Appendix B

Current Perspectives on Large-Scale Community Health Worker Programs: Summary of Findings from Key Informant Opinions

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INTRODUCTION

There is currently a high level interest in Community Health Worker (CHW) programs from the Secretary General of the United Nations to host-country governments to donor agencies and on down. Some countries have recently launched new cadres of CHWs as part of the primary health care system or are considering doing so. Other countries with mature CHW cadres in national programs are faced with decisions about possible changes in these programs, such as changing the selection criteria of CHWs, adding functions to existing CHW tasks, or modifying compensation arrangements. The majority of available published literature on CHW program effectiveness concerns smaller-scale CHW programs to improve population health.[1] In contrast, little is known about large-scale CHW programs. There is very little documentation on the planning and implementation of these programs. Also, there is a dearth of empirical research on the overall effectiveness of large-scale CHW programs on population health and on the functioning of specific program components, such as financing, CHW retention, supervision, and so forth.

PURPOSE

We explored the opinions of experienced technical advisors, program managers, and evaluators to contribute knowledge on large-scale CHW programs. The specific objectives were to identify: (1) key components of a successful large-scale CHW program, (2) key decisions that CHW program planners must consider when developing a program, (3) common errors made in CHW programs that compromise performance, and (4) areas where further research are needed. The purpose of this exploration was to serve as a guide for planning a systematic assessment of large-scale CHW programs, which is the subject of this guide.

METHODS

We conducted semi-structured in-depth interviews with 14 key informants in fall 2011 and early 2012. Each informant had significant and intensive experience working with large-scale CHW programs: each informant had five or more years of experience in working with one or more national CHW programs and had served as a technical advisor, program manager, or evaluator of a large-scale CHW program. The interviews were conducted one-on-one via telephone or Skype by three of the authors (ES-A, RZ, and HP) and also by two members of the study team—Steve Hodgins and Simon Lewin. See the interview guide in to the appendix of this document. Detailed notes were taken on each interview to record informant responses. The textual data were analyzed by identifying and summarizing *a priori* and emergent themes.

FINDINGS

Contextual Understanding Needed to Design Effective Large-Scale CHW Program

Expert informants emphasized there is no "one-size fits all" model to developing a successful CHW program. The features of a successful program in one setting may not be appropriate in another setting. Rather, informants pointed to the importance of understanding contextual factors, such as cultural, social, political, religious, geographic, economic, and health system factors, to designing an effective large-scale CHW program. Contextual factors can inform the nature of linkages of the CHW program to other services, the scope of services provided by the CHW, compensation, selection criteria, and processes for training and supervision. The following examples highlight how contextual understanding can help design a more appropriate and effective CHW program.

Example 1: CHW Recruitment Process
An appreciation of the cultural and political aspects of social structures and their hierarchy at the village level can help a program designer decide whom to involve in the CHW recruitment and selection process and discern how an applicant's social position may influence his/her effectiveness as a CHW. One key informant stated:

> It is very important to look at the cultural and political aspects of a program. For example, to look at whether you ask a village chief, a community clinic, or a village committee to select a community health worker and what are the different outcomes or implications.
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> A CHW must have a certain kind of standing within and ties with the community. The person who has this type of standing and community ties may not be the same type of person that the government wants to select as a CHW… the social position of a CHW in the community affects their effectiveness.

Example 2: CHW Selection Criteria
Understanding cultural and geographic factors is especially important in the selection of CHWs. Factors utilized in the selection of CHWs for large-scale CHW programs include age, gender, literacy level, education attainment, marital status, and geographic location (e.g., living in a particular area). Different socio-demographic characteristics are relevant in different communities in the selection of appropriate CHWs. Some communities are more likely to ascribe respect and trust to CHWs who are older and experienced as mothers. One key informant stated: *"It is exceedingly important that CHWs be responsive, accountable, respected, and trusted. These attributes are often associated with age and children."* In other communities, gender norms guide how CHWs interact with the community. For example, another key informant stated: *"Context is important here. In Afghanistan, only male and female pairs are accepted because women can't go outside of the home."* In another example, gender norms dictate where women live after marriage, which can impact where female CHWs can work and their retention. *"Marriage [as a] criterion has pros and cons—women who are unmarried and later get married are likely to leave the community,"* reported one key informant.

