Child Survival and Health Grants Program—Contributing to Emerging Priorities in Maternal and Newborn Health

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The Maternal and Child Health Integrated Program (MCHIP) is the USAID Bureau for Global Health's flagship maternal, neonatal and child health (MNCH) program. MCHIP supports programming in maternal, newborn and child health, immunization, family planning, malaria and HIV/AIDS, and strongly encourages opportunities for integration. Cross-cutting technical areas include water, sanitation, hygiene, urban health and health systems strengthening.

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Abbreviations and Acronyms

AKF	Aga Khan Foundation
AME-SADA	African Methodist Episcopal Church Service and Development Agency
AMPATH	Academic Model Providing Access to Healthcare
APHIA	AIDS, Population, and Health Integrated Assistance
AMREF	African Medical and Research Foundation
AMTSL	Active management of third stage of labor
ANC	Antenatal care
AOP	Annual operational planning
BCC	Behavior change communication
BCSP	Busia Child Survival Project
BEmOC	Basic emergency obstetric care
CATCH	Rapid Core Assessment Tool for Child Health
CB-HMIS	Community-based health management information system
CBIO	Census-based impact oriented (methodology)
CBO	Community-based organization
CCM	Community case management
CEmONC	Comprehensive emergency obstetric care
CHC	Community health committee
CHEW	Community health extension worker
CHS	Center for Human Services
CHW	Community health worker
CMW	Community midwife
CRWRC	Christian Reformed World Relief Committee (Now World Renew)
Concern	Concern Worldwide International
CRS	Catholic Relief Services
CSHGP	Child Survival and Health Grants Program
CSP	Child survival project
DCM	Department of Community Medicine
DHMT	District Health Management Team
DHS	Demographic and Health Survey
DIP	Detailed implementation plan
DSGA	Grand Anse Health Department
EBF	Exclusive breastfeeding
FBO	Faith-based organization
FCHV	Female Community Health Volunteer
FOCAS	Foundation of Compassionate American Samaritans
FOSREF	Foundation pour la Santé Reproductice et l'Education Familiale
FP	Family planning
GOK	Government of Kenya
GON	Government of Nepal
GOP	Government of Pakistan

HA	Health agent
HBLSS	Home-based lifesaving skills
HAI	Health Alliance International
HC	Health center
HF	Health facility
HFMC	Health Facility Management Committee
HHF	Haitian Health Foundation
HMIS	Health Management Information Systems
HR	Human resources
HW	Health worker
IMCI	Integrated management of childhood illness
IMR	Infant mortality rate
INGO	International nongovernmental organization
JHBSPH	Johns Hopkins Bloomberg School of Public Health
JSI	John Snow International
KP	Kishori Panchayat
KPC	Knowledge, practices, and coverage
KVM	Kisan Vikas Manch
L10K	Last 10 Kilometers (project)
LAC	Latin America and the Caribbean
LAM	Lactational amenorrhea method
LiST	Lives Saved Tool
LOE	Level of effort
M&E	Monitoring and evaluation
MCDI	Medical Care Development International
MCHIP	Maternal and Child Integrated Program
MGIMS	Mahatma Gandhi Institute of Medical Sciences
MH	Maternal health
MMR	Maternal mortality ratio
MNC	Maternal and newborn care
MNCH	Maternal, newborn, and child health
MNH	Maternal and newborn health
MOE	Ministry of Education
MOH	Ministry of Health
MOPHS	Ministry of Public Health and Sanitation
MSF	Médecins Sans Frontières
MSH	Management Sciences for Health
MSPP	Ministry of Public Health
MTE	Mid-term evaluation
MWH	Maternal Waiting Home
NGO	Nongovernmental organization
NMR	Newborn mortality rate
NNMR	Neonatal mortality rate

OR	Operations research
PEPFAR	President's Emergency Plan For AIDS Relief
PMNH	Partnership for Maternal and Neonatal Health
PNC	Postnatal care
PPC	Postpartum care
PPH	Postpartum hemorrhage
PSI	Population Services International
PVO	Private voluntary organization
PVP	Predictive value positive
QA	Quality assurance
QI	Quality improvement
SBA	Skilled birth attendant
SBC	Strategic behavioral communication
SC	Save the Children
SDM	Standards Day Method
SHG	Self-help group
SGS	Sisters of the Good Shepherd
SNL	Saving Newborn Lives
SSA	Sub-Saharan Africa
TBA	Traditional birth attendant
TBA	Trained Traditional Birth Attendant
U5MR	Under-five mortality rate
UCS	Unité Communale de Santé
USAID	U.S. Agency for International Development
VCC	Village Coordination Committee
WHO	World Health Organization
WR	World Relief
WRA	Women of reproductive age

Abstract

USAID's Child Survival and Health Grants Program (CSHGP) has supported 29 grants to international nongovernmental organizations (INGOs) focusing on maternal and newborn health (MNH) since about 2005. The objective of this paper is to recommend a five-year prospective learning strategy for this MNH portfolio. The strategy will draw out themes where more knowledge is needed and identify the means to capture this knowledge—to link NGO-supported MNH efforts more directly with global/national policy and strategy discourse and in response to stakeholders' interests. Methods to achieve the objective included a stakeholder meeting and interviews, literature review and a review of approximately a quarter of the completed and active operations research (OR) projects with at least a 40% level of effort in maternal and newborn care (MNC).

The interests of stakeholders are broad, ranging from effectiveness and cost-effectiveness of various community-based MNH efforts, to decision-making behind the interventions packages and approaches selected, to referral means and postpartum packages. The literature review found that addressing such issues requires specific study designs and well-articulated intervention packages, approaches, and context. It also requires continuous monitoring of inputs, outputs, and outcomes during the project and evaluation of impact and cost-effectiveness in the end, much of which is missing or not readily accessible in the completed standard MNH projects. These projects are not designed to measure effectiveness, but are and could be further mined for descriptive papers through external efforts that look across projects.

The OR projects show remarkable improvements in study design and articulation of the intervention package, but could be further improved with the following: a more specific focus, based on gaps found in the literature; a stratified intervention package that allows for attribution of the intervention components to address gaps or barriers; contextual description and indicators thereof and measurement of inputs, outputs and outcomes over the course of the project; along with costs of the intervention package. A standard journal style article from each project available through various search engines would begin the process of entering the global MNH dialogue. Other efforts to enter the global MNH dialogue include websites, policy briefs and meeting presentations—but all require the ability to succinctly describe the project and provide an interpretation of the study.

Recommendations are made for the three types of learning vehicles now being used by CSHGP:

- Possible cross-cutting topics similar to the one now planned for community case management;
- Monitoring and evaluation topics that projects could address while ongoing; and
- OR topics that could fill the gaps in the literature and address some of the stakeholders' interests.

Finally, it is concluded that greater focus on analysis, interpretation, and write-up of individual projects, with less emphasis and effort on the descriptive initiation of projects, would move CSHGP projects toward a larger role in the international MNH debates. Essentially, the project documents, especially from the standard projects, are not easily accessible. They are voluminous; they do not provide a succinct overview of the project or the intervention package. Analysis and interpretation of data collected in one relatively short, succinct piece are available only to those who are part of the NGO circles.

Background

To broaden approaches to reaching and improving the health of mothers and children in middle- and low-income countries, the U.S. Agency for International Development (USAID) supports the Child Survival and Health Grants Program (CSHGP), which has funded over 420 maternal, newborn, and child health (MNCH) projects through 55 U.S. international nongovernmental organizations (INGOs) since 1985. An impressive 143 million women of reproductive age and children under five in 62 countries have been reached through these INGO-led projects that provide development assistance through services implemented by local government or civil society partners. Approaches used target enhanced governance and management of local health care, improved quality of services, development of links from communities to needed health facilities, and improved preventive practices and service outreach within communities and households.

CSHGP supports the leadership role of the INGOs in implementing and evaluating these projects that address major barriers for improving delivery and use of MNCH services. Its recent focus on operations research (OR) provides a unique opportunity that enables INGOs to form new partnerships with research institutions and Ministry of Health (MOH) program managers to enhance the effectiveness and reach of their programs.

To date, CSHGP INGO programs have shown consistent improvements in health outcomes for children that exceed gains reported at the national level (MCHIP 2011a; Ricca et al. 2011; Yourkavitch et al. 2009). Beginning in 2005, maternal and newborn health (MNH) interventions became a greater focus of the funded programs, most likely in response to the growing evidence base for effective MNH service inputs and household practices detailed in the literature (Bhutta et al. 2008; Campbell and Graham 2006; Darmstadt et al. 2009). Given a recent USAID maternal health (MH) review highlighting the role of community participation and governance in delivering lifesaving maternal care services and the critical need to better understand demand by context, an overview of the potential for learning from the CSHGP portfolio in terms of what and how to improve implementation and access to such MNH services is thus timely and could fill a gap in the literature (Storey et al. 2011). It is also timely in that it coincides with a major effort to synthesize program learning for newborn health that is being undertaken by Saving Newborn Lives (SNL).

The current CSHGP MNH portfolio consists of 29 active projects with 10–100% maternal and newborn care (MNC) level of effort (LOE) per project, implemented by private voluntary organizations (PVOs)/INGOs and their local partners in 17 countries (76% of which are USAID MNCH priority countries) across five regions: sub-Saharan Africa (SSA) (eight), Asia (five), Latin America and the Caribbean (LAC) (three), and Europe and Eurasia (one). Two briefs describe CSHGP project contributions to MNH (MCHIP 2011a; MCHIP 2011b).

Objective

The objective of this paper is to recommend a five-year prospective learning strategy across CSHGP projects—drawing out themes where more knowledge is needed and identifying the means to capture this knowledge—to link INGO-supported MNH efforts more directly with global/national policy and strategy discourse. Guided by stakeholders' needs, a literature review and USAID/CSHGP's request to learn from their extensive portfolio, the emphasis of the paper is on strengthening processes to collect, analyze and use project data to enable learning from the micro to macro levels in the MNH fields.

To date, CSHGP's program data and lessons have been utilized by USAID, the Maternal Child Health Integrated Program (MCHIP), and CORE Group and have served to advance dialogue for MNH priorities and themes through presentations, publications and the development of tools and resources for measurement (e.g., sustainability, monitoring and evaluation [M&E], Lives Saved Tool [LiST], equity, and community health systems) and to improve the practice of approaches such as community case management (CCM), behavior change, and Care Groups. Even so, there is recognition within USAID and the broader INGO community that the CSHGP learning resource could be mined more systematically.

The specific output is a short white paper reviewing progress to date and outlining a learning strategy aimed at increasing the accessibility and visibility of program learning both internally and at the global level. It suggests means of analyzing project information through systematic efforts at central and project levels, building on the already extensive means of capturing project data (e.g., baseline/endline surveys, qualitative research, and evaluations). Potential frameworks for organizing project processes and learning are proposed.

Methods

A stakeholders meeting was held to ascertain their interests and suggestions for areas of learning in MNH to which they felt the CSHGP portfolio could contribute (see Table 1). Using their interests as a guide, individual interviews were held with some of these stakeholders, researchers in the areas of evaluation techniques and community MNH service implementation, and project directors of efforts at the Johns Hopkins Bloomberg School of Public Health (JHBSPH), the Population Council, the Ethiopian NGO project Last 10 Kilometers (L10K), and SNL. CSHGP documents were reviewed that had compiled learning to date or provided overviews of MNH projects.

The broader literature was also reviewed to determine the present understanding and outstanding questions of the effectiveness of community approaches to improve MNH. The selection criteria and grading of data quality used in the literature reviews on community approaches were also examined to understand the acceptable level of data quality. Other literature reviewed included papers on contextual features of settings that contribute to use of community intervention, evaluation means, sustainability, and scale-up.

CSHGP: ACTIVE PROJECTS AND OPERATIONS RESEARCH GRANT REVIEWS

In 2007, USAID, with CSHGP, initiated an OR program to evaluate implementation innovations through pilot testing and measurement. For MNH, particularly at the district level, it was felt that this critical oversight of implementation of program interventions could inform national policies, enhance effectiveness and lead to possible scale-up strategies and sustainability in priority countries. CSHGP grantees evaluate innovations in delivery through OR usually in partnership with an academic institution (global or national). Over the four rounds of grants, there have been 23 OR projects funded in 21 countries.

The OR portfolio has 16 active projects with 40% or more LOE in MNC. With the aim of learning about their MNH objectives, research questions, and means used to answer these questions, four OR projects with 100% LOE in MNC, a detailed implementation plan (DIP), and a mid-term evaluation report were selected for in-depth analysis. They include Aga Khan Foundation (AKF) Pakistan (begun in 2008 and to be completed in 2013), HealthRight Nepal (2009–2013), Christian Reformed World Relief Committee (CRWRC) Bangladesh (2009–2014) and Center for Human Services (CHS) Ecuador (2009–2014). In SSA, only five projects had 60% or more LOE in MNC and four began in 2010 or 2011.

CSHGP: COMPLETED STANDARD PROJECTS REVIEW

Criteria for selection of completed projects to review included 40% or more MNC LOE, funded since 2000 and completion of project. This cut-off was chosen to ensure an adequate range and presentation of information in the reports. There were 17 projects in 12 countries that fit the criteria.

To analyze these 17 projects, and based on the stakeholders' interest in MNH community, the MCHIP team, which was made up of Leo Ryan, Jennifer Yourkavitch, Kirsten Unfried, and me, selected one relatively encompassing topic—the intrapartum care package—for which data from completed MNH projects could be analyzed. It was anticipated that relevant indicator data for this topic would be available, given the list of Rapid Core Assessment Tool for Child Health (CATCH), key MNC, and other standard MNC indicators. These indicators included "delivery with whom (skilled birth attendant [SBA],traditional birth attendant [TBA], other)," "where (home, health center [HC]—basic emergency obstetric care [BEmOC], hospital— EmOC)," "antenatal care (ANC)

use," "counseling for birth preparedness (plans, danger signs knowledge, funds, transport)," "active management of third stage of labor (AMTSL)," "use of clean delivery kit," "emergency transport," "postnatal care (PNC) visits (mother, newborn)," and "immediate breastfeeding." Available project indicator data were also compared against national data from Demographic and Health Surveys (DHS) carried out at the approximate times of the INGO data collection.

From this selection of MNH projects, a more in-depth analysis of five projects was carried out to determine availability of information on other stakeholders' interests—decision-making regarding selection of the intervention packages and implementation approaches, contextual features that could infringe on implementation, and analysis of results. Criteria for project selection for this more in-depth analysis included variation in coverage for a standard set of indicators collected through the Rapid CATCH and geographical spread with preferably two projects in one country by region to diminish contextual/policy variation. The projects selected were two in Kenya (African Medical and Research Foundation [AMREF], HealthRight), two in Haiti (Haitian Health Foundation [HHF] and African Methodist Episcopal Church Service and Development Agency [AME-SADA]), and one in India (AKF). A simple table was devised to capture the relevant information in abbreviated form from the in-depth analysis of the DIP and final evaluation report of these projects to specify information considered important to address questions of context, decision-making, intervention packages, and approaches (Annex 1, Tables 1, 2, 3). Outcome data were included if available (newborn deaths, stillbirths, low birth weight, premature, maternal death).

Literature Review

The review included a search of the Cochrane library, recent systematic reviews on MNH care, and a review of technologies found effective for community use that postdate the extensive reviews of technologies in the 2005 and 2006 *Lancet* neonatal and maternal survival series. This was not a comprehensive review of the literature, rather an overview to determine gaps and areas in which CSHGP projects could contribute to learning.

Limitations

The main limitation of these methods was the small number of projects reviewed. Copious documentation from projects was a major inhibitor to reviewing more projects. While the selection criteria for the reviewed projects are sound, some criticisms of project reporting resulting from this narrow review do not hold for every project that could have been reviewed. There is as much variation in documentation standards as there is in project implementation, despite CSHGP efforts to provide standard project reporting guidance.

