Developing and Strengthening Community Health Worker Programs at Scale

A Reference Guide for Program Managers and Policy Makers

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Table of Contents

Section 1. Setting the Stage

Chapter 1 | Introduction

Introduction

The global renewed interest in community health workers (CHWs) provides an opportune moment to take stock of issues and challenges CHW programs face. *Developing and Strengthening Community Health Worker Programs at Scale: A Reference Guide and Case Studies for Program Managers and Policymakers* (the *CHW Reference Guide*) focuses on large-scale, mostly public sector, CHW programs and how they might become as effective as possible. We provide many concrete examples of how large-scale programs have organized themselves, but more importantly, we raise issues that need to be faced by any large-scale program. With this in mind, the *CHW Reference Guide* is intended to be used as a practical guide for policymakers and program managers wishing to develop or strengthen a CHW program, drawing lessons from other countries that have implemented CHW programs at scale.

The *CHW Reference Guide* is divided into four main sections, proceeding from broader, higher-level issues down to the more specific operational issues:

- Section 1 sets the stage through addressing planning, governance and finance.
- Section 2 covers a range of human resources issues (CHW tasks, recruitment, training, supervision, and motivation).
- Section 3 concerns the context for community health work, looking at both the health system and the community.
- Section 4 addresses operational issues essential for achieving program impact, such as scaling up and operating at scale, as well as measurement and data use.

Community health challenge

For more than 50 years, as leaders in primary health care (PHC) have tried to elaborate strategies to better meet the health needs of populations, they have gravitated repeatedly to solutions that involve recruiting and training local people to play roles complementing and supplementing those of health professionals, encouraging healthier practices and care-seeking and, in some instances through task-shifting, providing services that otherwise would fall within the responsibility of health professionals. Such strategies have varied considerably by place and time, with different names for community-level workers being used. Many of the issues that face policymakers, program managers, and external development partners, as they make decisions and design and manage community health programs, are essentially the same as those faced by their predecessors. Namely, how to sustainably finance such a program; how to design it so it will function effectively; how to select, train, motivate, retain, and supervise CHWs; how to ensure consistent supplies of needed drugs and commodities; and how to monitor and ensure performance.

Small-scale projects versus large-scale programs

Calls for large-scale public sector CHW programs based on experiences with smaller, more intensively supported programs are attractive. However, large-scale CHW programs are not a one-size-fits-all solution, and context-specific considerations must be made at scale. The value of small-scale experiences is in the sensitization of national- and global-level decision makers to the power of CHW programs in achieving population-level health gains. These small pilot projects are often not replicable at scale, although they can provide the indispensable seed from which large-scale national programs can emerge.

A systems perspective

CHWs work within the context of a program, a community, and a health system. An effective contribution to improved health in the community depends on the effectiveness of a system. Large-scale public sector CHW programs are complex entities that require adapting a systems perspective to the national and local contexts. Throughout the *CHW Reference Guide*, we will look at CHWs within this larger systems context, with the important take-home message that any decision we make about a particular detail within a program potentially has ramifications or consequences for other parts of the system.

Context

Any particular CHW cadre works in a setting along with other health workers, CHWs, managers, and actors—each with their own roles and each, potentially, interacting with others. This set of relationships and interactions resembles an ecosystem. The interactions can affect the performance of particular actors, the emergence of competing interests, and the evolution of these dynamics over time. The *CHW Reference Guide* attempts to avoid categorical recommendations, but rather offers suggested issues and principles to consider and, when possible, brings in relevant program experience.

Who are community health workers?

CHWs are a diverse group of community-level workers. The *CHW Reference Guide* distinguishes between two levels of CHWs: (1) full-time, paid, with formal pre-service training; and (2) volunteer, part-time workers. Specifically, four types of CHW cadre are referred to throughout the *CHW Reference Guide*:

- Auxiliary Health Workers, who are paid, generally full-time workers with pre-service training usually of at least 18–24 months, who may or may not be recruited from the localities where they serve.
- Health Extension Workers, who are usually paid, full-time employees but have less than a year of initial training and are generally recruited from the localities where they work.
- Community Health Volunteers-Regular, who generally work several hours a week, are non-salaried but receive some material incentives, and have a role that can involve health promotion and some limited elements of service delivery.
- Community Health Volunteers-Intermittent, whose duties normally involve only intermittent health promotion or community mobilization.

We recognize that this list is not fully exhaustive. There are other types that do not closely correspond to any of these categories, and there are cadres that stand in an intermediate position with respect to these types.

Variation in community health worker programs

There are a multitude of differing CHW programs. Programs differ markedly by technical content: on one hand, we have CHWs who are generalists responsible for a wide range of PHC services, but there are also many examples of cadres of CHWs working for specific technical programs (e.g., HIV/AIDS, malaria, or tuberculosis). In terms of institutional characteristics, at one end of the spectrum, we have national CHW programs or cadres, under ministries of health (MOHs). At the other end of the spectrum, there are many nongovernmental organizations (NGOs) and community-based organizations that have their own CHWs, who are not formally linked with public sector programs. There are also many examples of CHW cadres that are formally recognized by government but have strong links with NGOs (including donor-funded NGOs). Additionally, there are a few examples of large CHW programs operated by major NGOs. Because our

principal interest in the *CHW Reference Guide* is on efforts expected to contribute to population health impact at scale, our focus is primarily on large (generally national) programs and cadres operating under the MOH.

Conclusions

The effective functioning of large-scale CHW programs offers one of the most important opportunities for improving the health of impoverished populations in low-income countries. The *CHW Reference Guide* presents principles and programmatic suggestions that we hope will be useful as decision-makers and program implementers consider the initiation, expansion, or strengthening of CHW programs in their country.

Chapter 2 | A brief history of community health worker programs

Origins and early history of community health worker programs

Russia's *Feldshers* of the late 1800s are considered the first example of a formally well-trained non-physician cadre to carry out health care duties in rural areas of the country. *Feldshers* were literate, local people formally trained for three years and authorized by the state to provide PHC services; many were also trained in midwifery skills. The first example of a large-scale CHW program comes from Ding Xian, China, in the late 1920s. Dr. John B. Grant of the Rockefeller Foundation, assigned to Peking Medical University, and Jimmy Yen, a Chinese community development specialist with a background in teaching literacy to adults, trained illiterate farmers to record births and deaths, vaccinate against smallpox and other diseases, give first aid and health education talks, and help communities keep their wells clean. These services were delivered by what were originally known as Farmer Scholars, who later became known as Barefoot Doctors. By 1972, an estimated one million Barefoot Doctors served a rural population of 800 million people in the People's Republic of China. Barefoot Doctors were peasants who were given three months of training and expected to work half-time performing their health-related duties—environmental sanitation, health education, immunization, first aid, and basic primary medical care—and half-time doing agricultural work.

In the 1960s, the inability of the modern Western medical model of trained physicians to serve the needs of rural and poor populations throughout the developing world was becoming more apparent, and organizations such as the Christian Medical Commission began to envision a new approach to providing health services based on principles of social justice, equity, community participation, and prevention. The World Health Organization's (WHO's) 1975 book, *Health by the People*, consisted of a series of case studies from countries where CHWs were the foundation of innovative community health programs. The book served as part of an intellectual foundation for the International Conference on Primary Health Care at Alma-Ata, USSR—now Kazakhstan—in 1978. Ultimately, the conference resulted in the Declaration of Alma-Ata, which called for the achievement of "Health for All" by the year 2000 through PHC. The Declaration was explicit in defining an important role for CHWs in provision of PHC services. Article VII.7 of the Declaration states: "Primary health care . . . relies, at local and referral levels, on health workers, including physicians, nurses, midwives, auxiliaries, and community workers as applicable, as well as traditional practitioners as needed, suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community."

During this early period of experience with CHWs, the movement incorporated two agendas: a **service-oriented** agenda of extension of preventive and curative services within the existing health system, and a **transformative** agenda concerned with engagement of communities in the process of taking responsibility for their health and addressing the environmental, social, and cultural factors that produce ill health, including inequity and deep poverty.

Why community health worker programs failed in the 1980s and 1990s

In the 1980s, it was becoming apparent that a number of large-scale programs were encountering serious difficulties due to inadequate training and insufficient remuneration or incentives, along with insufficient continuing education, supervisory support, logistical support for supplies and medicines, acceptance by higher-level health care providers, and integration with the health system. The rising prominence of selective approaches to PHC that did not require CHWs, as well as the loss of momentum of the nascent PHC

movement as envisioned at Alma-Ata, led to the demise of a number of large-scale CHW programs. Furthermore, the global oil crisis of the 1970s led to a global recession and a debt crisis for many developing countries in the 1980s. Governments were forced by international donors, most notably the World Bank, to embrace free market reforms and to reduce their public sector financing, including financing for health services. Thus, financial resources needed to support new health initiatives, including large-scale CHW programs, were not available.

Political commitment for PHC and for strong and effective CHW programs was often lacking. There was a sense that these programs represented second-class care and that CHWs were a temporary solution. Returning to strategies prevalent before Alma-Ata, priority was again given to investments in secondary and tertiary levels of care. As CHW programs wavered, efforts at selective PHC and vertical programs with strong international donor and technical support gained prominence.

Evolution of community health worker programs that emerged during the mid-1980s

Successful examples of large-scale CHW programs began to emerge during the mid-1980s, including programs in Brazil, Bangladesh, and Nepal, which are notable because of their rapid achievements in reducing under-5 mortality since 1990. The Brazil national health care program (*Serviço Especial de Saúde Pública*) started in 1987 and over time gradually achieved universal PHC coverage and a marked improvement of population health status. The program employs one of the largest CHW networks in the world, consisting of 222,280 CHWs called *Visitadoras*, who provide home visits and services to 110 million people. Bangladesh started a community-based family planning (FP) program in the mid-1970s with an initial cadre of Family Welfare Assistants that expanded in the mid-1980s. By 1997, Bangladesh had 30,000 female CHWs providing home-based FP services. In the mid-1980s, BRAC, a national Bangladeshi NGO, initiated a CHW program composed of women who were members of a BRAC microcredit savings group. The CHWs were called *Shasthya Shebikas* and the program expanded gradually such that, at present, this national NGO cadre consists of 100,000 CHWs who reach more than 110 million people with comprehensive services. Nepal's Female Community Health Volunteer (FCHV) Program was established in 1988; responsibilities of the now 40,000 FCHVs include distribution of vitamin A capsules, detection and treatment of common childhood diseases, distribution of oral contraceptives, and promotion of health services for first aid, antenatal care, FP, and immunization.

