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# COMMUNITY HEALTH WORKER INCENTIVES IN MALAWI: LESSONS LEARNED

Village Health Committee members at Mbonechela Health Center, Machinga District. Photo by Uzaib Saya

## Background

Community health workers (CHWs) play a critical role in extending access to health services, especially in underserved and hard-to-reach areas. They are an important part of the frontline primary health care team and serve an essential role in integrated health systems. To maximize their impact, the design and implementation of CHW programs should be aligned with guiding principles that emphasize performance management. These include addressing CHW program leadership, health system integration, community engagement, financing, monitoring, health worker training, supervision, management, support, and the use of incentives.[1]

### ABOUT ASH

African Strategies for Health (ASH) is a five-year project supported by the U.S. Agency for International Development's (USAID) Bureau for Africa and implemented by Management Sciences for Health. ASH improves the health status of populations across Africa by identifying and advocating for best practices, enhancing technical capacity, and engaging African regional institutions to address health issues in a sustainable manner. ASH provides information on trends and developments on the continent to USAID and other development partners to enhance decision making regarding investments in health.

In order for governments and organizations to adopt, implement, and scale up community health programs, knowledge of the wide typology of CHW models and their associated incentive mechanisms is critical. It is equally important for policy makers and program implementers to understand the impact of program design factors, like incentives, and how they may contribute to optimal CHW performance and the achievement of sustained health impact.[2]

To better understand the impact of financial and non-financial incentives on CHW performance and retention in Africa, the African Strategies for Health (ASH) project undertook a literature review and in-depth studies in two countries.[3] Malawi was selected as one of the two countries because of its national cadre of government-funded CHWs, as well as the array of incentives currently being used by community health programs. This technical brief presents key findings and recommendations based on research conducted in Malawi. The full report is available online at www.africanstrategies4health.org.

## Country Context: Malawi

In Malawi, primary care is delivered through community initiatives, health posts, village health clinics, dispensaries, health centers, and community hospitals, mostly in rural areas where 86 percent of the household population resides.[4] Despite Malawi's progress in recent years to improve community health, challenges remain;

seventy percent of child deaths in Malawi are due to causes such as malaria, diarrhea, pneumonia, anemia, malnutrition, and neonatal complications, most of which can be effectively prevented and treated at the community level.[5] Through more than 3,000 village health clinics targeting hard-to-reach areas, community health workers such as government-funded health surveillance assistants (HSAs) and non-government funded community-based distribution agents (CBDAs), village health committee (VHC) members, and volunteers are providing promotive, preventive, and curative health services.

For many years, Malawi's health system has suffered from a critical shortage of health personnel. From 2004 to 2010, development partners supported the implementation of an Emergency Human Resource Plan under the Health Program of Works. This support resulted in significant increases in the availability of human resources within the health sector, expanding the number of CHWs by 53 percent from 5,453 in 2004 to 8,369 in 2010.[6] The capacity of health training institutions also increased and staff retention improved.

Today, as the Ministry of Health (MoH) allocates resources within the Health Sector Strategic Plan 2011-2016, it is important to analyze opportunities for planning and implementing community health activities through existing human resources for health. The National Community Health Volunteers Policy of 2015 presents further opportunities for ensuring the appropriate design of CHW programs.[7] This policy identifies the need for community health volunteers in addition to HSAs, recognizing the opportunity cost as well as the duties, rights and responsibilities of volunteers.

## Approach and Methodology

The overall goals of the Malawi study were to identify the types of CHW cadres and incentives being used, and analyze the impact of incentives on CHW performance and program implementation.

Five districts (Salima, Mangochi, Machinga, Kasungu and Mchinji) were purposively selected for the study with consideration given to distribution across health zones, numbers of HSAs, population size, functioning Village Health Committees (VHCs), hard-to-reach areas, presence of partner-supported CHW programs, and general proximity to each other.

Using a semi-structured questionnaire, 55 informants, including different types of CHWs at the district levels, were interviewed between February-March 2015. Data were collected on indicators at both the CHW and end-user levels (*see Box 1*).[8] CHWs, their supervisors, and selected partners were asked about intervention design factors influencing performance including incentives. Implementing partners and members from the Integrated Management for Childhood Illness (IMCI) Unit at the MoH also provided data on CHW supervision frequency, management, supervision meetings and training, as well as financial and non-financial incentives.