Example 3: CHW Payment and Incentives
Informants emphasized the need to find pay and incentives that are relevant to the local context. Varying types of incentives may appeal differently to different communities. Incentives that have been used for large-scale CHW programs may be financial (e.g., transport reimbursement), in-kind (e.g., bags, shirts, or badges), or social (e.g., a "CHW Day" to honor and celebrate this cadre). Considering the CHW's age and social standing within the country's social and economic contexts can also help the program designer identify an appropriate amount of payment and appropriate types of incentives. One key informant stated:

> I think that these issues are very contextual—are the CHWs young or old? High or low class? Young people desire skills and want to show them off. Providing skills might be enough to keep young people interested, but this may not be enough for an older person with high status.

Example 4: CHW Roles and Responsibilities
A clear understanding of the national health system—particularly its stakeholders, how health care is delivered, and its human resource needs—is needed to see where CHWs fit into the larger health system and to clearly define their roles and responsibilities. For example, one key informant noted, "*It is important to understand the organization of the health care delivery in a*

particular setting to be able to understand how and where the CHWs fit in." Another asked, *"Where does the program situate itself in the bigger picture—how is it linked to the health facility, district level, and the ministry of health? How are CHWs supported by the bigger formal system?"* Notably, an appreciation of the various formal and informal stakeholders and their role in health service provision is necessary to ensure that CHWs have specific roles and do not displace other sectors of workers. A commonly neglected stakeholder is drug sellers.

It is also necessary to understand what health services are valued by community members. Several key informants said community members have a tendency to place greater value on curative treatments than on preventive messages. Understanding this tendency is needed to ensure CHWs are meeting some of these needs for them to gain credibility in the community. For example, one key informant said, *"In terms of public health impact, behavioral changes can play a larger role; however, the community listens more when CHWs have some curative role. It can be hard to get the community to listen to a CHW when the only messages are preventive."* Similarly, another key informant stated, *"It is important that the CHWs come with credible skills. CHWs need to be seen as valuable to the community and as providing something that is interesting. Being able to provide "quick fixes" is very valuable in gaining interest or credibility."*

Need for a Long-Term Vision and Planning to Support Large-Scale CHW Program Functioning

Multiple key informants attributed an inadequate long-term vision and a lack of long-term planning as a key reason why some large-scale CHW programs have not been successful. Some informants noted that the lack of a long-term vision is often in response to demands from donors who push ministries of health (MOHs) to focus only on short-term goals and outcomes that are related to a particular funding cycle. This has resulted in inadequate preparation and planning of the program components, such as government ownership of the program, commitment of funds to support long-term costs, planning for a CHW career trajectory, and development of data collection systems.

Example 5: Governance
Governance is a leadership process typically administered by a national government and relates to defining expectations, granting power, and verifying performance. Key informants emphasized how governance of a CHW program is developed over time through a political process by nurturing relationships with relevant stakeholders, such as MOH officials, donors, and opinion leaders. One key informant stated, *"Our failures have been more political than technical. We don't put enough energy into the political side of it - both in terms of government officials and donors."*

Informants have suggested different strategies to promote government ownership of a CHW program. One strategy is for the implementing partner to involve the MOH delegate in program planning as much as possible and develop an advocate for the program. For example, one international organization that was an implementing partner of a new national CHW program gave special attention to nurturing the position and involvement of certain MOH personnel assigned to the CHW program. As a result of nurturing these relationships, the MOH assigned personnel became the *"biggest champions of CHWs in the country,"* reported one key informant. This same informant noted that it is important to keep up with personnel changes in the MOH: *"Any time there is a new leader, new emphasis needs to be placed on educating him or her about what CHWs are capable of."* Another strategy is to appeal first to opinion leaders, such as medical academics or a small group of decision-makers, before getting the MOH on board with the proposed program. Allow opinion leaders to see the program first-hand through dissemination workshops in the community and through site visits. This process can promote awareness of CHW program benefits and address points of skepticism.