Community health worker programs that have emerged since 1990

There is a growing evidence base on the potential contributions of CHW programs to the health status of populations. Examples of investment in large-scale CHW programs come from Pakistan's Lady Health Worker Program, Uganda's Village Health Team Strategy, Ethiopia's Health Extension Program, and India's Rural Health Mission. However, in spite of growing enthusiasm for expanding CHW programs, it remains the case that our knowledge of the effectiveness of large-scale CHW programs remains limited, and the challenges faced by early large-scale CHW programs appear to still be present.

Renewed interest and new programs in the 2000s

As evidence has continued to accrue on the effectiveness of interventions delivered by CHWs, enthusiasm has grown for a stronger investment in CHW programs as a strategy for accelerating progress to reach the Millennium Development Goals (MDGs) for PHC, particularly MDGs 4 and 5 for reducing child and maternal mortality.

Conclusions

The history of the many and varied approaches to expanding health services through the training and deployment of community-level workers provides a meaningful window through which to consider the explosion of interest and expansion of CHW programs throughout the world. Developing programs that are sustainable and that have strong periodic evaluations leading to ongoing improvements will be essential to achieve long-term viability and impact on population health.

Chapter 3 | National planning for community health worker programs

Introduction

Incorporating or expanding use of CHWs into existing health system infrastructures is a difficult task that requires careful planning. Planning for such an expansion demands the involvement of multiple stakeholders from the national to the village level. The direct result of careful planning during the design and implementation of a national CHW program is a context-appropriate program that successfully trains, supervises, and retains CHWs, while simultaneously improving the health service delivery at the community level. This chapter addresses the planning process in a very general way, recognizing the variation from country to country and context to context.

Phases of the community health worker program planning process

A national-level plan should coordinate planning committees and stakeholders from multiple governmental and community levels, as well as NGOs and relevant implementing actors, to create an informed strategic plan for the CHW program that includes a situational analysis, an operational model, integration of the program within policy, CHW training, CHW supervision, a deployment strategy, and routine and systematic monitoring and evaluation (M&E). This chapter helps to define clear processes to develop and implement a national plan for community health services that is responsive to local norms and context-specific constraints.

Phase 1: Policy-level planning

Situational analysis: A situational analysis can both identify context-specific needs and challenges and guide design decisions about key program elements. It can also document the current state of the health system and may include information on health services offered by the formal and informal sectors, care-seeking behaviors by priority groups such as women and young children, supply chain management, utilization and coverage of care provided by the health system, and human resources challenges. A situational analysis should provide decision-makers with a comprehensive understanding of the stakeholders and how they, along with their inter-relationships, affect people's access to health services.

Operational model: Development of an operational model provides an opportunity to visualize how the health system functions, including service provision, human resources, technology and information management systems, and the supply and distribution of commodities. An operational model can be used to define CHW roles in order to address identified gaps in the local health care system, such as defining who CHWs are, what they do, how they get their supplies, how the system intends to retain them, and what training and supervision will be required. Some tools that can be used at this stage include SWOT (strengths, weaknesses, opportunities, and threats) analysis, flow charts, feedback loops, constraints analysis (through the framework of the six WHO health systems building blocks), stakeholder analysis, develop-distort-dilemma (exploring changes—both positive and negative—that could be brought on by introducing a new cadre of workers, for example), power relationships, and cost-effectiveness scenarios.

Coordination of planning: National-scale implementation of community health services has implications for health care governance from the MOH down to village leaders. Health system planning and ongoing monitoring of performance must begin at the community level and provide feedback through various levels to the national level, where policy, funding, and evaluation can be periodically revised. The most effective planning mechanism is a feedback loop, where the community level feeds back information about the program through

the multiple levels (e.g., district, provincial) to the national level. This chapter outlines and elaborates upon roles and responsibilities at the national, provincial, district, health center, and community levels.

Phase 2: Translation of policies into a general plan

The principal ideas that emerge from the planning process need to be converted into CHW program policies, and these, in turn, need to be translated into a general operational national-level plan. Implementation research can help in ensuring that the analyses done in Phase 1 can be appropriately translated to the rollout of policies. Adopting evidence-based policies is a prerequisite to effective implementation, and focusing on continuous improvement to better understand challenges that arise in implementation is key in yielding sustainable programs.

Phase 3: Preparation of a detailed national implementation plan

After a general operational national-level plan has been created, the next step is to prepare a detailed national implementation plan. This preparation requires development of details for the specific subsystems of the program; here, we will briefly focus on planning for training and deployment, supervision, and M&E. Later chapters focus on governance, financing, selection and recruitment, relationship with the health system, engagement with communities, and scaling up.

Training and deployment: Information from the formative work in Phase 1 will help direct decisions about selection criteria for CHWs and their training needs. Further, information arising from the situational analysis on spatial distribution of facility-based services can inform the deployment strategy of CHWs. Questions to consider:

- Who will train CHWs? Will trainers be compensated? What are the incentives?
- What training models will be used? How often will CHWs receive additional training? If there is a hierarchy among CHWs, how are those who receive extra training selected?
- How are CHWs allocated to their posts? Is gender a consideration? Is burden of disease considered?
- What types of activities will CHWs be trained for? Will training be general or will CHWs learn how to carry out specific tasks? Are these tasks for treatment, promotion, or support?

Supervision, monitoring, and evaluation: Countries vary considerably in their approaches to supervision. Planning for supervision has to take into account the capacity of existing staff to take on additional time-consuming responsibilities. M&E is an integral part of any CHW program; mechanisms for data collection and feedback into modifying program operations are important when developing a detailed implementation plan. Questions to consider: Who are the supervisors? Are they compensated? What are the incentives? What is their time commitment? Are there gender implications? What are the power implications? How many CHWs are supervised by one person? What kinds of information are supervisors noting for their reports? Is quality being measured by supervisors in a systematic way? Are the data entered regularly? Who is responsible for collating data related to quality of CHW services from supervisors? How are data from supervisors used in impact evaluation projects?

Data use for continuing improvement: As a program is implemented, scaled up, or modified, an ongoing iterative replanning process is required. Findings from a variety of sources (e.g., routine monitoring, field visits, special studies) invariably show certain aspects of program performance not meeting expected standards; redesign of some features may be needed to address performance problems.

Conclusions

Careful planning during the design and early implementation of a national-level CHW program is essential for a context-appropriate program that successfully trains, supervises, and retains CHWs, while simultaneously improving the health service delivery on the community level.

Chapter 4 | Governing large-scale community health worker programs

What is meant by "governing" in the context of health systems?

Improving how CHW programs, and health systems more broadly, are governed is increasingly recognized as important in achieving universal access to health care and other health-related goals. Governing comprises the processes and structures through which individuals and groups exercise rights, resolve differences, and express interests. The process of governing involves ongoing interactions among actors—such as health care decision makers, community representatives, and agencies—and structures, including the laws, resources, and beliefs within which these actors operate. Governing health services can also be conceptualized in terms of inputs, processes, and outputs. Governance inputs include how and by whom the institutions governing the health system are constructed and managed. The processes of governance concern how administrative procedures and rules governing the health sector are implemented day to day. Governance outputs can be seen as the benefits that should result from the implementation of governance rules and processes within a health system.

Why is governing an important issue for CHW programs?

Decisions on the type of structures established for governing CHW programs, who will be involved in governing (i.e., the actors), and how these will relate to the wider health and political systems are political. These decisions are important, as they will affect a range of other processes in these programs, including day-to-day accountability, and will ultimately impact on performance and sustainability. Some important decision parameters include the following: extent to which the CHW program is part of the formal health system; extent to which CHWs are formally recognized as a cadre within the health system; extent of decentralization of authority for governing and managing CHW programs; scale of the program; roles that key stakeholders, including communities and/or service users, have in governing the programs; and how, and by whom, resources are obtained and administered.

There are different models for governing CHW programs in relation to the health system. For example, some programs are not part of the formal facility-based health system, but have structures that provide good links to this system. Some programs are integrated with the formal health system and are well-supported within it. Other programs are centrally driven with national guidance, but implemented through separate structures. These varied models for governing CHW programs have implications, in turn, for how programs are financed and funded, how and by whom CHWs are selected and trained, how CHWs are supported and supervised, how CHWs are paid, and how communities are involved, among many other issues. Table 1 in this chapter provides a summary of governance principles within health care, including strategic vision, participation and consensus orientation, rule of law, transparency, responsiveness, equity and inclusiveness, effectiveness and efficiency, accountability, intelligence and information, and ethics.

What key questions do decision-makers need to consider regarding governing CHW programs?

Because CHW programs are usually located between the formal health system and communities and involve a wide range of stakeholders at local, national, and international levels, their governance is often complex and relational. In addition, CHW programs frequently fall outside of the governance structures of the formal health system or are poorly integrated with these structures—making governing the programs more challenging. This chapter discusses several key questions that decision-makers need to consider in relation to governing CHW programs.

How, and where within political structures, are policies made for CHW programs? CHW programs experience a number of challenges in relation to policy processes, and it is therefore important to consider the following questions: Where are policy decisions made? Who are the stakeholders involved in defining and designing these policies (participation), and to what extent is this done in a collaborative manner (consensus orientation)? Are there important historical legacies that may shape CHW-related policymaking? How might wider health and political systems goals in a particular context influence how CHW programs are governed?