Qualitative and quantitative data collected were used to identify the geographic coverage of CHW programs, the types and location of services provided, actual and target coverage, supervision and support, stock-outs, and expected CHW time spent on carrying out relevant duties.[9] Data were further analyzed using the CHW and end-user levels framework (*outlined in Box 1*) to determine the impact of incentives on performance.[10] Specific measures at each level are outlined in the findings section.

## Select Findings

### CHW Programs Sampled

Interviews were conducted with 55 CHWs across a range of programs. They include:

- HSAs and their supervising senior HSAs, the only government-supported, fixed-salaried cadre;
- Interpersonal Communication Agents (IPCAs) supported by Population Services International (PSI), who receive performance-based financial incentives;
- Informal volunteer groups including Community-based Distribution Agents (CBDAs), who receive irregular financial incentives and non-financial incentives;
- Volunteers such as Growth Monitoring Volunteers and Community Action Group members supported by organizations such as Mai Khanda, World Vision Malawi, and Red Cross Society, who receive irregular financial incentives and non-financial incentives; and
- Village Health Committee (VHC) members, who receive only non-financial incentives.

Details on the programs and incentives, workload, and services provided by these CHWs are available in Tables 1 and 2. Further details on specific incentives provided to each cadre of CHW are available in the full report.[11]

### Box 1. Measuring CHW Performance

**The design of CHW programs influences CHW performance. Important program design factors include CHW workload, human resource management, financial and non-financial incentives, quality assurance, resources and logistics, and community and health system links. This study examines the influence of incentives (financial and non-financial) on performance.**

**CHW performance can be measured at two levels: the individual CHW level and the end user or community level.**

- **At the CHW level, measurable factors include CHW motivation, competency, guideline adherence and job satisfaction.**
- **At the end-user/community level, CHW performance can be measured through coverage, numbers of services provided, utilization of services, quality of services, health-seeking behavior, and adoption of practices that promote health and community empowerment.**

## Table 1. Overview of Activities and Incentives for CHW Cadres

| Type of Community Health Worker | Overview of Activities and Incentives |
|---|---|
| Health Surveillance Assistant (HSA) | *Coverage:* HSAs provide services for communities in 3,138 village clinics throughout all 28 districts. |
| | *Role of CHWs:* HSAs provide integrated community case management (iCCM) and curative services for children, conduct disease surveillance, outreach clinics, immunization and growth monitoring, health education, water and sanitation inspection, and manage community health committees and volunteers. |
| | *Financial incentives:* HSAs receive monthly salaries (40,000 to 45,000 Malawi Kwacha), regular per diems also known as Daily Subsistence Allowance (DSA) at trainings and meetings, and are enrolled in income-generating activities such as Village Savings and Loan Associations not associated with the MoH. |
| | *Non-financial incentives:* HSAs receive opportunities for start-up and refresher training at regular intervals; they also receive in-kind incentives such as t-shirts, bicycles, gumboots and kit bags from their supervisors. Quarterly supervision is regular and they provide peer supervision for other HSAs and volunteers. HSAs indicated public acknowledgement, increased knowledge, and improved capacity as motivating non-financial incentives. |
| | *Supported by:* HSAs are financed through the MoH. |
| Interpersonal Communication Agent (IPCA) | *Coverage:* IPCAs are in 2 districts (Kasungu and Mchinji), covering the catchment population of 28 private social franchise clinics. |
| | *Role of CHWs:* IPCAs provide reproductive health education sessions, distribute reproductive health vouchers to enable access to subsidized services in private social franchise clinics, sell condoms, and refer women of reproductive age to clinics for counseling on reproductive health and HIV services. |
| | *Financial Incentives:* IPCAs are paid based on their performance in group and individual sessions and on referrals. They also retain profits made from selling condoms obtained through PSI to potential clients. |
| | *Non-financial incentives:* IPCAs receive regular training, bimonthly supervision and participate in meeting discussions with peer IPCAs. They are eligible for job opportunities at PSI. IPCAs receive equipment and materials such as bags and t-shirts. |
| | *Supported by:* IPCAs are supported through KfW Development Bank in partnership with PSI. |
| Community-based Distribution Agents (CBDA) | *Coverage:* Unknown |
| | *Role of CHW:* CBDAs provide education and counseling on family planning methods, oral contraceptives and condoms. They also provide HIV testing and counseling in certain areas. |
| | *Financial Incentives:* CBDAs receive irregular per diems from trainings and some also sell condoms and oral contraceptives. |
| | *Non Financial Incentives:* CBDAs receive inconsistent supervision support and irregular non-financial incentives. |
| | *Supported by:* CBDAs are not formally supported though some are linked to HSAs and some NGOs working to support relevant maternal health areas. |
| Volunteer Groups | *Coverage:* Unkown |
| | *Role of CHWs:* Volunteers provide education on various health topics and refer children to the village clinic. They identify tuberculosis suspects and collect sputum smears, assist with outreach campaigns, and assist health centers with vaccinations, weighing children, and conducting patient follow-up home visits. |
| | *Financial Incentives:* Volunteers do not receive financial incentives |
| | *Non-financial Incentives:* Volunteers receive in-kind incentives such as bicycles, t-shirts and other job aides from NGOs. Supervision and training from HSAs is irregular. Volunteers describe increased capacity and community acknowledgement, as motivating non-financial incentives. |
| | *Supported by:* NGOs including World Vision, Mai Khanda, and the Red Cross Society. |
| Village Health Committee Volunteers (VHC) | *Coverage:* There is one VHC for each of the 3,138 clinics in hard-to-reach areas. |
| | *Role of CHWs:* VHCs participate in community committees, closely engage with HSAs at the village clinic and monitor community health improvements. |
| | *Financial Incentives:* VHC members do not receive financial incentives |
| | *Non-financial Incentives:* VHCs are typically not involved in formal trainings or meetings but they play a crucial role in the recruitment of volunteers from communities and villages. |
| | *Supported by:* VHCs are convened by local village elders but not formally supported. |