Results

STAKEHOLDERS' INTERESTS (MEETING DECEMBER 1, 2011)

The stakeholders presented a number of issues they felt could be informed by CSHGP projects, including the process of working with TBAs, the effect of specific community approaches for improving implementation and access for MNH interventions, decision-making regarding the selection and costs of MNH intervention packages and implementation approaches, community-based health management information system (CB-HMIS) and its use in decision-making and costs of implementation, and others (Table 1).

A key stakeholder interviewed separately, Mary Ellen Stanton, USAID's Senior MH Advisor, suggested that her primary interest is the possible contribution of the grantees in understanding the implementation and operations of referral systems for mothers and newborns, including their transport, communications, and financing needs/inputs. As such systems may vary by context, description of context is much needed, along with costs of the interventions to determine efficiency and cost-effectiveness. She noted that learning around postpartum care (PPC)/PNC implementation and access would be timely. SNL and the World Health Organization (WHO) have also signaled interest in this latter topic, and much groundwork is ongoing in both organizations concerning the timing, content, and measurement of PPC/PNC visits through a country-level survey.

LITERATURE REVIEW

To examine the present level of global/national policy and strategy discourse on MNH interventions, the literature was reviewed for knowledge of community approaches to provision and use of MNH care, the acceptable level of data quality in articles included in the reviews, and outstanding questions. The specific findings, which can be found in Annex 1, are used to pinpoint questions that INGOs could address, as found in the Discussion section.

ANALYSIS OF AVAILABLE CSHGP PROJECT INFORMATION ON MNH OUTCOMES

Five of 17 completed standard CSHGP projects with a MNH component sufficient for this effort and four of the 16 active OR MNH projects were reviewed. Based on these reviews, the study designs, intervention packages, and various data—from impact to inputs of the interventions and formative research, cost data, etc.—were assessed to understand the availability, accessibility, and quality of project data.[1]

Study Designs

The selected completed projects used pre and post surveys (knowledge, practices, and coverage [KPC]) to measure their outcomes only in geographical areas in which they work. Pre and post survey designs are typically considered low-quality grade.

Three of the four OR projects reviewed included a comparison area. HealthRight Nepal assigned different areas to different interventions to complement the strengthening of the primary intervention, the Community-based Neonatal Care Package, which the Government of Nepal (GON) has supported. This approach will allow them to test various intervention packages. Given the quasi-experimental designs, the data quality of the OR projects would be rated higher than those in the standard projects.

[1] "Standard" projects are four to five years and require implementation of one or more child survival interventions and conduct standard program evaluations; "innovation" or "operations research" projects are four to five years and require a research/investigation component in addition to program evaluation. Newer projects are required to partner with a research institution.

Intervention Definition

In the standard projects, the complete intervention, including the technologies being delivered and the approaches used to introduce them, is not clearly articulated in one place in the final evaluation reports. Much of this information is available in the DIP, but while the DIP describes the plan for implementation, it is not clear what the intervention package is that is actually delivered in the Final Evaluation (see Annex 1, Tables 1, 2, 3). The planned interventions of the OR projects are clearer; however, even so their descriptions have not necessarily been found to be complete. Measuring adequacy of intervention inputs over time, through baseline, midterm, and endline surveys at the population level, is not reported (for example, the number of women's groups attended by targeted women in contrast to the number of women's groups held as reported provided by managers).

The primary aim of the reviewed CSHGP projects is to enhance the demand and/or quality of the government programs (e.g., AFK Pakistan is implementing the community midwife [CMW] program of the Government of Pakistan [GOP]; Nepal HealthRight the CB-NCP program of the GON). To achieve these goals, both the completed standard projects and OR projects should implement intervention packages that are typically complex. They may include, for example, many of the MNH technologies determined to be effective (*Lancet* series 2005, 2006), delivered through skilled workers who have received further training and supervision in a setting that now may have a quality improvement system in place. Awareness of these technologies can be improved through multiple approaches simultaneously, including community mobilization, behavior change communication (BCC), and mass media. Access could also be enhanced through multiple approaches, such as village committees, group meetings, community health workers (CHWs) with household visits, trained traditional birth attendants (TTBAs), savings groups to reduce the financial burden, emergency transport plans, etc. (Table 3 lists the multiple types of approaches used by the CSHGP projects.) The intervention packages are not typically stratified by area to test specific components of this complex package, nor do they collect cost data to determine the cost-effectiveness of a package for a specified outcome (e.g., percentage of women who used a SBA). The CHS Ecuador OR project is one exception in that it has selected a specific intervention to test—postnatal visits. By focusing so specifically and collecting output data on the intervention (e.g., percentage of mothers who report a postpartum visit within two days of delivery at home or at a facility), this project will have a higher grade of evidence and be able to report progress/learning.

Impact Data

Impact data were not available for the completed projects reviewed (e.g., mortality data for newborns, stillbirths or mothers). However, they have been collected in five of the 17 MNCH projects (J Yourkavitch pers comm):

- World Vision Mozambique–Child mortality data have been published (Ricca et al. 2011)
- Food for the Hungry Mozambique (2005–2010) used data on births and deaths collected by Mother Leaders to directly measure mortality in their project area. Given data completion and timing issues, they reported only crude estimates: 30% reduction in under-five mortality rate (U5MR) for whole project area; 32% in Area A and 26% in Area B.
- Curamericas Guatemala (2002–2007) used mortality monitoring and verbal autopsies, as part of the Census-Based Impact Oriented methodology to measure a decrease in U5MR in each of the three project areas. They also measured maternal mortality, but note that some key information needed for the analysis is missing.
- World Relief Cambodia (2003–2007) used CB-HMIS to measure the infant mortality rate (IMR), which decreased from 61.3 to 23.1; in the project's extension area, IMR decreased from 62.6 to 33.6 in the same time period (2003–2007). They also collected data to measure

child and maternal mortality, but data were incomplete and they were unable to report specifically on these decreases.

- Foundation of Compassionate American Samaritans (FOCAS) Haiti (1999–2002) conducted a mortality study using the Vital Events Registration (VER) system, showing a decrease in U5MR from 188 to 66. There were two maternal deaths registered.

In the draft publication on of the impact of CSHGP projects (Ricca et al. draft 2011) and Yourkavitch's APHA presentation (2009), the LiST tool has been used to determine deaths averted with the increase in use of child health interventions.

It is not clear in the reviewed OR projects whether death data will be collected (e.g., CRWRC is not collecting mortality data but AKF Pakistan mentions that it will collect maternal and newborn death audit information—no details provided (there is an update in the mid-term evaluation [MTE] report). Nepal HealthRight has trained personnel in carrying out maternal and newborn death verbal autopsies, and CHS Ecuador is also collecting mortality information.

KPC Outcomes

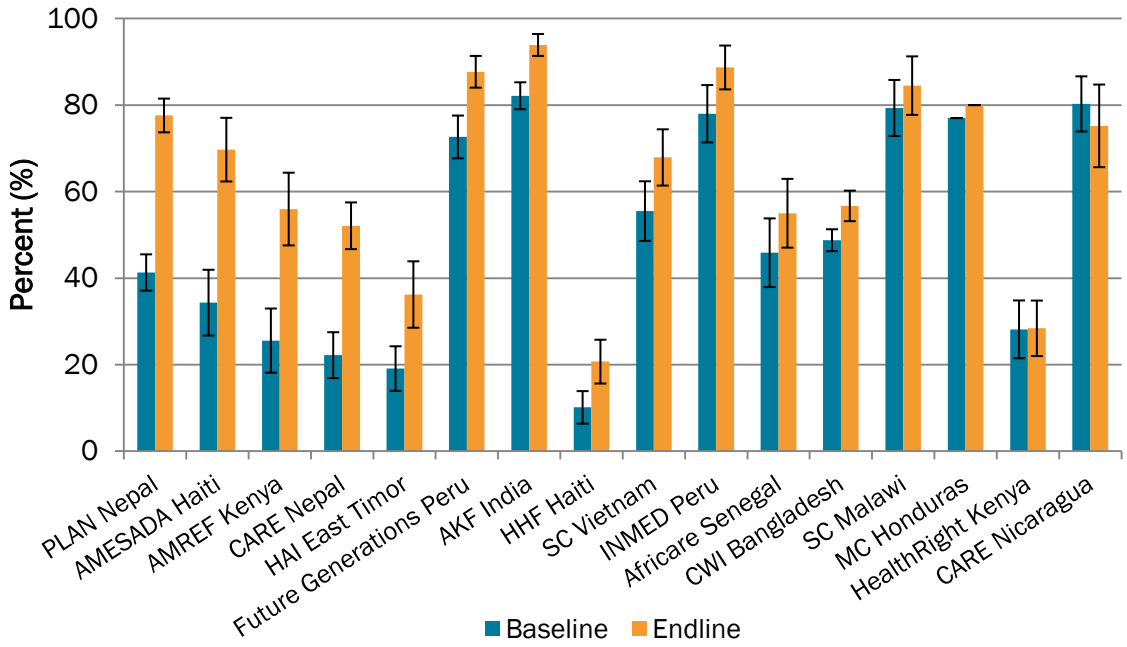
Table 2 provides information on the number of completed CSHGP MNH projects reporting data on relevant indicators. Of the 17 projects, 16 reported the Rapid CATCH SBA indicator, 15 reported maternal TT vaccinations, 15 reported ANC, and nine reported postnatal visit to check the newborn. The number of projects reporting "other standard MNC indicators" decreased dramatically, including delivery kits used (four); and knowledge of danger signs during pregnancy (nine), delivery (five) or postpartum (11). Newborn care behaviors, such as delayed bathing, feeding colostrum, immediate drying/wrapping, clean cord care were reported by three to four of the 17 projects.

The definition of some of these CSHGP indicators varied by project. For example, projects varied the number of ANC visits and days when postnatal visits should happen, perhaps based on national policy/program guidelines. Data quality based on completeness and validity is not discussed in the selected standard project reports; OR projects reviewed did have means of testing data quality.

Outcome data from the standard projects show (Figures 1–3):

- **Use of Skilled Birth Attendant (Fig 1):** There were large increases in use of an SBA in Plan Nepal, AME-SADA Haiti, AMREF Kenya, CARE Nepal and Health Alliance International East Timor—all projects with relatively low use at the beginning of their projects (less than or equal to 40%). Among those with less percentage point change, but still significant increases (Future Generations [FG] Peru, AKF India, and HHF Haiti), the base level was 50% or over in the first two and very low (about 10%) in the HHF Haiti. There was no significant improvement in SBA levels in six grantees and no or decreased use in HealthRight Kenya and CARE Nicaragua.

Figure 1: Change in Use of SBA (%) between Baseline/Endline (4 to 5 years) of Completed CSHGP Projects



- **Use of a health facility for delivery (Figures 2a and 2b):** Although not a mandated or specified indicator, use of a health facility (HF) for delivery is important given the current literature showing impact of use of emergency obstetric care facilities on the reduction of maternal mortality (Chowdhury et al. 2009). There was a significant improvement in use of a HF for delivery in all the Asian projects reviewed (Plan Nepal, CARE Nepal, Save the Children [SC] Vietnam, AKF India, and HAI East Timor and Concern Worldwide International [Concern] Bangladesh) as well as one SSA project—AMREF Kenya. The increase in the Asian projects could be due to the various demand-side incentives or free facility care now being offered in most of these countries or the community mobilization efforts. As such increases are also noted in the DHS data they are more likely due to the financial incentive efforts, given that they are nationwide (Figure 2b).

There were no improvements or no significant improvements in Africare Senegal, HealthRight Kenya, SC Malawi, FG Peru, and INMED Peru. The projects in the LAC region start with a high use rate (greater than 70%) and as with use of SBA in these same projects (except for FG Peru), there was no obvious improvement. That there was improvement in one SSA project, AMREF Kenya but not the second Kenyan project should raise interesting questions as to their differences (also see Annex 1, Table 1).

Figure 2a: Change in Use of Health Facility for Birth (%) between Baseline/Endline (4 to 5 years) of Completed CSHGP Projects

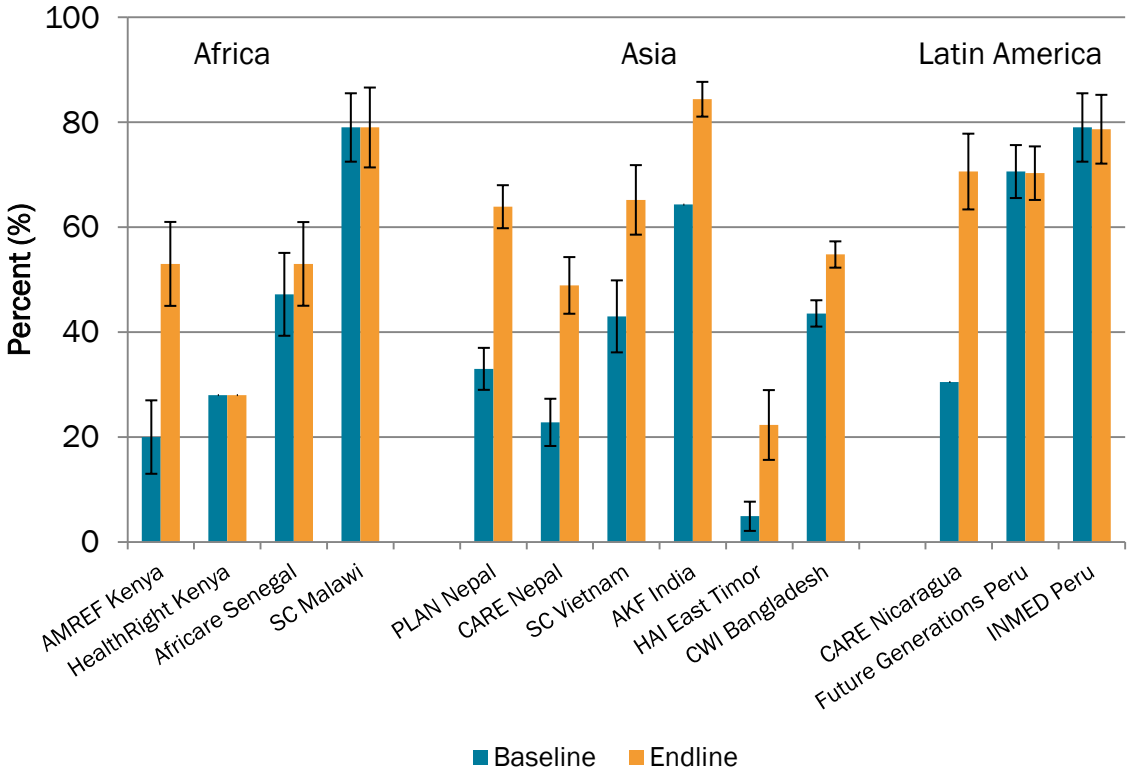
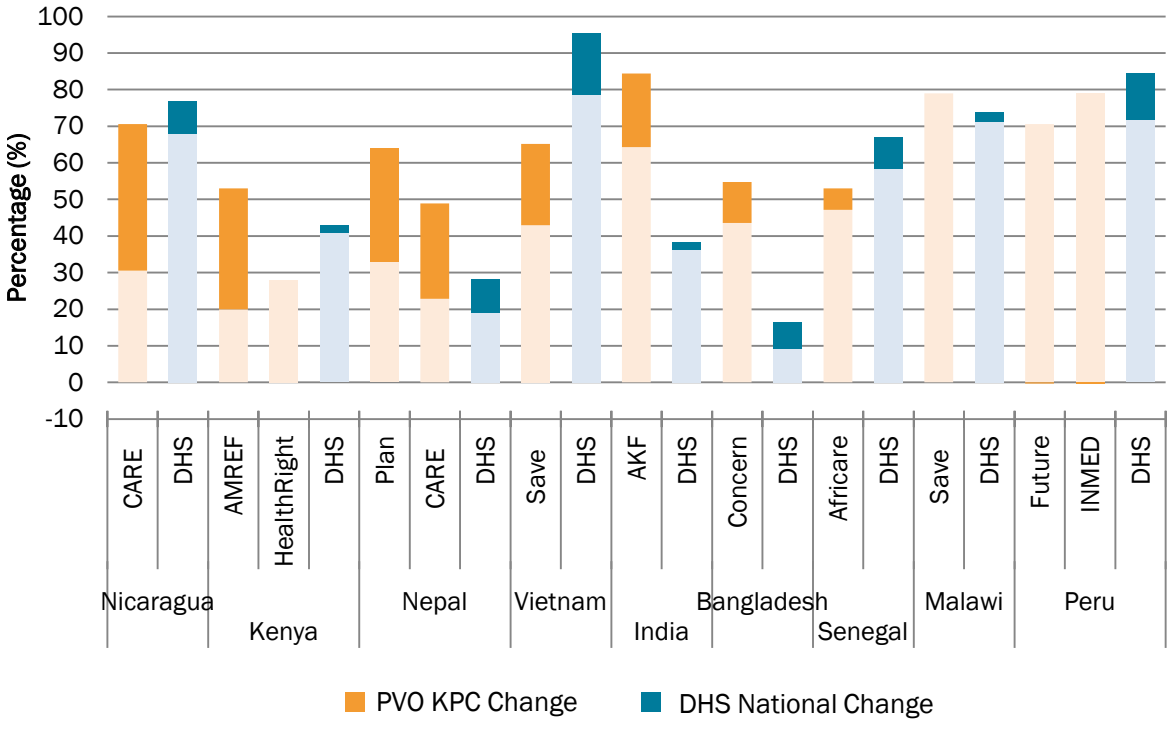