Who, and at what levels of government, implements decisions regarding CHW programs? After a policy decision has been made, the next key challenge is transforming this policy into practical actions. Policy implementation is challenging in most settings for a range of reasons, including the complexity of the health system. The process of implementing policy decisions may involve multiple levels of government, as well as other stakeholders, and the coordination and management of complex processes. Such complex processes may include (1) limited financial resources or difficulties in disbursing resources to the levels where they are needed; (2) deficits of other resources, including human resources for health care delivery and management; (3) competing priorities within and beyond the health system; and (4) challenging physical environments, such as very remote communities. Careful and systematic planning is needed to ensure that CHW program policies are implemented as intended.

What laws and regulations are needed to support the program? The governing and implementation of CHW programs may be shaped or constrained by existing laws or regulations in relation to, for instance, the organization of health services, human resources, drugs, technologies, and financing. CHW programs may experience challenges if laws and regulations that are needed to enable effective program functioning are not put in place in a timely manner or if existing laws and regulations are not amended as needed. Appropriate legal and regulatory frameworks are, therefore, needed for large-scale programs to function effectively. Those developing and scaling up CHW programs need to consider which existing laws and regulations need to be taken into account and whether changes to them are needed to ensure the effective governing of the program and its implementation as intended.

How should the program be adapted across different settings or groups within the country or region? For CHW programs operating at scale, there may be tension between adopting a fairly standard approach to the governing and implementation of programs versus trying to ensure that the program is tailored to the needs of different settings or groups. There are a number of reasons why programs may need to be adaptable. Firstly, different population groups within a country may have very different health and, therefore, program needs. Secondly, programs may need to be adapted for particular local contexts, such as remote areas with poor physical access where operational challenges differ dramatically from more densely populated urban areas. Thirdly, CHW programs may need to be adapted to local or regional health system arrangements, such as the availability of other health care providers in the area, the presence of private drug sellers or other sources of drugs, or the extent of private sector health care provision.

Conclusions

Governing CHW programs can be complex because of the location of these programs between the formal health system and communities, and the involvement of a wide range of stakeholders at local, national, and international levels. CHW programs frequently fall outside of the governance structures of the formal health system or are poorly integrated with it. The most appropriate and acceptable model for governing CHW programs depends on the community, on local health systems, and on the political context of the program.

Chapter 5 | Financing large-scale community health worker programs

Introduction

CHW programs have been promoted over the last half century as a principal means to extend basic health services to large populations of underserved people at low and sustainable cost. However, the relatively low cost of training and supplying individual CHWs—compared to more highly trained health workers—can distract attention from the large number of workers needed and the importance of financing a full range of costs that such programs might require to be successful. While CHW programs are neither cheap nor easy to implement, the emerging consensus is that these programs are nonetheless a good investment to promote equity. This chapter focuses on indirect and direct costs of CHW programs, options for financing, and guidance on financial sustainability of CHW programs.

What are the elements of CHW programs that need to be included in cost calculations?

Investment costs (including capital expenditures) involve planning at the outset, which requires budgeting for time and money. Certification, accreditation, and quality control, as well as the development of training institutions for the CHWs and their supervisors, also need to be budgeted at the outset. Orientation of health staff to the role of CHWs is an important activity to carry out up front before program implementation, as well as publicity, community engagement, and community mobilization. Other investment costs include the initial costs of vehicles, equipment, materials, supplies and medicines, and drug kits.

Recurrent costs are those costs required to fund the operational expenses year to year. For example, capital expenses for vehicles and equipment will be made on an ongoing basis. Direct annual operational expenses need to be budgeted for, including the costs of recruitment and training, compensation, supervision, supplies and equipment, community engagement, and M&E.

Direct costs are budgeted, while indirect costs refer to the support provided to the CHW program from other parts of the health system through administration, training, supervision, and supplies. Indirect costs also include costs incurred by patients or their relatives in obtaining services from CHWs.
Even CHWs working as volunteers have costs that need to considered, whether they are opportunity costs (what a CHW could have earned if she had not been working as a CHW) or actual (and unreimbursed) expenses that CHWs may incur in their work, such as paying for transport to attend meetings or pick up supplies. Indirect costs include salaries or incentives for supervisors, as well.

What are the full costs of CHW programs?

CHW program costs can be considered from a variety of vantage points. This includes costs that need direct funding, as well as in-kind costs. These costs can be calculated as total program costs, costs per program beneficiary, or cost per CHW. Cost per program beneficiary may not be the same as the cost per capita (of the total population) if the CHWs are serving a targeted population, such as mothers and children. This chapter provides a comparative table (Table 2) of large-scale CHW program costs across India, Pakistan, Brazil, Ethiopia, and Nepal.

What are the different options for financing CHW programs, including strengths and limitations?

Sources of funding range from the central national government; to a combination of revenue from the central national government, state government, and local municipalities; to local contributions from communities (via user fees, volunteer donation of time by CHWs to general community contributions); to funding from international donors. When CHWs are volunteers, they are in fact a major source of the funding for the program. This section considers some advantages and drawbacks of each type of financing and highlights examples of the CHW program financing mechanisms in Brazil and Bangladesh. Key considerations here are who bears the burden of financing, whether the financing mechanism has incentives for efficiency and quality and how sustainable it is, and what the risks to sustainability are.

Government as funder: Funding from government has important advantages, including job security for the individual CHW and stability (of a sort) for the program. It also helps the CHW program to achieve a higher degree of equity than would be possible with local community financing. General revenue tax financing is generally more equitable than user-financed services. Programs that rely primarily on community financing, such as fees for services, place greater burdens on poor communities and the sick. One of the inherent problems with government funding, particularly from the central level, has been the vulnerability of CHW programs to cutbacks in funding when government shortfalls occur.

Community as funder: The concept of community financing is attractive, but unfortunately it has proved to have serious limitations and numerous examples exist of community funding support for CHW activities failing to be sustainable. It is not uncommon for communities to provide labor and pay for the construction of a health post from which the CHW will work. Profits from revolving drug funds might be used to pay for maintaining a health post, purchasing supplies, or providing payment to the CHW. Fee for service by CHWs is generally considered to be open to abuse, and for this reason is not recommended by UNICEF and WHO.

CHW as volunteer: This form of community financing has serious limitations when a program is expecting a significant amount of work from the CHW. There is a general consensus that this approach can be unjust, inequitable, and unsustainable in the long term in situations in which CHWs have no other source of income and a significant portion of the day is needed to meet the job requirements. In general, volunteerism has been associated with a high attrition rate, leading to increased costs of recruitment and training. Governments face formidable challenges by giving formal recognition and salaries to CHWs because in virtually all countries, CHW programs are not well established nor are their benefits to population health widely recognized.

External donors: External donors are most likely to pay for certain start-up costs, such as planning, policy advocacy, technical support, initial training, and procuring an initial drug stock or an initial set of supplies and equipment. They are unlikely, however, to pay for long-term recurring expenses.

Guidance to assure financing becomes a sustainable positive element in CHW program development

Careful planning that takes into account the full costs of the program is essential, and the establishment of a plan for adequate, fair, and sustainable financing must follow. Establishing a strong a base of political support for long-term financing is critical if government funding is required. Establishing a strong M&E system and documenting early program quality and impact can generate political support that will be invaluable in securing governmental financial support. Finally, if CHWs are adequately remunerated (and have career

advancement opportunities), attrition will be low, which can reduce the costs and poor quality associated with high rates of attrition.

Conclusions

Accumulating evidence on the effectiveness of CHWs in low-, middle-, and even high-income countries provides strong indications that, for the foreseeable future, CHW programs are not merely a stopgap solution. Investments in these CHW programs are, in fact, investments in strengthening the health system. CHW programs need adequate financing to reach their full potential.

Chapter 6 | Coordination and partnerships for community health worker initiatives

Introduction

The critical shortages within the essential health workforce in virtually all low- and middle-income countries pose a serious obstacle in attaining health goals. Challenges like geographic misdistribution of human resources for health (HRH), limited capacities of many health workers, inadequate retention strategies, weak management systems, and poor working conditions contribute to an inadequate capacity of HRH to provide essential health services at local levels that are readily accessible and appropriate in quality. With this backdrop, CHW initiatives as a part of community-based health systems are absolutely vital and have manifested their value in improving health access and population-level health in many settings. It is globally acknowledged that no single actor or organization can improve the health workforce situation in any given country and, therefore, multidimensional interventions and multisectoral partnerships are essential. This chapter addresses key questions around coordination and partnership collaboration.

Why are partners and coordination needed for CHW initiatives?

Improvements are needed in the process for developing and managing CHW programs. In many countries, this process has been piecemeal and often centered on individual projects—frequently, vertical programs with separate funding mechanisms—leading to gaps in services as well as lack of integration and synchronization with the local health systems and local health needs. Within this landscape, national governments along with partners, including supporting donors and technical advisors, can make important contributions toward developing approaches that can strengthen relationships between the CHWs and the formal health system. The planning, financing, management, implementation, and monitoring of CHW initiatives require actions from and interaction among various sectors and stakeholders. Additionally, coordination and synchronization is essential, particularly for policy development, planning, implementation, management, and M&E.

What are the challenges of collaboration and coordination for CHW initiatives?

CHW initiatives face a complex set of challenges that are multidimensional and multisectoral. This chapter provides a list of prominent challenges, including (1) health system weaknesses, (2) inequitable distribution of health workforce, (3) limited political commitment to CHW initiatives, (4) deficient policies and plans for CHW initiatives, (5) inadequate financial resources to support CHW initiatives, (6) non-engagement of key stakeholders, (7) lack of effective coordination mechanisms and harmonization of actions, (8) no single typology for CHWs internationally or within countries, (9) diverse models of career and incentive structures, and (10) insufficient training systems.

What are the policy options for collaboration and coordination for CHW initiatives?

