

Impact Evaluation of Interventions to Strengthen Health Facility Operation and Management Committees in Nepal: Summary of the End Line Report

Introduction

The Health Policy Project (Palladium) and MEASURE Evaluation, funded by the United States Agency for International Development (USAID), implemented the Gender, Policy, and Measurement (GPM) Program. This program partnered with the USAID-funded Suaahara Project (2011–2016), a community-focused organization in Nepal that is dedicated to improving the health of pregnant and lactating women and children younger than two years of age. Suaahara worked closely with the Government of Nepal (GON) to strengthen policies and programs that aim to improve the health and nutritional status of this target group. It also worked with health facilities (HFs) to improve health counseling and care services, and to connect families with services for reproductive health; maternal, newborn, and child health (MNCH); and family planning (FP).

Suaahara and GPM collaborated to integrate gender and social inclusion (GESI) and community participation components in existing GON guidelines, processes, and training for the Health Facility Operation and Management Committees (HFOMCs). These committees are the local oversight bodies for HFs. The Strengthening HFOMCs through a Community Engagement Approach project (hereafter called Strengthening HFOMCs) tested two capacity strengthening approaches:

- **Approach A:** Implemented in Syangja district, this approach included a three-day GESI training for HFOMC members on the management of HFs. Review meetings were conducted six and 11 months after the training. Regular

supportive supervision visits from GON officials and Suaahara staff were also planned.

- **Approach B:** Implemented in Baglung district, this approach included all of Approach A, plus community engagement training; orientation of community mobilizers on the roles and responsibilities of the HFOMCs and how to work with them; and periodic interaction between the HFOMCs and community mobilizers. One aspect of the community engagement training was participatory discussions with disadvantaged groups (DAGs) to create an action plan, and incorporating community and disadvantaged groups' feedback.

This technical brief describes the overall design of the evaluation, summarizes key findings from the end line impact analysis using baseline and end line data, and provides conclusions and recommendations for use by the Government of Nepal, USAID, and others addressing the work of HFOMCs.



Women wait for services at a child immunization clinic in Parbat District Nepal
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Evaluation Design

In 2014, MEASURE Evaluation developed a mixed-methods evaluation design for the impact evaluation of Strengthening HFOMCs. The objective of the impact evaluation was to document the intended and unintended impact of the capacity strengthening approaches on MNCH/FP service use, the quality of those services, and ultimately, on MNCH/FP outcomes in the intervention districts among women and children under two years of age. The evaluation also aimed to understand whether there were differences in impact between DAGs and non-DAGs.

The primary questions the evaluation sought to answer were these:

1. What is the impact of integrating GESI and community involvement processes in capacity strengthening activities with the HFOMCs, compared with the impact of standard capacity strengthening activities with the HFOMCs on:
 - a. Use of maternal and child nutrition and health services
 - b. Health service quality
3. Does the integration of GESI and community involvement processes in capacity strengthening activities with the HFOMCs have a higher impact than do standard capacity strengthening activities on:
 - a. Use of maternal and child nutrition and health services
 - b. Health service quality

The evaluation sought to contextualize impact results and to understand how the intervention may have affected change.

MEASURE Evaluation led the collection of baseline data (2014) and end line data (2016–2017) in Nepal. It partnered with two Nepalese organizations for the data collection. The Institute for Social and Environmental Research–Nepal carried out the baseline data collection from July to October 2014. Research Inputs and Development Action conducted the end line quantitative and qualitative data collection from November 2016 to February 2017.

Methods

MEASURE Evaluation employed a quasi-experimental design using the “difference-in-difference” (DID) technique with baseline (2014) and end line (2016) data to compare the changes between districts over time. The district of Parbat, which received no intervention, was the

control area. Quantitative surveys were conducted with households (HHs), mothers with children under two years of age, and community leaders. Qualitative baseline and end line data were collected through client exit interviews of women using MNCH/FP services; waiting room observations; observations and/or review of minutes of the HFOMC meetings; in-depth interviews (IDIs) with female and DAG HFOMC members; key informant interviews (KIIs) with HF staff and district-level stakeholders; and focus group discussions (FGDs) with parents of children under two years of age. End line data collection also involved KIIs with community leaders and program staff, FGDs with HFOMC members, and review of HF monitoring data. Program monitoring data, including data on implementation costs, were also used.