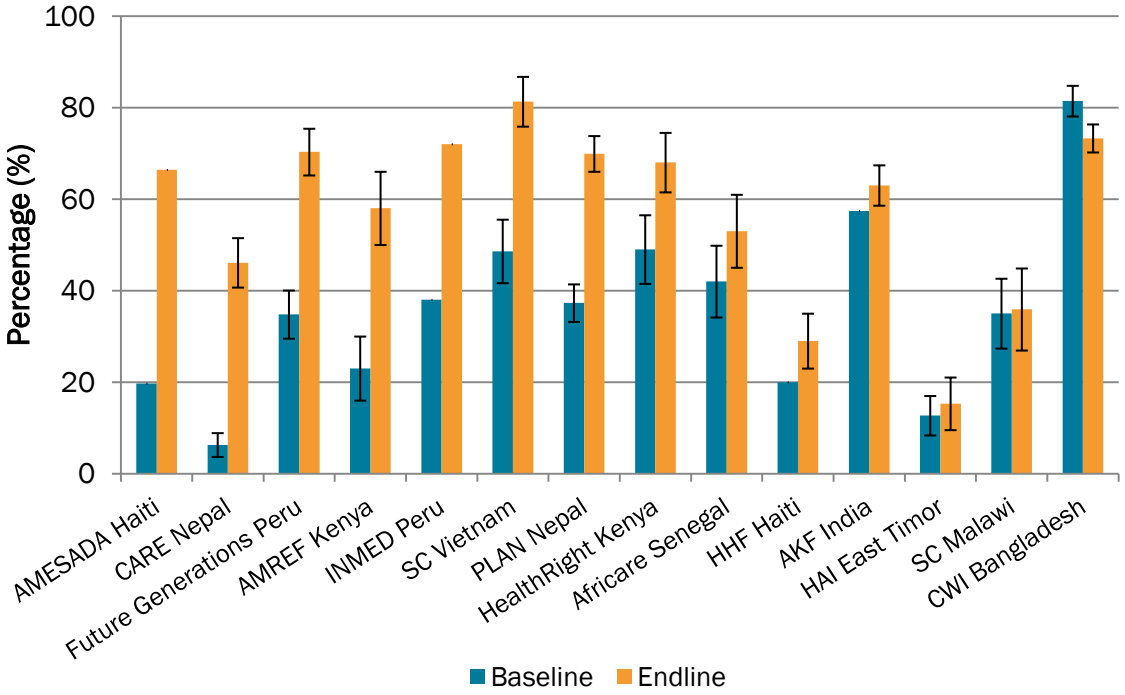
Figure 2b. Changes* in Use of Health Facility for Birth (%) between Baseline/Endline (4 to 5 years) of Completed CSHGP Projects Compared with DHS by Country



* Indicated in figure by darker shade of color.

- **Postpartum visit for mothers (Figure 3):** There was significant improvement in levels of postpartum visits to check the mother in AME-SADA Haiti, FG Peru, INMED Peru, CARE Nepal, Plan Nepal, SC Vietnam, AMREF Kenya, and HealthRight Kenya. There was no improvement or no significant improvement in HealthRight Senegal, HHF Haiti, AKF India, HAI East Timor, SC Malawi and Concern Bangladesh.

Figure 3: Changes in Percentage of Mothers Who Received a Postpartum Visit between Baseline/Endline (4 to 5 years) of Completed CSHGP Projects



Output Data

In the standard MNH projects reviewed, no indicators of outputs were reported (e.g., numbers of visits by trained TBAs or CHWs in last x months; number of group meetings attended in last x months; or other measures of engagement with the interventions, depending on approach used). Given that such indicators are not required, they may not be provided in the selected project reports, or they may not be collected, although "Module 8: Health contacts and sources of information" has existed for potential use as part of the KPC survey guidelines since 2000.

Among the OR projects, CRWRC also does not collect output data; instead they rely on the various capacity indicators (plans of the organizations) to determine planned visits of CHWs, TTBAs, etc. CHS Ecuador is collecting output data (e.g., percentage of mothers who report a postpartum visit within two days of delivery at home or at a facility), making it one of the stronger research efforts.

Input Data

In both the standard and OR projects, measures of inputs are reported (e.g., number trained by type of category, groups formed) in the various reports. However, population levels of inputs are not specified, nor is it clear that the inputs remained the same throughout a project's lifetime.

Other Data Collected

Formative research: Qualitative data are collected at the initiation of a project, prior to the DIP, and supply needed information for development of various parts of the interventions (e.g., the messages for raising awareness). One report from an OR project (AKF Pakistan) quantified results of various qualitative means (focus groups, in-depth interviews). How representative or useful such quantification is of qualitative means is unknown, given that other projects did not provide separate reports of their qualitative efforts.

The **Sustainability** Framework developed in the early 2000s[2] presents a six component framework that aims to help promote continued improved health outcomes beyond the life of the project. It includes a number of composite indicators, including capacity indicators for local government and for local NGOs. It is not clear how many projects have used or are using this framework—but it was found in one of the selected OR projects (CRWRC Bangladesh). It is known that some CSHGP grantees develop their own capacity indicators. In the case of CRWRC, they were also developing a social capital indicator.

Work on **context** indicators initiated by the Countdown 2015 (2010) was limited to the health systems building blocks. According to the Countdown Decade Report, "To understand the context in which countries are making efforts to scale up maternal, newborn and child health interventions, the Countdown examined progress of key indicators related to each of the building blocks, complementing the information on intervention coverage (a direct function of service delivery)" (page 27). The building blocks include: governance, human resources, information, financing, medicines and technologies and service delivery with people at its center. In their country profiles, they also include specific relevant policies such as whether midwives are allowed to perform lifesaving interventions. More recently, Victora et al. (2011) have broadened the context definition to include not only socioeconomic and demographic factors (e.g., levels of poverty, parental education; population density, ethnic groups), but also environmental (e.g., urban, rainfall, altitude, sanitation), health services (e.g., availability of health services—government and private, population/facility ratio, staffing patterns, compensation), and baseline health characteristics (e.g., mortality patterns, HIV prevalence, malaria transmission patterns). In CSHGP project information, contextual information may be available in the DIP but is not necessarily carried forward into the final report. For active/OR projects, there is a specific section on contextual factors that hinder the project's progress in the MTE reporting guidelines.

Cost data on the interventions are not available in either the standard or active/OR projects. However, the CRWRC OR project states that it will collect cost data for the interventions to determine cost-effectiveness.

[2] The latest version (2008) is explained in the manual by E. Sarriot et al. found at: http://www.mchipngo.net/controllers/link.cfc?method=tools_sustain

Discussion and Recommendations

As stated above, the objective of this paper was to recommend a five-year prospective learning strategy across CSHGP projects—drawing out themes where more knowledge is needed and identifying the means to capture such knowledge—to link INGO-supported MNH efforts more directly with the global/national policy and strategy discourse. We started with the concerns of stakeholders who wanted answers regarding the effectiveness of PPC, ANC, birth preparedness and complication readiness, and the impact of delivery kits used by SBAs; cost-effectiveness; decision-making for selecting the intervention packages and approaches; and use of CB-HMIS for decision-making. More specific questions were also asked of the implementation of referral systems and specific content and timing of PPC.

To address the study of project effectiveness, projects need a quasi-experimental design or surveys over an extended time (time series) such that changes can be attributed to the interventions/intervention packages used. The standard projects were not designed to test intervention effectiveness given that they did not employ a quasi-experimental design (no comparison groups) or surveys carried out over extended time (time series). They cannot provide cost-effectiveness information because cost data were typically not collected They did not typically report on their decision-making regarding approaches and packages of interventions used, although those reviewed essentially were enhancing government-supported strategies.

Collection of quantitative data for relevant MNH indicators beyond the Rapid CATCH indicators (mandated for all projects), even within projects with over 40% LOE in MNH, is minimal (see Table 2). Hence, quantitative data on, for example, the use of delivery kits or use of birth preparedness/complication readiness, are not widely available. The relationship of either of these inputs in facilitating use of a trained attendant at birth or delivering in a facility has not been reported at the individual project level.

CSHGP presently works at three major levels for learning:

- Developing cross-cutting themes to review progress of intervention packages
- Following progress through various M&E indicators and standardized questionnaires
- Pursuing OR projects

These three levels of learning set the stage for learning over the next five years, and could be improved with some modifications. I will review each of these efforts separately and provide recommendations for improved learning over the short term (two to three years), which would set the stage for continued learning over the next five to 10 years.

CROSS-CUTTING THEMES

What has been done to date to cull data from CSHGP projects is to look across projects to determine the usefulness of a specific implementation approach (e.g., use of Care Groups) for various outcomes. For child survival, such an effort was undertaken resulting in the useful brief entitled, “Building on the Current Evidence to Strengthen Community-based Services Delivery Strategies for Promoting Child Survival.” (MCHIP, no date) Data used in this brief also contributed to the published article by Freeman et al. (2012), “Accelerating progress in achieving the millennium development goal for children through community-based approaches” (2009). The article focused on common community-based approaches used in the implementation of interventions with documented improvements in child mortality, specifically in high-mortality, low-resource countries. There are other publications or grey reports based on

the CSHGP projects (e.g., APHA) and others underway, which review evidence of improved coverage and draw out common strategies.

A planned effort to review CCM as an approach to reducing childhood deaths is now under way, again with the development of a special questionnaire to collect needed information across projects. Such efforts are useful, but obviously require extra efforts by those beyond the project staff to cull data across the projects, and therefore will continue to be limited in number (e.g., presently there are just a few papers published based on this cross-cutting approach although there have been over 400 projects).

There are two major issues with the present system of learning about MNH across projects:

1. Project information is simply not easily accessible; information needed for learning about any one particular project is spread over 500–1,000 pages of text from the various project documents. The information is not detailed in one report/paper of standard journal size (20–25 pages) that includes objectives, methods, a complete intervention description, results, discussion/interpretation and conclusion.
2. To determine the "effectiveness" of an intervention or intervention package as requested by the stakeholders, there are specific study designs that need to be used (e.g., quasi-experimental, time series). These could be incorporated into the INGO projects more generally if that is one's objective. While OR projects do not require such designs, they also do not aim to determine effectiveness, rather they typically aim to improve implementation of a known effective intervention.

In the short-term (next two to three years), you may want to continue to ask questions across the completed projects and hire a consultant or engage a staff member to retrieve such information and report on it. Illustrative cross-cutting questions that could be asked of the standard type of INGO project include the following, which have been drawn from the literature reviews as well as the review of the CSHGP portfolio.

1. **What factors most affect the sustainability (or integration) of community-based approaches (e.g., CHW or TTBA outreach, women's groups, etc.) and interventions when scaled up?** (Include the use of different kinds of incentives and payment systems for workers.)
2. **What are the most appropriate mechanisms for integrating such community approaches with the formal health system?** (A CORE group discussion?)
3. **What is the effectiveness of the different community approaches for specific MNH issues?** (Note: Cost-effectiveness is preferred but would necessitate collecting cost data at project level.) As Henry Perry has already culled the child survival projects, it would be cost-effective to support his effort to look specifically at the newborn component.
4. **What are the best combinations of frontline health workers for family and community service delivery and the phasing of their roles or skills during the transition to skilled birth attendance?**
5. **What strategies optimize the deployment of frontline health workers and improve collaboration and partnership among frontline health workers and the health system?**
6. **What are the best ways to monitor and evaluate health outcomes of community-based interventions, including vital registration, community-based surveillance, improved verbal autopsy methods to assess specific medical causes and contributing factors to maternal and neonatal mortality and morbidity?**

7. **What is the necessary level of intensity and coverage of community mobilization and home-care interventions, to produce the most cost-effective effect?** (A paper based on intensity of interventions that could be a model for such efforts is Karim et al. 2010)
8. **Which are the most effective models of these MNH interventions? Can they be scaled up in the poorest communities, and what are the institutional and financial barriers to scale-up?**
9. **Why do the outcomes regarding use of HFs/SBAs/PPC (mothers) of the Haiti projects differ? Of the Kenyan projects?**
10. **When you look across the projects in LAC, Asia, and Africa, are there different patterns of MNH outcomes and if so, why?**

A framework that is useful to consider when reviewing these overarching and cross-cutting themes is that portrayed by Ergo et al. (Figure 4). It looks at the overall system—community/household as well as health system and partially includes the external context. More could be added regarding the external context based on dialogue with grantees to identify the most useful components. Whether the control knobs representing the intervention means most appropriate to manipulate the overall system are those most useful for the grantees is debatable—and should again be discussed with the grantees. The control knobs presently include regulation, communication, organization and financing. From your perspective, you may want to add in further community type interventions, such as transport, community groups/mobilization, community governance, etc. I understand that this framework was described and discussed with CORE group members at an early stage in its development, and it may be useful to revisit it with them.

MONITORING AND EVALUATION OF ONGOING PROJECTS

To be part of the global dialogue on MNH issues in a more continuous way that also represents the broader portfolio of the CSHGP grants, there are clear steps that CSHGP projects can take. The most obvious is that those involved with the individual projects must begin to analyze, interpret, write and publish their own efforts in standard formats acceptable to journals or provide condensed reports to be put on an advertised website. By doing so, grantees would become clearer about the adequacy of program implementation, coverage and outcomes. To judge project performance, all projects must include appropriate M&E means—collecting both input and output data at specific times over the life of the project, outcomes, along with some indicators of context; impact data would also be most helpful. The plan of any project (that portrayed in the DIP) is not acceptable as the intervention delivered; implementation of an intervention package requires continued validation through questioning the recipients. And most basically, whether published or a grey literature report, the findings of each project must be accessible to others through the literature search engines (e.g., PubMed) and other Web-based means.

To begin this process over the next two to three years:

- USAID needs to advise as to how much time and effort could/should be spent on measurement and reporting of efforts by the INGO grantees. I recommend that there be more emphasis in the last year on how to analyze, interpret and write up efforts—ultimately how to learn from the individual projects.
- USAID and CSHGP need to work together on measurement issues—e.g., identify study design issues for general INGO projects and those that are OR projects, determine indicators for context (e.g., population density, road density), outputs (e.g., percentage of women with one, two or more women's group meetings during pregnancy—if women's groups are the intervention), and determine how/when these are reported over the life of the project. Outcomes of interest should also be strengthened (e.g., not just ANC visits, but

measures of the quality of ANC, such as number of iron folate tablets given/consumed; use of SBA should include whether received a uterotonics immediately post-birth).