Example 6: Financing Large-Scale CHW Programs
Consideration of the long-term costs of program planning is often neglected. Inadequate financing planning for a large-scale CHW program may be caused by donors who rush the government to start a program. According to one key informant, *"Many programs are developed when donors push on the MOH and neither the government nor the donor approaches the new cadre with a long-term perspective. So, activities continue for as long as external funds are available and quickly wither away once the funding has come to an end."*

Also, there is a mistaken tendency for MOHs and donor agencies to assume that CHW programs are low-cost options. As one key informant reported, *"CHWs are not a low-cost alternative; they are a high-cost alternative, but also a high-access alternative. The number one cause of failure* [of large-scale CHW programs] *is that people consider this to be a low-cost option, and they don't factor in the high costs associated with high-level technical support and other support functions."*

In addition to funds needed to start a CHW program, long-term costs are required to provide appropriate continuous training, supervision, incentives, and other support functions, all of which are vital for an effective program. *"There's a mistaken idea that once the CHWs are trained it is a free program. Regular meetings are important because they allow CHWs to get together, learn from each other, engage in healthy competition, obtain additional education, and so forth,"* reported one key informant.

Careful long-term planning is needed to fund the types of training and continuing education strategies that are more costly but are also needed for programs to be effective. For example, one key informant stated:

> My sense is that most of the training should be conducted in their work environment. Of course, the problem with that is that it is very resource intensive because you need quite a number of trainers, but I do think that is the best way. One doesn't expect CHWs to have very high theoretical skills but they should have practical skills. Practical skills can only really be learned in practice so it seems obvious to me that a lot of the training should occur in the community.

Careful long-term planning is also needed to provide appropriate incentives that will motivate CHWs and at levels that can be sustained over time. Care should be taken to ensure that funds provided at the start of the program are no more than the amount CHWs can expect for their work over time. One key informant observed, *"A lot of CHWs get paid very well during their training because it involves three weeks of full-time training. Then they start "working" and they get paid much less because they are not working as much. The full-time pay during training increases their expectations."* Further, key informants indicated that they advised program planners not to provide payments or incentives that cannot be sustained over time. One informant said, for example, *"If a program starts out paying CHWs, it would be very hard to transition it into a volunteer program later. Sustainability is an important consideration with respect to compensation."* One key informant recommended movement toward recognition over compensation and salary because it is more sustainable financially.

Example 7: Training and Continuing Education for CHWs
As was mentioned briefly in Example 6, training and continuing education should be considered in the long-term planning of CHW programs. A long-range perspective to CHW programs may enable program planners to build a broader range of capacity among CHWs and ensure retention of these skills. In the words of two key informants,

> The lack of time or attention to this reflects the fact that we are always in such a hurry. Quite often it would be better if we were developing a multi-purpose type of CHW that you would train slowly, over time, in a piece-by-piece fashion (e.g., train them, let them practice it, train them on something else, let them practice it, etc.). But instead, because we're often in such a hurry, everything gets thrown into one larger training, which isn't as effective.
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> The approach to attaining and retaining skills is usually inadequate with initial training that offers too little practicum exposure and little or no program effort to confirm and ensure retention of skills.

Informants emphasized repeatedly the importance of using a slower but more rigorous and phased approach to training. Respondents from two informants were as follows:

> CHWs that go through a training for three or six months remember what they learned in the last five days, and everything else is lost. One of my strongest recommendations is training should be shorter but more often. Building Resources across Communities (BRAC) has layered it on one task at a time.
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> Trying to do tons of messages all at once in one training doesn't work as well. You can't go in with everything all at once. We found our programs were most effective in doing things one step at a time. For example, start with family planning and breastfeeding, then let them practice these messages, then train on other issues.