## Types of Incentives Being Used

The most common financial incentives reported by informants included fixed salaries, irregular monetary allowances in the form of per diems or the DSA, performance-based payments, and income from the sale of medicines and commodities. The most commonly cited non-financial incentives included community recognition and respect, acquisition of valued skills, identification (t-shirt or badge), training opportunities, status within communities, supervision, and peer support.

## Impact of Incentives on CHW-Level Factors

CHW performance can be measured through individual factors such as motivation, attitudes, competencies, guideline adherence, and job satisfaction. The following effects of incentives (labeled "F" for financial and "NF" for non-financial) were identified through key informant interviews.

### *Motivation*

- Salaries (F) were observed to motivate HSAs and encourage accountability in their roles.
- Income from the sale of medicines and performance-based incentives (F) increases motivation among HSAs, IPCAs and other CHWs.
- Insufficient financial compensation (F) was cited as a demotivating factor and a key reason for attrition among CBDAs and volunteers.
- Per diem payments (F) for attendance at trainings and meetings reportedly serve as a motivator to attend among all cadres and help to offset the opportunity costs of time spent as a CHW.
- Inconsistent per diem rates (F) for trainings were previously considered demotivating and frustrating among CHWs involved in multiple programs, such as those who work as both CBDAs and as volunteers. The recent establishment of a common per diem rate through the MoH has helped to address this.
- The lack of a guaranteed pension plan (F) reportedly adversely impacted HSAs' motivation and led to attrition.
- On-the-job training (NF) motivates HSAs and IPCAs to continue in their roles.
- Individual and group supervision (NF) reportedly improves motivation by increasing on-the-job capacity, the quality of services provided, and confidence among community members about the services that are being provided.
- Inconsistent supervision support (NF) left some CBDAs and volunteers feeling disenchanted with the health system, which led to increased attrition.
- Social prestige and community approval (NF) was a motivating factor for all cadres of CHWs.
- A heavy workload (NF) or high ratio of population to HSA can lower motivation among HSAs by burdening the services needing to be provided and increases loss to follow-up. In recognition of this, the MoH aims to lower the population to HSA ratio from 1530:1 to 1000:1.
- Time spent on tasks unrelated to service delivery (NF) can adversely influence CHW motivation. HSAs and CBDAs reported that time spent traveling to the health center to pick up supplies or completing monthly reports affected their ability to provide health services and was demotivating.

### *Competency*

- Per diem payments or the DSA (F), used to encourage both salaried and non-salaried CHW attendance at trainings and meetings, may help to improve CHW knowledge and capacity to provide quality health services, although they may have negative implications and perverse effects (e.g. misuse as a salary supplement has resulted in excessive absences from duty stations and unproductive trainings, and can negatively impact motivation).
- Conversely, for non-salaried CHWs, insufficient per diem payments (F) may affect participation in trainings, and therefore influence competency.
- Both HSAs and IPCAs receive training and structured opportunities for advancement (NF) which enhances their knowledge and skills.
- Volunteers, including CBDAs and VHCs, also noted that career advancement opportunities (NF), such as peer supervision and further education, can strengthen their skills.