Sampling

Quantitative

We calculated the quantitative survey sample sizes using the percentage of women reporting an HF delivery for their most recent live birth, in accord with the 2011 Nepal Demographic and Health Survey; an expected minimum change after the interventions; and the desired power to detect this change. We selected the sample using a stratified, three-stage cluster design. The women’s survey was conducted with all mothers who had a child younger than two years of age in all HHs in selected areas. The HH survey was conducted with HH heads in all HHs in which a mother with a child under two years of age resided. The community survey was carried out in semistructured small groups with political leaders, female community health volunteers, teachers, students, businessmen, and ex-army personnel, in all 325 wards in the three districts. Table 1 provides information on the quantitative sample sizes.

Table 1. Quantitative survey sample sizes

	HH survey	Women’s survey	Community survey
Baseline	3,775 (99.2% response rate)	3,845 (97.5% response rate)	2,196
End line	3,793 (99.3% response rate)	3,902 (98.8% response rate)	2,228

Qualitative

For the qualitative data collection, we purposively selected four village district committees (VDCs) per district (total of 12 VDCs) from the list of VDCs

selected for the quantitative methods, and one HF per VDC. The VDCs and HFs were selected to cover a mix of HF types, locations, and DAG mapping results. Researchers collected data in each selected VDC and at each HF. Table 2 summarizes the number of qualitative data-collection sessions conducted.

Table 2. Summary of qualitative sample at baseline and end line

Method	Number	
	Baseline	End line
Observations or review of minutes from the HFOMC meetings	10	8
IDIs with HFOMC members	21	24
IDIs with community leaders	N/A	12
HF observations	12	12
KIIs with HF staff	12	12
KIIs with project staff	N/A	6
Exit interviews with MNCH clients at the selected HFs	133	122
FGDs with community members	24	24
KIIs with district-level stakeholders	6	6
FGDs with HFOMC members using the most significant change method	N/A	8

Results

Program Implementation

Many intervention activities were carried out according to plans, although delays occurred because of unforeseen political events and severe weather challenges. The delays meant that the HFOMCs in Baglung and Syangja were not exposed to the program for as long as expected at baseline. Moreover, selected intervention components were not completed in all areas, and for some intervention components, there were no program monitoring data to show evidence of completion.

The reformulation of the HFOMCs was well coordinated and adhered to the model. Female and DAG HFOMC members appreciated the basic and community engagement approach (CEA) training; however, many HFOMC members could not recall the content of the trainings or confused the intervention training for the HFOMCs with other training in which they had participated. The two-day and one-day review meetings were often remembered by HFOMC members, and were thought to be an effective means of monitoring the HFs. However, some of these meetings were not completed,

because of the delays mentioned above. Technical support visits were the most challenging component to implement. Many visits were not conducted, because of the need for the participation of district-level government staff and their workload challenges. The extent to which interaction between community mobilizers and the HFOMCs occurred in the CEA areas (Baglung) was unclear. It seemed to happen on an individual basis, rather than as an organized HFOMC outreach effort, as originally intended.

Impact on MNCH/FP Service Use, Quality, and Selected Health Outcomes

Table 3 presents a summary of indicator trends and results from the DID analysis. The analysis shows statistically significant, positive program impacts on selected health service use and quality, and on some health outcomes. Key changes were the following:

- Postnatal care decreased less for children in Baglung and Syangja, compared with the control areas; the impact was slightly higher in Syangja than in Baglung.
- The percentage of mothers who reported ever having their child's health checked increased, as did reporting of having children's health checked in the past six months. The DID results showed a positive impact on these indicators in both program areas, with a higher impact in Baglung.
- Reporting of having a skilled attendant at birth increased more in Baglung than in the control areas.
- The percentage of mothers who reported ever having been counseled on healthy timing and spacing of pregnancy decreased in all districts; it decreased less in Syangja than in the control areas, suggesting a positive program effect in Syangja.
- Reporting of a health professional discussing a child's growth at the last child health visit increased more in Baglung and Syangja, according to the DID results, than in the control areas; the impact in Baglung was higher than in Syangja.

