

HOUSEHOLD-TO-HOSPITAL CONTINUUM OF MATERNAL AND NEWBORN CARE



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maternal, neonatal and women's health services

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The ACCESS Program is the U.S. Agency for International Development's global program to improve maternal and newborn health. The ACCESS Program works to expand coverage, access and use of key maternal and newborn health services across a continuum of care from the household to the hospital—with the aim of making quality health services accessible as close to the home as possible. JHPIEGO implements the program in partnership with Save the Children, the Futures Group, the Academy for Educational Development, the American College of Nurse-Midwives and Interchurch Medical Assistance.

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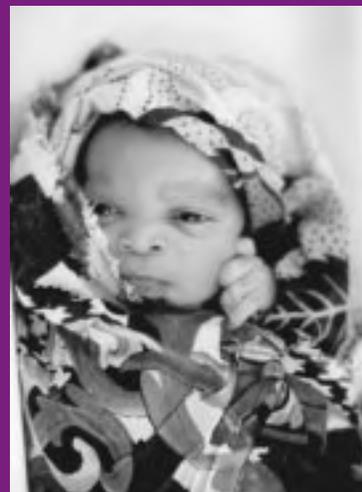
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Brian Moody/Malawi



ABBREVIATIONS

AMTSL	Active management of third stage of labor
ANC	Antenatal care
BCC	Behavior change communication
BEONC	Basic essential obstetric and newborn care
BP/CR	Birth preparation/complication readiness
CEONC	Comprehensive essential obstetric and newborn care
CHW	Community health worker
EMNC	Essential maternal and newborn care
ENC	Essential newborn care
FBO	Faith-based organization
HBLSS	Home-based life-saving skills
HHCC	Household-to-hospital continuum of care
IPT	Intermittent preventive treatment of malaria
ITN	Insecticide-treated nets
MOH	Ministry of health
NGO	Nongovernmental organization
PMTCT	Prevention of mother-to-child transmission of HIV
STI	Sexually transmitted infection
TBA	Traditional birth attendant
TT	Tetanus toxoid immunization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

Ayesha Vellani/Pakistan



INTRODUCTION

Health professionals who work to improve health care in developing countries generally acknowledge that addressing the multiple causes of maternal and newborn mortality and morbidity must be a top priority, but little progress has been made toward achieving this objective over the past 20 years. For millions of women who lack access to skilled care during pregnancy, childbirth, and their babies' first month of life, the special joy that mothers and their families feel at childbirth is often overshadowed by the life-threatening risks both mother and child face. Too often, the miracle of new life is transformed into a painful struggle for survival.

At least 529,000 women die every year as a result of pregnancy and childbirth, nearly all in developing countries¹. For every woman who dies from a pregnancy-related complication, 30 women suffer disability. Newborn mortality is even greater: Over four million infants die every year within the first 28 days of life, again, mostly in developing countries. Three-quarters of these deaths occur within the first week of life, and 25-45 percent occur within the first 24 hours after birth². This immense loss of life is needless and unacceptable: A high percentage of maternal and newborn deaths could be prevented by providing pregnant women with access to skilled caregivers and a number of proven, effective, and timely interventions for both mothers and newborns^{3,4,5}.

Although effective interventions for many causes of maternal and newborn death are well documented^{3,5,6}, effective delivery of care remains an enormous challenge in developing countries, where more than 60 million women deliver without skilled providers—most at home⁷. For many women, access to health facilities is hampered by distance to or cost of services, or because transport is unavailable or unaffordable. In addition, social barriers—such as women's lack of decision-making power, freedom of movement, control over finances, or the cultural incompatibility of the facilities—can deter them from using maternal and newborn services. Many countries have committed to the United Nations Millennium Development Goals of reducing maternal mortality by three-quarters and child mortality by two-thirds by 2015. To reach the latter goal, there must be a strategic focus to reduce newborn deaths because 38 percent of deaths among children under five occur during the newborn period². These goals will be unattainable unless barriers to health care are effectively addressed.

Studies have demonstrated that the implementation of essential maternal and newborn care (EMNC) in

community-based settings can reduce the number of deaths among mothers and newborns dramatically, including those mothers who give birth at home attended by skilled providers^{8,9}. In one pilot study in India, newborn deaths were reduced by 62 percent using a model for home-based newborn care.⁴ However, the potential of community-based care for mothers and newborns has not yet been exploited at a regional or national scale.