Also, a key informant highlighted how a phased approach to training can be more responsive to community needs because the flexible training structure can allow the community to decide on what health problems to address. This person said, *"Let the community decide what they want to work on and when. So if they choose diarrhea as a problem they want to address, then you teach the diarrhea module, which includes hand washing and latrines, etc. I feel that very few programs have done this, and those that do, have strong programs.*

Example 8: Defining CHW Tasks and Integration with the Peripheral Health System
There is a tendency to add tasks to CHWs as the program progresses, resulting in overworked CHWs, a lack of programmatic focus, and too many functions for a CHW to be effective. One key informant referred to the experience in Pakistan: *"More and more duties and functions have been added to Lady Health Workers (LHWs) in Pakistan, including from sectors other than health, with the result that their focus has become too diffused. More functional LHWs have been rendered less effective in their core functions."* The addition of new functions to CHWs may result from unrealistic expectations. Another key information observed, *"There is an unrealistic set of expectations in terms of what CHWs are capable of doing—they are often burdened with doing too much and not being able to do anything well."*

Therefore, several informants emphasized the need for a long-term vision of CHW tasks. Program designers need to prioritize key goals to be achieved by CHWs and set these expectations and provide a guideline at the start of the program. One key informant recommended the following:

"There is a tendency for more and more tasks to be added on once the program starts. It is crucial to think about workload during the program development stage and create guidelines and expectations prior to program start. The more it is structured prior to the program start,

the better off. Any optimal or prioritized sets of activities need to be defined before the program starts. Any additional tasks that are suggested or proposed need to be weighed carefully against the goals of the program and workload of the CHWs. It is also important to look at where that task fits in the curricula and how it will affect the ability to address previously outlined important tasks or goals."

To avoid overloading existing CHWs with new tasks, some key informants favor the addition of new cadres of CHWs. For example, one said, *"As you expand the tasks you want CHWs to tend to, it may work better to have multiple cadres of CHWs that can work together as a group—but each working in a vertical manner with his or her specific program."* Other key informants feel that multiple cadres of CHWs serving in the same catchment area may be confusing to the community. One said, *"It is confusing at the local level when there are different types of* [CHW] *workers in the same place."* Also, clients may perceive CHWs from a vertical program to be too limited to help them. Another key informant stated, *"If it's too vertical, the clients often feel the CHW can't help with much."*

Another consideration on tasks to be performed by CHWs is whether the assigned activities can be readily supported by the local health system. One key informant noted, *"Where does the program situate itself in the bigger picture? How is it linked to the health facility, district level, or MOH? How is the program supported by the bigger formal system?"* For example, if CHWs are expected to refer patients to health facilities, then they need the cooperation of health providers at these facilities and the MOH. One key informant, referring to the Jamkhed Comprehensive Rural Health Project (in central India) and the Barefoot Doctors in China, observed:

Without somewhere to refer people who have trauma or significant illnesses, then the program is not as successful. The strength of Jamkhed and the strength of the Barefoot Doctors was their connection to the public health system. CHWs should get feedback on their referrals after they refer someone. CHWs should know what happened, what they diagnosis was, and what the outcome was. Joining in meetings at the clinic is also important for them to feel integrated into the system.

Although there was consensus that CHWs should be connected to the frontline health workers in the local health system, key informants held varying perspectives on the level of integration between the CHW program and the national health system. Some feel that integration of CHWs into primary health care is necessary to ensure service delivery (to be able to refer patients, obtain medications and supplies, etc.) and to provide supervision and accountability of CHW performance. One key informant stated, *"CHWs need to be integrated with the health system at the most peripheral or local level—government needs a link to the frontline health workers to ensure programs are delivered."* Others feel that if CHWs were fully integrated into a peripheral health system that they would be misused. One key informant recommended "engagement" or "active interface" with the peripheral health system over full integration. This informant warned that CHWs would likely be misused because they are viewed as the lowest-level person on the health team, and they would be given tasks that would take them away from their identified scope or tasks as CHWs (e.g., told to clean rooms and latrines at the health facility).