Table 3. Summary of service use indicator trends and DID results

Service Use Indicators	Baglung		Syangja		Parbat		Trend	Program Impact	
	Baseline	Endline	Baseline	Endline	Baseline	Endline		Baglung	Syangja
Four or more ANC visits, among all women	70.1	74.8	75.5	77.7	84.0	89.0		○	○
Health facility birth, among all women	44.3	53.1	68.8	76.2	69.3	83.3		○	○
Mother: PNC within 48 hours, among all women delivering at home	1.7	5.2	2.0	12.8	4.8	15.3		N/A	N/A
Child: PNC within 48 hours, among all children delivered at home	2.5	2.7	2.3	4.8	6.3	8.1		N/A	N/A
Mother: PNC before leaving facility, among all women delivering at health facility	83.8	74.7	87.4	83.0	90.9	84.6		○	○
Child: PNC before leaving facility, among all children delivered at health facility	59.9	49.5	72.1	72.5	80.3	72.5		+	+
Among children with diarrhea in last two weeks proportion who sought treatment/advice	70.9	54.9	73.2	59.4	75.4	53.1		○	○
Among children with cold and rapid/difficult breathing in last two weeks, sought treatment/advice	73.1	54.9	74.8	62.5	77.6	62.7		○	○
Among children with fever in last two weeks, sought treatment/advice	80.0	81.5	88.6	80.2	82.5	84.7		○	○
Child's health ever checked, among all children	75.6	71.3	86.6	79.9	92.8	80.3		+	+
Child's health checked within the last six months, among all children	68.2	67.3	77.8	76.3	83.9	76.4		+	+
Quality Indicators									
Skilled attendant at birth, among all women	31.0	52.5	68.8	70.7	68.8	81.9		+	○
Ever counseled on HTSP, among all women	19.1	7.0	18.4	12.2	30.7	13.5		○	+
Child's weight ever measured, among all children	93.3	93.9	97.1	97.2	98.4	98.8		○	○
Child's weight measured within the last six months, among all children	68.1	80.1	70.3	85.6	79.4	91.0		○	○
Health professional discussed child's growth at last visit, among all children	17.8	12.4	20.5	16.3	36.2	19.3		+	+
Health Outcomes Indicators									
Health facility births (proxy for maternal morbidity and mortality), among all women	44.3	53.1	68.8	76.2	69.3	83.3		○	○
Skilled attendant at birth (proxy for maternal morbidity and mortality), among all women	31.0	52.5	68.8	70.7	68.8	81.9		+	○
Exclusive breastfeeding, under 6 months, among all children	91.6	92.2	83.1	87.5	89.1	89.9		○	○
Minimum acceptable diet, breastfeeding children, among all children	44.2	39.1	53.7	40.7	51.0	42.4		○	○

Legend:
 + positive impact;
 ○ no impact;
 larger + indicates higher impact;
 N/A "not applicable," as sample sizes were too small to estimate an impact

HFOMC Functioning and Accountability

The qualitative data show that the HFOMCs in Baglung and Syangja were slightly more active at end line than at baseline, compared with Parbat. Program HFOMCs were also more aware of their roles and responsibilities and of the services available at their HFs, compared with baseline and the control areas. Some women and DAGs in the program areas also reported increased confidence to raise their voice during meetings. However, observations at the meetings showed that, as we found at baseline, a few HFOMC members—mostly the heads of HFs—tended to dominate the discussions. In program areas where the HFOMCs had identified issues and made plans to address them, members highlighted the inability of government agencies to respond to their needs. This negatively affected HFOMC morale and the communities' perspectives on the utility and accountability of the HFOMCs. There were no significant differences between Baglung and Syangja.

Relationship among the HFOMCs, the Community, and Health Facilities

Improvements in communication and coordination between the HFOMCs and the communities were seen in program areas, compared with baseline and the control areas. There were more outreach attempts by the HFOMCs; however, the efforts were typically ad hoc, done by individual members rather than by the HFOMC as a unit. As found by the baseline evaluation, there was still no effective public platform for community-HFOMC interactions, despite the desire on both sides for such a mechanism. Awareness of the HFOMCs in the communities remained low, according to the qualitative data. The quantitative women's survey showed a decrease in awareness of the HFOMCs in all districts. There were no observed changes in communication and coordination between the HFOMCs and HF staff. No differences were found between Baglung and Syangja.

