Improving community health worker performance and productivity: Findings from USAID-supported studies in Swaziland and Uganda

Community health workers (CHWs) play an essential role in HIV prevention, care, and treatment by improving linkages between those that need care and those that can provide it and by supporting retention in care and self-management for improved clinical outcomes. For this reason, the performance of CHWs in these roles is an important contributor towards increasing enrollment into care, reducing loss to follow-up, reaching care and treatment goals, and achieving the UNAIDS 90-90-90 targets.

The U.S. Government hosted an Evidence Summit in 2012 in which 49 experts reviewed over 400 publications to learn how best to support CHWs and optimize their performance. The final report from the summit concluded that “Despite many years of empirical inquiry on CHWs, the Summit found that the relationship between support—from both community and formal health systems—and CHW performance is still not well understood.” Current evidence does not provide answers to the questions of what are the most efficient and effective strategies to ensure optimal, sustained performance of CHWs at scale.

To help address the evidence gap for improving the performance and productivity of CHWs, the United States Agency for International Development (USAID), with funding from the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), commissioned several studies through the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project to identify factors that increase CHW productivity and performance and facilitate evaluation and policy towards improvement in CHW performance.

This short report describes the main findings from two of these studies: the Swaziland CHW program performance evaluation, and the Uganda village health team productivity and performance study. Papers with complete findings are in preparation.

Evaluation of Swaziland’s Rural Health Motivator Program

Background: A key product coming out the CHW Evidence Summit was a theory-driven generic CHW performance logic model (Figure 1). Drawing on research and expert knowledge, the model proposed that optimal CHW performance is a function of high quality CHW programming that is reinforced, sustained, and brought to scale by high-performing health and community systems, all of which receive the prerequisite resources needed to achieve their objectives and are influenced by a variety of contextual factors.

The logic model was developed to facilitate evaluation and policy development to improve CHW performance. Using the model as an evaluation framework, this study, conducted by researchers from the Harvard T.H. Chan School of Public Health, assessed Swaziland’s national CHW program—the rural health motivator (RHM) program—and other donor HIV-focused CHW cadres to identify ways in which program performance could be improved. Initiated in 1976, the Ministry of Health-led RHM program currently employs...
over 5,000 RHMs and aims to cover every household in the nation with basic primary health care and health information.

Methods: This study was carried out in the Manzini and Lubombo regions of Swaziland and involved a survey of 2,000 households selected through two-stage cluster random sampling and a survey of a stratified random sample of 306 RHMs. Additionally, semi-structured qualitative interviews were conducted with 25 RHMs, 29 other non-RHM CHWs, and six CHW program managers.

Findings: While CHWs are instructed to visit every household assigned to them at least once a month, only 15.7% of RHMs interviewed self-reported to be meeting this target. Survey respondents reported more contact with RHMs than other CHW cadres: 46% of household respondents reported ever having been visited by a rural health motivator and only 15% by a non-RHM CHW. A theme arising from the qualitative interviews was that community members only rarely seek care from CHWs, with care-seeking tending to be constrained to emergency situations. The study also found that while CHWs are providing many HIV-relevant services, including the provision of condoms, information on HIV, and following up with pre-ART and ART patients who have missed an HIV care appointment, HIV treatment and care in Swaziland is still largely facility-based. Successful shifting of further HIV testing, treatment, and care tasks from health care facilities to CHWs will require that CHW programs perform reliably and that programs address population concerns over the ability of CHWs to keep health information confidential. Only half of household survey respondents indicated that they trust RHMs with confidential health information.

Conclusions and recommendations: Program-level changes aimed at improving RHM performance are likely needed before the program can play a central role in Swaziland’s HIV response. Three opportunities to improve CHW performance identified by the evaluation: 1) increasing monetary compensation for RHMs; 2) further training on confidentiality issues; and 3) improving the supply of equipment and material resources needed by CHWs to carry out their tasks. The study also concluded that the CHW Performance Logic Model provides a comprehensive framework for evaluating CHW programs and can support evaluators to identify which factors and domains are most salient to include in any evaluation. At the same time, the study recommended that the model could be enhanced with guidance on how elements of the model and specific factors influencing performance could be weighted or prioritized, based on relevant theory and evidence.

Uganda Village Health Team Performance and Productivity Study

Background: In 2000, the Ugandan Ministry of Health (MoH) established Village Health Teams (VHT) to mobilize community engagement in health programs and to strengthen the delivery of health services at the household level. VHTs are unsalaried community health volunteers who are linked to the lowest level of the health care system, or Health Center I. MoH guidelines for VHT selection stipulate that they must be 18 years of age or older, residents of their village, literate in the local language, capable of community mobilization and communication, dependable, trustworthy, and willing to work for the community. The MoH recommendation is that one male and one female community member be selected through popular vote of stakeholders and households in the village to constitute the VHT, though in larger communities, more than two VHT members may be chosen.

A VHT is responsible for approximately 30 households and has seven main tasks: collect data on the catchment population, model good health behaviors, provide health services and referrals, link village member with the formal health care system, mobilize village members for health activities, visit households, and assisting in care of those living with illness. In recent years, VHTs have been increasingly tasked with strengthening community support for people living with HIV, including tasks such as mapping HIV patients in the community; linking patients with other resources; engaging community groups to support HIV patients to address their needs; and supporting patients in health goal setting to improve health status.

Methods: To contribute to the global evidence on strategies to improve CHW productivity and performance, this cross-sectional study sought to explore the relationship between and factors associated with productivity and performance of VHTs in two randomly selected sub-counties out of the 10 sub-counties in Busia District, Eastern Uganda. The study collected data on the performance and productivity of 140 VHT members related to village visits and activities, as well on independent factors that may be associated with these measures, through direct observation of VHT activities, structured interviews with VHT, and review of available records. To quantify productivity and performance, the study focused only on the health services and home visit tasks of the basic package of services. One direct observation was conducted per VHT member.

Findings: VHTs demonstrated wide variation in productivity measures, conducting a median of 13.2 service units in a three-month span (range: 2.0–114.9). Performance of the studied VHTs was generally high, with a median performance score (out of 100) of 96.4 (range: 50.9–100.0). Older VHT age and knowledge of danger signs were positively associated with productivity, and job satisfaction and knowledge of danger signs were positively associated with performance. Only a weak correlation coefficient of 0.05 (p=0.57) was observed between productivity and performance scores.

Productivity and performance are both key measures in assessing how effectively CHWs are serving their respective communities. The study did not identify a covariate that was significantly associated with both productivity and performance. This implies that while there was no evidence that performance was being sacrificed for increased productivity or vice versa, there was also no evidence to suggest that improvements in one would contribute to improvements in the other or that there are specific characteristics of VHTs or their environments that may be targeted to improve both.

Conclusions: The lack of observed correlation between productivity and performance suggests that interventions to improve CHW effectiveness may affect each of these two dimensions of effectiveness differently. This highlights the need for conscious policy planning that recognizes that these two components of CHW effectiveness may need potentially integrated, but nonetheless independent, interventions. Such considerations may be particularly important for efforts to improve CHW effectiveness with HIV-related tasks such as providing self-management support to people with HIV, which can be time-consuming if performed appropriately.