- CSHGP can develop guidelines for the projects regarding study designs and measurement including definitions and illustrative questions.
- CSHGP could then work with project staff to write up a final report/publishable short paper of 20–25 pages that follows standard paper format with referencing, etc. Given that the initial writing of such a paper can be a formidable task, perhaps CSHGP could give writing lessons to a few select grantees.
- There are other means to advertise the work of CSHGP, such as blog articles, policy briefs that are on paper or the Internet or both. CSHGP and USAID need to determine the desired audiences and most appropriate vehicles to reach them.

With improved M&E, examples of questions that could be answered at project level include:

1. **Are inputs and outputs on target to achieve the desired outcomes? Specify at a population level.** (To do this, a project would most likely have data from baseline, midline and endline assessments on inputs as well as outputs and outcomes.)
2. **Who is the recipient of the interventions?** (While most projects allude to the most vulnerable as the target recipients, there was no assessment of recipients in the projects reviewed.)
3. **What contextual features have a positive or negative impact on the projects? Many of the projects reviewed use approaches to implementation of evidence–based, high-impact interventions that need to be seen in context; the same solution will not fit all situations.**

It would be useful for CSHGP, with its grantees, to determine contextual indicators of vulnerability, as well as of access (e.g., road density, transport availability) and quality (e.g., receipt of uterotonics immediately post-birth).

Model papers for project overviews with M&E results: Country case study from a Bangladesh project (Edwards and Saha 2011).

OPERATIONS RESEARCH

The initiation of the OR focus in 2008/2009 has the potential of increasing the accessibility of the CSHGP portfolio and marks an excellent beginning toward having useful data for the global discourse of MNH strategies. To engage in OR alongside M&E is appropriate for the type of work the projects have been carrying out. As stated above, many of the projects reviewed were enhancing implementation of the government's program strategy. Described by Padian et al., OR "… focuses on increasing the efficiency of implementation and operational aspects of a particular program through the use of scientifically valid research methods." (2011, page 200)

With regard to Padian's "scientifically valid research methods," there is a perceptible change compared with the completed standard MNH projects in how the CSHGP OR projects pose their research questions, define interventions, design their study, and collect data. Even so, more specificity concerning the study question (the primary outcome) of implementation of intervention packages is needed (e.g., a positive example is CHS Ecuador's focus on postpartum care versus all of MNH). The interventions should be described thoroughly (e.g., training and support strategies used), along with ongoing co-interventions and health care organization and system issues that could affect the main study. Another positive example of a study maximizing its effort is HealthRight Nepal's stratification of the intervention by geographic area, allowing for comparison of different intervention packages.

With improved analysis, interpretation, and individual project write-ups, these projects could make a major difference in CSHGP project accessibility and visibility. Best would be that those involved in the studies carry out their own mid-term and final evaluations and reporting, given that they are the most appropriate persons to interpret findings in the local context. And typically with such immersion in analysis and interpretation, the project directors and staff may become more analytical about specific programmatic needs.

Illustrative OR questions could include:

1. **What are the benefits/efficiencies to different training approaches for CHWs or TTBAs? To supervision mechanisms of these workers? What is the impact of different intensities of intervention on outcomes?**
2. **Are community workers or professional health care providers more appropriate for providing counseling messages (promotion, prevention) regarding MNH?**
3. **What are the effects of involving local people in the planning and support of CHW or TTBA programs?**
4. **Examine the impact of different forms of community worker incentives and payment for program outcomes.**
5. **What is the impact of new technologies, (e.g., mobile phones) on the range of tasks that community workers can undertake effectively?**
6. **Is it cost-effective to add community mobilization means to the ongoing financing efforts of governments to increase appropriate use of health facilities for birth?**
7. **What are the most effective approaches for promotion of care-seeking for life-threatening complications?**
8. **What methods are most useful to improve prevention or initial home-based management (first aid stabilization), or both, for mothers and newborns, and safe referral care?**

A greater focus on African settings is needed according to Lassi et al. (2011), given that the majority of the effectiveness trials to date regarding community-based approaches to MNH have been in Asia. They also call for more studies reporting the actual costs incurred for providing interventions for saving one life or the cost of one averted death (e.g., costs per lives saved or disability-adjusted life years [DALYs] averted).

Sibley et al. (2011) state, "A focus on TBA training in relation to reducing perinatal and neonatal death, the potential mechanisms involved in reducing deaths, strategies that link TBAs to health systems, and costs continue to hold the most promise. Future studies should include also at least the following information on participants, the intervention and outcomes, to permit subgroup analyses: (1) TBA age, socioeconomic status, educational attainment, experience (number of deliveries per year and number of years of practice), and proportion of all births attended in the study area; (2) maternal age, parity, socioeconomic status, and educational attainment; (3) training method, content, duration, contact hours, trainer/trainee ratio, supportive supervision and education after training, context, e.g., whether training is a single invention or part of complex intervention, whether it is situated within an enabling environment that includes elements such as advocacy, community mobilization, emergency transportation or adequate accessible referral sites; and (4) timing of measurement (observations) relative to the intervention, as well as data collection method and source, and most importantly (5) perinatal and neonatal mortality outcomes that use standard definitions." Further considerations for program implementation are provided in Darmstadt et al. 2009, Table 9.

A framework to consider for development of OR efforts of MH care is that based on the three-delay model as depicted by Lawn et al. 2009 (Figure 5). This enables grantees to see quickly the steps leading to use of needed care on a timely basis.

Potential model papers for OR efforts include Hodgins et al. 2009 and MacPherson et al. 2010 regarding improving access to use of MNH services in Nepal and Rajbandhari et al. (2010) regarding feasibility of introducing misoprostol into the Nepali services.

Steps to improve the OR portfolio:

1. Identify specific innovation grants where focused OR questions could be examined in more depth, and provide necessary support to effectively generate data to answer those questions. This may be Jim Foreit's scope of work.
2. Review the overall guidelines for the CSHGP to ensure that grantees are oriented toward the critical issues that stakeholders are interested in with regard to implementation (not effectiveness), collecting the right indicators at the right levels, and clearly linking their inputs, activities, outputs and outcomes. Support grantees to publish their work in peer-reviewed journals.
3. Engage in meetings with a broad audience (e.g., CORE sits on the PMNCH partnership), but for future efforts, succinct reports that are accessible to outside groups is much needed (website, policy briefs, published articles).

Other recommendations for CSHGP/USAID consideration:

1. **The Institute for International Programs' Catalytic Initiative (CI) has guidelines for M&E aimed at child survival, which may be useful to adapt for the MNH focus (Gilroy et al., undated).** As these guidelines state: "Documentation of program implementation and the contextual factors that may affect child survival are essential components of any evaluation effort, but are particularly important for multi-country evaluations aimed at assessing the effectiveness of specific public health approaches. The results of such evaluations contribute to global learning only if there is a clear description of what activities were implemented, how, and at what level of quality. Even clearly-defined global strategies or approaches will be implemented in different ways in different settings, and these differences must be carefully described in order to understand variations in program results." (page 2, undated)

   Such documentation of context and implementation could be improved for the ongoing projects (through continuous measurement of inputs and outputs, along with outcomes) although many of the completed projects do not have the information needed.
2. Especially with regard to MH, the know-do gap is large, given the near impossibility of measuring maternal mortality ratio (MMR) change. There is, however, an evidence base for the effectiveness of single MH interventions although there are few indicators available and used for these interventions. There is now an effort, led by MCHIP with WHO, to include MH indicators in international guidelines. These indicators include: use of uterotonics post-delivery (one component of AMTSL, not the three tasks that require additional cumbersome steps for reporting), availability of magnesium sulfate ($MgSO_4$), percentage of cesarean sections (population level), and percentage of stillbirths. Other MH indicators are being drafted now that will need to be field tested for usefulness. NGOs could participate easily in such an effort depending on the packages of interventions in place.
3. CSHGP has focused relatively narrowly on MNH as interventions to reduce mortality. Other themes that aim to improve the health and quality of the lives of mothers and children are very likely to require future inputs from groups outside the public sector and may be a niche for NGOs. Themes that come to mind include the disrespect and abuse of service providers

(now being explored by USAID through the Translating Research into Action [TRAction] project with advocacy efforts through the White Ribbon Alliance), mental health of women, decreasing of partner violence in relation to pregnancy and childbirth, and improved early child development.

Conclusion

In conclusion, a learning agenda must begin within CSHGP before lessons can be brought to the table of international discourse. To initiate this process, consideration should be given to decreasing the amount of descriptive information collected from grantees over the life of the project and increasing the analytical and interpretive information per project. Obviously, more analytical thinking beginning at the project development stage through formative research/analysis/writing—followed up at the mid-term and final stages with adequacy surveys that measure project inputs and outputs, and with final evaluation surveys in the last six to 12 months of the project—would be decisive. The last 12 months of a project should be devoted to analyzing what happened and why, and how to communicate these results.

To help develop the specific project questions, define the intervention package and project design, bring analytical skills to bear, and assist with the writing, one possibility is to work with JHBSPH Master of Science students partnered with Master of Science students of a research institution in country. Another is to work with Population Council staff (e.g., Jim Foreit) who have extensive experience on how to develop OR projects, and especially how to write them up (see Foreit et al. with WHO on Writing OR for Policy Makers).

USAID and CSHGP have already begun the process toward becoming a partner in the global MNH dialogue with the OR portfolio—now the emphasis needs to shift from development of these efforts to analyzing and learning from them.

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Tables and Figures

Table 1: Topics of Interest to Stakeholders and Availability of Quantitative and Qualitative Data in Past and Ongoing Projects Reviewed

TOPIC OF INTEREST	STAKEHOLDER QUESTIONS	INDICATORS	PROJECT INFORMATION/COMMENTS
TBAs	▪ Processes of working with TBAs ▪ New roles ▪ Best practice for TBAs ▪ How they link to the big picture ▪ How effective are TBAs? What do they do?	Other standard MNC indicator: % trained delivery attendants	▪ Because of MOH policies TBA information is not incorporated into project reports as shared with the Ministry ▪ Indicator: TBA is not distinguished from any trained delivery attendant ▪ Not key word, cannot distinguish projects working with TBAs ▪ Projects may have qualitative data and number of TBAs trained but cannot easily locate
Postnatal care—PNC within 2 days; PPC within 2 days	▪ Progress achieved in early coverage ▪ Advocacy done but don't know what's happening on the ground ▪ Anticipate vulnerable populations with PNC home visits ▪ USAID priority 2	▪ Rapid CATCH 2008 indicator: PNC to check on newborn within the first 2 days after birth ▪ The indicator for the mother is a key MNC indicator—the projects may or may not include this indicator depending on their project foci	▪ No quantitative information regarding content of PNC/PPC ▪ SNL topics of interest: Lessons learned for improving interactions and effectiveness of PNC coverage ▪ PNC measurement ▪ PNC content ▪ What is the importance of PNC and what progress has been made in achieving increased coverage in early PNC rates?
Delivery kits	▪ Clean birth kit influence on HF deliveries (incentive/ disincentive)	Other STD MNC indicator: ▪ % used clean delivery kit	▪ Effectiveness? (no Cochrane) ▪ Few projects use it as indicator SNL: ▪ What is the influence of clean birth kits on facility-based delivery? (Maybe expand to include counseling and birth preparedness)
Birth preparedness/ complication readiness	▪ Not scaled up. ▪ What is evidence base of effectiveness?	Indicators: birth preparedness; knowledge of danger signs—pregnancy, delivery, postpartum, neonatal danger signs	Nepal has scaled up complication readiness—3 district (1.5 million people) pilots with public sector, built off CSHGP project, GON moved ahead with scale-up but didn't put monitoring provisions in place—not good follow-up. Ideally, would capture tracer behaviors routinely
Coverage with ANC in vulnerable population	Effectiveness	Indicators: ANC, (coverage); IFA, knowledge of dangers signs, clean delivery kit; ENC, cord care, colostrum, delayed bathing	▪ CSHGP projects not designed to determine effectiveness ▪ Population context in DIP "all projects work with vulnerable populations" ▪ Could look at increased use of ANC by comparing coverage of area vs. DHS for area/country SNL: ▪ How effective has SNL been in reaching more vulnerable populations (e.g., poorest or indigenous)? Intervention targeting? Should we be targeting certain sub-groups? ▪ How important is ANC?

TOPIC OF INTEREST	STAKEHOLDER QUESTIONS	INDICATORS	PROJECT INFORMATION/COMMENTS
			▪ ANC platform limited for newborn and woman, but this is an important entry point for other services
Uptake of SBAs	Means to increase uptake? Community mobilization, community participation USAID priority 1: Interest in referral system, including transport, communications, financing issues—need cost effectiveness and contextual factors	Indicators: % trained delivery attendant (SBA not distinguished from any trained delivery attendant)	▪ P. Winch: Measurement of the degrees of community mobilization and different dimensions/types of mobilization in NGO programs/projects is almost non-existent. SNL: ▪ What are lessons learned to effectively implement referral systems for sick newborns? ▪ How do community-based programs influence uptake of skilled birth attendance? ▪ Lessons learned on how to improve quality of care for newborn health at the facility level.
Incorporating proven interventions into a health system	▪ How can danger signs awareness, emergency transport be incorporated into a health system? ▪ How to make the transition from home to facility delivery? Influence on where babies are born over time—from family to govt. program		▪ Scaling up: see Anbrasi Edward regarding Scale Squared Center, Future Generations? ▪ Transitioning from community to facility over time? ▪ Integrating community workers with existing health systems?
Community-level Packages	▪ What drives decision-making for packages and community-level inputs? ▪ Strategies to deliver packages? Characterize choices made for MNH CHWs, TBAs, and families? ▪ Best practices for remote areas (e.g., Nepal MOHP has developed Remote area Guidelines; India is interested)—task-shifting, misoprostol, transport, community midwives, home-based lifesaving skills (HBLSS)		▪ Decision-making regarding packaging not generally articulated ▪ Testing/comparing packages not done ▪ Jennifer Y: Regarding decision-making about packages is based on local needs and ability of the PVO (and partners) to meet them. “A more interesting question, I think, is about the aggregated power of certain combinations of interventions and activities—are there inherent, generalizable efficiencies, or does everything depend on context? Using LiST, one could argue for the relevance of a certain, pre-determined set of interventions to have the most impact, but in reality, that group of interventions may not lead to efficient implementation, given PVO and local context and limited resources—which may result in suboptimal results.” ▪ Document strategies used, who delivers them, what’s been successful—not described ▪ Strategies vary even within districts; document across projects how they handle variability within their project areas.