Delivery of health care is also problematic. Many primary health care centers and district-level facilities in developing countries struggle to meet the existing demand for care. The challenges they face include:

- poor infrastructure;
- shortages of basic or appropriate equipment and adequate supplies;
- inadequate numbers of skilled health staff or low retention of existing skilled health staff at facilities close to the community;
- lack of competency-based pre-service and continuing education programs;
- poor communications and referral linkages; and
- the absence of legal authority for service providers to perform certain life-saving procedures.

Any approach to improve essential maternal and newborn care services must address the issues of the community and the health system together, systematically, and in close collaboration among all stakeholders if it is to be successful. Communities and health care providers need to join forces and work together to overcome these complex obstacles, with the long-term goal of ensuring that pregnant women and newborns receive appropriate and timely care—preferably as close to home as possible. Achieving significant reductions in maternal and newborn morbidity and mortality will be facilitated by developing a comprehensive approach to address the social and health system issues in the community, and at both peripheral and district-level facilities. This integrated approach to community- and facility-based maternal and newborn programming and implementation is called the Household-to-Hospital Continuum of Care (HHCC)⁹.

HHCC in the Community

The starting point for HHCC is the household, which comprises the pregnant woman and her family. Many interventions for maternal and newborn health—such as birth planning, birth spacing, sleeping under insecticide-treated bed nets, daily rest, antenatal and postnatal care and attendance,

immediate breastfeeding, clean and safe delivery, hygiene and cord care, and drying and wrapping the baby—can be adapted as regular practices in virtually every household, even under very limited circumstances. Using behavior change communication (BCC) strategies, EMNC practices can be introduced to pregnant women and family members. Ultimately, the well-being and survival of both mother and baby may depend on successfully establishing and maintaining these interventions in the home.

Closely linked to the household are community-based caregivers, such as community health workers (CHWs), traditional birth attendants (TBAs), and others who are trained to work with families on antenatal counseling, birth preparation and complication readiness, clean and safe childbirth, postpartum and newborn counseling and care. In addition, these caregivers should be equipped with knowledge about danger signs and basic maternal and newborn first aid skills that are safe and feasible in the home setting.

Also critical to community-based care is the participation of the full range of community leaders—including political, educational, and religious leaders, and others—who uphold or modify social norms and practices. The process of establishing partnerships among key community leaders, families, caregivers, and key stakeholders can be instrumental in expanding the reach of maternal and newborn health services, bringing them as close to home as possible.

In developing the community-based care component of the HHCC model, multidisciplinary teams bring together the major stakeholders and representatives from community with representatives of the health system. Community leaders and caregivers lay the groundwork for community-based care, in collaboration with family members and facility-based service providers, by identifying the gaps in EMNC services and selecting evidence-based best practices from successful programs or models. Together, communities, health caregivers, and NGO partners work to identify, implement, and disseminate the evidence-based best practices for maternal and newborn health. The success of HHCC community-based initiatives, in turn, can reinforce global efforts to define and scale up preventive and treatment strategies for women and newborns.

Linking the Community to the Facility

In many regions of the world, the social and physical gaps separating the community and the facility can be daunting.

Where access to health services is not available, for whatever reason, women in local communities generally rely on their established traditions or practices to cope with pregnancy, childbirth, and newborn care. Some of these practices are harmless but others can result in adverse outcomes.

Evidence from the literature shows that BCC interventions can be effective in improving care and care-seeking for mothers and newborns^{8,9,10}. It has also been shown that the social barriers that prevent mothers from performing—and newborns from receiving—protective or preventive practices can be modified. BCC interventions also facilitate community action, such as creating the necessary enabling environment for healthy behaviors, creating demand for health care services, and advocating and supporting the provision of quality maternal and newborn services.

In HHCC, community mobilization and social mobilization are two key components of the process. Through community mobilization, the capacity of the community is built to explore essential maternal and newborn health issues, and to plan, implement, monitor and evaluate strategies to improve the health of pregnant women, mothers, and newborns. Community ownership over the strategies is fostered by engaging those most affected to plan and carry out appropriate health actions. As the benefits of EMNC interventions gain in acceptance, communities assume ownership of and responsibility for improvements in maternal and newborn health care, and take positive actions to strengthen connections between the household and the health system.

