Progress on the 2005–2010 National Plan for Maternal and Child Health Training

The National Plan for Maternal and Child Health (MCH) Training provides a framework for action with specified goals and objectives designed to ensure that the aim of the program is achieved and that partners in MCH training are working toward a common end. This document provides a brief summary of activities conducted by the Health Resources and Services Administration (HRSA) Maternal and Child Health Bureau (MCHB) Training Branch and MCH training grantees' recent activities to address the goals of the strategic plan.

This document presents summary performance measure and administrative data from fiscal year (FY) 2005 to FY 2008 that directly relate to specific goals and objectives of the strategic plan. Information about MCHB activities was provided by Training Branch staff. Information on grantee activities is based on grantee progress report narratives. The grantee activities described are selected examples only; Altarum is undertaking a forthcoming systematic analysis of report narratives.

Goal 1. Ensure a workforce that possesses the knowledge, skills, and attitudes to meet unique MCH population needs

- In FY 2008, MCHB-funded programs provided training for 1,890 long-term trainees, 3,578 medium-term trainees, and 14,878 short-term trainees.

Goal 2. Prepare and support a diverse MCH workforce that is culturally competent and family centered

- Cultural competence instruction increased by 35% over the 4-year period.
- The racial and ethnic diversity of MCH trainees as a group matches that of the U.S. population nationally, but no increases were seen between 2005 and 2008.
- No increase in faculty racial and ethnic diversity was seen between 2005 and 2008.

Goal 3. Improve practice through interdisciplinary training in MCH

- Increasingly, consortia among different training programs in close proximity are forming to jointly present symposia and leadership training courses and to provide technical assistance (TA) to MCH organizations.
- MCHB Training Branch funded a research project on interdisciplinary training and supported a webcast and other venues for disseminating important findings.

Goal 4. Develop effective MCH leaders

- Eighty percent of long-term trainees engaged in at least one category of leadership 5 years post-training.
- In 2008, 28% of MCH-designated faculty were former trainees.
- MCH leadership competencies were developed and in wide use.

Goal 5. Generate, translate, and integrate new knowledge to enhance MCH training, inform policy, and improve health outcomes

- Across all programs, the number of grantee publications and products averaged 4,267 per year; approximately 52% of these were published peer-reviewed scientific papers.

Goal 6. Develop broad-based support for MCH training

- Financial support for MCH training increased by 23% between 2005 and 2009.
- In 2008, grantees reported 102,103 recipients of TA activities. On average, about 60% are local or state focused; nearly 30% reached national or international audiences.

Goal 1. Assure a workforce that possesses the knowledge, skills, and attitudes to meet unique MCH population needs

Federal/National Activities

- In FY 2008, MCHB-funded programs provided training for 1,890 long-term trainees, 3,578 medium-term trainees, and 14,878 short-term trainees.
- With partner and grantee assistance, Training Branch staff organized and presented four informational and educational webcasts for the MCH training programs each year.
- MCHB Training Branch added a component in the long-term training guidance requiring that grantees provide training to those currently in the workforce.
- MCHB Training Branch partnered with the Association of Maternal and Child Health Programs (AMCHP), the Association of Teachers of Maternal and Child Health (ATMCH), and the Johns Hopkins University (JHU) in a national survey of state Title V program staff training needs and supported ATMCH in its survey of public health MCH doctoral program graduates.
- MCHB Training Branch established a Reporting and Monitoring Workgroup to strengthen grantee reporting. The workgroup developed a new tool to gather data about grantees working in underserved communities. These data will be used in revised performance measures.

Grantee Activities

The MCHB training programs have fully adopted the MCH competencies and incorporated them into their training curricula. Almost all of the training programs reported that the MCH competencies have been a useful foundation for identifying the knowledge base and skills that should be taught to MCH trainees and practitioners. Programs are addressing the competencies through a combination of approaches, including didactic coursework, clinical training, field placements, practica, retreats, forums, workshops, coaching, and mentoring. One grantee uses both the ATMCH and MCH leadership competencies to develop their training efforts and a retreat, which is designed to enhance the ability of participants to maximize achievement of the MCH leadership competencies. Another program presents sessions on the competencies during the MCH seminar series. Some programs also used self-assessment tools based on the MCH competencies to monitor trainees' progress throughout the program.

