Vietnam Country Brief

Scaling-Up Household-to-Hospital Continuum of Care for Maternal and Newborn Health

Program Summary 2008—2012

PROGRAM OVERVIEW

Vietnam has made significant progress in the reduction of maternal and child mortality rates over the past decade. However, neonatal mortality rates have not declined as rapidly and in 2012 accounted for nearly 50% of under-five deaths. Notable disparities persist in the availability and access to quality maternal and newborn care for ethnic minorities in mountainous and remote areas. Among these under-served communities, the maternal mortality rate is several times higher than the national average, and both mothers and newborns are more likely to die from preventable causes.

Ho Thi Lai, 24, holds her four month old daughter Ho Thi Mai Le after a morning feeding at a breastfeeding support group in A Rong Village in Qunag Tri Provence, Vietnam.
Photo credit: Save the Children

With a grant from Atlantic Philanthropies, Save the Children (SC) USA implemented a comprehensive model to improve maternal and newborn health (MNH), with activities linking households, communities, Community Health Centers (CHCs) and district and provincial hospitals. The first phase was implemented in Danang and Kjanh Hoa provinces from 2005-2007. The second phase expanded into three additional provinces with high proportions of ethnic minorities in Thai Nguyen, Thua Thien Hue and Vinh Long from 2008-2012, covering five out of the 58 provinces in the country.

The **Household-to-Hospital Continuum of Care (HHCC)** approach seeks to encourage preventive household and community practices and improve the quality, accessibility, and utilization of facility-based MNH services. The model integrates community outreach, effective referral, provision of essential equipment and supplies, and to strengthen the capacity of facility-based staff to provide quality care to mothers and newborns. The HHCC approach ensures sustainability by working within existing health systems, improving MNH program management and the policy environment while mobilizing local communities.

PROGRAM SNAPSHOT

Availability and Access to MNH Services

- Established Newborn Care Units in 6 district hospitals
- Expanded services at 62 Community Health Centers
- Built the capacity of eight mobile emergency teams and 35 community-based referral networks

Quality of Essential & Emergency MNH Services

- Refined national curriculum and protocols for practice of medical and nursing training institutions.
- Trained staff at all facility levels in essential newborn care & comprehensive emergency obstetric care

MNH Knowledge & Practices

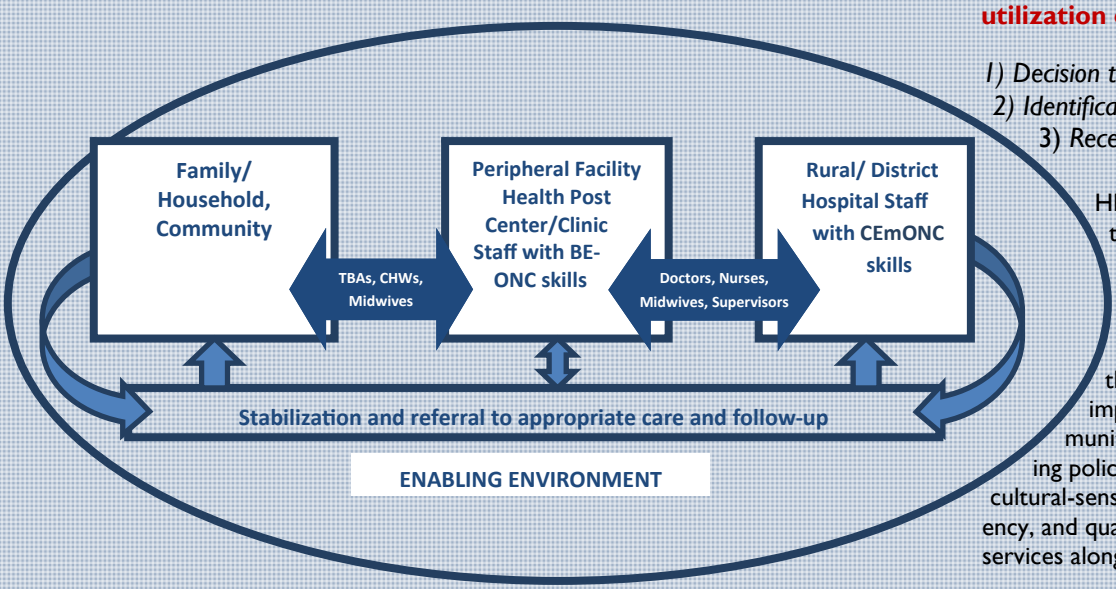
- Trained village health workers & women's groups to conduct household and community behavior change activities reaching 300,000 people resulting in a 50% increase in facility deliveries

Enabling Environment for MNH

- Strengthened the health system and developed national MNH policies & guidelines adopted by the Ministry of Health

Save the Children

Diagram of the Household-to-Hospital Continuum of Care (HHCC)



The HHCC approach addresses the *"3 Delays"* in the availability, quality, accessibility, and utilization of MNH services:

1) Decision to seek care by patient or family
2) Identification & transport to facility
3) *Receipt of quality services*

HHCC utilizes evidence-based interventions to support the adoption of healthy practices and timely, appropriate care-seeking. The model strengthens the capacity and coordination among human resources and facilities across the continuum of care. It sustainably improves primary care by engaging community and national stakeholders in developing policies and systems to ensure gender and cultural-sensitivity, shared accountability, transparency, and quality of essential and emergency MNH services along the continuum of care.