Social mobilization takes place at multiple levels among coalitions of partners working to increase awareness and understanding of the causes of newborn and maternal morbidity and mortality, and to encourage policy and advocacy actions that will improve health outcomes for both

Thomas Kelly/Nepal



Community members attend a newborn health meeting in Nepal.

mothers and newborns. Multisectoral partnerships at the district, provincial, and national levels identify and address the systemic challenges, and leverage existing resources to create or support improvement in maternal and newborn health.

Alliances among local leaders, NGOs, and other stakeholders can also contribute to increasing demand for accessible, quality health services in peripheral and district-level facilities. To bring the process full circle, health care providers at both peripheral and district levels must reach out to communities and to inform women about the available health services at each level.

Training for Community- and Facility-based Care

Training community health workers to deliver effective preventive and emergency care for mothers and newborns is particularly important in countries that do not have enough health professionals to meet the needs of the population. Research projects have demonstrated that community health workers, including volunteers, and family members in the household can be trained to appropriately identify and treat sick newborns, and provide first aid for obstetric emergencies such as postpartum hemorrhage^{4,11}.

Key caregivers at each level of the continuum must have the capacity to deliver basic care, and the ability to appropriately manage or refer women and newborns for additional or emergency services. Through close collaboration with



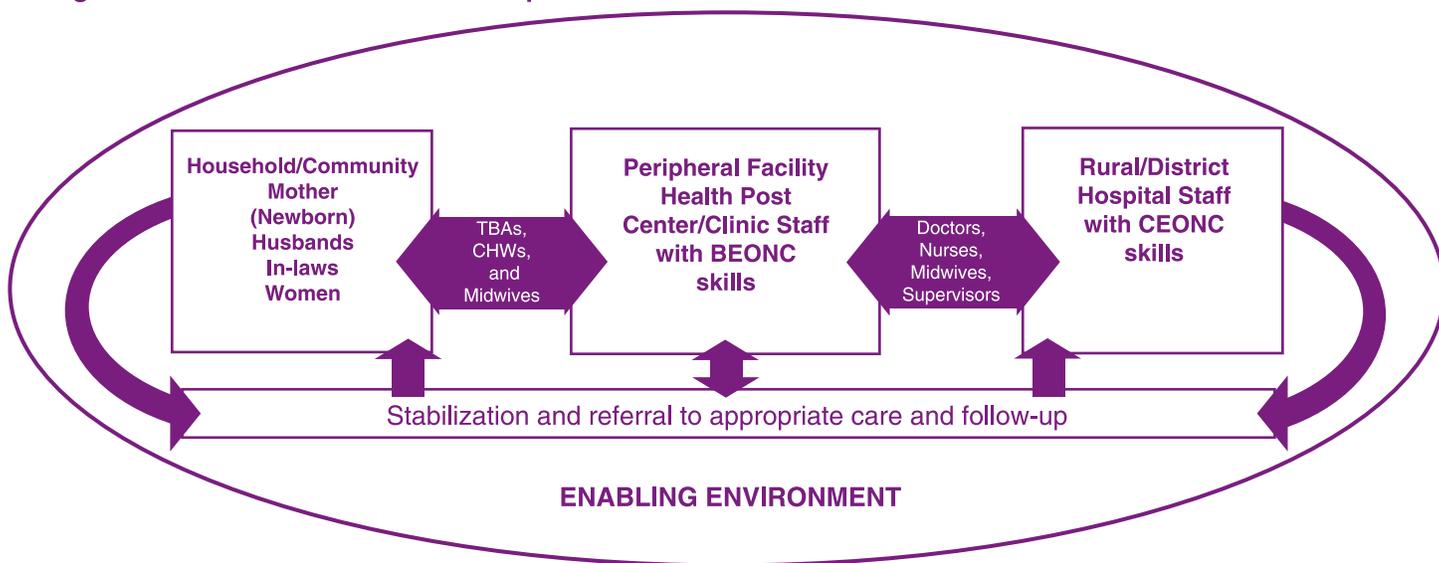
Female shopkeepers and health care workers in the Haripur District of Pakistan attend a training session on safe birthing kits.

ministries of health (MOHs), NGOs and other partners can provide the technical assistance and materials necessary to establish high-quality health services.

HHCC strengthens the capacity of caregivers—whether in households, the community, peripheral health facilities, or hospitals—to manage normal maternal and newborn care, prevent and manage maternal and newborn complications, and provide prompt referral to the next level of care when such complications arise that cannot be treated on site (see Figure 1).