A multisectoral approach is an important theme in the current discourse on addressing HRH challenges. A first step is the establishment of a sufficiently competent coordination process to offer a workable platform that will engage all partners and stakeholders, with their resources and competencies, to yield tangible results. National coordination processes should be institutionalized and should bring a suitable national perspective to the policies and plans that emerge, thereby increasing the likelihood that mutual accountability will be fostered and that proposed solutions will be sustainable.

A policy dialogue among stakeholders is helpful to agree on a joint policy and priority interventions. In many settings, the MOH is in the best position to provide stewardship of the coordination process and facilitate the alignment of related sectors by bringing them on board during the key phases of planning, mobilizing the necessary resources, carrying out the strategic interventions, and monitoring the progress and effectiveness of implementation. Sharing information and insights requires a formal mechanism for continuous policy dialogue and also formal communication channels for sharing the results of the policy dialogue. Building an effective and inclusive partnership network also provides a platform to coordinate and collaborate with development partners and UN agencies for harmonizing their efforts in support of national goals, priorities, and plans and systematically addressing the needs for financial and technical support required for effective CHW programs.

What are approaches to national-level multi-stakeholder coordination?

There are several national multi-partner coordination mechanisms for health, such as sector-wide approaches, country coordinating mechanisms, the International Health Partnership, national HRH observatories, and country coordination and facilitation approaches. This section defines each approach, including strengths and limitations. The coordination process for CHW initiatives should be able to meet the country's needs, and should be aligned with other coordination mechanisms as part of the overall health agenda.

How can initiatives for CHWs and other front-line health workers best be coordinated?

Many partners are engaged in supporting CHW programs in various countries but find fragmentation of policies and programs to be a big challenge. This calls for harmonized and synchronized actions that support national needs. Particularly, in order to deliver on universal health coverage at the country level, the global health community needs to work together to address critical gaps and inefficiencies at all levels. In 2013, the Global Health Workforce Alliance and other partners convened a global consultation during a side session at the Third Global Forum on Human Resources for Health at Recife, Brazil. A CHW Framework for Partner Action was endorsed alongside a joint commitment to work together to adapt, apply, and implement the CHW Framework, fostering harmonization and synergies, accountability, and joint action on critical knowledge gaps, and reaching out to all stakeholders engaged with CHW programs. The key actions (summarized below) derived from the CHW Framework and the joint commitment together provide guiding principles toward harmonizing of support for CHW initiatives.

Key actions for harmonization and alignment

At the global level, all actors need to contribute together to a comprehensive systems approach in advocacy, programming, funding, implementation, monitoring, and expansion of the knowledge base for CHW programs. At the national level, principles for alignment and harmonization for CHW programs and initiatives need to be established and made compatible with broader national health system development frameworks.

Key actions for monitoring and accountability

Accountability for harmonization of CHW initiatives will be achieved by public reporting. The monitoring and accountability framework calls for scheduled reporting and mechanisms for transparency and public information-sharing at national and international levels. It is proposed that the Global Health Workforce Alliance, WHO, or another global coordinating body, through a global convening role, provide a platform

through which partners can disseminate and evaluate their contributions toward the development and support of effective and sustainable CHW programs that are aligned with national policies.

Key actions, knowledge gaps, and research priorities

The organization and prioritization of a global CHW research agenda need further discussion to build global consensus on the way forward. Particularly, mechanisms that foster collaboration and knowledge sharing of CHW research efforts, and that establish a process for identifying future research priorities, will ensure continued expansion of the evidence base for CHWs.

Section 2. Human Resources

Chapter 7 | Community health worker roles and tasks

What kind of roles and tasks do CHWs have already?

CHW programs within maternal and child health (MCH) and primary health care (PHC) tend to focus on one of several broad roles: health promotion, preventive care, community mobilization, and treatment.

Health promotion: CHWs in the role of health promoter primarily provide information and counseling with the aim of encouraging particular behaviors. CHWs in this role are typically used to promote breastfeeding and child nutrition, family planning, immunization, and other behaviors linked to MCH. In addition, CHWs are sometimes also used to promote awareness about social welfare issues, such as domestic violence or alcohol and drug abuse.

Preventive care: CHWs provide preventive health care services by distributing commodities such as bed nets, iron folate supplements and other micronutrients, condoms, contraceptives, and certain vaccines, for example, to all pregnant women or children of a certain age. The provision of commodities has logistical implications, as well as implications for how the CHW is perceived by the community.

Community mobilization: CHWs act as community mobilizers, initiating activities such as the digging of latrines, the identification of clean water sources, and the organization of nutrition and sanitation days.

Treatment: CHWs assist in provision of curative health care services. Tasks for this role commonly include the diagnosis and management of common childhood illnesses, such as malnutrition, diarrhea, and pneumonia, as well as timely referral to health facilities.

How effective and safe will it be to use CHWs to perform a specific task?

There are a variety of interventions we know can save lives and improve health, but how do we decide which services should be delivered by CHWs? When making these decisions, program planners should explore what current research evidence and evidence-based guidelines say about the effectiveness and safety of tasks when performed by CHWs. The WHO has developed guidance about the types of tasks for mother and newborn health that CHWs and other health worker cadres can perform. Similar WHO guidance is available concerning the use of CHWs and other health worker cadres for the care of people with HIV/AIDS. There is a growing body of evidence that concludes that the promotion of certain health care behaviors and services by CHWs, such as the promotion and support of breastfeeding and childhood immunization, probably leads to significant improvements in MCH. However, far fewer studies have explored whether CHWs can effectively perform more curative or invasive tasks; therefore, the WHO has recommended that a number of tasks should be performed by CHWs only in the context of either M&E or rigorous research.

Are CHWs' roles and tasks likely to be regarded as acceptable by CHWs and their target population?

Program planners also need to assess whether potential CHW roles and tasks are considered acceptable and appropriate by the CHWs, their target population, and the wider community, including community leaders, husbands, mothers-in-law, and other community members. Attempts to introduce roles and tasks that do not find support among these groups are likely to be unsuccessful. The involvement of community members and CHWs in program planning is critical to ensure that tasks are seen as relevant and useful. The delivery of services that are valued by the community and by the CHWs themselves can increase uptake of these services

and the CHW's legitimacy and motivation. The acceptability to the community of particular tasks performed by CHWs is also likely to be influenced by the type of CHW who performs them. In many societies, recipients may prefer to receive MCH care from female CHWs. However, the age and life experience of the CHW may also be important. Gender considerations can also go beyond patient preference. Traditional gender roles may affect CHW mobility, workload, hours of work, and incentives. These considerations are context-specific and culture-dependent; a general understanding of gender roles and expectations in the community is critical to program sustainability.

How many tasks and activities should each CHW have?

Program planners will also need to think about the scope of the CHW's role, whether he or she should have a few but specific tasks and activities or have a broad repertoire of responsibilities. A related issue is whether each community should be offered different types of CHWs, each with his or her own specialty or whether they should have access to one generalist CHW. From the health care recipient's point of view, the generalist CHW may make more sense. Having a system in which community members have to relate to several CHWs, each with his or her own specialty, can lead to confusion about who is offering which task. It can also lead to frustration when CHWs are only able to respond to very specific health issues, for example, when tasks are split between health care for the mother and health care for the newborn or the child. Communities may therefore prefer generalist CHWs who can offer continuity of care. The generalist approach may also be more satisfying for the CHWs themselves as it may be perceived as more meaningful and allows them to achieve a better understanding of the recipient and his or her health and social circumstances. Despite these advantages, CHWs may find it more manageable to split work between them and to focus on and become skilled at a small number of tasks or to have tasks introduced gradually. In some cases, it may also make more sense to split some tasks between male and female CHWs according to what is most appropriate from a gender perspective.

When and where will each task be performed and how much workload will it imply?

Program planners also need to think about when and where each task can or should be delivered by the CHW and the amount of work anticipated for the CHWs and their supervisors. These factors will have important implications, including the amount of flexibility and influence a CHW has over his or her work day, the appropriate catchment area, suitable incentives, and the opportunity to keep skills up-to-date. Program planners will need to consider the need for transportation, safety measures, and the CHW's freedom of movement. CHWs with large workloads are likely to need more incentives.

What kinds of skills and training will the CHW need to perform specific tasks?

When assessing skills mix and training needs, program planners may want to think about the following questions to determine training needs: Is the task complex to perform? Does the CHW need to tailor the task to the needs and circumstances of the individual recipient and the local context? Does the CHW need to make a complex diagnosis before performing the task? Does the CHW need to know how to deal with adverse effects or complications?

What type of health system support will the CHW require?

Health system support may primarily involve supervision, typically from facility-based health workers, but may also occur through peer support, such as by working together in teams or in pairs. Health system support

may be required to ensure a well-functioning referral chain. A number of tasks are given to CHWs on the condition that they are trained to recognize symptoms or danger signs and refer patients to the appropriate health facilities.

Conclusions

Decisions regarding CHW roles and tasks are complex, and each decision has implications for the effectiveness, acceptability, feasibility, and costs of a CHW program. Decision makers should draw from global guidance and research evidence, but they also need to engage with and understand the experiences, needs, and concerns of local communities and health workers.

Chapter 8 | Recruitment of community health workers

Introduction

Selecting and recruiting the most appropriate individual to fill the role of a CHW is among the most essential elements that contribute to a well-functioning community health strategy. A best practice for recruitment is to recruit a CHW from within the community through community participation, meeting all selection criteria when possible. In special cases where a CHW may need to be recruited from outside the community, a second best practice is to ensure that the community not only participates in and agrees with the recruitment process, but also is consulted on the final selection of the CHWs. Careful attention to CHW recruitment and ensuring the right person is selected for the job will go a long way to reducing turnover, protecting investments, and obtaining results in CHW programs.

What are the specific recruitment needs for the CHW program?

