP coverage ▪ Percentage of children with dental insurance ▪ Extent of mental health coverage in SCHIP insurance benefits for children ▪ Percentage of low-income children under age 6 receiving child care that is either fully or partially paid for with a subsidy	▪ Percentage of pediatricians and pediatric clinics adhering to Bright Futures Guidelines for preventive and primary care ▪ Percentage of parents reporting that their child's health professional did not encourage preventive health steps for their child ▪ Cultural competency of child health providers serving new immigrant populations and racial/ethnic minority groups

Table 7. Sample Capacity Indicators for CSHCN

ACCESSIBILITY	AFFORDABILITY	QUALITY
▪ Percentage of newborns who are screened and confirmed with metabolic conditions who receive appropriate follow-up (MCHB NPM #1) ▪ Percentage of families of CSHCN reporting unmet need for health services (Available from National Survey of CSHCN) ▪ Percentage of families of CSCHN reporting problems obtaining referrals for needed specialty care (Available from National Survey of CSHCN) ▪ Number of pediatric specialists and subspecialists and their geographic distribution in a State (Available on AAP Web site) ▪ Number and geographic distribution of rehabilitative service providers for children ▪ Percentage of children screened and determined eligible for publicly financed Early Intervention services who receive them; or number and geographic distribution of children on waiting list for Early Intervention follow-up services	▪ Percentage of CSCHN whose families have adequate private and/or public insurance to pay for the services they need (MCHB NPM #4) ▪ National Survey of CSHCN (survey of caregivers) includes the following indicators for this measure: 1) adequacy of benefits and covered services, 2) extent of out-of-pocket costs, and 3) choice permitted for child to see provider he/she needs to see. ▪ Percentage of State SSI beneficiaries under age 16 receiving rehab. services from the State CSHCN program (MCHB HSCI #8) ▪ Degree to which the State CSHCN Program provides or finances specialty and subspecialty care, not otherwise accessible or affordable to its clients.	▪ Percentage of CSHCN who receive coordinated, ongoing, comprehensive care within a medical home (MCHB NPM#3) ▪ National Survey of CSHCN includes the following indicators for this measure: ▪ child has unmet need for care coordination ▪ 2) child has a personal doctor or nurse ▪ 3) child has a usual source of sick care ▪ Percentage of families of CSHCN reporting receiving family-centered care ▪ National Survey of CSHCN includes the following indicators for this measure: 1) provider spends enough time with family 2) provider listens carefully to parents 3) provider makes parent feel like a partner in child's care 4) provider is sensitive to family's values and customs 5) provider gives the specific information that family needs ▪ Percentage of families of CSCHN who are satisfied with the services they receive ▪ Sample Indicators from State surveys: 1) family concern with skill of their child's physician 2) family concern with provider respect for parent 3) waiting times for appointments, adequacy of time spent with child ▪ Cultural competency of providers serving CSCHN in new immigrant communities and other racial/ethnic minority groups

Table 8. Sources of Information (Quantitative & Qualitative) on MCH System Capacity

INFORMATION SOURCES	ACCESSIBILITY	AFFORDABILITY	QUALITY OR EFFECTIVENESS
Program Data			
MCH Program	▪		▪
CSHCN Programs	▪		▪
Medicaid/SCHIP	▪	▪	▪
Newborn Screening Program	▪		
Early Intervention Program	▪		
School Health	▪		
Family Planning	▪		
WIC	▪		
Lead Screening	▪		
Public and Private MCH-Focused Outreach/Public Awareness Programs	▪	▪	
Care Coordination/Family Support Programs	▪		▪
Child Care	▪	▪	▪
Survey and Surveillance Data			
National Survey of CSHCN	▪	▪	▪
Health Access/ Information Surveys	▪	▪	▪
PRAMS	▪	▪	▪
Vital Statistics	▪		
Fetal-Infant and Pregnancy-Associated Mortality Reviews (FIMR and PAMR)	▪		▪
Special Topic Surveys, e.g., Oral Health, Mental Health	▪	▪	▪
▪ Consumer/Family Satisfaction Surveys	▪	▪	▪
Provider Surveys and Clinic Staff Surveys	▪	▪	▪
School-based surveys of parents, children and/or teachers	▪	▪	▪
Health Professions Associations			
American Academy of Pediatrics	▪	▪	
State Medical Societies	▪	▪	
State Primary Care Associations	▪	▪	
Qualitative Data			
Focus Groups		▪	▪
Key Informant/Stakeholder Interviews		▪	▪
Other Local, Regional or Topical Needs Assessments	▪	▪	▪
Program Evaluation Research	▪	▪	▪