In order to enhance maternal and newborn survival,

Figure 1. The Household-to-Hospital Continuum of Care



caregivers and health care staff at all levels must have the necessary knowledge to perform certain defined, preventive and/or treatment interventions with competence. Researchers have demonstrated that health workers such as nurse-midwives and general medical practitioners can be effectively trained and equipped to perform emergency obstetric procedures, previously reserved exclusively for obstetricians. In the HHCC model, caregivers at the household and/or community level are capable of providing basic maternal and newborn care, and using their home-based life-saving skills (HBLSS) for preventing and at times managing some complications. Moreover, they are capable of making decisions to refer more serious complications to the next level where health providers are trained and equipped to manage obstetric and newborn emergency care.

It is essential that the proposed quality, evidence-based EMNC interventions are performed consistently at each level of the continuum to ensure continuity of care for the woman and her newborn—from the mothers and families at the household level to peripheral facilities and the district hospital. The investment of resources from multiple stakeholders, including the MOH and other government ministries, donor agencies, faith-based organizations (FBOs), and local and international NGOs will be required to achieve this goal. For this reason, multidisciplinary teams involving representatives from all three levels of care should be fully engaged in program planning, implementation, monitoring and evaluation.



Pregnant woman receiving antinatal care in Malawi.

EMNC at Peripheral and District Facilities

The HHCC model identifies the peripheral health facility as the link between the household and the district hospital. Peripheral health facilities should be staffed and equipped to provide basic essential obstetric and newborn care (BEONC) that includes:

- 1) all six functions listed for basic essential obstetric care services as defined by UNICEF, WHO and UNFPA¹²; and
- 2) the capacity to provide essential newborn care (ENC) and manage select newborn complications.

District hospitals should have the capacity to perform the set of services referred to as comprehensive essential obstetric and newborn care (CEONC), which includes:

- 1) the eight functions defined by UNICEF, WHO, and UNFPA for comprehensive essential obstetric care services¹²; and
- 2) care for all sick newborns.

The World Health Organization (WHO) classifies peripheral facilities into two types. Type I health facilities include freestanding maternal and child health units, basic health units, health posts, and dispensaries, which are usually staffed by auxiliary nurses providing limited services. They may also have one bed for delivery. Ideally, Type II health centers are staffed by a multidisciplinary professional team and offer more services to a larger population⁵ (see Table 1).

For the survival of mothers and newborns, it is crucial that both Types I and II peripheral health facilities should be equipped and staffed to:

- conduct normal deliveries and provide essential newborn care;
- offer BEONC;
- manage and refer sick newborns appropriately.

Table 1. WHO Classification of Peripheral Health Facilities

Type I Health Center	Type II Health Center
<ul style="list-style-type: none"> • Staffed by auxiliary nurse-midwife • Limited ambulatory and curative services • No beds—possibly one maternity bed • Community development • Population served <10,000 	<ul style="list-style-type: none"> • Staffed by professional team including doctors, clinical officers, nurses, nurse-midwives, and/or auxiliary health workers • Ambulatory and curative services • Health promotion, prevention, and education • Support for subcenters • Maternity and observation beds • Outpatient operating room • Population served maximum 100,000

World Health Organization, Mother-Baby Package: Implementing Safe Motherhood in Countries. WHO/FHE/MSM/94.1

In addition, Type II health centers should have the capacity to provide blood transfusions, although they may not necessarily have a blood bank.

At the end of the HHCC continuum is the district hospital. The hospital should be staffed and equipped to provide CEONC as well as management of sick newborns on a full-time basis. In addition to BEONC, comprehensive emergency obstetric and newborn care covers surgical services such as cesarean section and laparotomy for treatment of ectopic pregnancies. District hospitals also should be able to provide blood transfusions and should house a blood bank.

Health facilities, whether peripheral or district level, must maintain key health delivery services, 24 hours a day, seven days a week, a goal that depends on strengthening systems for human resource management, including supervision, record keeping, quality improvement activities, client feedback mechanisms, continuing education, and training programs. Other supportive services, including availability of drugs and drug management systems, equipment maintenance, communications systems and community outreach are equally critical. Achieving this objective will require the ongoing commitment of the MOH, the facilities, and other stakeholders in the health professions.