PROGRAMMING & ACCOMPLISHMENTS

Availability of & Access to MNH Services

Prior to the HHCC Program, only provincial hospitals had Newborn Care Units (NBCUs). The grant enabled SC to provide equipment and staff training to establish six new NBCUs at district hospitals to reach underserved areas with high maternal and neonatal mortality. These NBCUs were located close to delivery rooms or in pediatric wards, and stocked with critical supplies to promote newborn survival. Staff in district NBCUs were able to treat newborn complications in addition to providing the seven essential immediate care services: drying/warming, monitoring of respiratory rate and skin color, resuscitation, umbilical cord care, breastfeeding initiation, eye care, and vitamin K injection. As a result, the neonatal fatality rate declined from 6.3% in 2007 to 1.1% in 2010 in the six district hospitals with NBCUs and the proportion of CHCs providing all seven newborn care services increased from 40% in 2007 to 70% in 2010.

The HHCC program also expanded the range of quality maternal and newborn care services available at 62 CHCs. After program training, all 62 CHCs were able to provide daily services for antenatal care including tetanus toxoid immunization, iron/folate supplementation, and counseling on pregnancy-related danger signs, exclusive breastfeeding and protective maternity and infant care practices. Midwifery training for nurses ensured 24/7 delivery services at the CHCs. The program significantly increased the proportion of CHCs where staff conducted Active Management of the Third Stage of Labor (AMTSL) and administered oxytocin and antibiotics. The proportion of CHCs providing basic emergency obstetric services significantly increased from 53% in 2007 to 79% in 2010.

To prevent delays in care-seeking, a community-based referral (CBR) network for 35 mountainous and remote villages was established, resulting in a 12-30% increase of referrals for delivery at district and provincial hospitals. The program worked with local partners to develop guidelines for CBR teams based on their responsibilities, organization, and management. To further strengthen referral linkages among health facilities, SC improved the capacity of eight district and provincial mobile emergency teams by providing medical equipment, conducting training drills, and developing protocols to ensure safe and rapid transport of patients. Village Health Workers (VHW) and Women's Union members received communication skills training on healthy MNH practices and behaviors, conducted supportive home visits, held community meetings in order to promote healthy practices and encourage the use of facility-based maternal and newborn care services.

Quality of Essential & Emergency MNH Services

In order to ensure better maternal and newborn outcomes and encourage delivery at a higher-level health facility, the program trained doctors, nurses, and midwives at all facility levels in essential newborn and delivery care and as well as in Comprehensive Emergency Obstetric Care (CEMOC) at district and provincial hospitals. The competency-based curriculum was endorsed by the Ministry of Health and included pre-service education, case-based discussions, and supervised clinical assignments.

Following the trainings, supportive supervision was provided at all facility levels to ensure adherence to guidelines of technical procedures, eventually enabling health staff to systematically conduct supportive supervision internally for continuous monitoring of quality of care. National trainers developed emergency scenarios, such as management of premature birth, postpartum hemorrhage, and treatment of sepsis, as well as conducted training drills from the household to the facility. After observing the response of village health workers, emergency mobile teams and health staff at all facility levels, the national trainers convened a workshop to provide feedback so protocols for practice of medical and nursing training curriculum may be refined.

SC training included exercises on "Client-Oriented, Provider-Efficient" (COPE) services, through which health staff assessed the responsiveness of services to needs of patients. Communities, program staff, and decision-makers developed "Partnership Defined Quality" (PDQ) Teams for service assessment. Systematic use of COPE at all health facility levels resulted in improved teamwork and efficiencies among midwives, nurses, obstetricians, and pediatricians, as well as engagement with communities and government health officials.

The COPE and PDQ tools provided support and guidance for CHC midwives from medical staff at the district hospital to competently manage pregnancy and newborn complications. In addition, the emergency mobile teams were upgraded to be able to transport patients to facilities when needed.

Greater technical proficiency in detecting and managing complications and emergencies at CHCs and district hospitals not only reduced unnecessary referrals to a higher level facility, but also resulted in improved coordination of care and referrals among all levels of facilities. It also increased use of antenatal care and services, as well as increased use of skilled birth attendant at home deliveries, which can contribute to decreases in maternal and newborn mortality.