Table 8 provides examples of many of the data sources Title V agencies have drawn from for the conduct of their assessment of direct and enabling services. Program data, for example, have a large amount of potentially useful indicators, including numbers of participants in relation to numbers in need or eligible, program income-eligibility criteria, size of waiting lists, data on program staffing and hours, and information from quality assurance or quality improvement reviews. Several national surveys, State surveys and State surveillance systems are also rich sources of capacity information. Other important data sources include associations of health professionals that maintain current information on provider distribution, shortages and training needs. Local or regional health needs assessments and topic-specific needs assessments conducted within the State also provide critical information for the State Title V capacity assessment. Finally, as discussed in the section above on assessing population needs, focus groups, and key informant interviews are excellent tools for MCH needs assessment. With regard to assessing system capacity, these data collection methods can provide information not otherwise available on clients' views of the quality of services and on factors promoting or impeding the accessibility or affordability of services.

Step Two: Assessment of Population-Based Service Capacity

The purpose and organization of the capacity assessment of population-based MCH services are similar to that for direct and enabling services, with one exception. At this level of the MCH Pyramid, affordability is not likely a factor affecting capacity. The following key questions can guide States in their selection of indicators to measure population-based service capacity. Examples of indicators that have been used by Title V agencies are included where relevant.

Accessibility

- What proportion of the population receive the service? (Sample indicators: percentage of newborns receiving screening, percentage of children who receive appropriate vision and hearing screenings, percentage of third graders who have received protective sealants on at least one molar, and the length of waiting lists for Early Intervention screening and services.)
- Are the services accessible to all geographic areas and to all demographic groups in the State? (Sample indicator: percentage of children under age 6 living in high-risk areas screened for lead poisoning.)
- Are there physical barriers to accessibility and which geographic areas are most affected? (Sample indicator: qualitative information about access barriers to community screening programs.)
- Are there language barriers and which demographic groups are most affected? (Sample indicator: the extent of outreach and services provided in other languages in communities with concentrations of non-English speaking groups.)

Quality

- Are the services culturally competent?
- What do the target groups say about the quality of services?
- How effective are the services in achieving their desired outcomes for the general target population and specific high-risk groups?

Step Three: Assessment of Infrastructure-Building Service Capacity

States must assess not only the capacity of the services that are being delivered to the target populations, but also the State agency's internal program capacity, through an analysis of its MCH infrastructure-building services. Title V program capacity includes delivery systems, workforce, policies and support systems (e.g., training, research, and information systems)

and other infrastructure needed to maintain MCH service delivery and policy making activities. The program capacity will define the core capacity of Title V to reach its mission as State Title agencies continue to evolve from providers of direct services to a focus on promoting, monitoring and assuring quality of comprehensive systems of care for the MCH population.

In recent years, The Women's and Children's Health Policy Center of Johns Hopkins Bloomberg School of Public Health and The Association of Maternal & Child Health Programs, in partnership with MCHB, have developed a set of model assessment and planning tools titled *Capacity Assessment for State Title V* (*CAST-5)* for State agencies to use to assess their internal agency capacity, with a focus on infrastructure-building services. CAST-5 is designed as a group assessment process limited to internal Title V agency staff, though it could include staff from other agencies or departments within the State Department of Health who collaborate closely with Title V on infrastructure-building services, such as school health or injury prevention programs. Title V representatives interviewed suggested that for this process to be most effective and prevent internal agency bias, it should be facilitated by someone who is not directly involved in administering or delivering Title V services, or who does not have a special interest in a particular MCH issue or population.