Example 9: CHW Supervision and Career Trajectory

Supervision and long-term support for career advancement of CHWs constitute another neglected program component that needs to be considered at the outset as part of program planning. One key informant reported, "*There is a failure of effective, institutionalized supervision. Often, supervision is a complete afterthought. Initial program efforts consist of developing a training manual, doing mass training and deployment, and then … nothing."*

Nurses or other health staff at a primary health care clinic have been the traditional supervisors of CHWs. However, multiple informants have noted several challenges with this supervision set up. First, supervision is assigned to a staff in the clinic without consideration of whether this person has the time, skills, or desire to perform supervisory tasks. One key informant reflected in the following way, *"Our experience … has been that it is not enough just to have people at health facilities overseeing CHWs as an additional task. We needed to seek out new employees specifically to take on this task of overseeing CHWs. Overloading of supervisors became a problem (e.g., trying to oversee the CHWs associated with 30-40 health posts was too much)."* Second, supervisors based in health facilities often lack means of transport or other mechanisms (e.g., a cell phone for text messaging) to monitor the quality and performance of CHWs. Finally, and most importantly, health providers were not in touch with the technical needs and realities of CHWs, so their supervision was not very effective. One key informant stated:

You have to have the right people to supervise and support CHWs - people who themselves are well-oriented. I worry that in South Africa professional nurses will supervise CHWs. I don't think most professional nurses in South Africa have a very comprehensive approach. They don't know about health promotion, disease prevention, and getting communities involved, yet they will be the direct supervisors of CHWs."

Similarly, another key informant observed that in one program, *"The supervisors often were not as clinically savvy as many of the CHWs, so they were not able to effectively provide technical assistance."* Yet another noted, *"Checklist supervision is minimally effective, if at all. One of the keys to effective programs is making sure that the supervisors or trainers are in touch with the needs and realities of their workers."*

Several informants recommended "reverse supervision" (that is, having an experienced CHW be a supervisor to newer CHWs) as a means to more effectively monitor quality, provide technical support, and help problem solve issues on the ground. *"Reverse supervision at monthly meetings will allow CHWs to help each other solve problems,"* claimed one key informant. Reverse supervision can also be an incentive to retain and motivate CHWs, as it allows them to develop their career. One key informant stated, *"Career development and career mobility should exist. In my experience, the best supervisors are those who have worked their way up and were once CHWs themselves."* Similarly, another key informant about Pakistan's LHW program, *"By selecting the best LHWs and allowing them to be a supervisor to other CHWs was an incentive for others to work harder."*

Need for Relevant Data Collection System for Large-Scale CHW Program

Much of the available data on CHW programs comes from small pilot programs run by nongovernmental organizations (NGOs). These findings may not be appropriate for extrapolation to scaled-up national programs. Several key informants noted it would be helpful to have some type of database where the basic features of large-scale programs are documented. This database could include information such as:

- Number of households per CHW
- Scope of services being provided
- Compensation/incentives
- Selection criteria
- Selection process
- Training process

- Supervision process
- Degree and nature of integration with the primary health care system
- Management and evaluation systems
- Health outcomes measured

This database would allow governments to have a better understanding of what types of programs have been implemented in other settings and perhaps allow for increased collaboration during the planning phases.

Notably, several key informants pointed out the current top-down approach to monitoring and evaluation leads often to situations in which CHWs collect data that are not relevant to their work. One key informant emphasized, *"CHWs who are collecting health information should be able to use the data. If it's not relevant to them or their work, then someone else should be collecting it."*

Several key informants noted that there is a need for better documentation of the CHW program decision-making process at the national level. Having information about how large-scale programs are managed is seen as an important element for better understanding the reasons for the degree of effectiveness of large-scale CHW programs. The key informants also recognized that there is a lack of collaboration in the development of training materials, particularly for illiterate CHWs. Each program seems to be creating its own materials and is attempting to "recreate the wheel."

CONCLUSION

Because of limited published information about the details of large-scale CHW programs, the opinions of those who are knowledgeable about such programs is of value at this time, given the rapidly growing interest in CHWs and the emerging commitments in a number of countries to strengthen existing national CHW programs or to establish new ones. The findings from this review of key informants suggests that as countries engage in these activities, the success of their efforts will depend to an important degree on the quality of realistic planning that is carried out initially, taking into account the real costs required for effective programming and then developing monitoring and evaluation systems that will make it possible for these programs to adjust to needs and problems as they emerge at the local level and at the various levels of management.