Goal 2. Prepare and support a diverse MCH workforce that is culturally competent and family centered

Federal/National Activities

- MCHB Training Branch established and supported a Diversity Learning Collaborative. Related activities included a multifaceted needs assessment, publication of a diversity literature review, development of MCH Training Program Diversity Plan guidelines, and development and dissemination of a Diversity Resource List. Five teams, selected through a competitive process, worked over a 9-month period on self-defined activities to improve trainee and/or faculty diversity.
- MCHB Training Branch added a requirement in the long-term training guidance to provide instruction on family-centered practice and have active, paid roles for family and youth.
- Through its cooperative agreement with MCHB, the National Center for Cultural Competence provides TA resources to training program grantees, including program self-assessment guides and curricula materials.
- MCHB Training Branch established a family-centered practice workgroup that developed a compendium of family-centered and family-directed field experiences, resources for teaching family-centered and family-directed practices, indicators of comprehensive Instruction and field placement, and family advisory board guidelines. An Association of University Centers on Disabilities MCH Leadership Education in Neurodevelopmental & Related Disabilities (LEND) Family Discipline Workgroup also was formed.
- MCHB Training Branch funded four new pipeline programs that recruit undergraduate populations enrolled in minority-serving institutions and provide enriching experiences to expose students to MCH public health professions.

Grantee Activities

Of note is grantees' recognition of diversity as a broad construct. Diversity includes not only racial and ethnic diversity but other characteristic of underrepresented groups[1] such as gender, geographic origin, socioeconomic status, and disability among other aspects. It is by supporting diversity in all these areas that training programs feel that they will best serve their consumers, their trainees, and the larger MCH community. Also of importance with respect to Goal 2 is inclusion of families in all aspects of the training programs, as well as instruction in cultural competence and family-centered care.

Trainee diversity. Grantees are confident that great strides toward a diverse workforce can be made, but they also stress that much still depends on the pool of potential trainees and faculty at their university and in their geographic area as well as institutional commitment to the cause. Various types of outreach activities are being employed by grantees to raise awareness of MCH career paths and training programs, as well as encourage potential students early in their education to consider MCH professions. Grantees' institutions offer and advertise scholarships and fellowships to diverse students.

Percent age of Trainees from Underrepresented Groups

	2005	2006	2007	2008
PM 09	35%	32.1%	31%	31%

Source: 2004–2007 Discretionary Grant Information System (DGIS) datasets

[1] "Underrepresented groups" refers to, but are not limited to, groups based on race, ethnicity, geographic location, gender who are underrepresented in a field of study.

Programs use both minority alumni and faculty to reach out to potential trainees and serve as mentors. In addition, a few programs have extended their "pipeline" efforts as early as middle school, adding this population to the traditional high school, community college, and undergraduate pool. The percentage of ethnically and racially diverse trainees is similar to that of the U.S. population. However, when examining individual groups, African Americans and Hispanics of any race continue to be underrepresented.

Percentage of Racially and Ethnically Diverse Trainees by Long-Term Training Program Category[2]

Program Category	Year			
	2005	2006	2007	2008
Leadership Education in Adolescent Health	31%	25%	30%	27%
Communications Disorders	21%	17%	14%	18%
Developmental Behavioral Pediatrics	50%	40%	41%	38%
LEND	20%	16%	20%	20%
MCH Certificate Program	18%	20%	30%	33%
MCH Pipeline	NR	NR	50%	NR
Nursing	30%	14%	27 %	11%
Nutrition	29%	26%	26%	19%
Pediatric Dentistry	41%	38%	33%	29%
Pediatric Pulmonary Centers	25%	32%	32%	25%
School of Public Health	26.7%	32.9%	35%	29%
Social Work	35%	31.8%	37%	32%

Source: 2004–2007 DGIS datasets (NR = Not Reported)

Faculty diversity. In the program narratives**,** diversity among faculty was reported with slightly less emphasis and detail than that of trainees. A number of different types of outreach activities are being employed to raise awareness of MCH career paths and training programs, as well as encourage potential students early in their education to consider MCH academic careers. Overall, while varying from year to year, from 2005 to 2008 the diversity of MCH training program faculty did not change significantly in either direction. Many Training Program categories have a small total number of faculty members; therefore a small change in the number of diverse faculty members in an individual program can greatly affect the diversity within a training program category.