The scope and intention of the health program as well as the needs of the community should always drive the recruitment process. Before initiating the recruitment phase of any program, it is essential to understand the specific needs and context of the CHW program in which the CHWs will work. In particular, this means having a clear description of the roles, responsibilities, and tasks the CHW will undertake; the catchment area population in terms of the number of households to be served; and the geographic distance the CHW will need to cover. CHWs who are from the communities that they serve are more likely to be invested in their catchment population's health outcomes and generally more likely to stay. Many CHWs also thrive in positions where there is opportunity for employment promotion. In addition, it is important to recruit and select CHW candidates who understand what the job will entail, including the expected performance, conditions, management support, and remuneration.

What are the criteria for selection of CHWs?

Before recruiting CHWs for a community-based program, the criteria or qualifications that each individual CHW should meet to be considered for the program should be defined. The selection criteria may include demographic elements, such as gender, age, marital status, and usual place of residence, as well as education level and ability to successfully complete training on standard competencies. This last will be heavily dependent on the specific community-based health strategy that the CHWs will support, as well as the roles and responsibilities they will undertake. Residency is an important best practice criterion in the selection of CHWs, although this can cause challenges for large-scale programs that need to systematize the recruitment process. Community trust and acceptance should be prioritized over other criteria, such as literacy and gender. More than the level of education, it is far more important that the person selected is engaged with his or her work, responsive, accountable, respected, and trusted by the community.

What is the CHW recruitment process?

The ideal CHW recruitment process entails establishing criteria, communicating CHW opportunities to identify candidates, interviewing and selecting CHWs from candidates, and hiring selected CHWs. Policymakers and program planners at the central level often make decisions regarding the basic criteria for CHW selection, considering many factors including the maturity of the program and its needs, the health and social needs of communities and clients, the size and health service scope of the program, and the organizational and financial capability of regional, district, and local management systems. Where it is feasible, various actors are involved in implementing the recruitment process: district health managers, the

health facility team to which the CHW may report, other local authorities, and communities within the catchment population.

Once the selection criteria have been defined and a job description has been developed, the process of communicating the CHW job position(s) to communities and possible candidates can occur in a variety of ways depending on context and resources, such as announcing positions at community meetings, conducting face-to-face or internal recruitment, receiving referrals from current CHWs, posting recruitment fliers, placing newspaper advertisements, and announcing positions on the radio. Given the skill level for most CHWs in community health programs, recruitment should remain as local as possible. However, in many cases where CHWs require higher-level skills or skills that cannot be found within the community, then external recruitment may need to take place for this underserved area.

Other important considerations of CHW qualifications during recruitment are the expressed interest and motivation of the candidates. Are they natural helpers? Do they have a genuine investment in the health of their community? Do they treat all people with care and respect? Do they demonstrate problem-solving and leadership skills? Directly asking why the candidate is interested in working as a CHW is recommended.

How do available resources influence CHW recruitment?

The resources allocated for the management and support of this cadre, whether volunteer or compensated, may be limited or sporadic. Recruitment costs can become considerable, especially when programs have high turnover of CHWs. Note that how community-based health programs are financed will affect how recruitment takes place and who participates in the process. What are the resource requirements for successful CHW recruitment? They may include, but are not limited to,

- time and effort to convene stakeholders to develop and standardize criteria (e.g., developing the recruitment process; CHW selection criteria, tasks, and responsibilities; and other aspects of the community health program as relates to human resources management);
- costs related to communicating the availability of CHW positions; and
- costs related to reviewing and selecting CHW candidates (e.g., obtaining a venue for conducting interviews, reimbursing of any transport or other expenses incurred by the CHW candidate, and announcement of selected CHWs via traditional communication channels).

How can CHW retention be fostered?

Because many CHWs are recruited from their villages, the retention challenge is not so much one of retaining them geographically at a post, but rather ensuring CHWs continue to perform their tasks actively and effectively. Particularly when a community health program has limited resources to supervise CHWs, and CHWs are working on a volunteer basis, strategies for motivating CHWs are essential. Supportive supervision is recognized in the literature as a key approach for maintaining CHW motivation, although experience has taught that this is very difficult to achieve in large-scale public sector CHW programs. Issues of CHW turnover and retention should be considered as part of the CHW recruitment process within community health programs. Managers of community health programs should review past experiences with CHWs who are leaving their roles and should try to estimate future levels of turnover by answering the following questions: How many CHWs are needed? How many CHWs are leaving their roles within a given time period? Why are the CHWs leaving? What is the program's approach for evaluating the recruitment strategy?

Conclusions

Ensuring community participation in the planning and execution of the recruitment, selection, and supervision process is considered a best practice as it can improve program outcomes. Convening stakeholders, defining standards, and allocating sustainable resources for CHW recruitment has the potential to further improve the program. Once CHWs have been selected and are working, it is important to consider what kinds of incentives, whether financial or non-financial, will support CHWs to perform well and remain motivated on their jobs.

Chapter 9 | Training community health workers for large-scale community-based health care programs

Introduction

In the implementation of a community-based health care (CBHC) program, some new health workers, such as CHWs and their supervisors, will need the full complement of skills, knowledge, and attitude training to enable them to fulfill the tasks and responsibilities defined in the program. Some health professionals, such as health facility–based staff, may need training for new skills to perform their expanded role in part-time support and supervision of the CHWs. Others, such as facility and district health managers, will not need new skills, but will need an orientation to the new CBHC program and need to know why it has been developed to effectively apply existing skills in the implementation and management of the new program. This chapter discusses how learning and performance competencies can best be achieved and training organized.

How should the training program be organized?

The overall length of the training will reflect the size of the curriculum. Many programs have considerable amounts of practical training. Depending on the type of CHW (volunteer or intermittent versus auxiliary or health extension), training needs will vary. In this chapter, Table 1 provides a summary of training differences by CHW level and Table 2 compares training programs for various large-scale CHW programs. Multipurpose CHWs have become a familiar feature of many country health systems given the desire to bring essential health services closer to families; the wider scope of work necessitates a longer training duration. CHWs with narrower scopes of work, or a single-disease focus, may have a training duration of only one to two weeks.

If there is already a CHW cadre established in communities, there may be a considerable advantage to expanding the scope of work of that CHW rather than creating a new cadre. This expansion will likely also involve adjusting the incentives for the CHW as well. For example, in a number of African and Asian countries, integrated community case management is now being delivered by CHWs that previously were only involved in malaria or diarrhea control programs. Similarly, successful integration of TB and HIV programs has been achieved by retraining community workers previously working for only one program. Nevertheless, the enthusiasm to add more tasks to the job description can create work pressure for many CHWs and problems for the health system in keeping up with the training needs.

Education level is often assumed to be assumed to be a way of identifying the most capable people for the job, but how important is educational level as an entry requirement into a CHW training program?
Broadly speaking, a primary school education provides many skills and experiences unavailable to an illiterate person. Likewise, a secondary school education usually provides an introduction to scientific concepts that make understanding of the biological and medical concepts much easier. However, the correlation with problem-solving skills is less clear. Many countries have found that a higher educational level for CHWs also brings disadvantages, including the social barrier it may create between the CHW and less-educated people in the community and a preference for living and working in urban areas.

The establishment and maintenance of a high-quality training program for CHWs is a challenge, especially when so many regular health staff members are tasked to conduct the training. Obtaining and making the most of practical experiences is difficult for the trainers. The competency-based approach is often very different from the more traditional training experienced by trainers. There is a need for a core group of master

trainers who can train and mentor provincial- or district-level trainers in competency-based approaches and be responsible for maintaining a high quality of training. In some instances, training of trainers is done in a cascade fashion, meaning trainers at the local training health facility are supported in the training and monitored by master trainers from the region or district. When training is being provided in specific training institutions in several locations in different regions of the country, the quality of training can be maintained through a process of accreditation of the training schools.

Who should be responsible for the government and management of the training program?

When a CHW program is part of a vertical program in a MOH, the oversight of the training program is usually implemented by the same group. Oversight of the training for the overall CHW program is usually the responsibility of a unit within the MOH. The CHW program and the CBHC unit are frequently part of a health services or PHC division. Management of the training implementation may come from that unit or may be delegated to a national training institute that is responsible for training programs for the MOH. When a new program is being planned and designed, it is helpful to have both a steering committee and an ad hoc or formal technical advisory committee(s). The steering committee should have a broad membership of all the stakeholders of the program to guide and approve the design of the training. The technical groups will usually represent the key stakeholders and will ensure that the CHW program and its training program involve the best practices that are appropriately adapted and applied to the country situation or its different regions.

How can optimal performance be achieved through training?

Evidence suggests that knowledge of correct actions is not sufficient to ensure that the right thing will be done. The quality of training and the regularity of refresher training are important determinants of performance, but proper performance also requires competence in the skills to perform those tasks. More emphasis is now being placed on competency-based training rather than the traditional knowledge-based training. Any particular task may involve any combination of psychomotor, communication, and decision skills. Each of these three types of competencies or skills is different and requires different types of learning experiences. The factor common among all of them is the requirement of active participation in the learning experience by the trainee CHW to achieve competency. This chapter provides further in-depth details on action, communication, and decision-making skills, and emphasizes the important role of attitudes. Assessment of the CHW student's ability to perform the activities and is necessary for all training programs. Written or oral examinations that test the student's knowledge about what needs to be done will not suffice. A valid and relevant assessment of competency requires observation of the performance of that task and checking its quality against a checklist of essential components.

Fitting the training to the situation

Too often, when there is a problem with a health program, it seems to be assumed that the solution is more training. Training is a necessary, but not sufficient, basis for successful CHW programs. Initially, the design of the program is more important: how the roles and tasks of the CHWs will fit with and complement the roles and tasks of the health staff of the supervising health facility; how well they cooperatively meet the health needs of the community and its socio-cultural setting; and whether the CHWs understand exactly what they should do and have the time, job-aids, tools, and resources to do it.

Conclusions

Careful planning and utilization of appropriate approaches to the training of CHWs is essential for effective program functioning. CHW training needs to be carefully adapted to the needs of the trainees, the job, and the tasks they are expected to perform and the context in which they will be working.

