

**MCHIP Nepal**  
**Annual Report Guidance for FY11 Program Year 3**  
**October 1, 2010 to September 30, 2011**

**1. Bullets of Major Accomplishments**

- Completed three proteinuria test studies (steps 1,2,3) to determine if the new self-test for pre-eclampsia/eclampsia (PE/E) detection is comparable to more expensive, lab-based standard tests and if pregnant women are willing and able to use the self-test correctly
- Initiated a national evaluation of the community-based newborn care package (CB-NCP) with full support and ownership of the Government of Nepal (GON) and key stakeholders
- Resolved key issues regarding the calcium supplementation pilot for pre-eclampsia prevention—paving the way to start the innovative pilot in the next program year
- Facilitated national dialogue on integration of key community-based maternal, child and newborn health activities
- Facilitated the first research capacity-building activity led by the National Health Research Council (NHRC)

**2. Short Narrative of Major Accomplishments**

During this program year, MCHIP/Nepal continued with work in close partnership with the Nepal Family Health Program II (NFHP II) in four key areas, described below.

For the **calcium supplementation** pilot among pregnant women to reduce the risk of developing pre-eclampsia, MCHIP/Nepal successfully secured government buy-in and commitment to this innovative pilot. Several implementation issues remained to be resolved—mainly securing a low-cost supply of calcium—and the MCHIP team worked through multiple channels and donors to explore options. By April, Jhpiego committed non-USG corporate funds of \$15,000 to purchase sufficient calcium to supplement 5500 pregnant women for 150 days each. Planning for the pilot was revitalized towards the end of the year, with plans for the pilot to begin in December 2011/January 2012.

Further in support of **PE/E detection**, MCHIP/Nepal completed three proteinuria point-of-care (POC) self-test studies (steps 1,2,3) to determine if the new self-test for pre-eclampsia/eclampsia (PE/E) detection is comparable to more expensive, lab-based standard tests and if pregnant women are willing and able to use the self-test correctly. Step 1 and 2 studies were conducted at the largest tertiary maternity hospital in Nepal, the Paropakar Maternity and Womens Hospital in Kathmandu. Studies began August 2010 and concluded in early FY11. Results were very promising and were shared with USAID prior to the start of Step 3. Step 3 study

was conducted in August 2011 in two government health facilities in Morang district—Koshi Zonal Hospital and Mangalbare primary health center (PHC) among 600 pregnant women seeking antenatal care (ANC). Results from Step 3 will be analyzed in early FY12 and shared with USAID. While Step 4 study at the community-level was originally intended to be jointly funded under MCHIP/Nepal field funds and the USAID global Development Innovations Ventures (DIV) funds awarded to Jhpiego in 2011, the full study will be supported with DIV funding from October–December 2011. Note, all four studies received JHU IRB and NHRC approval. Jhpiego has also kept AID/W involved in the discussions on innovations, and has contributed extensive support in kind from its partnership with the Johns Hopkins University School of Engineering on the self-test development and forthcoming blood pressure test device.

Under the third workplan objective—Support Implementing Partner in Advocacy, Documentation and Dissemination of Evidence-based MNCH/FP Interventions, MCHIP/Nepal organized a successful interaction among key government officials (including from the Family Health Division [FHD], Child Health Division [CHD] and the National Health Training Center [NHTC]) and key stakeholders in May 2011. MCHIP/Nepal continues to facilitate consensus-building around the various integration frameworks. This activity has contributed to further dialogue and joint activities on community-based initiatives, such as the CB-NCP evaluation. By August, MCHIP was asked to support Dr Robert McPherson as the team leader for the national evaluation of the CB-NCP. With USAID leadership, this evaluation has achieved the full support and ownership of GON and key stakeholders. It continues into FY12, with dissemination expected December 2011.

Under the fourth and final workplan objective, support capacity building to institutionalize research for decision-making to improve health outcomes, MCHIP facilitated the first research capacity-building activity led by the NHRC. Next steps will be decided with USAID/Nepal and NHRC for FY12 MCHIP support.

### **3. Challenges and Opportunities**

- A major challenge during this program year was identifying a low-cost source of calcium.
- A real opportunity in Nepal continues to be the GON openness and willingness to pilot new MNCH interventions.
- Calcium in particular as one of the few evidence-based maternal nutrition interventions available has much interest in both health and nutrition circles.
- Another opportunity lies in combining a set of PE/E interventions (calcium; POC self-test, BP device and magnesium sulphate) for implementation as a pilot in 1-2 districts.

#### 4. Success Story/Anecdote

Although urine testing is a key component of PE/E detection according to national clinical standards, only 31.6% of pregnant women had it done during ANC according to the 2006 DHS. Barriers to universal screening of both urine and blood pressure are numerous. MCHIP with innovations from Jhpiego and the Johns Hopkins University School of Engineering have developed a simple point-of-care (POC) self-test that women can use. In FY11, after MCHIP compared this test with two more expensive, lab-based standard tests, a subsequent study was conducted to determine if pregnant women are willing and able to use the self-test correctly. In the process of preparing for this study—and ultimately implementation at the community-level to reach large numbers of pregnant women—MCHIP developed and pre-tested the following BCC materials.



During the implementation of the Step 3 study, the majority of women coming for ANC agreed to participate in the study and generally their experiences using the test were positive.