Percentage of Racially and Ethnically Diverse Faculty by Long-Term Training Program Category[3]

Program Category	Year			
	2005	2006	2007	2008
Leadership Education in Adolescent Health	14%	15%	NR	17%
Communications Disorders	34%	32%	29%	10%
Developmental Behavioral Pediatrics	12%	15%	17%	15%
LEND	12%	11%	12%	11%
MCH Certificate Program	27%	27%	14%	NR
MCH Pipeline	NR	NR	43%	43%
Nursing	27%	23%	15%	6%
Nutrition	14%	20%	14%	21%
Pediatric Dentistry	11%	12%	NR	39%
Pediatric Pulmonary Centers	NR	21%	15%	15%
School of Public Health	NR	18%	14%	16%
Social Work	34%	32%	23%	9%

Source: 2004–2007 DGIS datasets (NR = Not Reported)

[2] The percentage of trainees listed as American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or other Pacific Islander, or White of Hispanic Origin.
[3] See Note 2.

Cultural competence. All grantees report a strong, longstanding commitment to cultural and linguistic competency in the administration of their programs and provision of their services. Cultural competency for grantees encompasses skill and sensitivity surrounding not only racial and ethnic groups but also gender, geography, and disability among other characteristics. Many programs report that cultural competence is woven throughout their curricula and program design. Nine grantees mentioned a written cultural competency plan. Little reference was made to official cultural and linguistic competence policies distinct to the administration of and recruitment for training programs, but grantees were still able overall to draw upon institutional supports for cultural competency. Georgetown University's National Center for Cultural Competence (NCCC) tools were widely referenced as being directly used or having influenced training program curricula, including NCCC Curricula Enhancement Modules and the new online guide *Bridging the Cultural Divide in Health Care Settings: The Essential Role of Cultural Broker Programs*. It is clear that training programs take cultural and linguistic competency into account when arranging field and clinical training by including experiences where trainees interact with not just providers but health care consumers of different cultures.

Percentage of Trainees Who Receive Instruction in Cultural Competency and Family-Centered Care

Year	Percentage of Programs
2005	56%
2006	55%
2007	66%
2008	76%

Source: 2004–2007 DGIS datasets

Incorporating family members. Incorporating family members into advisory groups and committees is very common, although there is substantial variability in this category. Most programs have their own advisory groups or committees; others make use of existing bodies that have family members, such as local Healthy Start programs and the boards of community clinics and hospitals. Some programs pay family members for participation, and others provide support such as reimbursement for travel and food. Many programs emphasize the diversity of their family members and strive for a membership that represents the demographics of the community being served. Having family members or patients act as teachers or otherwise contribute to the didactic learning experience is a very common activity.

Percentage of MCH Training Programs That Demonstrate Active, Paid Roles for Family and/or Youth

Year	Percentage of Programs[1]
2005	66%
2006	64%
2007	77%
2008	81%

Source: 2004–2007 DGIS datasets

PM 07 Family Participation Average Grantee Score/Element (of 18) by Type of Training Program, 2005–2008

	2005	2006	2007	2008
LEAH	9.4	10.0	11.0	10.9
Communication Disorders	9.0	11.0	14.0	15.0
Developmental Behavioral Pediatrics	8.6	9.3	11.6	11.0
LEND	12.9	15.0	15.5	16.1
Nursing	7.2	11.5	13.0	14.0
Nutrition	7.6	9.3	12.1	12.3
Dentistry	3.3	8.0	10.5	6.7
PPC	10.3	11.5	13.0	13.7
SPH	6.6	7.7	10.1	10.7
Social Work	5.7	5.6	9.0	11.0
Average All	8.6	9.9	12.0	12.1

Source: MCHB Training Branch

Goal 3. Improve practice through interdisciplinary training in MCH

Federal/National Activities

- The MCHB Training Branch established a Grantee Interdisciplinary Training Workgroup that developed a definition for and indicators of interdisciplinary training.
- The MCHB Training Branch Program funded a research project on interdisciplinary training and supported a webcast and other venues for disseminating important findings.
- The MCHB Training Branch added a requirement in the long-term interdisciplinary training programs' guidance and some single-discipline programs to provide interdisciplinary training in both classroom and field settings.