TOPIC OF INTEREST	STAKEHOLDER QUESTIONS	INDICATORS	PROJECT INFORMATION/COMMENTS
			▪ H Perry's "Building the Current Evidence…" has analyzed delivery strategies for CS; he has data regarding neonatal survival delivery strategies. SNL: ▪ What are lessons learned to effectively implement newborn care using existing front-line workers (within existing health systems)? ▪ Profile of CHWs for newborn programs—get info from Bangkok meeting for matrix ▪ Lessons learned working with CHWs and other front-line health workers (facility and community levels) ▪ What are lessons learned to increase uptake of improved newborn practices at household level?
Cost-effectiveness			Costs of interventions are not captured
CB-HMIS	▪ Do grantees have HMIS systems in place that work well, can be taken to scale? How do communities use data for decisions? ▪ Simplifying forms? Pictorial registers? Vital events? ▪ Verbal autopsies? Death audits? ▪ What do these monitoring systems cost?		▪ Supervisors review last 10 visits the CHW documented when they visit (Nepal). ▪ Review Nepal HMIS by Female Community Health Volunteers (FCHVs) (Nepal–FCHVs meet semiannually to report data) ▪ 21 of 36 projects have CB-HMIS according to CSHGP's data system
Adolescent pregnancy			KPC survey may have demographic data

Table 2: Number and Definition of MNH Indicator Reporting, Completed CSHGP Projects

INDICATOR	# OF PROJECTS* (N=17)	INDICATOR NOTES/DEFINITION
Skilled Birth Attendant: % of children age 0–23 months whose births were attended by skilled personnel	16	HealthRight Kenya reported for children 0–11mo only
Maternal Tetanus Toxoid: % of mothers with children age 0–23 months who received at least two TT vaccinations before the birth of their youngest child	15	HealthRight Kenya reported for children 0–11mo only CARE Nicaragua's EL value is card-verified
Immed breastfeeding: % of children age 0–23 months who were put to the breast within one hour of delivery	12	AKF India, HealthRight Kenya, and Plan Nepal reported for children 0–5mo only
PNC Visit: % of children age 0–23 months who received a postnatal visit from an appropriate trained health worker within 2 days after births	9	▪ Was not a required (CATCH) indicator for projects starting prior to 2006 ▪ Indicator definition varies among grantees (time periods, locations, personnel)
ANC visits: % of mothers with children age 0–23 months who had 4 or more antenatal visits when they were pregnant with the youngest child	15	# of ANC visits tracked varies among grantees: ▪ 1+ visits: HAI Timor Leste (BL) ▪ 3+ visits: Save Vietnam, AFK India (0–11mo BL, 0–35mo EL), Concern Bangladesh (0–11mo), HAI Timor Leste (EL), Africare Senegal (card-verified), AMESADA Haiti ▪ 4+ visits: HealthRight Kenya (0–11mo), HHF Haiti, HAI Timor Leste (EL), AMREF Kenya, Plan Nepal (0–5mo), CARE Nepal, SAVE Malawi ▪ 6+ visits: Future Generations Peru, INMED Peru ▪ Some reported only card-confirmed visits
Postpartum visit (mother): % of mothers with children age 0–23 months who received a postpartum visit from an appropriate trained health worker within 2 days after the birth of the youngest child	14	Indicator definition varies among grantees (especially time period)
Health Facility Delivery	13	AKF India reported for children 0–11mo at BL and 0–35mo at EL CARE Nicaragua reported BL for one of two project areas and EL for both HealthRight Kenya reported for children 0–11mo only
Danger signs: Pregnancy: % of mothers of children 0–23 months who knew 2+ danger signs during pregnancy	11	# of danger signs varies among grantees: ▪ Any signs: AKF India (0–35mo EL) ▪ 2+ signs: SAVE Vietnam, Concern Bangladesh (includes delivery), HHF Haiti, HealthRight Kenya (0–11mo), SAVE Malawi, Plan Nepal (0–5mo), CARE Nepal ▪ 3+ signs: CARE Incaragua, SAVE Vietnam, AKF India (0–11mo BL), Future Generations Peru, INMED Peru
Danger signs: Delivery: % of mothers of children 0–23 months who knew 2+ danger signs during delivery	5	# of danger signs varies among grantees: ▪ 2+ signs: SAVE Vietnam, Future Generations Peru, Plan Nepal (0–5mo), CARE Nepal ▪ 3+ signs: SAVE Vietnam, AKF India (0–11mo BL and 0–35mo EL), Future Generations Peru
Danger signs: Postpartum: % of mothers of children 0–23 months who knew 2+ danger signs for the mother after birth	9	All reported 2+ dangers signs except Future Generations and CARE Nicaragua (3+ signs) SAVE Vietnam reported both 2+ and 3+ signs HealthRight Kenya reported for children 0–11mo only Plan Nepal reported for children 0–5mo only

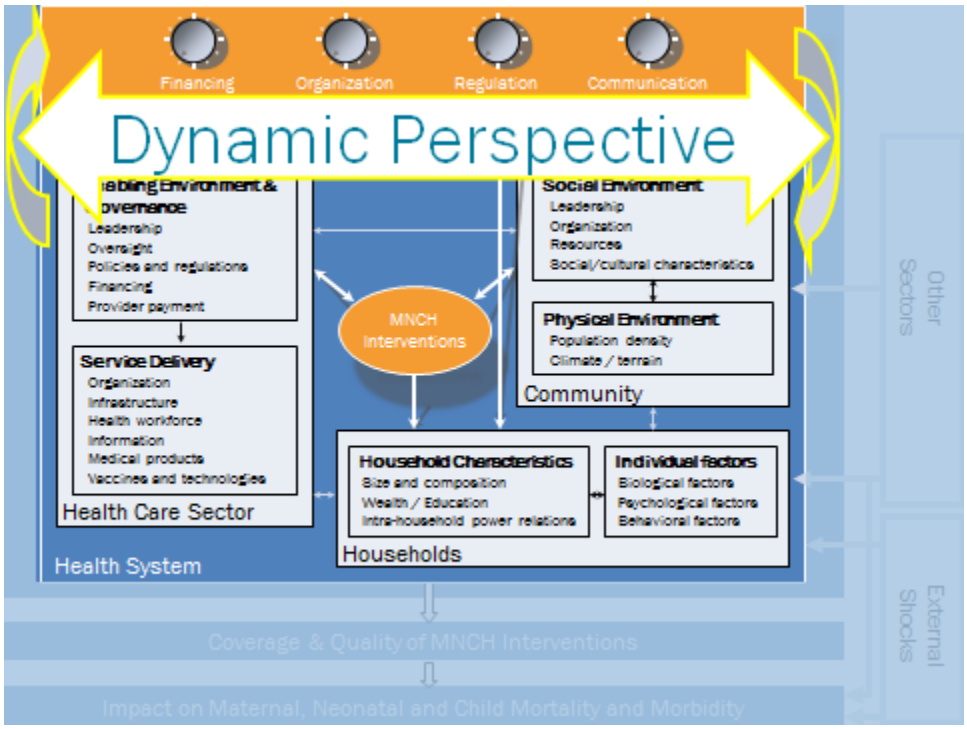
INDICATOR	# OF PROJECTS* (N=17)	INDICATOR NOTES/DEFINITION
Danger signs: Newborn: % of mothers of children 0–23 months who knew 2+ neonatal danger signs	11	# of danger signs varies among grantees ▪ 2+ signs: SAVE Vietnam, Concern Bangladesh, HHF Haiti, HealthRight Kenya (0–11mo), AMESADA Haiti, SAVE Malawi, Plan Nepal (0–5mo), CARE Nepal ▪ 3+ signs: CARE Nicaragua, SAVE Vietnam, AKF India (0–11mo), INMED Peru
Birth plan	6	
Colostrum: % of children 0–23 months who were fed colostrum after birth	3	2 additional grantees incorporated colostrum information into their immediate breastfeeding indicator
Delayed bathing	4	1 additional grantee incorporated delayed bathing info into their drying/warming indicator The amount of time before bathing varied among grantees
Immediate drying/warming: % of children 0–23 months who were dried and wrapped with a cloth or blanket immediately after birth	4	Plan Nepal incorporated delayed bathing into their drying/warming indicator
Clean cord cut: % of children 0–23 months that had clean cord cutting at the time of birth	4	▪ SAVE Vietnam and CARE Nepal only reported the indicator for home deliveries ▪ AMESADA Haiti report a clean cord cut OR delivery kit as one indicator
Clean delivery kit: % of mothers of children 0–23 months who used a clean delivery kit during the birth of their youngest child	4	▪ SAVE Vietnam and CARE Nepal: only reported the indicator for home deliveries ▪ AMESADA Haiti report a clean cord cut OR delivery kit as one indicator—included in Clean Cord Cut count

Table 3: Description of Project Approaches

1. Quality improvement in first-level health facilities	Any activity that involves training of health facility staff in technical areas, improvement of health facility and/or district management capacity, and/or improvement of logistical capacity or essential supplies.
2. Establish/strengthen community governance groups	Governance groups are organized by the local community, by self-volition or by a governmental mandate, to provide accountability for health and development activities. Generally, a governance group represents various constituencies within the community and serves to create awareness about health services and entitlements, develop a community health plan, maintain health information board and calendar, analyze key issues and problems pertaining to health, and provide feedback to relevant functionaries and officials. Examples of governance groups include village development committees (included if they deal with health), village health committees, dispensary health committee, neighborhood health committees, and health facility management committees.
3. Interpersonal behavior change achieved through: a. Health education outreach from community and faith-based leaders b. Peer support groups and/or c. Home visits by CHWs or volunteers	a. Outreach: Community outreach activities oriented around the provision of health information, education, and communication to an individual for the purpose of improving health-related behaviors. Included here is such work as religious leaders who provide health information and counseling to members of their religious community. Village health theatre may also be included if there is individual contact regarding health issues. Also, meetings of selected community members for health education are included here. b. Peer support groups: Peer support groups are gatherings of neighbors, friends, colleagues, or other peers who may or may not have previously known each other. Participants meet regularly for a period of time to support one another in taking desired actions. When they come together they meet as equals. Peer support groups are used when barriers to change are particularly high, or the actions you want to bring about are numerous or complex. Peer support groups have also been called solidarity groups, circles, and community groups. Examples of peer support groups frequently used in MCH projects include mother-to-mother support groups, women's groups, grandmother's groups, care groups, leaders groups, breastfeeding support groups, men's groups, etc. c. Home visits: Home visits for health education, generally done by local inhabitants who are given a limited amount of training to provide specific basic health and nutrition education (health promotion, health prevention) to women and children. They may be volunteers or receive a small stipend. They are not civil servants or professional employees of the MOH nor do they work full time. Visits for health education might be delivered by CHWs, community health volunteers, Care Group volunteers, or health hut volunteers.
4. Provision of health care service at outreach points outside a facility	Community outreach activities include those health service oriented outreach events and activities organized by health facilities or other institutions to provide services. These activities are distinguished from mass media events because they provide a means to increase individual contact with health information and services. These events include well child clinics that take place in the community, immunization camps, child health days, integrated measles/malaria campaigns, or other types of campaigns, rally posts, or health days.
5. Community-based treatment by CHWs	Trained community health agents are generally local inhabitants with drug kits for one or several diseases that make house visits, provide the ill child with a first dose of treatment and possibly accompany families to the clinic. S/he is accessible in his/her home for children requiring immediate care and treatment.
6. Local media/social communication	Use of local media approaches—signs, radio, megaphones, theater.
7. Introduction of new medicines	PVOs participating in the CSHGP have been instrumental in introducing and rolling out state-of-the-art new products and technologies such as zinc and the new ORS, for the treatment of diarrhea; artemisinin-based combination therapies (ACT) and long-lasting insecticide nets (LLINs), for the treatment and prevention of malaria.

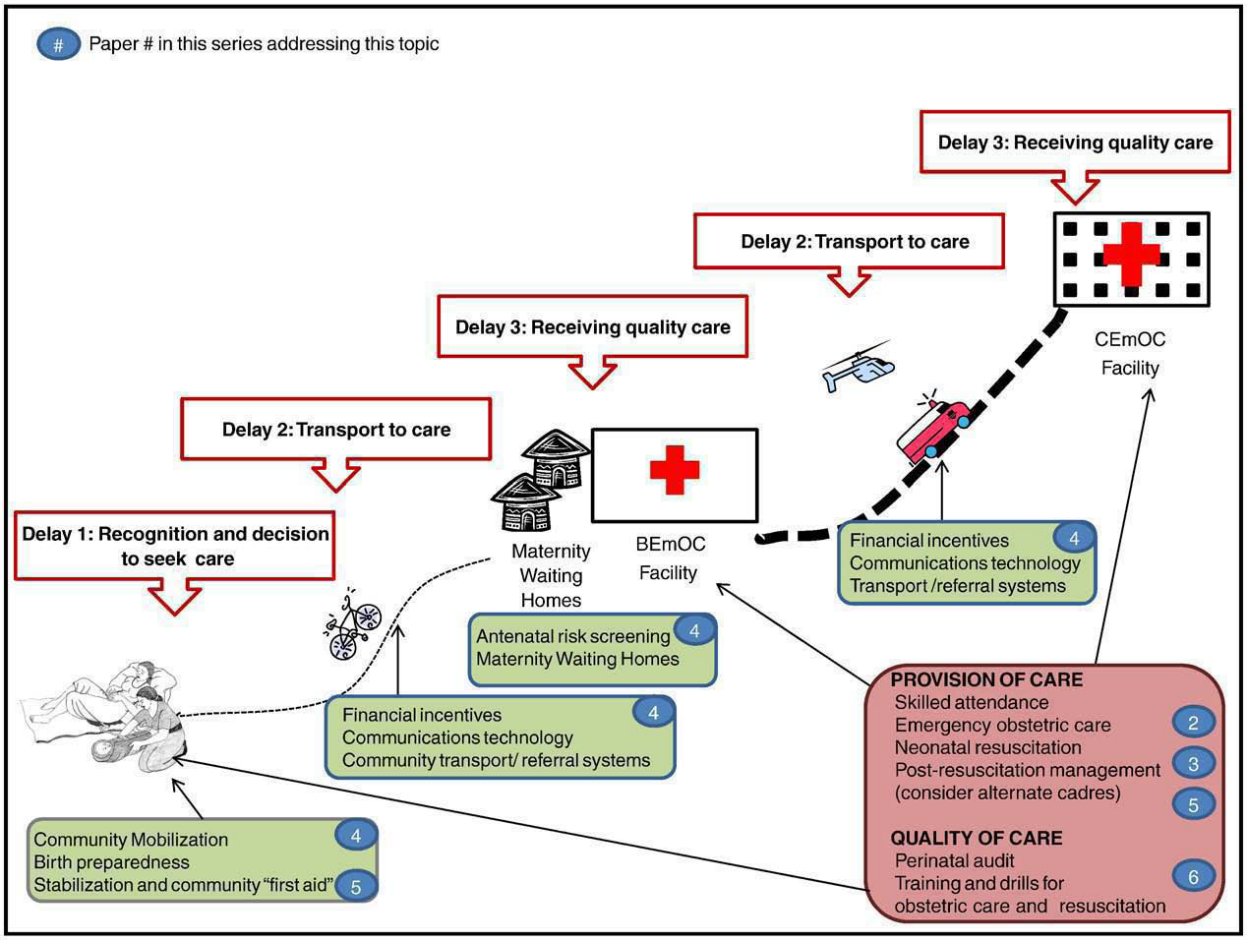
Context (what do we know)—population, rural/urban, post-conflict, literacy of mother, education of husband/wife, other projects in area, other illnesses that affect mother/newborn (e.g., AIDS, TB, malaria), HDI/GDP, Road –paved/network, population density, case load for SBA and for CHW.

Figure 4: M&E Framework—Health Systems Strengthening



Source: Ergo et al. 2011

Figure 5: Cascading OR Framework—Reducing Delays to Emergency Obstetric and Neonatal Care



Source: Lawn et al., page S13, *IJGO* 2009.

Annex 1: Findings from the Literature Review Regarding Community-Oriented/Based Interventions or Intervention Packages

COCHRANE REVIEWS

Given that most maternal and newborn deaths (intrapartum stillbirth and newborn deaths) in low-income, high-mortality countries, occur around the time of birth and immediately thereafter, three Cochrane reviews are instructive that focus on death during that period and the evidence of the effectiveness of community means and packages for reducing those deaths. They include a review of lay health workers (Lewin et al. 2010), integrated community packages (Lassi et al. 2011) and training of TBAs (Sibley et al. 2011).

In brief, the Cochrane review authors conclude the following:

1. There has been significant impact on stillbirths, perinatal deaths, early neonatal deaths and total neonatal deaths through integrated community packages, though the number of projects that can show these effects are few (evidence is of moderate quality). According to the Lassi et al. review (2011), the most successful integrated community packages "were those that emphasised involving family members through community support and advocacy groups and community mobilisation and education strategies, provision of care through trained CHWs via home visitation, and strengthened proper referrals for sick mothers and newborns."
2. Lewin et al. (2010) found that there is low quality evidence for lay health worker involvement in reduction of child morbidity, and child/neonatal mortality and increasing care-seeking for childhood illnesses, but moderate quality evidence in LHWs' effectiveness in promoting immunizations and increasing breastfeeding.
3. TBA training to reduce peri-neonatal mortality is promising when combined with improved health services but more studies are needed to show impact. Sibley et al. (2011) conclude that … "recent studies show that providing TBAs who have been previously trained in clean safe delivery and basic neonatal resuscitation techniques (mouth-to-mouth ventilation) with additional training in the initial steps of neonatal resuscitation and bag-valve-mask ventilation have the potential to change the survival advantage for newborns, but more studies that report neonatal mortality outcomes are needed."
4. Both Lassi et al. (2011), and Sibley et al. (2011) found that the integrated community packages or additional TBA training increased referral for illness/acute maternal complications.
5. Impact on maternal mortality has not been shown with lay health workers, integrated community packages or TBAs. One major problem contributing to this result is the need for very large sample sizes required to show significant change, a dilemma that all MH projects face and the primary reason behind the inability to know what works to reduce the MMR in various settings.