Cost-Effectiveness

The cost-effectiveness of Approach B (in Baglung) compared with Approach A (in Syangja) for the positive DID outcomes in which Approach B showed greater impact than Approach A were examined. The Incremental Cost-Effectiveness Ratio represents the average incremental cost to achieve one additional unit of improvement in an outcome. For example, it cost an additional Rs 1,319,560 to achieve an additional 1 percent of children under the age of two getting their health checked in Baglung, compared with Syangja (Table 4).

Table 4. Cost-effectiveness results

Outcome	Incremental Cost-Effectiveness Ratio (Approach B versus Approach A)
Child's health ever checked	Rs 1,319,560
Child's health checked in past six months	Rs 860,582
Health provider discussed child's growth at last health check	Rs 1,522,568

Discussion

The quantitative evaluation component of this impact evaluation of Strengthening HFOMCs reveals improvements in selected health service use and quality outcomes, most notably those related to child wellness. These results occur with both program approaches; however, it is not clear which approach fares better. Qualitative data show slight improvements in the HFOMCs' functioning and interactions with the communities under both program approaches, as indicated by the greater confidence of DAGs and women, and evidence of increased collaboration and communication with the communities to organize outreach events and share information about services. Increased HFOMC outreach for immunization events and growth monitoring, although ad hoc, may have encouraged parents in program areas to use the child wellness promotion services, contributing to the impact results found. The qualitative data do not support impact results for the other outcomes.

Several factors may explain the mixed results of this impact evaluation. Delays in program implementation led to a short intervention exposure time (roughly one year). For a complex program with a long causal pathway, this may not be enough time for changes in outcomes to occur. Baglung was selected as a pilot for a new GON case-based integrated management of neonatal and child illness approach shortly after the collection of baseline data. This program directly targets outcomes of interest to this evaluation, and it may have influenced the results. Several expected processes on the path to outcomes did not systematically occur, or did not occur at all with the HFOMCs. For example, there was no regular communication by the HFOMCs with communities on health service issues. Implementation of some program components was also incomplete. The intervention was envisioned as a package; the missing components may

have led to less-significant impact than expected. The program approach, in general, may have not provided sufficient ongoing support, particularly for the more demanding CEA component.

Conclusions

The data reveal a small, plausible program impact on the use of child growth monitoring services and their quality. Impact results for the other outcomes were not systematic, and the triangulation of qualitative data does not explain these results. The other outcomes may be because of contamination by other programs.

There were small but promising effects on the HFOMCs' functioning, communication, and collaboration with the communities, with no differences shown between Approaches A and B. The long causal pathways for both approaches (particularly Approach B) likely need more time to have an impact, given the short period of program implementation.

Some women and DAGs reported increased confidence and participation in HFOMC proceedings. The sharing of health service information with other DAGs and women were also noted. Greater effects will take longer to take shape.

The HFOMC-level effects had already started to wane (e.g., decreases in meeting frequency) by the time end line data collection occurred. The CEA component cannot be effective with only the training events engaging the communities and the HFOMCs. Involving an external party to facilitate HFOMC-community interactions for a limited period after the training would be helpful.

Although the HFOMCs made decisions, they require government support to implement their decisions, and a clear understanding of the processes they need to follow to get support.

Recommendations

- HFOMC capacity building and CEA activities should have intervention exposure times longer than one year.
- USAID/Nepal and Suaahara II should advocate that the government reestablish the GESI integration requirements for the HFOMCs, with participation from DAGs. Longer program exposure time is also required.
- Training needs to be simpler, and implemented over time with refresher training offered. Technical support should be provided for a longer period after the training.
- Consider adding a component to the CEA approach such that an external person co-leads several community outreach events with the HFOMCs for a period after the CEA training.
- Future programs should establish clear processes and provide contact information, in collaboration with district health authorities, so that the HFOMCs may make requests.