Health Systems Strengthening Case Study: Demonstration Project to Strengthen the Community Health Systems to Improve the Performance of Health Extension Workers to Provide Quality Care at the Community Level in Ethiopia

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Background

Ethiopia’s Health Extension Program (HEP) was designed to improve access to, and utilization of, quality preventive, promotive and curative health care services in an accessible and equitable manner to reach all segments of the population, with special attention on mothers and children (Ethiopia Federal Ministry of Health, 2007). The HEP has recruited more than 30,000 frontline Community Health Workers (CHWs)/Health Extension Workers (HEWs)* who deliver services in four major areas and provide 16 different health services packages to reach the poor at rural Health Posts across Ethiopia. Studies have shown that in order for the HEP to function at full capacity, improvement in certain areas of management and health services is needed. These areas are as follows: More supportive supervision from Woreda (government) (Negusse et al., 2007), better supply of drugs and equipment, fully functional referral and follow-up systems, effective transportation and communication systems, and in-service refresher trainings (Haines et al., 2007). The Community Health Worker Improvement Collaborative supported by the USAID Health Care Improvement Project (HCI) uses a community health system strengthening approach to address these issues and focuses on the following objectives:

1. Improve the competence and performance of CHWs;
2. Strengthen the linkage between the community and the health system;
3. Improve the capacity of community groups to take ownership of health programs in their catchment areas and establish an effective community health system.

Adapting and Applying Quality Improvement to Community Health Systems

Quality improvement (QI) has been successfully applied by QI teams in developing countries to improve facility-based services for MNCH (maternal, newborn, and child health), Malaria, Tuberculosis, and HIV. These QI teams consist of different cadres of providers, administrators, volunteers, patients, and community outreach workers (Figure1). As the complex needs of people facing the double burden of health issues and socio-economic difficulties are increasingly identified

*CHW and HEW are synonymous, in Ethiopia they are generally referred to as HEW
and addressed, the importance of community level health and social services is magnified. Community health services provided include health education, referral, follow-up, and links to the health facilities as well as services for MNCH, family planning, malaria, tuberculosis. Largely due to overburdened workers, existing CHW programs are frequently inadequate in providing these services to all households. In addition, although CHW are usually linked to facilities, facility health care teams often do not have the time or the capacity to address the challenges facing the CHWs. As a result, in rural communities in low resource settings have utilize their own informal community health and social welfare systems to work together to improve the health and general welfare of the community. HCI has developed and tested a conceptual framework which recognizes CHWs as part of this Community Health System, and encourages the use of these informal systems to strengthen the quality of health and social services at the community level. By leveraging the network of existing community groups and social structures, CHWs can address the needs of every family in the community.

Quality improvement (QI) focuses on systems and processes of health service delivery, but health systems strengthening programs often do recognize the communities are actually systems with their own processes and the potential impact of the Community Health System on the health of community is often overlooked. It is therefore not readily apparent that QI principles can, or should be, applied at the community level. Programs that do address community health problems often work with only one community group, not realizing that community groups are linked to one another. In addition, although communities have these groups and structures in place, they may be poorly organized, dysfunctional, or not connected to appropriate resources to be able to address the health issues of community members. The Community Health System model provides an opportunity to sustainably strengthen existing community groups and organizations and increase their capacity to work as a system to effectively reach all households in the community with needed health education and services.

The Community Health System is managed by representatives from each community group or structure who are brought together to serve as a community management committee for the purposes of identifying local health priorities and developing strategies to address local needs. This committee applies QI principles to strengthen the performance of the Community Health System by identifying and strengthening the processes by which participating groups and structures function and interact with each other. When all elements of the Community Health System are harmonized and functioning well and coordinated with the efforts of CHWs, health services become more accessible to community members, and information exchange between health facilities and households occurs more rapidly and effectively.