Chapter 10 | Supervision of community health workers

Introduction

Supportive supervision is a process of guiding, monitoring, and coaching workers to promote compliance with standards of practice and assure the delivery of quality care service. The supervisory process permits supervisors and supervisees the opportunity to work as a team to meet common goals and objectives. Supervision is frequently thought of as the main link between CHWs and the health system. Facility-based supervisors, whether from the nearest primary care center or the district health office are important because they have the ability to monitor the quality of services, provide technical support and refresher training, and collect information, forms, and other data from the periphery to feed into the national health information system.

What are the challenges in implementing supervision?

Many programs fail to design and implement a supervision system that is both functional and beneficial. In large-scale CHW programs, supervision is rarely implemented successfully. Providing effective supervision is not easy, and it is expensive. There are several key challenges to supervision, including (1) travel expense and logistics, (2) supervisors who are really not supervisors, (3) supervisors who do not have appropriate tools and support to conduct supervision, (4) supervision not being a priority, (5) supervisors who don't understand the CHWs' role or the context in which they operate, and (6) gender issues complicating the supervisory process because often supervisors are men and CHWs are women.

What are the objectives of a supervisory system?

Supervisors generally are asked to address three different areas in their supervisory capacity: (1) quality assurance, (2) communication and information, and (3) a supportive environment.

Quality of services: The supervisor is expected to make sure that the CHW understands his/her tasks and can perform them to an acceptable standard. High-quality services also require the continuous monitoring and improvement of CHW performance through measurement, feedback, and learning—tasks that are generally assigned to supervisors.

Communication and information: The supervisor gathers data from the CHW to learn where she has gone, how many clients she has seen, what services she has provided, and other statistics on the overall health and well-being of her catchment area. The supervisor also provides the CHW with updates on new guidelines and other information regarding the health status of a community, a planned event such as a vaccination campaign, and other key information from the MOH.

Supportive environment: The supervisor coaches and helps the CHW solve problems s/he might encounter. A supervisor also often can help the CHW develop or maintain a respectful relationship with his/her community by positioning himself/herself as an important and valued member of the health team, and by clarifying and reaffirming to the community the importance and the details of the specific expectations the CHW is trained and expected to meet.

What working strategies should shape the supervision approach?

It is advisable for strategies to be agreed upon by key policymakers, stakeholders, and program managers that will guide the design of a supervision approach. The following principles might be considered.

Build upon what exists: Understanding what is already functioning and building upon it is important. Do not create parallel systems.

Use a bottom-up approach: Engaging CHWs and communities in the design and process of supervision will encourage participation.

Focus on planning and monitoring the implementation: Plans to supervise are frequently made but not carried out, and the implementation process itself is not monitored.

Engage all levels for accountability: Supervisors alone should not bear all of the responsibility. Supervisors of supervisors, CHWs, communities, and even clients can share in both the process and making each other accountable for its completion.

Develop capacity at all levels in data management, teamwork, and problem-solving: Basic data use, teamwork, and problem identification, prioritization, and resolution are skills that everyone, including community members and engaged clients, can use to solve problems.

What standards and guidelines are needed?

It is advisable to develop a set of standards and guidelines that clearly state to all stakeholders—including CHWs, community members, supervisors, health workers, and ministry officials—the objectives, responsibilities, results, and outcomes of the supervisory system. This document should include a detailed description of the tasks that supervisors are asked to perform, as well as the tasks and performance standards for CHWs: what supplies and equipment CHWs should have, the content of the supervision visit, its frequency, and the optimal profile and set of skills needed by supervisors. The process to develop the standards and guidelines should involve a wide range of stakeholders.

How often should supervision be done?

Regular encounters between the supervisor and the CHW are recommended. Monthly visits are best, as regular reinforcement of skills and frequent communication is important for CHW motivation and performance. However, quarterly visits are more practical for most programs, and even they may be difficult and costly to maintain. Other CHWs, community organizations, and peer groups can offer coaching, emotional support, and feedback to CHWs and should be considered as alternatives, or additions, to the support that CHWs can receive.

How can you ensure that supervision visits are planned, implemented, and tracked?

Because supervision is not made a priority, it can be superseded by other events that are viewed as more critical. A planning process is only as good as its implementation, and action plans require implementation, monitoring, and evaluation. Tracking and reporting mechanisms should be put in place that help regional, district, and local officials adhere to their plans, monitor their own implementation, and report on indicators and the processes that are needed to achieve target indicators.

How will information be used to improve performance?

Program planners and managers need information gathered from the community level on a wide range of indicators. Because CHWs are the closest link to communities, they are often asked to collect more data than

is actually used. Information flow is usually upward, with little information flowing back down to the community so that CHWs understand how to use the data to solve problems. Supervisors can play a critical role in this process by monitoring the quality of data that is collected and working with CHWs and local leaders to share the collected data with the CHWs and communities for problem-solving.

Approaches to CHW supervision

Table 2 in Chapter 10 summarizes the four most common approaches to supervision, including external, group, community, and peer-based supervision. Each approach has strengths and limitations, and some are more tried and tested than others. Still, given the generally poor quality of supervision that has existed in most programs to date, broadening the approach of who provides supervisory support and how supervisory support is offered might allow for more practical, effective, and less costly supervision.

Conclusions

The development of an effective supportive supervision system takes time and significant financial resources. It is not a quick fix. Decision-making authority must be decentralized to frontline supervisors. CHW program implementers should first select which of the range of supportive supervision mechanisms and tools are appropriate for the context, then adapt and test them, and then use this experience to gradually strengthen the program of supervision.

Chapter 11 | What motivates community health workers? Designing programs that incentivize community health worker performance and retention

Introduction

A perennial challenge in CHW programs is the question of how to motivate community members to engage in community health work as CHWs, to remain in these positions once trained, and to perform their work effectively over time. Motivation is a complex phenomenon that is the product of a range of psychological, interpersonal, and contextual factors. Thus, there is no one right or best way to motivate CHWs in their work, but there are some lessons that can be gleaned from the experiences of other CHW programs. This chapter reviews the question of CHW motivation and identifies a range of issues that policymakers and program managers would need to grapple with as they consider how best to motivate CHWs in their own context. The most common approach to developing and sustaining motivation in CHW programs revolves around the use of "incentives"—a term broadly inclusive of any factor that increases motivation to engage and perform well in CHW work—which could include rewards such as payments, promotions, awards, decent salaries, opportunity for career advancement, supportive colleagues, a safe working environment, and the recognition of the community.

What forms of incentives are there?

CHW incentives are most commonly divided into financial and non-financial incentives. Both kinds of incentives might be referred to as "direct" since they are specific incentives offered directly to individual CHWs as part of a CHW program. Most programs offer some form of financial incentive. In larger government-run programs, these might be modest but full-time salaries. In nongovernmental organization (NGO)-run or community-supported programs, these incentives might be small stipends and reimbursements for travel or airtime. Common non-financial incentives found globally include formal uniforms, T-shirts, and name tags; access to bicycles and medical supplies; and preferential access to health or housing resources. In contrast, "indirect" incentives may include health systems incentives such as good management, sustainable financing, fairness, and transparency and community-level factors such as CHW training, selection, and community support. In many settings, indirect incentives have been identified by CHWs and program managers alike as critical success factors for effective CHW programs. Incentives, whether direct or indirect, are generally defined by their impact on the motivation of individual CHWs. Table 1 in this chapter summarizes common categories of direct and indirect incentives. In addition, a case study of incentivizing CHWs in India is presented.

What are the decisions related to incentives that must be made?

Designing effective incentives to increase motivation and performance is clearly a complex task and requires careful attention to a range of interconnected factors. Like any other aspect of the health system, incentives need to be (1) properly designed through review of the evidence and consultation with stakeholders; (2) implemented, managed, and monitored on an ongoing basis; and finally (3) evaluated to assess their effectiveness and plan for changes. The following decision questions are designed to help policymakers, program managers and implementing staff at all levels to think through how various elements of a CHW program work (or do not work) together to increase CHW motivation and improve recruitment, retention, and performance.

Decision 1: What kind of direct financial or non-financial incentives should CHWs receive?

This decision is often framed as a choice between "paid" and "volunteer" models, but the options and the challenges involved are actually much more complicated. There is a spectrum of possible approaches, from volunteers who cover their own costs and determine their own hours of work, to salaried CHWs on who have contracts, supervisors, and benefits similar to the other health care professionals with whom they work. CHW salaries are typically less than those of nurses, but are still a substantial means of support for most CHWs. Stipends for volunteers, by contrast, are often framed as mere honoraria or token payments to volunteers, meant to reimburse them for the cost of their travel or their food during the day. Non-financial incentives, such as training opportunities, preferred access to health care services, or access to uniforms and bicycles can also have substantial material benefit. Successful CHW programs typically offer a mix of financial and non-financial incentives. There is no general rule for how many of these incentives should be offered or at what level, but successful incentive strategies do reflect the local contexts and concerns of the CHWs.

This section details seven issues to consider in the design of incentives: (1) local precedents and expectations with respect to CHW incentives, (2) local cultural and religious norms, (3) personal motives and triggers of CHW involvement, (4) social recognition of the value of CHWs, (5) fairness of incentives, (6) sustainability of financing, and (7) local labor market and economic context (see Table 2 in this chapter).

Decision 2: How can the health system and the community contribute to indirect and complementary incentives for CHWs?

This section and Table 3 in Chapter 11 describe seven key issues to consider regarding indirect and complementary incentives: (1) CHW motivation through clear roles and responsibilities and the opportunity for feedback to and from both their peers and managers; (2) opportunity for personal growth and professional development; (3) day-to-day working relationships among CHWs and between CHWs and other health care professionals; (4) clear lines of accountability and recognition across the health system and the community; (5) CHW "champions" in the community to help sustain CHW recruitment, retention, and performance; (6) working effectively with civil society partners; and (7) the relationship between the community and the health system.