CAST-5 divides infrastructure-building resources into the following categories:

- *Structural Resources.* These include the physical structure of the agency, its computer hardware, other material resources, and financial and human resources.
- *Data and Information Systems.* These include technological resources for state-of-the art information management and data retrieval, analysis and reporting.
- *Organizational Relationships.* These include formal partnerships or communication channels with other types of public and private organizations.
- *Staff Competencies.* These include staff knowledge, skills and abilities and those of other individuals who work with the Title V program (including consultants).

To assess the MCH system's capacity in each of these areas, *CAST-5* utilizes a four-part analysis often referred to in strategic planning literature as a SWOT analysis. A SWOT

analysis involves the identification of: (1) organizational *strengths*, (2) organizational *weaknesses* or gaps, (3) internal and external factors that provide *opportunities* or that can facilitate improving and expanding the infrastructure resources, and (4) internal or external *threats* or barriers to improving or expanding these resources. The information from this group assessment is then brought together for the staff to prioritize where efforts may be most effectively spent to improve MCH system infrastructure in the short and long term.

CAST-5 is a user-friendly, practical guide for States that uses a defined set of process indicators and a set of assessment guidelines, tools, and exercises. States interviewed suggested that *CAST-5* may be followed in whole or part, depending on States' needs and the level of resources available for the capacity assessment.

Step Four: Assessment of Assets for MCH Systems-Building

Key resources that are often overlooked in public health needs assessments, but are essential for building MCH systems at the State and the community level, are the individual and organizational *assets* that are available to build partnerships or collaborations. The public health and related community development literature suggest that needs assessment should be re-oriented away from its emphasis on negative needs, toward a positive approach that builds on existing partnerships and collaborations at the State and community levels.[1] The formal or informal connections that State MCH leaders make with other important assets at the State and community level can contribute greatly to the understanding of and support for MCH goals by the public as well as to the effectiveness of the system of care.

For MCH, this approach involves inventorying the assets that exist in the State and at the community level in the form of individuals, formal and informal associations, and institutions such as libraries or faith-based groups, and determining how these people and groups can be organized to more effectively address MCH concerns and build systems of care for women, children and families.

Worksheet 1 serves as a form for inventorying and evaluating existing and potential assets.

[1]The model of assets-focused capacity assessment presented here is drawn from the community development literature and particularly from publications by the Asset-Based Community Development Institute at The Institute for Policy Research at Northwestern University and their joint work with the American Academy of Pediatrics.

As assets are identified they can be listed and categorized into the groups listed in the left-hand column of Worksheet 1. The worksheet is structured to collect information on the strengths of each asset, their potential for building and partnering in MCH systems, and the specific tasks needed to mobilize each of these assets. Completing this form may require some research, but most of the assets will be identifiable from the personal/professional experience of the State and local agency staff as well as from members of the needs assessment advisory or planning group. One option is for this part of the capacity assessment to be completed as part of a group exercise; this could be integrated with the infrastructure-building exercises recommended in CAST-5. Alternatively, this worksheet can be copied and distributed to members of the needs assessment team for them to complete individually and bring back to the group for discussion and integration into a collaborative assessment of MCH assets.

Upon completion of a capacity assessment the Title V agency will be able determine whether the resources are present, accessible and effective to deal with the identified health needs in your target populations. This information is key for matching capacity strengths and weaknesses to your identified needs, to prioritizing among the many identified needs, and then finally for determining what must be done differently to develop and maintain the necessary resources and systems of care to meet the State's MCH population's needs.

C. Matching Needs to Capacity

The next step is to begin to compile all of the information gathered through the needs and capacity assessments. For this information to be most meaningful, health needs and system capacity to meet those needs must be analyzed together.

The first step in this process is to assess the key strengths and weaknesses in the capacity of the system to meet the identified needs. Examples of capacity strengths and weaknesses include geographic areas where services are particularly accessible or absent, populations that are well- or underserved, or issues that are thoroughly addressed or neglected. The types of needs and the focus of the strengths and weaknesses identified will vary across the levels of the MCH Pyramid.