“Three Delays Model”: Where the Continuum of Care Counts Most

In addition to basic preventive EMNC interventions before, during, and after childbirth, strategies must be introduced to deal with maternal and newborn complications. In the “three delays” model, successful EMNC programs must pinpoint the critical moments when women and newborns experiencing complications need to receive care, and when someone must take action to respond to a life-threatening situation:

- Birth preparedness/complication readiness (BP/CR)¹³: Family members should prepare in advance for the delivery and course of action to take if either mother or newborn shows danger signs.
- Household decision-makers must be able to recognize danger signs in mother or newborn and not delay in deciding to seek further care;
- Emergency funds and transport must be available in order to reach a BEONC or CEONC facility without delay;
- Once at the facility, health care providers should not delay in delivering timely and appropriate care.

Although caregivers may be qualified to provide different interventions depending on their level of training, they are unified by their shared responsibility to mothers and babies. The ability and readiness of caregivers to refer to the next level of care when the need arises is critical to the success of the HHCC approach—and to saving the lives of mothers and newborns.

Programs seeking to significantly increase maternal and neonatal survival must implement change across the household-to-hospital continuum of care to:

- 1) introduce knowledge and skills in using the appropriate set of maternal and newborn interventions at each level;
- 2) ensure that caregivers can recognize danger signs in mother and newborn, and know when to refer to the next level;
- 3) support competent providers and maintain equipped facilities to provide basic and comprehensive essential obstetric and newborn care; and
- 4) create links among providers in facilities, the community and families to ensure demand for and timely access to quality health services.

THE PROCESS FOR BUILDING SUCCESSFUL HHCC

The key first step for countries or organizations committed to implementing the HHCC is to conduct an assessment of care of women during the antenatal, labor and childbirth, and postpartum periods, and for newborns at birth and immediately after. Using existing quantitative and qualitative tools for assessing maternal and newborn practices and services at the household, peripheral health facilities, and hospitals, program managers can identify areas of care that need strengthening at each level. Given the variety of potential gaps that may be identified and the need to build partnerships to address them, the assessment should be conducted by a multidisciplinary team (representing social and medical expertise) from service providers, MOH managers, and community representatives.

Table 2 describes the key activities for each component of the HHCC. Instituting the necessary components of health care capacity at household, peripheral facility, and district hospital levels requires complementary but integrated activities.

- **Planning and defining success at the community level.** The HHCC model promotes a participatory

approach that is sensitive to gender, equity, and cultural issues, through which the community arrives at a better understanding of healthy pregnancy, delivery, and newborn care, as well as maternal and newborn health problems. Community members are key to the planning and decision-making process to improve health care for mother and newborns, including:

- Exploring and understanding the factors affecting the health and survival of women during pregnancy, childbirth, and the postpartum period, and the health and survival of newborns;
 - Starting the dialogue to develop evidence-based community and social mobilization approaches for a) reaffirming current healthful practices in the community; and b) negotiating future activities;
 - Helping communities develop their action plans for implementing and sustaining strategies that support healthful practices;
 - Taking positive action to support social norms or individual behaviors that could contribute to better outcomes for women and newborns, or discourage harmful practices through integration of new behavior;
 - Developing systems to prepare for emergencies, such as savings schemes, transport, and potential blood donors;
 - Monitoring and evaluating the results of efforts to improve household practices and the quality of care at facilities, use of skilled care, and coverage with key health services. The indicators for monitoring and evaluating the progress and impact of these interventions are listed in the CORE Group’s Safe Motherhood and Reproductive Health Working Group, Maternal and Newborn Standards and Indicators Compendium¹⁴.
- **Improving the skills of caregivers.** Engaging with caregivers (including family members, CHWs and skilled providers at the community level) is an essential component of selecting and implementing activities and interventions to improve care in the community and at the facility level. These community interventions are not limited to behavioral changes only. Facility-based health providers also need to improve delivery of services based on the needs of the communities they serve. Competency-based in-service and/or pre-service training are necessary to provide evidence-based knowledge and skills, including training in conducting normal childbirth in a culturally appropriate manner, BEONC and CEONC. Supporting and facilitating partnerships among facility-based service providers and community leaders, non-MOH health staff, donors, and NGOs, is fundamental to building supportive health systems that address and resolve the issues of access for women in communities.
 - **Creating an enabling environment.** Linking communities to the peripheral and district health facilities requires change. Families, community and facility health workers, community groups and leaders, policymakers, program managers of NGOs and FBOs, and donors must work together to create the enabling environment for maternal and newborn care.
 - The social and medical environments should enable families, communities, and health workers to put into practice the behaviors and services of the HHCC approach, so these appropriate behaviors can become established social and community norms.
 - The necessary policy and legal authority should be instituted nationally so caregivers are empowered to provide appropriate interventions and services.
 - A community-based referral system—including communication, emergency funds and transport, and supportive supervision from skilled health providers—should form a support structure linking women, newborns and community health workers to the health facilities.
 - Efficient and functioning health facilities need to have sufficient skilled attendants with the legal authority to perform life-saving skills in the community, specifically through the delivery of uterotonics, antibiotics, and life-saving clinical procedures as appropriate.
 - A support system is necessary for community health workers, in terms of adequate compensation, supervision, and equipment, that provides them with the necessary skills and supplies required for them to adequately perform their assigned tasks. Job satisfaction needs for health workers at all levels should be addressed, including appropriate pay scales, career advancement opportunities, continuing medical education, and supportive supervision⁹.
 - **Ensure quality health care.** Communities, service providers, policymakers, decision-makers, donors and other stakeholders must be committed to collective action and shared responsibility to ensure that quality care is provided at all levels, and that the linkages among levels are strong. The quality and sustainability of health services is created through building alliances, coordinating activities, and joint oversight, and is the key to the effective functioning of the continuum of care.
 - **Commit resources.** Donors and decision-makers seeking