OTHER SYSTEMATIC REVIEWS

1. **Access to intrapartum care:** Lee et al. (2009) show the most common obstacles to seeking obstetric care include financial barriers (50%), challenges with transport (37%), and distance (37%) based on an analysis of DHS data from 41 countries. As the authors state, social factors may influence the decision to seek care, such as lack of knowledge about seriousness of complications or where to receive services, requiring permission from family decision-

makers, and cultural beliefs that may prevent the removal of the mother or newborn from the home. Unavailability and high costs of transportation, poor road conditions, and time to arrange transport may increase the time to reach a health facility. A meta-analysis of programs providing community mobilization to overcome these barriers, with a moderate level of evidence, resulted in a two-fold increase in institutional births and prevented one out of three early neonatal deaths, cause not specified.

Lee et al. define community mobilization as "a process of enabling people to organize themselves, recognize opportunities, identify their collective potential and utilize available resources to realize a shared goal through unified actions. Strategies to 'mobilize' communities are diverse, and may entail differing levels of intensity of engagement, community involvement and ownership." (page S67) For MNH care, they include approaches to change individual behaviors, increase collective knowledge, and promote broader community action to address major barriers.

Strategies that address specifically financial barriers, community referral and transport systems, and cell phone technologies to increase use of skilled obstetric care were considered promising but require further evaluation of their impact on both maternal and perinatal outcomes, cost-effectiveness, and sustainability (note that Lee et al. was published in 2008). Maternity waiting homes, they found, "may also have potential, although well-designed evaluations are needed to evaluate their effect on perinatal-maternal outcomes and acceptability in different regions. Risk screening, while previously rejected, deserves re-evaluation to determine the potential validity and impact of refined algorithms. New questions need to be asked of these "old" strategies." Page S83.

As the authors repeat from articles dating back at least 20 years, investments need to improve both supply and quality of obstetric services with demand side initiatives to ensure those in need seek and receive the care they need in a timely fashion, and rigorous evaluation is needed of this whole system.

2. **Integration with TBAs:** Byrne and Morgan (2011) found increased SBA use and referrals when TBAs are integrated with formal health systems (e.g., through training and supervision by SBAs, linking SBAs and TBAs through communication systems, defining specific roles for TBAs and SBAs, sharing workload at health facilities). Greatest impact is seen when context-specific barriers to linking women with SBAs, TBAs (e.g., low SBA levels) are addressed.

IMPACT OF MATERNAL CARE

1. Scott and Ronsmans, 2009, reviewed 10 individual studies examining the risk of maternal death with and without a health professional and showed little evidence that giving birth with a health professional reduces a woman's risk of dying, and in some settings it appears to be associated with an increased risk of death. However, these are observational studies and the co-authors caution that the study designs are not optimal in evaluating impact.
2. In Matlab, Bangladesh, a further study found the MMR decline witnessed over a 30-year period ending in 2005 was linked primarily with accessing emergency obstetric services in local hospitals as women selectively bypassed the free midwifery system in place (other factors that reduce the MMR are maternal education and total fertility rate) (Chowdhury et al. 2009). Use of the SBA—the WHO-specified approach to reduction of maternal mortality—may be the answer but the evidence is not available to prove this and some evidence actually says this may not be the case.

NEW COMMUNITY-LEVEL TECHNOLOGY INTERVENTIONS

1. **Misoprostol**: Among the major killers of women during the maternity period in low- and middle-income settings, postpartum hemorrhage (PPH) kills the most and relatively quickly. The primary hope to reduce PPH in these resource-poor settings, where women give birth at home, is oral misoprostol. The initial trial by Derman et al. (2006) found that oral misoprostol (600 micrograms) was associated with significant decreases in the rate of acute PPH and mean blood loss. A review by Sheldon et al. (2012) to be published shortly, covering evidence from 51 randomized controlled trials for both prevention and treatment of PPH with oral misoprostol, concludes the evidence justifies use of misoprostol—600 µg orally for the prevention of PPH and 800 µg sublingually for the treatment of PPH. It also stipulates that there is no evidence to support the adjunct use of misoprostol following administration of conventional uterotonics for prevention or treatment purposes.
2. **Chlorhexidine**: In Nepal, a randomized controlled trial of chorhexidine compared with dry cord care and soap and water, found a significant reduction in omphalitis (75%) and a 24% reduction in neonatal mortality when compared with the dry cord care group. Soap and water did not reduce the infection or mortality risk (Mullaney et al. 2006). Papers from the replication trials in Bangladesh and Pakistan have been accepted for publication and they, along with a meta-analysis paper, are expected to be in print sometime over the next several months. There are two other trials underway, one in Pemba (JHSPH) and the other in Zambia (BU) (S Hodgins, pers comm).

DATA QUALITY

1. The research supporting the systematic reviews were culled from (for example, for the intrapartum series in *IJGO*, 2008) medical databases (PubMed, EMBASE, POPLINE, LILACS, African Index Medicus, EMRO; the Cochrane library; selected program report searches (WHO documents, Eldis, POPLINE); conference proceedings; and selected Google searches (Lawn et al. 2009). Grey literature (unpublished reports) could be accessed via POPLINE, Google searching, Eldis, WHO documents, and conference proceedings. Note that researchers used key words for such literature searches, and looked at articles with data analyzed, interpreted and written up; authors of the original articles selected the keywords to describe their work. Typically if there are questions about the data after having read an article or if they need more information for a meta-analysis, authors of systematic reviews may request a data set for manipulation.
2. Data were included from these literature searches that had a controlled trial methodology, defined the intervention, were population-based, and reported mortality impact (Lawn et al. 2009). Other studies that reported the effect of important intermediate or process indicators were also included. The data were graded using the GRADE system criteria that ranks data by study design (randomized trial is high quality; observational studies are low to moderate), and data quality can be lowered or increased depending on limitations, threats to validity, confounders, etc. (Guyatt et al. 2008; WHO 2008)

Annex 2: Projects in Kenya, Haiti and India

Table 1: Kenya projects—HealthRight and AMREF

	HealthRight Kenya 2006–2010	AMREF Kenya 2005–2010
LOE	70% MNC (plus 15% HIV and 15% Malaria)	40% (plus 40% Malaria and 20% HIV)
Partners/Other projects	▪ Primary implementing partner: District Health Management Teams (DHMTs) ▪ Local community-based organizations (CBOs) and faith-based organizations (FBOs) for BCC ▪ Pfizer: Maternal Waiting Homes (MWHs) and strategic behavioral communication (SBC) activities ▪ FilmAid International: educational videos ▪ Project CURE: medical supplies ▪ Population Services International (PSI): LLINs ▪ Wharton International Volunteer Project: CHW study ▪ APHIA II: HIV testing and treatment program in North Rift Valley	▪ MOPHS ▪ Ministry of Education (MOE) ▪ USAID Mission ▪ Academic institutions (The Great Lakes University of Kisumu and Karolinska Institute in Sweden) ▪ NGOs (Médecins Sans Frontières [MSF] Spain, Academic Model Providing Access to Healthcare [AMPATH], AIDS, Population, and Health Integrated Assistance [APHIA] II)
Population/# Admin Units	**LOCATION:** Greater West Pokot, Rift Valley Province (at start of project, it was one district but during, it was subdivided into two separate districts—West and North) Serves excluded and geographically isolated populations (both settled and semi-nomadic communities) in five divisions focusing on nine HFs (2 hospitals, 4 health centers, and 3 dispensaries) **POPULATION:** Total: 257,083 WRA: 61,699 0–59mo: 48,844 0–11mo: 11,616 12–23mo: 10,603 24–59mo: 26,625	**LOCATION:** 2 of 6 administrative divisions in Busia District, Western Province (13 locations, 50 sub-locations and 312 villages) (during project, redistricting resulted in one division being in Samia district) 4 hospitals, 8 health centers, 23 dispensaries **POPULATION:** Total: 215,384 (2006) WRA: 49,858 0–59mo: 31,664 0–11mo: 8,987 12–23mo: 6,191 24–59mo: 16,486
Objective/hypothesis	Reduce maternal and neonatal morbidity and mortality ▪ Strengthen the capacity of 9 Greater West Pokot HFs and DHMTs to provide quality MNC, in accordance with MOH policy ▪ Promote adoption of positive MNC, malaria and HIV/AIDS practices in the community ▪ Increase access to, and utilization of, quality MNC services for communities in target area ▪ Strengthen the District HMIS	Contribute to "sustained reduction of child and maternal morbidity and mortality." The specific objectives were: ▪ Increased access to and utilization of MNC services; ▪ Reduced malaria incidence among pregnant women and children under five years; and ▪ Reduced HIV infections among the newborns.

	HealthRight Kenya 2006–2010	AMREF Kenya 2005–2010
Approach/strategy	Establish a continuum of knowledge, access, skills and care from households to hospitals that promotes maternal and neonatal survival and health and to integrate essential HIV/AIDS and malaria interventions. ▪ Establish capacity to perform BEmONC at 4 health centers ▪ Establish capacity to provide CEmONC at 2 hospitals ▪ Build capacity for emergency transfers and mobile clinics to provide key services in communities ▪ Increase community knowledge about MNH issues Framed project activities within the three-delays model: 1. **Delay in deciding to seek care:** SBC activities to mobilize women (and men) to seek facility-based antenatal, delivery, and postnatal/neonatal services as well as recognizing danger signs. 2. **Delay in reaching care:** expanded the locations where essential MNC services are available and brought key services (e.g., ANC and PNC) closer to communities through mobile outreach. In the last two years, the project also improved the referral and emergency transport systems from the community to HF. 3. **Delay in receiving care:** improved HFs' capacity to provide services, through quality assurance (QA)/quality improvement (QI) systems, improving clinical skills and supervision, strengthening health systems (e.g., data and supply chain management) and infrastructure. The first year of PMNH implementation was focused on improving the level and quality of services available at the nine targeted HFs (BEmONC and comprehensive EmONC [CEmONC] signal functions).	The Busia Child Survival Project (BCSP) Project adopted the MOPHS Community Strategy for program implementation. BCSP used the following specific approaches: ▪ Capacity Building: training (14 CHEWs, 23 HF HWs, 910 CHWs, 2 DHMTs), helped establish 50 CHCs and 4 MNC Centers of Excellence ▪ BCC (5*5*5, mother-to-mother support groups, child-to-child school health clubs) ▪ Quality Control and Assurance: DHMTs conduct facilitative supervision using a checklist developed under AMREF's guidance ▪ Health Systems Research (5 studies) ▪ Advocacy (scale up CHW training, MNH curriculum, working group participation)
Interventions: ▪ Policy ▪ Governance groups ▪ Training ▪ Outreach visits ▪ Women's groups ▪ Positive deviance ▪ Home visits ▪ Financing scheme ▪ Mass media ▪ CCM ▪ Other	**POLICY:** Supported the rollout of the nationwide Community Strategy for Level 1 Services in 1 sub-location in each of the 5 divisions targeted (but not in DIP because introduced after project started) Presence in/on: Division of Reproductive Health (MOH) Safe Motherhood Working Group, West Pokot Stakeholders Forum, quarterly NGO/CBO coordination meetings, Health NGO Network of Kenya (HENNET) **MASS MEDIA:** Soap opera-like video series discussing MNC issues in Pokot language, l audiocasette and CD addressing MNC topics by local artist, series of MNC radio talk shows **INCENTIVES/FINANCIAL SCHEMES:** Provision of incentives and recognition for CHWs (upon completion of training), special study	▪ BCC approaches ▪ CHW home visits ▪ Pregnancy registration POLICY: Got MOPHS to accept and replicate CHW training manual There was no systematic effort to include TBAs in the community mobilization effort or to work with them to find mutually agreed roles for the benefit of women and newborns. No data were collected from or about them, but they were active in communities—and there were interviews conducted with TBAs at final evaluation Fathers' groups were planned but not implemented (time/budget)

	HealthRight Kenya 2006–2010	AMREF Kenya 2005–2010
	(Annex 11) reviews of the CHW program in its Pokot districts—including incentives (financial vs. non-financial) **TBAs:** TBAs in two sites transitioned to Birth Referral Agents and provided with training, certificates, and ID badges **OTHER: (e.g., CHWs, Community health clinics)** Mobile outreach clinics Maternity waiting homes Referral system (but transport lacking) Home visits (20,499 by CHWs) Community Health Committees (5: 1/div.) HF Management Committees (9: 1/HF) Also reported on # of people receiving health talks and attending video shows, etc.	CHWs did not receive financial support for their activities, which contributed to the attrition rate Research partnerships with local university
Reasons why interventions/approaches were selected	Difficult terrain and climate, poor infrastructure, and scant public resources have left West Pokot trailing in health and development; for nearly all child survival indicators, the district lags well behind the Kenyan average. Most health facilities in the project location are not able to provide MNC services that meet MOH policy. District providers have received little or no training in focused ANC, current delivery and postpartum practices, ENC, or the integration of HIV/AIDS and malaria control interventions with MNC. Where trainings have occurred, no standardized practice of evaluating provider performance has been established. There is a great need to mobilize community members to seek MNC services and to practice positive health behaviors that promote MNH.	When project was proposed in 2005, MNC indicators were very poor compared to national-level indicators Lack of knowledge among community members and HF staff re: proper MNC; poor infrastructure; etc.—see context info below
Analysis of results:	"There was no change in the percentage of women receiving 4 ANC visits or those with births attended by skilled professionals. This is partly explained by the fact that although the KPC was conducted throughout all five of the Partnership for Maternal and Neonatal Health (PMNH) divisions, the project supported CHWs in only one sub-location of each division (each division may have 4–5 sub-locations). HMIS data collected at the nine facilities supported by the project, shows modestly increasing trends in ANC and skilled deliveries at these facilities (see Table 3 below). However, the FE team also heard from community interviews that some women were frustrated that when they went to the HFs for delivery, they were told to wait and walk around for a while. This led to them delivering on the facility grounds but without a skilled provider. This may also be affecting the survey results."	
Costs		