Grantee Activities

Most grantees, including single-discipline programs, reported focusing on interdisciplinary training. Trainees and faculty learn the principle of interdisciplinary practice through the didactic and practice portions of their programs. Increasingly, consortia among different training programs in close proximity are forming to jointly present symposia, leadership training courses, and provide TA to MCH organizations. Examples include Alabama, Minnesota, and North Carolina.

Didactic training. Many programs have faculty from multiple disciplines on their teaching staff, which exposes trainees to varying perspectives. Programs also supplement their course content by inviting guest speakers from other disciplines to present their perspectives on a particular topic. In several programs, trainees are required to take classes outside of their discipline. Some programs require trainees to enroll in an MCH program.

Practice exposures. Interdisciplinary practice occurs in team conferences, workshops, and research. For the clinical programs, most have weekly meetings where team members convene to discuss complex cases; each trainee brings their particular competence to bear on the case. Trainees also use their discipline-specific knowledge to plan interdisciplinary discussions and workshops on topics such as asthma and obesity.

Goal 4. Develop effective MCH leaders

Federal/National Activities

- The MCHB Training Branch partnered with grantees to develop MCH leadership competencies for use in the MCH training program. MCH leadership competencies were distributed to grantees and national partner organizations such as CityMatCH (2006) and AMCHP (2007).
- The MCHB Training Branch created an online repository to document the use of the MCH leadership competencies in training programs and MCH professional associations in the areas of professional development, training programs, and evaluation and assessment.
- In 2007, the Training Branch convened faculty, staff, and trainees from all programs for a 1½-day meeting. The meeting was an opportunity to share program activities and to strategize around common themes. Trainees participated in a panel where they spoke about their experiences.
- The MCHB Training Branch conducted a meeting of grantee representatives to discuss medium-term training, expectations for medium-term trainees, and a definition of medium-term trainees for use in the MCH training administrative reporting data form.
- The MCHB Training Branch funded several national projects designed to expand and enhance leadership competency within the MCH workforce: a Public Health MCH Leadership Institute, an annual leadership retreat for MCH professionals, and a leadership pathways individual coaching program.
- The MCHB Training Branch Reporting and Monitoring Workgroup developed a new former-trainee information form and new indicators for leadership.
- The MCHB Training Branch worked with the nutrition training grantees and the Association of State & Territorial Public Health Nutrition Directors to develop leadership and life coaching training for the state nutrition directors and other MCH state staff.
- The MCHB Training Branch promoted enhanced engagement of MCH trainees in Training Branch activities through their participation in national meetings and working groups; creation of practicum and internship positions within the Training Branch; and enhancements to the MCH training program website, which features resources and information targeted to trainees.

Percentage of LT Training Program Faculty Who Are Former Trainees in MCHB-Funded Programs, 2005–2008

Training Program	2005	2006	2007	2008	Average
	%	%	%	%	%
LEAH	28	30	43	45	37
Communication Disorders	21	19	12	19	18
DBP	19	22	21	26	22
LEND	24	24	27	32	27
Nursing	24	13	15	24	19
Nutrition	29	31	29	42	33
Pediatric Dentistry	23	19	15	24	20
PPC	NR*	27	39	33	33
Schools of Public Health	NR*	13	15	18	15
Social Work	6	13	15	21	14
Average (%)	**22**	**21**	**23**	**28**	**24**

Median of Column Average = 20% *NR = Not Reported. Source: MCHB Training Branch

Grantee Activities

The majority of the detail on leadership in report narratives is dedicated to listing the manner in which programs engage trainees in personal, academic, clinical, public health, and advocacy leadership activities. Leadership training starts with didactic activities and translates that knowledge into practice in a variety of ways. Trainees learn discipline-specific skills in concert with foundational leadership concepts.

Assessment. Integral to the leadership development process is the leadership assessment. Only a small number of programs cited leadership assessment as a part of their program, but there were similar processes noted among those that did. Trainees complete self-assessments to determine areas of strength and improvement.