1. Improve antenatal preventive practices such as:
 - Malaria prevention – ITN and IPT use for malaria prevention
 - Safer sex
 - Adequate nutrition
 - Immunization against tetanus
2. Ensure at least 4 ANC visits starting as early as possible (by 12 weeks of pregnancy)
3. Improve birth planning and complication readiness for pregnant women, their families and communities.
4. Improve recognition of maternal and newborn danger signs and care-seeking by mothers and families
5. Ensure families and community health workers have knowledge and skills to perform obstetric first aid
6. Promote testing and counseling for HIV

For Mother

1. Promote delivery by skilled provider (including use of partograph and Active Management of the Third Stage of Labor (AMTSL) in the home)
2. Ensure clean and safe delivery where skilled providers are not available, including use of misoprostol after birth of baby
3. Ensure adequate hydration and nutrition for mother during labor

For Newborn¹⁶

1. Initiate immediate and exclusive breastfeeding within 1 hour
2. Maintain baby's warmth: dry and wrap immediately or dry and put skin-to-skin with mother and cloth over the baby
3. Delay bathing
4. Recognize and resuscitate asphyxiated newborns

For Both

1. Improve recognition of maternal and newborn danger signs and care-seeking by mothers and families
2. Ensure families and community health workers have knowledge and skills to perform obstetric first aid

For Mother

1. Improve preventive practices such as:
 - ITN use for malaria prevention
 - Safer sex
 - Adequate nutrition
 - Basic hygiene
2. Initiate family planning

For Newborn

1. Continue exclusive breastfeeding
2. Maintain baby's warmth
3. Keep cord clean and dry
4. Provide recommended immunizations
5. Sleep with mother under ITN

For Both

Ensure early postnatal visit, within 3 days with skilled provider

Improve recognition of maternal and newborn danger signs and care-seeking by mothers and families

Ensure that families and community health workers have knowledge and skills to perform obstetric and newborn first aid

1. Provide focused ANC¹¹ services: IPT, TT, STI prevention and detection, PMTCT, Iron/folate, BP/CR
2. Recognize and appropriately manage danger signs
3. Provide BEONC 24 hours a day
4. Improve involvement of community in management of the facility
5. Improve referral system including communication with, and transportation to next level of care
6. Provide ANC outreach services
7. Support and supervise interventions at the household level

1. Conduct clean and safe childbirth including the use of partograph and AMTSL¹⁵
2. Recognize and appropriately manage maternal and newborn danger signs
3. Provide BEONC 24 hours a day
4. Improve referral system including communication with, and transportation to next level of care
5. Support and supervise interventions at the household level
6. Provide PMTCT services including the use of nevirapine

1. Recognize and appropriately manage maternal and newborn danger signs
2. Provide BEONC 24 hours a day
3. Improve referral system including communication with and transportation to next level of care
4. Support and supervise interventions at the household level
5. Provide PMTCT services including nevirapine for the baby
6. Provide postnatal care outreach services