HHCC PROGRAM IMPACT

SC interviewed over 2,000 mothers with children under one year from 62 communities in the three provinces regarding their most recent pregnancy using a structured household survey. All results are statistically significant ($p<0.01$).

Use of MNH Services		
Indicator	**2007 Baseline (n=2,079)**	**2010 Endline (n=2,236)**
% of mothers who received at least 3 antenatal visits	84%	91%
% of home delivery	4.6%	1.1%
% of mothers and newborns who received postnatal care within 24 hours after delivery	72%	89%
% of mothers and newborns who received postnatal care within 7 days after delivery	69.5%	85.3%
MNH Knowledge & Practices		
% of mothers who know 3 or more danger signs for mother during:		
Pregnancy	24.0%	58.7%
Labor	6.0%	41.7%
Postpartum period	20.0%	57.2%
% of mothers who know 3 or more danger signs for newborn health just after delivery	12.4%	49.6%
% of mothers who know 3 or more actions in immediate newborn care	13.0%	58.2%
% of mothers who immediately breastfed infant within 1 hour of delivery	70.7%	79.6%
% of mothers who know at least 3 danger signs for newborn health during 7 days after delivery	30.7%	73.7%
% of mothers who exclusively breastfed infant for 6 months or more after delivery	25.6%	36.7%

MNH Knowledge & Practices

Critical to the success of the HHCC is promoting and reinforcing healthy behaviors and practices in households and communities. VHWs and Women's Union members groups were trained to lead community meetings, and use drama and mass media to raise awareness and convey preventative MNH messages to over 300,000 people. A major accomplishment of the project was the increase in the number of mothers who delivered at a higher-level facility: from 15.9% to 28.2% at provincial hospitals and from 46.2% to 53.6% at district hospitals, while deliveries at CHCs decreased from 33.2% to 17.1%. A supervision system of VHWs by CHC staff was established to provide ongoing monitoring of the quality of BCC activities.

The establishment of supportive working relationships between VHWs and CHCs improved referral linkages between communities and health facilities, and ensured household-level follow ups with mothers and newborns. These measures included, among others, postnatal home visits and immunization promotion days benefitting the health and well-being of mothers, children and communities at large.

Enabling Environment for MNH

Improving knowledge of maternal and newborn health (MNH) in households and communities and generating demand for quality services created a foundation for an enabling environment for MNH along the HHCC. A high level of collaboration, accountability and ownership by community leaders and Ministry of Health staff nationally and at provincial, district and community levels, was vital in strengthening the provision of quality MNH services within the health system. This was achieved through support and approval from the central MoH to implement joint oversight of services, approval of training curriculum and coordinated dissemination of information along the HHCC.

Save the Children worked with the central MoH and UN agencies (WHO, UNICEF, and UNFPA) to improve national MNH policy guidelines using best practices for maternal and newborn care program implementation. Three core documents were subsequently developed and approved by the MoH: the National Plan of Action for Child Survival, a chapter on newborn care within the National Standard Guidelines for Reproductive Health, and a newborn care training manual package for health staff at all facility levels.

Using these documents and having determined the cultural acceptability and programmatic feasibility of the model, the MoH has integrated HHCC into the National Master Plan for Maternal and Newborn Care 2010-2015.

References

Thaddeus, S. and Maine, D. *Too Far to Walk: Maternal Mortality in Context.* Soc. Sci. Med. 38.8 (1994): 1091-1110.

The ACCESS Project (Access to clinical and community maternal, neonatal and women's health services), Household-to Hospital Continuum of Maternal and Newborn Care, USAID, 2005.

HHCC Phase Three in Vietnam

The successful establishment of NBCUs at the three provincial hospitals inspired provincial leaders to expand the establishment of NBCUs to 11 additional district hospitals in their provinces during the project, and have committed to establishing NBCUs in all district hospitals in Vietnam by 2015, during phase three of the project. Starting in mid -2012, SC will continue collaborating with the MoH to implement the national level scale-up of the HHCC model in three additional provinces: Yen Bai, Dak Lak, and Ca Mau. Supportive supervision will continue in the Thai Nguyen, Thua Thien-Hue, and Vinh Long provinces, which will unite with the new provinces to develop six Regional Centers of Excellence that will provide both clinical and academic learning opportunities for replication of the HHCC model throughout the country.

To further ensure national scale-up of the model, the project will improve the capacity of three national medical training centers in Ha Noi, Hue, and Ho Chi Minh City to serve as central institutions for scale-up MHN services based on the HHCC model in their respective regions.

In phase three, MNH training curriculum will be finalized for national implementation at medical and nursing schools, and additional national and provincial trainer teams will be trained and deployed. Sustainability and scalability will be ensured by the MoHs ownership of the HHCC model, which has committed to allocating a majority of the National Target Program budget of Reproductive Health for national scale-up of HHCC Model.

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