	HealthRight Kenya 2006–2010	AMREF Kenya 2005–2010
Context ▪ Population density ▪ Roads ▪ Terrain ▪ Systems issues (HR-SBAs per pop in selected areas, HF (pub, priv, NGO) in selected areas, supplies/logistics, supervision, referral sites) ▪ Baseline mortality, nutrition and infection status ▪ Vulnerability of selected population	▪ U5MR: 127/1,000 Live births (LB) (2003) (vs. 115) ▪ MMR: 565/100,000 LB (2003) (vs. 414) ▪ Regional insecurity mainly due to tribal and ethnic differences ▪ Post-election violence in early 2008 (~3 months) ▪ Few and poor roads—many impassible during rainy season, weak communication system ▪ Poor (53%), absolute poverty (35%), low literacy levels (~70% women in district vs. 78% in country), semi-nomadic lifestyles, language, and remote village locations ▪ 31.6% of children under five are stunted; 7.7% are wasted; and 24% are underweight in province (2nd highest in country) ▪ In the Rift Valley, maternal deaths represent 27% of all deaths for women ages 15–49, compared to 15% across Kenya (2000) ▪ KDH state premature delivery, neonatal sepsis, asphyxia, respiratory distress, and hypothermia as primary causes of neonatal mortality (2007) leading causes of inpatient mortality: malaria, anemia, tuberculosis, pneumonia, dehydration, HIV, gastroenteritis ▪ In Year 3, changes in the national health policy contributed to progress in HFs ▪ >95% of women in the district undergo type III FGM (focus on obstructed labor, women's preference for home delivery with TBA) ▪ The national policy on delivery of health services in the community has clearly stated that TBAs should not be trained in delivery services. ▪ District's health data system is poor (underreporting, lack of uniformity, miscoding, etc.) ▪ Government of Kenya (GOK) has recently made delivery services free at all health facilities (July 2007) ▪ High level of male dominance ▪ No access to MOH/PVO tools and training curricula ▪ Little supervision/support for MNC services ▪ Many HFs are understaffed (defacto hiring freeze exists) ▪ Only two health centers can provide emergency transfers to a hospital ▪ Neonatal integrated management of childhood illness (IMCI) algorithms are not understood ▪ Providers, even at the hospital, remain focused on risk profiling.	▪ U5MR: 144/1,000 LB (2003) ▪ MMR: 680/100,000 LB (2003) ▪ Of 210 constituencies in Kenya, Butula is ranked 168th poorest and Funyula 161st ▪ In both divisions, >67% earn <US $1 per day ▪ One major road (Trans-African Hwy)—helps with HIV transmission ▪ More boys than girls attend school and more boys (76%) than girls (55%) are literate ▪ HF delivery costs were reported to be at the time of the FE ▪ Many roads are impassible in the rainy season ▪ Tertiary referral facility is far and patients must cover their own transport costs ▪ None of the facilities provides BEmOC. The project area has only six VCT sites and seven facilities offering PMTCT services ▪ High level of male dominance ▪ CHW training was delayed while HFs were improved ▪ Piloted the Community Strategy but implementation delayed while waited for clarification on certain points ▪ Post-election violence (5 months in 2008)

	HealthRight Kenya 2006–2010	AMREF Kenya 2005–2010
	capacity of human resources/training and equipment, supplies, and medicines, lacking to provide EmOC across health centers ▪ Due to its geographic distance from Nairobi and ongoing stereotypes in Kenya about the Pokot people, there continues to be a lag in transfer of information, supplies, and equipment from central departments to the District.	
Scaleup plan	Piloted many aspects of the national Community Strategy and because of success, the DHMTs have received additional funding support from the MOH for the rollout of additional CHW units. 2010 funding supported an additional 11 community strategy units and 2011 funding increased to support 24 more units or 1,200 CHWs. Developed a CHC curriculum, based on the community strategy policy documents that will be shared at the provincial and national levels. CB-HMIS tools for non-literate CHWs will be presented to the national level for consideration.	Successful in scaling up CHW training and supervision at the direct request of the MOPHS. Lessons learned while piloting the Community Strategy will be used when implementing it elsewhere in Kenya Worked with the MPPHS to develop a national MNH training curriculum. AMREF is using lessons learned in a new program in Lamu.
Sustainability	During the final year of the project, handed over most project implementation duties to DHMTs and HFs. Plans have budgeted for continuation of all activities and staff in the district annual health plans. HR also applied for additional funding and projects. So far they have received continued funding for malaria and a small HIV grant. They are also hoping to work as a subcontractor on the new APHIA project in the Pokot area once it is funded by USAID/Kenya. The PNMH project has tried to address sustainability from the design stage by focusing on interventions that strengthen the existing DHMT activities and supporting implementation of MOH systems and policies. The radio health talk program was so successful that after the series finished, the MOH negotiated for more air time to continue the weekly programs. Participation in the Annual Operational Planning (AOP) process with the HFs and DHMTs has helped incorporate all project activities into district annual health plans. Some of the threats to sustainability identified include DHMT and HF staff turn-over, delays in DHMT funding from the national level, limited DHMT funding and CHW retention. Key examples of sustainable activities include:	The phase-out plan was to turn responsibility for program activities over to the DHMT, CHCs and communities themselves. Many in the project area hoped another NGO would continue program activities in the area. A phase-out plan was never really part of the project because the MOH's demands kept changing. Objective targets were exceeded in the *health status indicators*. It is expected that many of these will be sustained because of increased women's and community receptivity to ANC, SBA and PPC. This assumes that the health facilities are properly staffed and continue to treat the women and their families with respect. As indicated previously, cost, distance and transport remain major barriers to SBA. It is not clear that the same will be true for exclusive breastfeeding (EBF), especially because the EBF BCC was part of HIV messages and this resulted in some confusion about who should EBF. Since there remain many cultural and gender beliefs about infant feeding, it is not clear that this will be sustained. The DHMT has the skills to train new staff and provide supportive supervision, but may not have the transport and/or time without the support of BCSP. The MNH Centers of Excellence will continue to be resources but will

	HealthRight Kenya 2006–2010	AMREF Kenya 2005–2010
	▪ Re-establishing the District Reproductive Health Training and Supervision Teams ▪ Supporting the implementation of CSP ▪ Implementation of a QA/QI system at target hospitals and health centers ▪ Development of an Excel-based database for the HMIS ▪ Establishment of MWHs ▪ Sustainable Capacity Building Strategies Some activities continue to present challenges to sustainability, including: ▪ **Mobile outreach clinics** (lack of district vehicles and budgets for fuel) ▪ **CHW Program** – Concern about ability of DHMTs to provide the support and leadership needed to keep the CHWs motivated. Some observed that CHW attendance at monthly meetings decreased after the training ended and lunches were no longer provided. – Other groups working in the country have begun to offer CHWs stipends (although not HR). (1) not sustainable and (2) HR losing CHWs to groups with money. – Orientation of CHCs and Health Facility Management Committees (HFMCs) in 2010 to provide ongoing maintenance of CHW kits after project ends.	need maintenance and upgrading over time. Most of the CHCs interviewed in the FE said they would continue to meet but probably not as often.
Recommendations	▪ DHMTs develop a strategy for better maintaining infection prevention practices (e.g., MNC equipment) ▪ Work with the DHMTs to address remaining supervision issues and explore mechanisms to motivate staff to improve their performance. ▪ Review infrastructure requirements for facilities and adequacy for decentralized drug supply system. ▪ Encourage DHMTs to continue strengthening HFMCs in line with child survival guidelines for representation of all community units served by the HF and strengthen their ongoing activities in support of HFs. ▪ Work with DHMTs to address CHW transportation needs. (e.g., bicycles via income generation projects). ▪ Work with DHMTs to assure AOP funding of outreach and plan for sustaining monthly outreach clinics. ▪ Continue assisting CHCs and communities in developing	Sustainability study 3–5 years after the project ends Include TBAs somehow Share scale-up of CHW training, community mobilization process, special studies

	HealthRight Kenya 2006–2010	AMREF Kenya 2005–2010
	emergency transport plans. ▪ All facilities institute "pull system" of medical supplies and essential drugs to avoid stock-outs. (There are four HFs that have not yet implemented the system.) ▪ DHMTs need to provide drug supply chain training and TA to assure that all HFs have operable pull systems.	

Table 2: Haiti projects—HHF and AME-SADA

	HHF Haiti 2004–2009	AMESADA Haiti 2005–2009
LOE	60% MNC (plus 20% breastfeeding and 20% child spacing)	50% MNC (plus 30% acute respiratory infection, 10% diarrhea, and 10% immunization)
Partners/Other projects	▪ Ministry of Public Health's (MSPP's) Grand Anse Health Department (DSGA) which coordinates four Unité Communale de Santé (UCS) ▪ Sisters of the Good Shepherd (SGS), an established, private health provider within the KOMBIT Project area. ▪ Other local CBOs will function as implementers in areas where HHF is not implementing its mission funded CSP. HHF works with a number of other organizations in the area : ▪ Hospital Saint Antoine, the only referral hospital in the region, which houses the PEPFAR Counseling, Testing and Treatment Center for HIV Grand Anse (HHF coordinates its HIV services with them) ▪ CARE: new programs on ITNs and support of people living with AIDS. HHF is providing logistical support for this project ▪ Catholic Relief Services (CRS): general relief and maternal child nutrition support for the Grand Anse ▪ Missionaries of Charity hospice facility for families ▪ Medicin du Monde support Department of Grand Anse health initiatives ▪ Foundation pour la Santé Reproductice et l'Education Familiale (FOSREF) provides youth RH services ▪ Gebeau Methodist programs (microcredit, education, FP, rural development) ▪ Jhpiego training in LSS	▪ Service Oeucumerique d'Entraide (SOE): a local NGO that has been working in the peri-urban areas of Fontamara (area of Boulosse/Sous Dalle) to improve the quality of health care services to the local population ▪ MCDI (at start of project): provided technical assistance in the development of the project design (assisted with the DIP, provided tools and training for the baseline assessment as well as the HF assessment) AME-SADA is the only NGO providing health services in the area of Arcahaie/Cabaret. Prior to the child survival project (CSP) grant, AME-SADA had some limited child survival activities. The USAID CSP allowed AME-SADA to expand its services to more beneficiaries and increase sustainability by implementing community-based child survival and MH services AME-SADA worked closely with other NGOs such as: ▪ Concern Worldwide (HIV/AIDS) ▪ UNICEF (vaccination/school health program) ▪ GHESKIO (HIV/AIDS CD4 count) ▪ Management Sciences for Health (MSH) (HEARTH Program/rehabilitation of malnourished children) AME-SADA worked closely with MOH / MSPP operating in agreement with the national health policy. (MSPP provided vaccinations and supplies and staff visits)
Population/# Admin Unit	**LOCATION:** Grand Anse-Jeremie area and nearby regions (Jeremie, Roseaux, Bonbon, and Abricots) Including 8 first-level HFs (dispensary) in the project area **POPULATION:** Total: 171,703 WRA: 37,776 0–59mo: 25,755 (2002 DSGA Health Profile, unpublished)	**LOCATION:** Western Department: 7 rural districts of the municipalities of Arcahaie and Carbaret (Sources Matelas, Belanger, Pont Matheux, Delice I & II, Fond Baptiste and Léger) and sections of Port-au- Prince (Saint-Anne, Cité l'Eternel, Village Dieu and Fontamara) **BENEFICIARIES:** Total: 120,000 WRA: 75,000 0–59mo: 45,000 **POPULATION:** Total: 300,000

	HHF Haiti 2004–2009	AMESADA Haiti 2005–2009
Objective/hypothesis	The goal of the five-year Child Survival project is to reduce maternal and neonatal mortality in the Grand Anse-Jeremie area and nearby regions. HHF supports this goal by improving family, community and clinic-based maternal and newborn services, including support for child spacing and breastfeeding. 1. Increase use by women and men of voluntary practices that contribute to reduced unintended and mistimed pregnancies 2. Increase use of key maternal health and nutrition interventions 3. Increase use of key child health and nutrition interventions	Main project goal: to reduce morbidity and mortality and to improve health status of children under five and WRA in the program area. This has been achieved through the following objectives: 1. Improve MNC services. 2. Improve quality of pneumonia assessment and case management. 3. Improve quality of diarrhea assessment and case management. 4. Improve access to and use of immunization services for infants. 5. Train and empower community volunteers through establishment of Care Groups. In addition, AME-SADA achieved the goal of increasing the capacity of local partners and communities to successfully plan, implement, monitor, report on, and evaluate community-based and household child survival and health services. This was achieved through reaching the following objectives: 1. Increased technical and management capacity of local partners; 2. Increased appropriate and accessible care information from the community and at-risk households; 3. Improved assessments of quality of care at the level of the individual beneficiary; 4. Improved partnerships between health facilities, health care providers, and communities in the program area.
Approach/strategy	The KOMBIT project had 4 major strategic concepts to achieve its main results: A) The BCC program was focused on danger signs in pregnancy (prenatal, delivery, and postpartum) and the neonatal period, BF and natural FP. Few key messages were developed for main themes such as pregnancy, danger signs, HBLSS actions, evacuation, and promotion of institutional deliveries. FP activities were mainly related to natural FP, promoting lactational amenorrhea method (LAM) and Standards Day Method (SDM). Nutritional messages for the newborn included early initiation of BF and EBF for the first six months of life. Primary target audiences were WRA, mothers, and pregnant women. The dissemination of messages was done through home-visits, education of organized community-based groups (mothers and fathers clubs), community health fairs, and special events such as radio broadcasts, soccer tournaments, mother's day, and mobile theater troupes. B) Improve quality of MNC at community and obstetric complication management at peripheral clinical levels. This was done through the implementation of HBLSS by health agents (HAs), community leaders and TBAs. Likewise, there was training on first aid for prenatal, delivery, postpartum and newborn complication care for	AME-SADA's major strategy to improve the quality of MNCH was to increase access to and use of basic health care services for pregnant women and nursing mothers and children under five through the training and empowerment of frontline health care providers and community volunteers, and expanded involvement of community members and their leaders in program planning. To facilitate the implementation of the CSHGP, AME-SADA expanded its previous network of rural outpatient clinics. Each clinic provides health coverage to a specific geographic sub-zone. The project has addressed some of these obstacles by using the care group models, and the BCC approach to transmit key health messages. Another strategy used was home visits by the CHWs and the TBAs to increase access to health services to the communities distant from the HFs. Strategies to improve MNC services: ▪ Training for TBAs and HAs on danger signs warranting emergency care for mother or newborn ▪ Training HF staff in MNC services

	HHF Haiti 2004–2009	AMESADA Haiti 2005–2009
	health personnel at all 8 dispensaries (first level facilities) in the KOMBIT project area. C) Improve access to MNC. Project activities to improve access included early identification of pregnant women in the community by TBAs and HAs, development of a community-based evacuation system for obstetric and newborn complications, early identification of danger signs by community resources, specially TBAs, provision of 6 remote sites and the hospital maternity unit and MWH with mobile phones for 24-hour monitoring of pregnancy complications and advice for community-based stabilization, care and transport arrangements. D) Develop links between community structures and peripheral health services through improvement of communication venues, collaborative health activities, and health information sharing. A great deal of program effort was devoted to demand creation, basically with BCC efforts on the three delays that contribute to maternal deaths as deciding to seek care, reaching care and receiving care. The program increased community understanding of the need to use health care services during pregnancy, childbirth, and the postpartum period. The communication program used simple messages to educate individuals and communities on what needs to be done, what could be done, at what level of the system (community or facility), and when. HBLSS, adapted to Haitian reality was the vertebral column of both, improving awareness and improving health care services, complemented by a highly effective community-based evacuation system. The project's first two years will focus on baseline assessments, the development of a coordinated plan to address the findings of these assessments, and training programs in the major project strategies and methods to begin implementation of services in the Commune of Jeremie and, to the extent possible, in adjoining areas. Years 3–5 will expand services to all KOMBIT areas and fully implement the scope of interventions. See table below ("HHF Strategies" for more detail.)	▪ Training for HAC (HA coordinator) in supervision of HAs and TBA child survival activities ▪ Introduction of incentive system for TBAs to accompany pregnant woman. ▪ Establishment of care groups to educate pregnant woman, Mothers, and their families on newborn care practices and HF services ▪ Establishment of recording system for TBAs ▪ Establishment of regular schedule of home visits by HAs ▪ Training and empowering community volunteers through establishment of Care Groups ▪ Using Model Care Groups to encourage pregnant women to obtain tetanus toxoid immunization ▪ Training of HAs and TBAs in Key Family Practices to facilitate the introduction of, and coordination of, Community and Household IMCI activities. They in turn, supported the introduction and development of the Care Group Approach for training and empowering local women volunteers to integrate the community into child survival programs. ▪ Increasing technical and management capacity of local partners ▪ Increasing appropriate and accessible care information for the community and at-risk households ▪ Improving assessments of quality of care at the level of individual beneficiary ▪ Improving partnerships between health facilities, health care providers, and communities in the program area
Interventions: ▪ Policy ▪ Governance groups ▪ Training (package used) ▪ Outreach visits ▪ Women's groups	Key activities: ▪ Establishment of a community-based info system to detect, document and review maternal deaths (the system was extended to newborn mortality during the last year of program implementation) ▪ Implementation of a community model to improve identification of maternal and newborn complications (HBLSS) coupled with a	Goals were met through interventions provided by local CSP clinic staff, HAs, and TBAs: ▪ Trained 124 HAs and 355 TBAs—of whom 5 HAs and 86 TBAs were trained to provide the same services that AME-SADA staff were provided. ▪ More than 300 Care Group volunteers were recruited and trained ▪ Census-Based Impact Oriented (CBIO) Methodology (and the

<table>
<tr><th></th><th>HHF Haiti
2004–2009</th><th>AMESADA Haiti
2005–2009</th></tr>
<tr><td>▪ Positive Deviance
▪ Home visits
▪ Financing scheme
▪ Mass media
▪ CCM
▪ Other</td><td>community-supported emergency evacuation system.