Leadership foundations. Programs reported using classroom courses as well as seminars, workshops, and roundtable series to impart leadership principles' and theories. The amount of hours dedicated varies widely from a short half day workshop to semester long courses. The sessions have a variety of formats, including bringing in outside speakers and faculty- or trainee-led sessions. One public health training program developed an open-access set of distance learning modules offering a mix of presentation and exploration in different learning formats, mini-lectures, interactive group discussion materials, video clips with MCH leaders, individual self-reflection exercises, and case studies.

Academic . Grantees offer trainees the opportunity to develop skills in research logic and methodology, scholarly writing, adult learning and teaching, and large- and small-group presentation. Some programs include these topics as part of their general leadership courses. To supplement the lectures and seminars, grantees provide opportunities for trainees to apply their skills in practice settings.

Clinical. In the interdisciplinary programs, trainees often work as a part of clinical teams and represent their discipline in client encounters. Trainees also provide clinical education to professionals of other disciplines. For example, pediatric dentistry trainees provide oral health training to pediatric residents. Trainees also serve as resource persons and case managers; in this role, they provide support and information to families.

Advocacy. Trainees attended seminars on the policy and advocacy process using relevant topics such as health care financing and IDEA policy. Trainees participate in legislative visits including observing testimony at legislative hearings and meeting with legislators. Trainees sometimes are invited to present their research or field work to local elected officials. In addition, during the National Disabilities Policy Seminar, most LEND programs have their trainees attend legislative visits.

Percentage of Graduates Demonstrating Leadership

Year	Percentage of Graduates[4]
2005	75%
2006	78%
2007	76%
2008	80%

Source: 2004–2007 DGIS datasets

[4] An unduplicated count of trainees demonstrating leadership in any category compared to the number of trainees at 5 years who completed the 5-year survey.

Goal 5. Generate, translate, and integrate new knowledge to enhance MCH training, inform policy, and improve health outcomes

Federal/National Activities

- The MCHB Training Branch collaborated with AMCHP, ATMCH, and the JHU to undertake a workforce assessment project related to state Title V programs. A research manuscript has been accepted for publication and detailed data tables organized by regions were posted on the Web for grantee use in preparing grant applications. These data are also being analyzed for a public health dissertation.
- Through a cooperative agreement with the NCCC, MCHB partnered in the development of two program briefs widely disseminated in the MCH training community: *Rationale for Cultural and Linguistic Competence in MCHB-Funded Training Programs* and *Research: Cultural and Linguistic Competence Checklist for MCH Training Programs*.

Grantee Activities

MCHB training programs have used a range of approaches to address Goal 5 of the Strategic Plan. Most programs employ research, courses, and trainings to generate, translate, and integrate new knowledge to enhance MCH training, inform policy, and improve health outcomes.

Instruction through courses or trainings. Training programs described providing trainees with didactic instruction either through semester-long courses or through shorter trainings and workshops. Courses were typically intended to prepare students for their clinical experiences, field placements, and experiences. In addition to receiving didactic instruction through semester-long courses and on-line courses, a number of the training programs described another option for learning through discussion sessions and seminars that exposed trainees to new knowledge and offered a forum to discuss the latest evidence base information with faculty and other trainees.

Research. The most common strategy cited in the program narratives was the conduct of primary and secondary research. Most training programs mentioned research as a cornerstone of the program and described a research component that trainees are required to complete, often as a final project. In most cases, this research involved a review of the literature and evidence base, development of research questions and methodology, collection and analysis of data, and then a final presentation to faculty and colleagues. Some of the training programs expected that this research would result in a publication in a peer-reviewed journal or a conference presentation.

Products and publications. Overall, there has been an increase in the number of products and publications. Programs produce numerous products and publications, averaging a total of 4,000 per year. Slightly more than half the publications are peer reviewed. Products and publications appear to be increasing with regard to book chapters, course development, and distance learning.