Worksheet 1: Assessment of Current & Potential Assets for MCH Systems Building

POPULATION						
Categories of Assets	Names	Current or Potential Asset?	Strength of current working relationship? (High, Medium, Low)	Perceived strength of interest in MCH issues? (High, Medium, Low)	How can asset help build MCH systems?	What steps are needed to mobilize/further engage this asset?
Partnerships/ Collaborations						
Advisory Committees/ Task Forces						
Other Public Agencies and Interagency Groups						
Higher Education Institutions						
Individuals						
Voluntary Associations/CBOs						
Other						

Worksheet 2 presents a template for arraying the findings of the needs and capacity assessments. For clarity, State officials may want to complete separate worksheets for each of the MCH priority populations.

Worksheet 2. Analysis of MCH System Capacity to Address MCH Needs

POPULATION			
Service Category	Needs	Capacity	
		Strengths	Weaknesses/Gaps
Direct Services			
Enabling Services			
Population-Based Services			
Infrastructure			
System-Building/Collaboration			

The next step in the analysis is to evaluate the relative importance of the identified needs. Worksheet 3 can be used to divide the identified needs into four categories or levels of relative need and capacity, as described below.

- *High Need/High Capacity.* These are issues that are ripe for intervention, as resources exist to address the needs.
- *Low Need/High Capacity.* These may include issues that have traditionally received large amounts of resources but which have declined in importance, or geographic areas with substantial medical resources but low levels of need in the immediate area.
- *High Need/Low Capacity.* These are priority issues to which resources are not currently being devoted.
- *Low Need/Low Capacity.* These are low-priority issues.

Worksheet 3

NEED	CAPACITY	
	High	**Low**
High	Intervention	Need to reallocate resources to address these needs
Low	Excess capacity—Can move resources to other needs	Not a priority

Those that fall in the first category of high need/high capacity are likely to be those that are most in need of and susceptible to intervention.

Based on this analysis, State MCH officials can develop a master list of priority MCH needs from which ten high-priority issues can be selected. The process of selecting these ten priorities is discussed in the next section.

D. Setting Priorities

The final step in the needs assessment process is the selection of ten (or more) priority areas for program planning and resource allocation. This requires first that the findings of the needs assessment be framed as priorities, and then that the priority issues that are most critical be selected for inclusion on Form 14 of the Block Grant Application.

In order to track progress toward the priority goals, priorities must be linked to concrete measures. Therefore, Section IV.B. of the Block Grant Application asks States to link their priorities with National and State Performance Measures. This requirement can be seen as limiting, as some important MCH issues, such as substance abuse, mental health, and obesity, are not reflected in the National Performance Measures. However, State-specific measures can be crafted to assure that progress toward these goals can be assessed and monitored. Also, because the Block Grant application is organized around the Performance Measures, it can be easier to assure that programs and resources are directed to each priority if they can be tied to the measures as well.

1. Framing Priorities

In selecting and framing priorities, State officials face several choices:

- *Broad or narrow?* A priority framed broadly, like "improve access to comprehensive prenatal care" can encompass a wide range of programs, so it can be clearly shown that resources are being devoted to the issue. On the other hand, broad priorities can be difficult to measure. A more specific goal, like "reduce overweight, addressing physical activity and nutritional habits," is measurable but would require that resources be allocated to a specific (possibly new) program.
- *New issues or existing programs?* Some States choose to focus their priorities on issues that have not traditionally received MCH funding, such as oral health, mental

health, and nutrition, in the hope that identifying them as priorities will raise their visibility and justify the allocation of resources to these issues. Others include in their priority lists at least a few traditional MCH concerns.

- *How many to choose?* While Form 14 has space for 10 priorities, States may select more (or fewer). Some State officials felt that even 10 was too many to track consistently, while others added one or two additional priorities because they were unable to limit their list to 10.

2. The Priority-Setting Process

Often the needs assessment process produces far more than 10 potential priorities. States need an inclusive, representative process for selecting among this priority list. The steps in this process include:

- *Convening a body of stakeholders.* Convening a Steering Committee or other body of stakeholders on both the State and local levels can provide a forum for an open discussion of potential priorities and the use of a method for selecting among them. These committees may include agency representatives as well as outside stakeholders, including providers, family advocates, local health departments, and universities. States may hold these discussions on a regional level around the State or convene one group for a discussion of Statewide priorities.
- *Choosing priorities through consensus methods.* A number of methods exist to help a group to come to agreement on a list of priorities. These generally involve asking each participant to rate each issue according to a list of criteria, whether quantitative (such as prevalence) or qualitative (such as the degree of political support for addressing the issue). All of the participants' rankings are then combined to create a ranked list of priority issues.
- *Selecting criteria.* Whatever the process or forum used to select priorities, participants will need criteria with which to select ten priorities from a longer list. States reported using a number of different criteria, including some reflecting the impact of a health issue; the issue's susceptibility to intervention; and practical concerns about monitoring and addressing the need. Criteria may be selected from the checklist below; of course, data must be available for each priority on the criteria that are chosen.