Appendix: Interview Guide

Key Informant Interviews

There is currently high-level interest in CHW programs, from the Secretary General of the UN, to host-country governments, to donor agencies, on down. There are a number of countries that have recently launched new CHW cadres, or which are considering doing so. Furthermore, countries with mature CHW cadres and programs are faced with decisions about possible changes in these programs, for example adding functions, changing arrangements with regard to compensation or changing selection criteria.

Despite abundant experience with CHW programs, a vast body of literature documenting these experiences, and several large-scale reviews of such evidence, we see many of the same programmatic mistakes being made repeatedly. For example, while most CHW literature cites the importance of CHW supervision, many programs have not fully invested in the development or maintenance of such supervision. Additionally, much of the guidance available to date pays too little attention to the diversity of kinds of CHW work or of the settings where this work is done. Guidance on offer tends to be either so general as to not be very useful or overly prescriptive, over-generalizing based on specific program experience.

We would like to develop a product which will help to close this gap and influence decision-making through highlighting issues of CHW program design and development. Our goal is to reach beyond the published literature and speak to MoH officials, field officials and other experts about their experiences with such programs. We do not intend to use a case-based model, but rather plan to look at the processes and many decisions faced when developing or changing existing CHW programs.

We anticipate that the principal product of our effort will be a book-length set of papers or chapters that would be available as a free-access, full-text, online journal supplement (modeled in part on somewhat similar efforts around 20 years ago, led by Gill Walt and Stephen Frankel). This will probably be supplemented by other products, possibly including algorithmic decision-aid tools, powerpoints, and/or workshop modules.

As someone with considerable experience working in this area, we would like to tap that expertise and request your feedback and guidance.

1. ***Can you identify any gaps in the currently available CHW literature? If our goal is to assist decision-makers with the planning and revision of CHW programs, what information do you feel would be most useful?***

2. ***Where do you feel those involved in developing or making changes to CHW programs most often run into problems, or make choices which ultimately compromise performance?***

3. ***Where have failed programs gone wrong? Where, with a bit more foresight, can we sharpen up our judgment in making strategic choices concerning CHW programs?***

4. ***We have identified the following topic areas as important decision points in developing a national or large-scale CHW program. Can you provide us with feedback regarding which are the most important to include or other topics we might have left off the list?***

    - CHW selection criteria (only women as CHWs, age range eligible, married/unmarried eligible, literacy or education requirements, etc.)
    - CHW selection process (elected by community, appointed by local health council, etc.)

- Compensation/incentives (volunteers vs. paid salary vs. paid stipend vs. linkage to economy-production such as selling goods as part of role)
- Training (how long is training, how often do CHWs receive further education, etc.)
- Supervision (how often, by whom, etc.)
- Supply chain/commodities (consistent availability to the CHW of the drugs and supplies needed for them to fill their role - e.g. vaccines, antibiotics, antimalarial drugs, oral contraceptive pills, ORS sachets, reporting forms, functioning respiratory rate timers, etc.)
- Catchment population (how many households per CHW)
- Breadth of tasks (vertical program vs. more general information, focused interventions/campaign, curative vs. preventive care etc)
- Support from/integration with rest of PHC system
- Community support/accountability
- Role of external partners (INGOs, donors)
- Sense of ownership of the program by host government
- Performance monitoring
- Task shifting
- CHW safety issues

5. ***Do you have recommendations in terms of managing this process? How can we increase the likelihood that this effort will influence the design/development/implimentation of CHW programs?***

6. ***Could you suggest any other individuals whom you considerable to be knowledgeable about CHW programs, broadly speaking?***

This input will be particularly useful to us at this point, as it will help us prioritize across the various issues we could be addressing. We expect this will be just the first of a number of contacts we will have with you through this process.

Reference

1. Perry HB, Zulliger R. *How Effective Are Community Health Workers? An Overview of Current Evidence with Recommendations for Strengthening Community Health Worker Programs to Accelerate Progress in Achieving the Health-Related Millennium Development Goals*. 2012. Available at: http://www.coregroup.org/storage/Program_Learning/Community_Health_Workers/review%20of%20chw%20effectiveness%20for%20mdgs-sept2012.pdf. Accessed January 9, 2013.