TYPE 2 HEALTH FACILITY

DISTRICT HOSPITAL

ENABLING ENVIRONMENT

ANTENATAL CARE

1. All of the interventions stated for Type 1 health facility PLUS:
2. Provide basic laboratory service for screening for anemia, STI, and HIV
3. Provide blood transfusion

1. All of the interventions stated for Type 2 health facility 2, PLUS:
2. Ensure in-house blood bank
3. Provide comprehensive laboratory services

1. Linking communities to the peripheral and district health facilities requires change. Families, community and facility health workers, community groups and leaders, policymakers, program managers of NGOs and FBOs, and donors must work together to create the enabling environment for maternal and newborn care.
2. The social and medical environments should enable families, communities, and health workers to put into practice the behaviors and services of the HHCC approach, so these appropriate behaviors can become established social and community norms.
3. The necessary policy and legal authority should be instituted nationally so caregivers are empowered to provide appropriate interventions and services.
4. A community-based referral system—including communication, emergency funds and transport, and supportive supervision from skilled health providers—should form a support structure linking women, newborns and community health workers to the health facilities.

DELIVERY & NEWBORN CARE

1. Same services as described for Type 1 health Facility PLUS:
2. Blood transfusion
3. Basic laboratory service

1. Same services as described for Type 2 health facility, PLUS:
2. Manage all pregnancy-related complications and treatment for the sick newborn including associated obstetric/surgical procedures
3. Comprehensive laboratory services: all basic lab tests, blood sugar, bilirubin, STI/HIV
4. In-house blood bank
5. Provide CEONC 24 hours a day

5. Efficient and functioning health facilities need to have sufficient skilled attendants with the legal authority to perform life-saving skills in the community, specifically through the delivery of uterotonics, antibiotics, and life-saving clinical procedures as appropriate.
6. A support system is necessary for community health workers, in terms of adequate compensation, supervision, and equipment, that provides them with the necessary skills and supplies required for them to adequately perform their assigned tasks. Job satisfaction needs for health workers at all levels should be addressed, including appropriate pay scales, career advancement opportunities, continuing medical education, and supportive supervision.
7. Ensure quality health care. Communities, service providers, policymakers, decision-makers, donors and other stakeholders must be committed to collective action and shared responsibility to ensure that quality care is provided at all levels, and that the linkages among levels are strong. The quality and sustainability of health services is created through building alliances, coordinating activities, and joint oversight, and is key to the effective functioning of the continuum of care.

POSTPARTUM CARE

1. Same services as described for Type 1 health facility PLUS:
2. Blood transfusion
3. Basic laboratory services

1. Same services as described for Type 2 health facility PLUS:
2. Manage all pregnancy-related complications and treatment for sick newborns including associated obstetric/surgical procedures
3. Comprehensive laboratory services: all basic lab tests, blood sugar, bilirubin, STI
4. In-house blood bank
5. Provide CEONC 24 hours a day

8. Commit resources. Donors and decision-makers seeking to reduce maternal and newborn mortality and morbidity must commit funds and strengthen policies to support the implementation of the whole continuum of care, and work in collaboration with other partners to ensure that programs address all of the critical elements of the HHCC. Program managers, NGOs, FBOs, service providers, community leaders and other stakeholders must advocate and work with the MOH for improved policies and human and financial resources.

to reduce maternal and newborn mortality must commit funds and strengthen policies to support the implementation of the whole continuum of care, and work in collaboration with other partners to ensure that programs address all of the critical elements of the HHCC. Program managers, NGOs, FBOs, service providers, community leaders and other stakeholders must advocate and work with the MOH for improved policies and human and financial resources necessary for the full implementation of the HHCC framework.



Jaime Cisneros/Bolivia

ESTABLISHING A FOUNDATION OF NATIONAL AND GLOBAL SUPPORT

Implementing HHCC requires the support of stakeholders in the health care community, and most importantly, the ministry of health. Updating national guidelines for maternal and newborn care to reflect new evidence-based knowledge and practices and advocating for supportive policies can have a significant impact on improving care; generating commitment to programs—such as training and outreach—that complement rising demand from communities.

Moreover, to obtain the legal authority to perform the necessary life-saving procedures that can prevent maternal and newborn mortality and morbidity, it is necessary to collaborate with multilaterals and civil society partners to help persuade government (particularly MOH) authorities to permit health workers increased responsibility for delivering life-saving interventions.