Impact Criteria

- ❑ Prevalence of the problem (rates and absolute numbers)
- ❑ Seriousness of the issue (morbidity and mortality rates)
- ❑ Economic impact of the problem
- ❑ Whether the issue affects subsequent (downstream) issues

- Degree of demographic disparity

Intervention Criteria

- Whether the issue can be addressed with known interventions
- Whether the number of risk factors is small and identifiable
- Amount of resources (from Title V and other sources) available for the problem

Practical Criteria

- Degree to which other agencies identify the issue as a priority need
- Whether the issue can be tracked and measured

The priorities can be scored and ranked based on the criteria selected, and the top ten selected for inclusion in the Block Grant application.

CHAPTER IV
PUTTING NEEDS ASSESSMENT FINDINGS INTO PRACTICE

A needs assessment, if it is to be truly useful, does not end when the document is submitted to MCHB. Rather, the needs identified and priorities selected must be used to design programs and allocate resources. In many States, however, this is not easily done; the forces of political pressure and bureaucratic inertia often work against even the best-intentioned efforts toward change. In the real world, MCH agencies cannot completely revamp their budgets each year, or every five years, regardless of the data and reasoning behind their stated priorities. Existing positions and programs are generally continued unless there is a pressing reason to terminate them, and funding for new positions and programs can be difficult to find. In addition, a substantial proportion of MCH funds are often passed on to local health jurisdictions, whose decisions about allocating these funds may or may not be linked to the State's priorities.

Nonetheless, several States offered useful examples of how priorities and needs assessment findings can be applied to planning efforts on the State and local levels. These include:

- *Use measurable priorities.* Data that demonstrates a clear need is the most effective tool for getting funding for programs that are based on MCH priorities. Moreover, linking the priorities to performance measures—especially those on which MCH agencies are required to report—helps to assure that resources will be devoted to these issues.
- *Marshal empirical evidence.* Likewise, if it can be shown that a program is effective or, better yet, cost-effective, it is more likely to receive political support.
- *Take advantage of open slots.* When positions become open due to attrition or retirement, take advantage of the opportunity to redirect them toward issues on the MCH priority list.
- *Partner with other agencies.* Numerous agencies outside of MCH, and in some cases outside of health departments, address MCH issues in their work, such as Departments of Education, WIC programs, and mental health and substance abuse programs. Interagency planning and program development can help to leverage new sources of funding, minimize duplication, and improve coordination.
- *Use priorities to guide contracts with local agencies.* Several of the study States required their local health jurisdictions to incorporate the MCH priorities into their annual

work plans. In general, these States allow local agencies to select three to five priorities and require them to develop action plans to achieve measurable targets in these areas.

Actually using the needs assessment findings and the identified priorities to guide funding decisions can be challenging. Tying the priorities to measurable indicators of performance, either State-based or National, will help to draw resources to these issues. On the other hand, States should not feel limited to the issues covered by the National performance measures in selecting their priorities, as many of the most pressing MCH issues, such as obesity, asthma, and access to dental care, are not covered by these measures. Therefore, the development of State-level measures, with associated sources of data, may be critical to assuring that the priorities selected are used to guide programming decisions.

The Title V needs assessment, while sometimes an arduous process, can be a rewarding one as well. A thorough and comprehensive assessment can provide an MCH agency with clear, evidence-based guidance on the allocation of its own resources and strong arguments for the development of new sources of support. This requires attention to the inclusiveness of the needs assessment process, the rigor of data collection and analysis, and integration of findings into a coherent document. With a focus on each of the critical elements of needs and capacity assessment, this process can form the basis for planning and improving systems of care for children and families.