**Project Design and Implementation**

A. **Orientation about Community QI:** The CHW collaborative is being implemented in Oromia region in 16 health posts in three health centers. The project applies the Model for Improvement approach, which considers how systems and processes are designed at each level to improve the performance in the delivery the necessary services.
Before the collaborative began, HCI held a training to orient regional, district and health center staff about the activities of the demonstration project.

B. Coaches Training: The QI team works with a coach who provides support to the team during the implementation of health service activities. This support includes, training for data management and data usage (Figure 3), content training and supervision. Ideally, coaches have supervisory roles in the existing government structure, from the health center, and respective district. These selection criteria results in better in linkages and communications between communities and formal health centers. For this work, the community QI project trained 20 coaches from district and health centers for three days in the QI approach and data management.

C. Establishment of QI Teams: Each coach then established a QI team with representation, in general, from community groups (Gare Leaders, savings and credit groups, Idir etc), Kebele Managers, CHW, Health center staff (coach), Development Agent (looks after education and agriculture at the community), and religious leaders (Figure 4). The QI team received one-day training on their roles and responsibilities. Based on the situation analysis of CHW performance at the health post the health center focus was put on improvement in the following six areas of the performance of the health extension workers:

1. % of pregnant women visited health post for ANC services
2. % of pregnant women referred by health extension workers and tested for HIV at the health center
3. % of postpartum women followed-up for postpartum services
4. % of households having a latrine
5. % of households that use latrine properly

D. QI Team Meetings: The community QI team met every two weeks to present data on the number of pregnant women identified in their catchment areas and who were referred to health post, while the health extension workers presented the number of pregnant women they visited for ANC services. The QI team brainstormed a list of change ideas to reduce the gap of those women identified but not seen; the team then decided which change idea to select and how this change idea should be tested in the coming two weeks before the next QI team meeting. The QI team member tested the change idea in their community groups and collected the data. After two weeks, the QI team met again to review their progress in reducing the gap. This process of change idea testing and measuring improvement continued until the target goal was reached.

E. Data Collected:
• Community Groups: data of pregnant women identified from each household in their catchment area and number of households which have a latrine and use it.
• **CHW/HEW**: data of pregnant women who visited the health post for ANC services, recorded in their patient daily register.

• **Coaches**: share the data percentage of pregnant women tested for HIV at the health center.

### Learning Sessions

Learning session are held to provide a venue for all community QI teams to share their change ideas, improvements made and to learn from each other. This collaborative learning approach also examines ways to measure and model CHW productivity as part of its improvement change package. The QI teams depicted the improvement made by using a time series chart (Figure 5). At the conclusion of the collaborative, best practices will be documented and shared with all health centers involved. After QI teams return from participation in a Learning Session they adopt changes which were found to be successfully used by fellow health workers to improve the quality of services in their own areas. In addition, HCI and MOH continues to provide coaching visits to support QI teams as they carry out the analysis of their care processes, redesign systems, test and implement changes to their systems.

### How the Lessons Learned Can Be Applied in Global Settings

CHWs are overstretched and are not able to effectively meet the community level needs of health care services. HCI proposes that the Community Health System addresses challenges of poor performance, low morale, high turnover, poor communication, weak processes between community and health facility level, weak supervision to CHWs and lack of acceptance or support within the community for the work of CHWs. The CHW collaborative demonstration project in Ethiopia has addressed the above challenges by strengthening the Community Health System through utilization of a community QI approach. Other global health programs can use the following lessons learned to improve the performance of the community health workers:

1. A Community Health System composed of community groups and their networks can identify target groups and refer them to health facility for health services
2. QI teams can mobilize the Community Health System to follow up with patients referred by health facilities
3. The Community Health System can improve the participation of households in community level health services
4. QI teams can use the Community Health System to improve the mobilization of local resources
5. QI teams can use the Community Health System to strengthen communication among health facility, CHWs and community groups.
6. The evidence-based Model for Improvement approach can be used in a community to improve the quality of health services at that level.
7. Community QI empowers people at the community level by developing self-confidence and ownership of the program, resulting in a sustainable program.

![Figure 4: Data with time-series chart](image-url)