The coalition of ministries of health as well as other government agencies and officials, NGOs, and stakeholders is essential to providing resources for a functioning household-to-hospital continuum of care and must be supported by appropriate national policies that enable communities, health care providers at all levels, and private sector and public facilities to enhance maternal and newborn well-being and survival. By preparing women and families for pregnancy and childbirth, and having solutions in place for provision of basic care and identification and treatment of emergencies, the community can prevent needless loss of life among women and their newborns. Ultimately, implementing the HHCC strengthens health care for all members of the community.



REFERENCES

1. World Health Organization. *World Health Report: 2005: Make Every Mother and Child Count*. Geneva: WHO, 2005.
2. Lawn J. et al. “4 million neonatal deaths: when? where? why?” *The Lancet*, Neonatal Survival series, March 2005. 9-18.
3. Darmstadt G, et al. “Evidence-based, cost-effective interventions: how many newborn babies can we save?” *The Lancet*, Neonatal Survival series, March 2005. 19-30.
4. Bang A, Bang R, Reddy H. “Home-based neonatal care: summary and applications of the field trial in rural Gadchiroli, India (1993 to 2003).” *J. Perinatology* 2005; 25: S108-S122.
5. World Health Organization. “Mother-baby package: implementing safe motherhood in countries.” WHO/FHE/MSM/94.11
6. World Health Organization. “Managing newborn problems: a guide for doctors, nurses and midwives.” Geneva: WHO, 2003.
7. Knippenberg R, et al. “Systematic scaling up of neonatal care in countries,” *The Lancet*, Neonatal Survival series. March 2005. 31-43.
8. Morrison J, et al. . “Women’s health groups to improve perinatal care in rural Nepal.” *BioMed Central Pregnancy and Childbirth* 2005, 5:6.
9. Nanda G, Switlick K, and Lule E. “Accelerating progress towards achieving the MDG to improve maternal health: a collection of promising approaches.” *Health, Nutrition and Population*. Washington: The World Bank, April 2005.
10. Parlato R, Darmstadt G, Tinker, A. “Qualitative Research to Improve Newborn Care Practices.” *Saving Newborn Lives Tools for Newborn Health*. Washington, DC: Save the Children, 2004.
11. Sibley L, Buffington S T, Beck D, and Armbruster D. “Home based life saving skills: promoting safe motherhood through innovative community based interventions.” *J. Midwifery and Women’s Health* 46(4): 258-266 2001.
12. UNICEF, WHO and UNFPA. Guidelines for monitoring the availability and use of obstetric services. UNICEF, WHO and UNFPA, October 1997. According to these guidelines, BEOC includes administering parenteral antibiotics, administering parenteral oxytocic drugs, administering parenteral anticonvulsants for pre-eclampsia and eclampsia, performing removal of retained products (e.g., manual vacuum aspiration), and performing assisted vaginal delivery. CEOC covers all of the basic essential obstetric care services plus performing surgery (cesarean section) and performing blood transfusion.
13. The MNH Program. “BP/CR: A Matrix of Shared Responsibility.” Poster (revised). Baltimore: JHPIEGO, 2004.
14. Safe Motherhood and Reproductive Health Working Group, CORE Group, *Maternal and Newborn Standards and Indicators Compendium*, Washington, D.C: December 2004.
15. Prendiville WJ, Elbourne D, McDonald S. “Active versus expectant management in the third stage of labour.” The Cochrane Review, in *The Cochrane Library*, Issue 3. Chichester: John Wiley & Sons, Ltd., 2004.
16. Kinzie B and Gomez P. “Basic maternal and newborn care: a guide for skilled providers.” *Maternal and Neonatal Health*. Baltimore: JHPIEGO, 2004.
17. Beck D, Ganges F, Goldman S, and Long P. *Care of the newborn: reference manual*. Saving Newborn Lives. Washington: Save the Children, 2004.

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The ACCESS Program is the U.S. Agency for International Development's global program to improve maternal and newborn health. The ACCESS Program works to expand coverage, access and use of key maternal and newborn health services across a continuum of care from the household to the hospital—with the aim of making quality health services accessible as close to the home as possible. JHPIEGO implements the program in partnership with Save the Children USA, the Futures Group, the Academy for Educational Development, the American College of Nurse-Midwives and Interchurch Medical Assistance.

 **access**

Access to clinical and community
maternal, neonatal and women's health services