**Table 2. Summary of Incentives for CHW Cadres**

| | HSAs | IPCAs | CBDAs | Volunteers | VHCs |
|---|---|---|---|---|---|
| Financial Incentives | | | | | |
| Salary | ✓ | | | | |
| Per diem allowance | ✓ | ✓ | ✓ | | |
| User fees | | | | | |
| Performance-based incentives | | ✓ | | | |
| Non-Financial Incentives | | | | | |
| Education and improved capacity of community | ✓ | ✓ | ✓ | ✓ | ✓ |
| Equipment and materials | ✓ | ✓ | ✓ | ✓ | |
| Supervision | ✓ | ✓ | | ✓ | |
| Recognition from community and family | ✓ | ✓ | ✓ | ✓ | ✓ |
| Job advancement | ✓ | ✓ | ✓ | ✓ | ✓ |

### *Guideline Adherence*

- Supervision **(NF)**, consistent among HSAs and IPCAs and variable among other cadres, reportedly helps to ensure that CHWs provide high-quality services.
- The provision of equipment and materials **(NF)**, more regularly available for HSAs who can rely on the support of government officials to obtain a regular stock of medicines, led to better quality services.
- Some informants attributed the high quality of care provided by HSAs (over care provided by volunteers or traditional healers) to the fact that they are paid a regular salary **(F)**.
- The provision of tools such as mobile phones **(NF)** helped HSAs to improve data visibility and reduce stock-outs of health products at the village clinic levels (e.g. cStock ).[12]

### *Job Satisfaction*

- HSAs reported satisfaction with their roles because, as salaried, government employees, they were recognized by their supervisors and community **(NF)**.
- Both financial and non-financial factors that improved motivation also played a role in improving job satisfaction among CHW cadres.

## Impact of Incentives on End-user/Community-Level Factors

CHW performance can also be measured through end-user or community-level factors. This study focused on supply-side factors and did not explore health-seeking behavior or community empowerment. Analyses of interviews and programmatic data determined that incentives influenced CHW performance and community health programming in the following ways. Differences in performance between CHW cadres are highlighted.

### *Population and Geographic Coverage*

Among all the CHW cadres interviewed, HSAs, which have paid salaries and receive regular training and support, had the highest reported geographic coverage. An estimated 9,907 HSAs are covering all 28 districts in Malawi. IPCAs currently cover 2 districts, but there is a plan to scale up services. The population and geographic coverage targets of unpaid CHW cadres varied and were considerably lower since the volunteer programs operate on an ad-hoc basis for a limited period of time and had fewer links to the broader health system at the health facility level (which in turn influenced CHW access to equipment, supplies and referral systems).

*Lesson: As evidenced by HSAs, salaried CHWs may achieve greater population and geographic coverage compared to other CHW cadres that are not provided with fixed salaries or regular allowances.*

### *Numbers of Services Provided*

Reliable caseload data were only available for HSAs. Based on the target population in need of integrated community case management (iCCM) services and the numbers of HSAs trained in iCCM, on average, each HSA provides 29 iCCM treatments per month. This frequency allows HSAs to maintain competency and be regularly assessed.[13] Often the numbers of services provided were influenced by non-financial incentives such as supportive supervision and training and the availability of medicines and equipment. Normative caseload data for IPCAs indicated the numbers of women counseled on reproductive health as almost 75 per month and 50 women referred monthly to the Tunza clinic.

*Lesson: HSAs and IPCAs, CHW cadres receiving regular support through financial and non-financial incentives, are regularly assessed and therefore able to maintain competency and provide high numbers of services.*

### *Estimated Demand Met*

To calculate the estimated demand met and utilization of services provided by CHWs, this study considered the estimated catchment population and the expected number of services for each condition, based on disease-specific incidence rates. Due to data availability, an estimate of the utilization of services was only feasible for services provided by HSAs. The estimated demand met was calculated using an assumption that 40 percent of the population is living in hard-to-reach areas. While these estimates would be worth examining using sub-national incidence rates (especially for hard-to-reach areas), HSAs covered more than 100 percent of expected cases of diarrhea, pneumonia, and malaria among children (estimated to be 17 percent of the population). Similar calculations could not be made for the volunteer cadres.

