Interventions and Measuring Impact

High-impact MCH interventions

Based on more than 20 years of USAID leadership in maternal and child health programming, the foundation of USAID MCH programming is the development and implementation of evidence-based, high-impact interventions that can be feasibly delivered at low cost to women and children who need them. USAID has taken a systematic approach to this process, which involves:

- Identifying the specific diseases and conditions responsible for large shares of maternal or child illness and death
- Identifying potential interventions that prevent or treat these conditions and that can be used in low-resource settings
- Systematically testing these interventions, first in controlled settings and then in actual field conditions
- Introducing interventions deemed promising in demonstration areas of "early use" countries and evaluating their effectiveness
- Expanding implementation to national scale
- Integrating the interventions into comprehensive programs
- Supporting these interventions and programs in multiple countries

At the ground level, the MCH strategic approach will employ these evidence-based interventions, documented in the recent *Lancet* series on maternal, newborn, and child survival, in program approaches that have proven effective and cost-efficient, and have the potential for scaled-up national implementation.

With USAID support, countries as diverse as Nepal, Cambodia, Ethiopia, Madagascar, Nepal, Tanzania, and Afghanistan have already used this approach and demonstrated the possibility of reducing U5MR in high-mortality countries by 25 percent in 5 to 7 years. Comparable reductions have also been achieved for maternal mortality in such countries as Indonesia, Bangladesh, Egypt, Bolivia, and Guatemala.

Strengthening the community health workforce for MCH

There is convincing evidence that many of the MCH needs in high-burden countries can be met by nonprofessional health workers at the community level. Low-income countries have a long tradition of providing some elements of health care through nonprofessionals with only limited training. These community health workers (CHWs) cost much less than even low-level health professionals, and often work as unsalaried volunteers. CHWs are typically long-time residents of the community where they serve and are unlikely to move away.

Since the 1978 Declaration of Alma-Ata, the World Health Organization has promoted wider use of CHWs to provide selected types of MCH care and to promote health-related behaviors. Technical advances have allowed a wider range of high-impact interventions to be suitable for delivery by a provider with limited training. Examples include a simple package of services for the newborn and protocols for community treatment of malaria, pneumonia, and diarrhea.

CHW programs have traditionally focused on training volunteers to perform certain well-defined activities. Several countries have trained large numbers of CHWs and other volunteers, and are committed to training more. This large, ongoing investment provides an opportunity to foster complementary cost-effective approaches to further developing the skills of CHWs. USAID experience suggests that job aids, self-evaluation tools, incentive systems, and other approaches to CHW performance merit more attention.

Even with excellent training, CHWs are unlikely to achieve their maximum impact on health without the effective support of the organized health system. Based on USAID experience with health systems strengthening, this initiative will include a broad effort to monitor and improve the support provided to CHWs, including supervision, information systems, logistics, human resources management, and modern quality improvement. USAID will also address the role of the community itself, selection criteria for CHWs, and cultural factors. By 2013, USAID plans to expand the current supply of well-performing CHWs by 100,000 in MCH priority countries. USAID will build upon exist-

KEY MCH INTERVENTIONS	DESCRIPTION
Antenatal care	Depending on epidemiology and health system capacity, interventions focus on providing pregnant women with iron folate supplements, deworming, intermittent preventive malaria treatment, insecticide-treated mosquito nets, HIV and syphilis control, and counseling to use a skilled birth attendant and to seek timely emergency care in the event of a pregnancy or birth complication.
Skilled care at birth	Basic essential obstetric care that includes use of partogram, infection prevention, active management of the third stage of labor, essential newborn care, and recognition, initial treatment, and referral for hemorrhage, infection, hypertensive disorder, prolonged labor, newborn asphyxia, and postabortion complications.
Emergency obstetric care	Includes treatment of life-threatening complications, such as medical management of hypertensive disorder, blood transfusion, cesarean section, hysterectomy, and resuscitation.
Active management of the third stage of labor	Requires provision of a uterotonic drug immediately after birth, delivery of the placenta by controlled cord traction, and external uterine massage by a skilled birth attendant for prevention of postpartum hemorrhage. In the absence of a skilled birth attendant, a uterotonic alone may be administered.
Treatment of postpartum hemorrhage	Includes assessment of the cause and, if uterine atony, provision of a uterotonic; removal of the placenta or fragments as necessary; emptying the bladder; external or bimanual uterine compression; and recognition of severe hemorrhage that requires referral.
Essential newborn care	Focus is on immediate warming and drying, clean cord care, and early initiation of breatstfeeding.
Treatment of severe newborn infection	Includes assessment of symptoms and treatment with antibiotics and additional respiratory, nutritional, and fluid support, as feasible and needed.
Prevention of diarrhea	Focus is on point-of-use (typically household or school) water treatment to ensure the safety of drinking water, coupled with associated improvements in key hygiene behaviors, such as correct water handling and storage, effective hand washing, and safe feces disposal.
Treatment of diarrhea	Focus is on home-based treatment with oral rehydration therapy (use of oral rehydration solution, increased fluids, continued feeding) to prevent severe dehydration and treatment with zinc to reduce severity and duration of diarrhea.
Treatment of pneumonia	Focus is on community-based treatment of pneumonia with antibiotics and effective recognition of severe illness with appropriate referral.
Treatment of severe childhood illness	Includes assessment of symptoms, treatment with antibiotics and antimalarials, and provision of respiratory, fluid, and nutritional support as needed.
Immunizations	Focus is on full immunization for children (defined as three doses of diphtheria/pertussis/tetanus vaccine and immunization against measles and polio before age 1) and introduction of new vaccines in countries with high routine immunization coverage.
Vitamin A	Focus is on provision of vitamin A capsules to children 6 to 59 months twice annually.
Infant and young child feeding	Includes breastfeeding from immediately after birth, exclusive breastfeeding for the first 6 months of life, and addition of soft/semisolid foods. Community-based growth promotion and community-based management of acute malnutrition with ready-to-use therapeutic foods.

ing successful country-level CHW models, such as those deployed in Nepal and Bangladesh, as well as more recently developed efforts, such as the Health Extension Program in Ethiopia or the Accredited Social Health Activist cadre in India. USAID will provide support in both deepening current country efforts, as well as introducing effective CHW approaches in countries that currently do not have them.

Monitoring

No special reporting will be required of countries beyond routine annual Operational Plans and results reporting. Indicators and baseline measurements on key indicators (such as U5MR and MMR) are established with this report using existing national Demographic and Health Surveys. These indicators will be updated as additional national population-based surveys (Demographic and Health Surveys, Multiple Indicator Cluster Surveys) are carried out. They will include impact, outcome, and output indicators. Each year, USAID will aggregate and report on these key indicators for each priority country to allow tracking of progress toward MCH goals.

A core set of output indicators (such as the number of antenatal care visits by skilled providers from U.S. Government-assisted facilities or the number of people trained in child health and nutrition through U.S. Government-supported health area programs) has been identified by USAID Missions for annual reporting of maternal/child health and related health systems interventions. Baseline measurements of these output indicators will start with fiscal year 2008, with further refinement of reporting over the next fiscal year.

In addition, USAID will report on outcome indicators (such as use of antenatal care and skilled birth attendants [SBAs], immunization and micronutrient coverage, feeding practices, and use of appropriate treatment for child illness) as data are made available through the routine annual Operational Plans.

Individual Missions and country programs will use indicators and qualitative results to revise programs on an ongoing basis. All monitoring and measurement activities will be carried out in ways that contribute to strengthening host countries' national and local information systems and capacities.