67 out of 72 communities (93%) formed emergency evacuation committees during the life of the project. Committees meet monthly to raise funds for women and newborns that needed urgent hospital care, learn warning signs of emergencies and take action.

Maternal Mortality Review Process: See FE pages 25–27 for info.

The system is simple, in terms of structure and operation. Anecdotic information establishes that KOMBIT personnel uses between 5 to 10% of time to maintain the system. The system is not flexible since does not accommodate any disease or health condition, but rather concentrates on the most prevalent causes of maternal mortality. According to our qualitative survey, the system is well accepted by people involved with it, demonstrated by their willingness to continue with the system once KOMBIT operations ceased. The system needs to be further evaluated on its sensitivity and predictive value positive (PVP), which is out of the scope of this evaluation. Likewise, it will be useful to determine the cost of the system to determine its applicability to expansion.

Not sure of #s trained—according to the CHW training table (following this table), 55 were trained but do not differentiate between HAs and TBAs.</td><td>integration with the Care Group strategy)
▪ Mothers' Clubs (160 formed)
▪ COZAM Clubs (BF supporting committee clubs)
▪ Bi-monthly Rally Posts, which are used to educate the community, to provide vaccination for children and pregnant women, to monitor growth of infants and children, to counsel families on nutrition, hygiene, water purification and most of all to review danger signs for pregnant women, postpartum women, infants and children.</td></tr>
<tr><td>Reasons why interventions/ approaches were selected</td><td>Technical design and interventions were tailored to high MMR, newborn mortality rate (NMR) and low SBA/high home deliveries</td><td>Interventions (stated above) were selected to address existing barriers (stated below).</td></tr>
<tr><td>Analysis of results:</td><td></td><td></td></tr>
<tr><td>Costs</td><td></td><td></td></tr>
<tr><td>Context
▪ Population density
▪ Roads
▪ Terrain
▪ Systems issues (HR-SBAs per pop in selected areas, HF (public, private, NGO) in selected areas, supplies/logistics, supervision, referral sites)
▪ Baseline mortality, nutrition and infection status
▪ Vulnerability of selected population</td><td>▪ MMR: 680 (2003 WHO)
▪ NNMR: 36 (2000 DHS)
▪ IMR: 80 (2000 DHS)
▪ HHF has been authorized to work in Haiti since 1988
▪ Have their own outpatient clinic in Jeremie
▪ 8 dispensary-level (periphery) HFs in program area (1 govt, 2 private, and 5 "mixed")
▪ Low SBA (90% plus of home deliveries)
▪ HHF has operationalized its mission through an extensive community-oriented primary care system, including CHWs, health posts, an outpatient clinic, a satellite clinic, a MWH, and a nutritional rehabilitation center.</td><td>▪ MMR: 523 (Western Region)

<table><tr><th></th><th>Nationwide</th><th>Western region</th></tr><tr><td>NNMR</td><td>40.5</td><td>41</td></tr><tr><td>PNMR</td><td>53.3</td><td>67</td></tr><tr><td>IMR</td><td>89.4</td><td>108</td></tr><tr><td>U5MR</td><td>53</td><td>59</td></tr></table>Source: MSPP 2000.

Most of the volunteers are illiterate or have only basic literacy.

In Port-au Prince, the population in the area in which services are</td></tr>
</table>

	HHF Haiti 2004–2009	AMESADA Haiti 2005–2009
	▪ Do not give any demographic/regional info besides mortality rates and baseline assessment results.	provided, is mobile Tropical storms of Fall 2008—beneficiaries migrated out of area, and in spring some new families migrated into the project area Most AME-SADA project areas were located in underserved areas of Haiti.
Scaleup plan	Nothing specific, but "The director of the UCS2 was emphatic on the need to expand this type of project activities to other areas of the Grand Anse-Jeremie region, thus extending the benefit of maternal and newborn health." Recommend disseminating findings at the national level (to MOH and other NGOs)	Other Local NGOs approached AME-SADA staff to request assistance in training their staff and to provide support in other areas of the country. MSPP has adopted some of the reporting forms that AME-SADA has developed.
Sustainability	According to qualitative information collected during final evaluation, KOMBIT partners as well as community members were assertive in state that current activities likely to be sustained after the end of KOMBIT project were related to community mobilization, health education and the evacuation system. HHF stated that the agency will continue to support the evacuation system with the ambulance and its maintenance cost. According to anecdotic information from project management structures, is very likely that all current health agents will be supported after KOMBIT. Currently, no health policy amendments have occurred due to KOMBIT activities and results, nonetheless, the fluidity of communication between HHF and MSPP has increased, and according to Dr. Dady Montinor, UCS2 director, this is an ongoing activity that could in the future influence health policy regarding community-based activities. The areas covered by the Sisters of the Good Shepherd (SGS) are also, in principle, willing to continue. Nonetheless, during the final KPC, these areas showed lower impact in some of the indicators. It seems like community empowerment and community mobilization in areas serviced by SGS will need additional support when project activities end; and it is not clear where this support will come from. The Maternal Mortality Review process, given the importance placed by HHF and UCS2 during the qualitative survey, will likely continue and further become more inclusive of health leaders in the Grand Anse-Jeremie region, thus strengthening the process. Likewise, the institutional collaboration exerted during KOMBIT's, especially between HHF and UCS2, will very likely continue.	No formal sustainability design methodology was used or planned during the DIP. AME-SADA has continued to operate most of their health facilities over the last several years. New activities and systems are simply folded into ongoing operations. AME-SADA is dedicated to continue to work on improving access to better health for mothers and children in the areas which they provide services, and the HAs, TBAs, and volunteer mothers all live in their communities and were recommended by their communities and vowed to continue working after the project ends. AME-SADA developed a stronger partnership with MSPP. AME-SADA currently has a sub-grant from MSH to operate the HEARTH program to rehabilitate malnourished children in certain areas where AME-SADA provide services.

	HHF Haiti 2004–2009	AMESADA Haiti 2005–2009
	Additionally, the project has been instrumental in bringing TBAs' contribution to maternal health to the attention of MOH structures and other stakeholders. At the time of the final evaluation, MOH was taking an inventory of all TBAs active in the region as part of a plan to link them with the formal health system. It is very likely that TBA's role and linkages with the formal health system in the UCS2 region will increase given their value in improving maternal and newborn health demonstrated during KOMBIT implementation.	
Recommendations	See FE pages 34–35.	See FE pages 41–42.
Stated Barriers	Populations of the original and expansion counties received the various interventions in different magnitude, as measured by the time of intervention reception (4 vs. 2 years). HAs in Abricot did not live in the community were supervised by the MOH, while HAs in the other three counties lived in the community and were supervised by KOMBIT. Also in Abricot, they did not have a census-based system, whereas the other three counties did. Baseline levels were already higher (almost 70% prevalence for immediate BF and 60% for EBF) than national and regional averages in KOMBIT's geographical area of influence, due to HHF's existing programs. Likewise, the interventions, as being progressively phased in, had shorter impact in at least two of the areas of influence.	The existent barriers to accessing care that were reported and observed were as follows: ▪ Problems with knowing where to go (10%); ▪ Difficulty getting permission to go (13%); ▪ Getting money to pay for services (82%); ▪ Long distances to a health facility (42%); ▪ Lack of transport (39%); and ▪ Not wanting to go alone (39%). All contributed in some way to the overall status of health services (EMMUS 2000). The recording and reporting systems at the community, HFs and the supervisory levels remain challenging—large amounts of paper, papers were occasionally lost or got wet, lack of staff to enter data, etc. The timely supply of vaccines continues to be a concern Other NGOs in the community offer food and other incentives for services such as vaccinations and attendance at Rally Posts, so potential beneficiaries went to NGOs for services.

HHF Strategies

Quality Improvement strategies

- Train HAs, nurses, and mothers in HBLSS
- Train HAs, nurses, and mothers in Georgetown University's SDM
- Conduct PAHO Neonatal IMCI training for HAs
- Conduct training in prenatal, postpartum and newborn care for personnel at all 8 dispensaries in the KOMBIT project region
- Training in and implementation of the PAHO Perinatal Tracking system
- Training in management of obstetric emergencies for all nurses in the KOMBIT project area
- Conduct interpersonal communication training for personnel at all 8 dispensaries
- Workshop to develop danger sign educational messages based on KPC results

	HHF Haiti 2004–2009	AMESADA Haiti 2005–2009
▪ Continue the reproductive age mortality survey and follow up maternal mortality audit process and facilitate regional maternal mortality reviews committee meetings and recommendation development ▪ Additional training in Child Spacing using Cervical Mucous (CMM) of family planning for KOMBIT partners as well as LAM ▪ PAHO Perinatal software tracking program training with referral and counter referral system training		
BCC Strategies ▪ Expand danger signs in pregnancy and neonatal period messages, and promote BF and natural FP messages to CBOs by training HAs to engage Mothers' Clubs, Fathers' Clubs, local leaders and Mobile Theater Troupes ▪ Community participation (FBOs, CBOs and providers) in development of emergency evacuation plan using local resources and satellite phones ▪ Birth Preparedness and Complication Readiness activities, Village evacuation plan, education on danger signs, increased use of MWH ▪ Mobile Theater Troupes		
Access Strategies ▪ Provide 6 remote sites and the hospital maternity unit with satellite phones for 24-hour monitoring of pregnancy complications coverage and advice for community-based stabilization, care and transport arrangements. ▪ Training of nurses and HAs in pregnancy tracking. ▪ Establish pregnancy records so that home visits are emphasized and adapt maternal postpartum assessments of infection, anemia and BF problems for home setting. ▪ Develop an ambulance service.		

Table 3: India—AKF

<table>
<tr><th colspan="2">AKF India</th></tr>
<tr><td>LOE</td><td>MNC (60% of the LOE and resources), breastfeeding, nutrition, acute respiratory infection, and diarrhea, each at 10%</td></tr>
<tr><td>Implementation partner</td><td>CLICS was implemented by the Department of Community Medicine (DCM) of the Mahatma Gandhi Institute of Medical Sciences (MGIMS)</td></tr>
<tr><td>Population/# Admin Unit</td><td>Approximately 90,000 in 67 villages in the eastern Maharashtra district of Wardha , approx. 20,000 beneficiaries—children under 3 and WRA plus 7,000 adolescent girls</td></tr>
<tr><td>Objective/hypothesis</td><td>The goal of the project was to bring about sustainable improvement in the health status and well-being of the children under the age of three and women of reproductive age (15–44 years).
1. Provide affordable, high-quality health care through effective partnerships at the village level;
2. Build the capacity of coalitions of local partners to sustain child survival activities and health gains;
3. Refine and test a social franchising model for the delivery of child survival interventions; and
4. Document, disseminate and share key program lessons and results to facilitate adaptation, replication and policy advocacy. (these are delivery mechanisms)
5. No epidemiological profile provided
6. No package of services provided
7. Following MTR focused on maternal , newborn health (60% of the LOE and resources), breastfeeding, nutrition, acute respiratory infection, and diarrhea, each at 10%;</td></tr>
<tr><td>Approach/strategy</td><td>Double-pronged strategy—awareness building and behavior change built on a strong foundation of community mobilization and organization.
By launching community health clinics and encouraging the formation of village CBOs, CLICS was able to establish a close working relationship with project villages. With a high degree of community ownership, the project built the capacity of the local partners to identify and address health needs.
1. Social franchising to mobilize communities. The principle of “social franchising” to change communities’ health behaviors and generate demand for health care, especially for the youngest and most vulnerable members of the village. The medical facilities served as the “franchisers” responsible for mobilizing the communities while entering into a contractual agreement with coordinating committees in the individual villages, the “franchisees.” DCM built the capacity of the communities and formed Village Coordination Committees (VCCs) and other CBOs that participate in developing, managing, and sustaining a package of quality and affordable maternal, newborn, and child health interventions that significantly improve the health status of the community, the “social product.” Village Coordinating Committees—The 67 villages have 64 VCCs because a few small, nearby communities have been combined. Social franchising agreements have been signed between MGIMS and all existing VCCs.
2. Establishing and strengthening CBOs, including the VCCs, Self-Help Groups (SHGs), Kishori Panchayats or Adolescent Girls’ Forum (KPs), and the Kisan Vikas Manch or Farmers’ Development Forum (KVMs).

Community-Based Organizations—The three CBOs found in CLICS villages are SHGs, KVMs, and KPs. The number of CBOs by sector as of July 2008 is provided in Table 3.
Table 3: Number of CBOs (by Sector)
<table>
<tr><th>CBO</th><th>Anji</th><th>Gaul</th><th>Talegaon</th><th>Total</th></tr>
<tr><td>Self-Help Groups</td><td>85</td><td>70</td><td>121</td><td>276</td></tr>
<tr><td>Kishori Panchayats</td><td>20</td><td>21</td><td>23</td><td>64</td></tr>
<tr><td>Kisan Vikas Manch</td><td>27</td><td>22</td><td>26</td><td>75</td></tr>
</table>
The SHGs and KVMs have income-generating (savings and micro-finance) aspects that serve as an incentive for attendance at monthly meetings. (Is this part of program?)
increased organizational capacity of these entities as measured by Institutional Maturity Index (IMI) (developed by project)</td></tr>
</table>

AKF India	
	3. **Training** for community members (community leaders to the village members) provided over 108 person years =*CLICS Doot*: The Village Health Worker is an essential component of the CLICS program. Each member of this cadre of committed, hard working women serves approximately 1,000 people (ranging from less than 500 in small villages to over 1,800 in larger ones). At present, there are 89 CLICS *Doots* serving in the 67 program villages. (Training details are unclear.)
Reasons why interventions/approaches were selected	Comparing CLICS with components of the **National Rural Health Mission** (NRHM): goals are similar (i.e., to strengthen community organizations, utilize village-level workers, generate local funds, develop village health plans, improve quality of services, conduct monthly community child health days, build local capacity, and promote community-level monitoring) ▪ **Processes** used by MGIMS are very different from those used by the MOH. Specifically, the processes of how the local committees are mobilized, community workers are selected and trained, quality is maintained, child health days are focused on changing behaviors, and the community-based information system is utilized are very different between MGIMS and the MOH. ▪ AKF had worked with DCM, MGIMS before in same area; may be MGMIS training site
Costs	
Context ▪ Population density ▪ Roads ▪ Terrain ▪ Systems issues (HR, supplies/logistics, supervision, referral sites) ▪ Baseline nutrition and infection status	
Scale-up plan	
Sustainability	The community mobilization aspect of CLICS was particularly strong and establishes a basis for sustainability. The CLICS approach and results are highly likely to be **sustained** in the villages (about one-third) in which the MGIMS training activities take place. There is less confidence that program effectiveness will continue at a high level in the remaining communities. MGIMS maintains its rural training area for its medical and nursing students in selected villages.
Recommendations	**Recommendation: MGIMS undertake a study of neonatal deaths, determine the most common preventable causes, and strengthen the capacities of the hospital staff to dramatically reduce and eventually eliminate them. (This should have been done in beginning.)**
Missing	Outputs quantified, contextual determinants and decision making; other projects in area not clearly articulated; no epidemiological profile or assessment of previous means for killers; reason for selected strategy