Decision 3: How will CHW incentives be designed, negotiated, monitored, evaluated, and readjusted?

More evidence is available with respect to the initial design of incentive packages than about how to effectively manage and adjust these packages over time. In many cases, it appears that, once instituted, incentive packages either do not change or they change due to external circumstance (e.g., loss of funding) rather than a planned process. What kind of local process for designing, managing, and re-evaluating incentives will be most effective at responding to these changes over time? Table 4 in this chapter outlines five key issues to consider in the ongoing management and evaluation of CHW incentives: (1) the importance of feedback and participation in the policy/program cycles; (2) ensuring the "doability" of CHW work; (3) sustaining the effect of CHW incentives and managing their unintended consequences; (4) change over time as motivations, needs, and capacities of individual CHWs change; and (5) changes in social, cultural, political, economic, health systems, and demographic contexts.

Conclusions

This chapter has highlighted the fact that there is no easy, one-to-one relationship between incentives, motivation, and practice. Local relationships, contexts, histories, beliefs, and expectations can each have a dramatic effect on how and why a particular mix of program features may or may not work to incentivize CHWs in a particular place and time. Although programs cannot change or predict many of these factors, they can anticipate and manage them, which is especially important because the "stick" factors—the factors that keep one in a job—are generally much weaker for CHWs than they are for health care professionals. Thus, it is critical to pay careful attention to all the factors that motivate CHWs to engage, remain, and perform their best in this important work.

Section 3. CHW Programs in Context

Chapter 12 | Community Health Worker Relationships with Other Parts of the Health System

Introduction

In this chapter, we discuss the interface between CHW delivered services and the broader health system. We offer a set of considerations regarding these linkages for policymakers and program planners as they decide to either launch a national CHW program or, if one currently exists, how to strengthen or scale up services currently offered. The term "health system" in this chapter refers to governmental/MOH services as well as private and NGO health programs, unless otherwise noted. The World Health Organization (WHO) defines a health system as "all the activities whose primary purpose is to promote, restore, or maintain health." A health system is interconnected, dynamic, self-organizing, and nonlinear. Programs that are to be integrated with this complex system should be designed with the dynamic and adaptive nature of the system in mind. "Systems thinking" can serve as a tool for this kind of exploration. To facilitate this, the WHO building blocks—although they simplify the health system—can be used to identify how the different interconnected parts of the system will be affected and how they will affect each other. One of the main considerations for policymakers, program planners, and implementers in planning a new large-scale CHW program or in strengthening an existing program is the establishment of a functional relationship between the new services and the existing system, so that support and gradual improvements in both the facility-based health system and the community health services can be achieved.

What is the rationale for establishing, strengthening, or expanding a community health worker program?

The goal of universal health challenges governmental and NGO programs to reach underserved mothers, children, and families. In many settings, it may be appropriate to create new CHW programs, scale up existing programs, expand the responsibilities of currently functioning CHWs, or create a new level of CHW worker to ensure an adequate ratio of households per CHW. However, an important first step in considering a CHW program is to review the leading causes of preventable or treatable conditions in a country's population, the extent to which these conditions are being addressed by the current health system, whether there are services that CHWs can effectively provide that meet these needs, and whether CHWs are the most effective and efficient strategy for narrowing this gap. As emphasized throughout the *CHW Reference Guide*, the costs of operating an effective CHW program are, in fact, much greater than often anticipated, and normally functional services delivered by CHWs require a functional PHC system. Further, the costs associated with introducing a large-scale CHW program may require external donor support, at least initially. Evidence concerning the effectiveness of CHWs in achieving health gains in low-income countries with a high disease burden has been summarized recently. While there are many roles that a CHW cadre can potentially play, how appropriate these may be and whether or not they can be adequately supported in any given setting will depend on the characteristics of the existing health system.

How will the community health worker fit into the health system?

In most cases, CHWs receive training authorized and delivered by a national health system or one of its sub-units. Most CHW functions relate, in one way or another, with the rest of the peripheral health system, such as by creating demand for services provided in health facilities, receiving training and supervision by health professionals, and receiving supplies, educational materials, drugs, and equipment. How the relationship between CHWs and the health system is seen can be important for their legitimacy, as perceived by the

community and by the CHWs themselves. Depending on the particular role of CHWs, the health system can provide the following support critical to the functioning of CHWs: motivation and vocational support; information about what is going on elsewhere in the health system; supplies, medicines, and equipment; and knowledge about who the higher-level providers are, what services they provide, and how to handle referrals. This interaction between CHWs and the health system provides higher-level health providers with an understanding of who CHWs are and what they are doing. When CHWs are able to effectively link patients who need help with higher levels in the health system, the community recognizes the CHW as a respected source of information about the referral process, which ultimately provides the community with an important resource for accessing the health system.

How should community health workers relate to and be supported by the rest of the health system to adequately fulfill their tasks and to enable the health system to achieve its goals?

A CHW might begin their work each day at a PHC center and check in briefly with other members of the health staff before heading out into the community. In this scenario, the CHW is part of a PHC team that includes higher-level staff. The CHW is in close regular contact with their supervisor when any issues or problems arise. Notably, she and other CHWs have monthly meetings of the PHC team and regular opportunities to continue their education. In such an instance, she can submit a monthly report, and her health care team knows she is working effectively or not. In a more resource-constrained or rural setting where the beneficiary population is dispersed and transport between the community and the peripheral health facility is limited, CHWs may have much less contact with the peripheral health facility, coming in only once or twice a month for supervision, training, and replenishment of supplies. Examples of points of contact between CHWs and health system are highlighted for Brazil, Nepal, Peru, and Bangladesh.

What governance and management structures are needed to adequately support community health workers?

Programs making use of CHWs differ considerably in their provisions for oversight from the health system itself and from the community. Where support and accountability are in effect absent, performance will tend to be poor. In many settings, formal structures exist that, in principle, have the potential to provide this function. There is no one answer on how best to ensure support and accountability, but those involved in developing community health services need to give serious attention to ensuring that this function is operating effectively.

What challenges do community health workers face in interacting with the rest of the health system?

Several challenges are described, including (1) lack of respect for CHWs at interpersonal level, (2) lack of respect for CHWs by health professionals who provide curative care, (3) management of acute illnesses and referral, and (4) inability to obtain needed medicines and supplies.

What arrangements for linkages between community health workers and the rest of the health system are likely to be most functional?

This section offers guidelines and suggestions for how a CHW program can develop functional linkages with the health system. Several strategies are discussed, including (1) integrating with an already weak health

system, (2) defining and clearly communicating CHW roles, (3) promoting aligned and harmonized support, (4) clarifying long-term vision, and (5) nurturing champions.

Conclusions

A recent review of global experience of CHW programs led by WHO and the Global Health Workforce Alliance concluded that CHW programs need to be a part of the overall strategic planning for human resources for health for that country and that they should be coherently located in the wider health system. Planning for appropriate recruitment and training of CHWs and ensuring that supervisory systems and supply systems are appropriate are critical for long-term success. Learning from the experiences of large scale CHW programs, anticipating common challenges faced by these programs, and applying these lessons within the appropriate national and sub-national context are essential.

Chapter 13 | Community participation in large-scale community health worker programs

Introduction

The Alma-Ata Declaration of 1978 affirmed that health is a fundamental human right and encouraged the active participation of recipients of health services and communities in the planning, organization, operation, and management of health care systems. The right to health can be viewed as a right to health care and a right to conditions that promote good health. Community participation provides an opportunity for citizens to have a voice in ensuring the state meets their needs and to contribute to life-affecting processes, while building or rebuilding trust between the public and the health system. CHW programs thrive in communities that have been mobilized as part of a larger political process for promoting better public health (i.e., in China and Brazil), but generally struggle where CHWs themselves are given the responsibility of galvanizing and mobilizing communities. A CHW, by definition, is embedded in, drawn from, or at least related to the community in some way; the CHW aims to make appropriate health promotion and service delivery strategies that reflect the political, environmental, social, and cultural dynamics and realities of the community. This important relationship with the community presents a challenge to develop a national health program with standardized health system tools, clinical guidance, and performance targets based on medical evidence that are critical for scale-up, while at the same time empowering CHWs to respond appropriately to the specific needs and realities of local communities. This chapter reviews key question related to community participation strategies and community management structures.

Part I: Community participation and community health worker programs

Efforts to strengthen CHW programs should seek community participation in planning, supporting, and monitoring service implementation to ensure that services are appropriate, the coverage of quality services is high, and that benefits accrue to those in greatest need. CHW programs often struggle to be successful when not part of a broader community engagement process. Such community engagement should be seen as an integral component of an effective CHW program. Community engagement refers to the process of getting community members involved in decisions that affect them, including the planning, development, management, and evaluation of health services, as well as activities that aim to improve health or reduce health inequalities. Its effectiveness is likely to depend on having explicit methods for involving individuals and communities, clearly defined roles and responsibilities, training for policymakers and clients, and adequate funding.

Community engagement includes a variety of community participation approaches and runs along a continuum, from passive to transformative, and from informing, consulting, coproducing, and delegating power through to more direct community control. An effective community engagement strategy will draw on community resources that can support CHWs to most effectively accomplish their health goals and tasks. We know that CHW programs change in both predictable and unpredictable ways as community and health systems evolve. Feedback from and the active involvement of all parties are needed to adapt effectively to these changes. CHW programs also need to learn how to meaningfully tap into the community's reservoir of good will, volunteerism, self-interest, and desire to help others in the community.

Refer to Table 1 in this chapter for an outline of how community members can support the work of CHWs in all six building blocks of the health system. Community members are involved with various stakeholders within the health system and with each other in various complicated relationships influenced by their social networks. This section explores how community engagement can be used in the design and management of

CHW programs, including CHW selection, defining the CHW role, supervision, and monitoring and evaluation (M&E). Complex adaptive systems analysis, using tools such as network analysis and causal loop diagrams, can help managers develop more effective ways to use these community systems to improve rather than impede CHW programs.