Percentage of Total Products and Publications by Type

Type of Product or Publication	2005	2006	2007	2008
Books	4.4%	2.5%	5.5%	1.8%
Chapters	6.6%	9.8%	10.3%	11.9%
Course Development	2.3%	3.4%	4.1%	3.4%
Distance Learning	1.2%	0.9%	1.3%	2.1%
Peer Reviewed Publications	49.8%	49.3%	55.8%	51.7%
Electronic Publications	7.2%	6.5%	4.9%	5.1%
Reports	5.5%	6.7%	5.7%	6.7%
Non-Peer-Reviewed Publications	22.6%	20.4%	15.7%	12.7%
Number of Grantees Reporting	74/93	90/92	88/93	
Total Number of Publications[5]	3,645	5,765	3,326	4,332

Source: MCHB Training Branch

Applied learning experiences. Training programs also discussed using hands-on experience to apply knowledge in policy or program settings. In some cases, these experiences resulted in a field placement in an MCH agency or public health community setting. One grantee described that trainees, under guidance of faculty, worked with MCH programs throughout the year and have the opportunity to apply their evaluation and policy knowledge; these trainees meet with their faculty advisor periodically to reflect and debrief.

Curriculum and tool development. In their grant narratives, some programs describe developing and adapting tools for advancing the application of knowledge. For example, a distance learning grantee is developing a tool based on the *Bright Futures in Practice: Mental Health* curriculum by distilling this information into a shorter tool that could serve as an accessible resource. The expectation is that these tools will assist providers in applying new knowledge in clinical settings.

[5] Excludes Doctoral Dissertations

Goal 6. Develop broad-based support for MCH training

Federal/National Activities

- Financial support for MCH training increased by 23% between FY 2005 and FY 2008.
- The MCHB Training Branch launched new partnerships with the HRSA Bureau of Health Professions (BHPr) staff to promote collaboration between BHPr Public Health Training Centers (PHTCs) and the MCHB-funded training programs in schools of public health. MCHB arranged new connections between ATMCH and the PHTC National Network, including presentations at annual business meetings of each organization and creation of a new ATMCH-PHTC workgroup.
- The MCHB Training Branch collaborated with Nemours and the Centers for Disease Control and Prevention to focus on the prevention of obesity in child care settings, specifically to develop a training module for child care providers.
- The MCHB Training Branch prepared a partnership development plan including partnering activities directly related to strategic planning goals.
- The MCHB Training Branch convened a working group of federal and national partners to address MCH workforce diversity issues.
- The MCHB Training Branch completed an inventory of foundations that fund MCH training activities.
- The MCHB Training Branch redesigned the MCH training program website to enhance attractiveness and ease of use, incorporating trainee stories, training program "fast facts," and highlights of training grantees' educational products. MCHB launched a presence on Facebook as well as an "Emerging Leaders" blog.

Grantee Activities

All MCHB training programs described some form of collaboration in their narrative progress reports that relates to Goal 6 of the MCHB Strategic Training Plan. Training programs are engaging in collaborative activities at many levels—local, state, regional, and national. The reasons for collaboration vary as do the forms of the collaborative relationships. A few grantees described being more strategic in their selection of partners for specific activities. For example, several grantees initiated the formation of relationships specific to research, networking, or MCH training only. This section describes some of the primary purposes for collaboration and the types of partners that MCHB training programs have worked with over the past several years.

Training, curricula, and product development. In the narrative progress reports, a number of grantees discussed collaborating with colleague grantees or other partners to plan workshops and conferences. One of the adolescent health grantees that hosted a health disparities conference felt that this was the result of a successful collaboration across many of their regional partners and that implementation would not have occurred without their cooperation and input. Several LEND grantees also described working with local, state, and national partners to develop conferences on childhood obesity and other emerging topics.

Participate on planning groups. Another reason cited for collaboration is working with partners to improve planning and service delivery at the local, state, and national levels. A number of grantees regularly contribute to

planning by participating on working groups, advisory boards, and coalitions. One grantee commented that it is important for them to "be at the table" during planning activities.

Provide TA and consultation. In the 2007–2008 program years, grantees reported through DGIS, 102,103 recipients of TA activities covering a wide range of topics. The greatest proportion of TA is provided within a grantee's own state (2008; 45.9%). The relative focus of TA locally, nationally, regionally, and internationally varies among categories of grantees.

Conduct advocacy, research, and information dissemination. A few training programs discussed collaborating specifically to conduct research for advocacy and to build support for MCH training. Programs respond to legislative requests from local and state legislative staff and also provide trainees opportunities to visit and present to legislators.