*Lesson: HSAs in Malawi, supported with regular salaries and non-financial support such as supervision and training, conduct curative and preventive health activities and are successful in meeting the demand for community health services in hard-to-reach areas.*

### *Quality of Services Provided by CHWs*

This study did not include an in-depth assessment of the quality of services provided by CHWs or the quality of supervision and trainings. Instead, informants were asked about quality improvement mechanisms such as adherence to treatment guidelines, and the use of peer review, training, and performance standards. Among the CHW cadres interviewed, only HSAs and IPCAs followed standard protocols and guidelines and reported that these tools allowed for a better grasp of their roles and responsibilities. IPCAs are monitored through IPC Officers who ensure monitoring, supervision, and feedback, to evaluate IPC delivery and reinforce performance in accordance with the overall IPC strategy. CBDAs and volunteers reported that community feedback influenced their performance. VHCs conducted community monitoring of services provided at the village clinic by HSAs to monitor quality.

*Lesson: The use of formal guidelines and protocols, common among HSAs and IPCAs, can contribute to improved quality of services.*

## Discussion and Recommendations

The findings of this study demonstrate that CHW performance in Malawi is highly influenced by the provision of both financial and non-financial incentives. Variations in design of CHW programs and the use of incentives have considerable influence on CHW performance. Reported experiences of CHWs in Malawi suggest the following recommendations:

1. Financial incentives serve to motivate CHWs in Malawi. However, consistency in the timing and amount of compensation, whether for salary, allowances, or per diem (or DSA) payments, is critical to sustain motivation.
2. Non-financial incentives such as training and opportunities for advancement and professional development are important motivators for all types of CHWs. These incentives can serve to both motivate CHWs and increase capacity. They should be included in the design of both paid and volunteer CHW programs.
3. End user or community-level measures for coverage and quality should be consistently defined and included in all reporting for community health programs. Evidence from Malawi has shown that evaluation of performance among CHW cadres is feasible when such programmatic data are available (for example, through analysis of estimated demand met and utilization of services). This type of data management may provide opportunities to assess CHW performance and re-design intervention programs.
4. Implementing agencies, government partners, and donors supporting community health programs should collaborate to standardize incentives for CHWs. Programmatic aspects such as trainings, reporting forms, reporting frequency, supervision, equipment, and available resources for support staff and supervisors should be complementary. The harmonization and integration of programs will help to reduce duplicative costs and improve CHW performance by influencing CHW capacity, utilization of services, and CHW motivation.

## Conclusions

This study aimed to identify and analyze the impact of incentives on CHW performance in Malawi. The findings and recommendations may be useful for countries that are considering introducing, modifying, or scaling up a community health program. As governments analyze efficiencies in the allocation of resources across health systems components, it is important to improve the planning of community health activities and optimize existing human resources for health. By understanding how design features of community-based programs affect CHW performance, interventions can be shaped and adjusted to achieve optimal health impact. ■

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### ENDNOTES

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8. Final Report of Evidence Review Team 1: Which Community Support Activities Improve the Performance of CHWs? A Review of the Evidence and of Expert Opinion with Recommendations for Policy, Practice and Research. Fall 2012. USAID.
9. At the health centers, staff provided catchment population figures, utilization data, and expenditure figures for these facilities and the communities they serve. At the community level, CHWs provided population and utilization figures for their specific hard-to-reach catchment areas, as well as information on their time usage, salaries, and supervision, reporting, and meeting requirements.
10. Final Report of Evidence Review Team 1: Which Community Support Activities Improve the Performance of CHWs? A Review of the Evidence and of Expert Opinion with Recommendations for Policy, Practice and Research. Fall 2012. USAID.
11. Community Health Worker Incentives: Lessons Learned and Best Practices from Malawi. Report prepared by the African Strategies for Health (ASH) Project for USAID. September 2015.
12. CStock was designed in partnership between the Supply Chain for Community Case Management (SC4CCM) Project and Malawi's Ministry of Health, and was implemented by JSI Research and Training Institute, with funding from the Bill and Melinda Gates Foundation between 2009-2015.
13. Literature has suggested that, for CHWs to maintain their skills, CHWs should see at least 10 cases monthly. Adapted from Collins D et al. "The costs of integrated community case management (iCCM) programs: a multi-country analysis." Journal of Global Health (2014): 4(2). doi: 10.7189/jogh.04.020407.

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