This section also explores how to adapt community participation to local situations, key barriers and enablers to community participation, how to design a community participation policy to support CHWs, key components of a functioning community participation strategy, and how governments can best maximize their work with NGO and faith-based actors.

Part II: Community management structures

In 1989, WHO recommended that an effective CHW program have the support of a group composed of members of the community who have active links with the health sector and improves governance at the local level. We refer to these groups as community management structures known by different names, such as village health committees, community health committees, ward health committees, community advisory boards, and health management committees. In most countries, these management structures provide support to the CHW at the community level and a bridge to the health system, and may also be linked with the local political system. Objectives of community management structures include (1) provide a support system for CHWs, (2) work with CHWs to mobilize the community for improved health, (3) assist with communication to and from the district health system and the local administration, and (4) advocate for supplies and investments critical to good health.

While many countries have active community management structures, they are generally weak. Refer to Chapter 13, Table 4—modified from the CHW Assessment and Improvement Matrix Tool—for an overview of some best practices along with the most common issues and functionality problems of community management structures described in the literature. An EQUINET review of district health systems in East and Southern Africa found that community participation can have the most impact when supported by functional local management structures that promote participation in decision-making in addition to carrying out administrative tasks. However, when these structures are composed of elites, they are not accountable to any defined constituency and broad community participation is constrained.

There is no one-size-fits-all approach for designing or implementing a strategy on community management structures related to CHWs. However, a discussion around some key questions, as highlighted in Table 5 of this chapter, can help open the way for decisions on their potential roles and functions. A policy on community management structures would follow an assessment of their current content and context in relationship to a CHW program, followed by discussions on stakeholder perceptions and guidance around the mechanism.

Conclusions

This chapter highlights the critical importance of community participation to a CHW program. Because community participation can take many forms, and because each community is unique and always changing, large-scale CHW programs should be designed to enable local flexibility and tailoring in relation to community assets and needs. Community participation is a process that requires leadership from the overall CHW program, support of the health system and local government at all levels, and partnerships with other organizations. The formation or strengthening of a community management structure is often a strategy of choice for the community support of a CHW.

Section 4. Achieving Impact

Chapter 14 | Scaling up and maintaining effective large-scale community health worker programs

Introduction

As discussed in Chapter 1, there have been a number of noteworthy small-demonstration experiences over the history of PHC program implementation that have influenced thinking about what is possible at the community level. Although not necessarily replicated, they have served as inspiration and informed planning for the development of somewhat analogous efforts, some of which have also been effective at large scale. But such successful translation is far from straightforward. Often, the results obtained by CHW programs operating at large scale are far less impressive than those seen in demonstration projects.

Policymakers and planners need to look critically at the landscape of all the specific requirements that needed to be met to achieve that success. A careful look at the settings where implementation is planned is required, along with a determination of what it would take to meet these requirements—at scale. Is there a robust enough policy framework and adequate political support, management and supply systems, numbers of staff, and financial resources for successful scale-up and continued long-term effectiveness? If the picture looks favorable, it may be warranted to cautiously proceed, first implementing on a limited scale but under realistic conditions, and monitoring closely for performance, ready to make any necessary adjustments to address identified barriers or constraints to good performance. Then, as an approach is progressively validated, we can move toward scale.

Sustaining impact at scale

For CHW programs, it is important not just to achieve implementation at scale, but also to maintain effective programming at scale. This section describes some principles for sustaining impact at scale.

Gain and maintain support from policy-makers at the relevant levels: Key gate-keepers and opinion leaders need to be informed and won over to the initiative through early one-on-one informational briefings and exchange of views. Potential champions, who are well-placed to influence opinion and decision making, need to be identified and encouraged.

Sustain program momentum: Program momentum may diminish for a range of reasons including withdrawal of support from a key stakeholder, budgetary constraints, and poor management and supervision. One proactive strategy to avoid loss of momentum is the formation of a technical working group with MOH leadership and establishing an ongoing and meaningful involvement by all key partners in directing the initiative.

Ensure that what the scale-up initiative offers will appeal to the intended end-user: Formative research can help in identifying the potential end users' current practices, perspectives, and preferences with respect to the specific new service planned. These end-users include the MOH, the district health system, front-line health workers, and beneficiaries. In developing any new approach, strategy, or product, one has to start with where the user is now, bridging from the known to the new.

Achieve and maintain high coverage: Design a delivery strategy tailored to the country context, taking advantage of available channels or platforms. Start with a learning (pilot) phase, implementing at limited scale, but under conditions closely approximating what one would expect when institutionalized and running

as a normal program. Rigorously monitor during this phase, and then, based on what has been learned, revise and streamline the approach for implementation at the next stage of scale (preferably not nationally).

At all levels, monitor important aspects of program performance and actively address identified performance issues.

How do we get to scale?

The ExpandNet/WHO conceptual framework is commonly used for scaling up health interventions in global health. A principle guiding the framework is an open systems perspective, which views scale-up in the context of existing systems (e.g., political, legal, policy, socio-cultural, health sector, and organizational systems). The model consists of five components: the innovation, the user organization, the environment, the resource team, and the scale-up strategy. **The innovation** refers to the program to be scaled up and including the specific interventions that it comprises. What can be done to create more optimal conditions for successful spread? **The user organization** refers to the organization primarily responsible for implementing the program, and those organizations that work closely with it or support it. As a condition for successful adoption and implementation, the user organization needs to be convinced of the need for the particular program, and have the necessary capacity and resources to implement it. Champions are a key ingredient to advocate and inspire others at all phases. **The resource team** refers to individuals and entities promoting or facilitating the scale up process. Strong leadership and management are also needed to create a vision for scale. **The environment** refers to conditions external to the user organization that are fundamental to scaling up the program. **The scale-up strategy** refers to plans and actions necessary to scale up the program. Contextual issues of particular importance to large-scale implementation of community health services include (1) local epidemiology; (2) local mix of PHC services, including public, private and NGO providers, what categories of health workers are present, and the density of health care providers per unit population; and (3) strengths and weaknesses of the local PHC system.

What are some of the pitfalls of scaling up?

Scaling-up a CHW program is a complex and challenging process. However, many challenges can be mitigated by foresight and careful planning. Designing the initial program with scalability in mind certainly helps the scaling up process. Coordination and consensus among multiple implementing partners is vital but often difficult to achieve. A common strategy endorsed by all stakeholders is necessary so that the MOH can give its full support in a coordinated way.

Expanding tasks of an existing cadre or starting out anew with a totally new cadre is an important to issue to settle up front. For example, a CHW cadre involved primarily in immunization outreach services can progressively have new duties added. Alternatively, new cadres of CHWs have been created and they have been given comparatively long initial training and, from the beginning, have been expected to cover a wide range of duties. There is no single correct strategy, but it can be very challenging to simultaneously introduce a broad range of new functions. It can also be challenging for trainees to adequately absorb all the necessary material and it can be very difficult to put in place adequately functional support systems to cover the requirements of multiple interventions and programs. If these conditions can be met, then this more ambitious approach can be successful.

CHW programs have fallen prey to pitfalls that are not widely known and certainly not described or analyzed in the peer-reviewed literature or even in publicly available documents. This section details such pitfalls,

including (1) inappropriate pilots / learning phases, (2) too rapid a pace of geographic spread, (3) failure to ensure the quality of training, (4) envisioning scaling-up simply as a training cascade, (5) scaling up without ensuring long-term sustainability, and (6) lack of adherence to basic standards.

Conclusions

Effectively scaling up of a CHW program and sustaining effective program functioning at scale are enormous challenges. However, examples of well-run programs at scale suggest that this is achievable with the proper combination of leadership, visioning, planning, identification of the appropriate model, fitting the program to the local and national contexts, ensuring long-term financial support, and continuing performance improvements on the basis of rigorous ongoing M&E. Learning from successful and failed experiences of other programs can also provide invaluable insights.

Chapter 15 | Measurement and Data Use For Services Provided By Community Health Workers

Introduction

Measurement for a program is an essential function required for program effectiveness. It tells what is happening, alerting people to areas that need attention. Data are used at different points in the development and implementation of program activities. Data are used to define or characterize a problem that may call for some new action. Another important use of data is evaluation. Typically, formal evaluations are a donor requirement associated with major program initiatives. Most often, they are done as one-offs, sometimes finding very disappointing performance, resulting in decisions to make major changes in direction. Related to evaluations is the measurement and analytic work associated with pilot activities. From such findings, decisions can be made about whether or not to proceed with scale-up, and what particular aspects of a demonstration activity need to be modified. Finally, measurement can serve a critical function informing, on an ongoing basis, what is happening and where adjustments need to be made. This chapter focuses primarily on the ongoing collection and use of data related to community health services for purposes of continually improving performance and impact. This process requires appropriate documentation and information management systems and requires equipping CHWs and other health workers on appropriate documentation and data management and use for improving services.

Key questions

Pritchett et al. supplement the conventional concepts of monitoring and evaluation with the idea of structured experiential learning, adding another "e" to M&E to get MeE. They point out that, typically, (1) evaluation is done infrequently, and by some external entity; and (2) ongoing monitoring, of the usual kind, is done as an administrative, reporting function. What is needed is more than this; they call for "structured experiential learning," by which they mean rigorous, real-time tracking of important aspects of program performance by implementers, with tight feedback loops and continuous attention to address performance problems.

In the case of many tasks or program activities conducted by CHWs, the fact that a function gets measured and reported does not necessarily mean that it will get meaningful attention to ensure performance, but if it is not monitored at all there is little likelihood of effective performance management. This need for monitoring is true of all services, but is particularly important for community health services that often are not adequately monitored. Unfortunately, there have been few examples of rigorous, large-scale evaluations of community-based services. Some community-based services are frequently captured in routine monitoring or health information systems, immunization services is an example—while these services are generally reflected in routine health information systems, they are not necessarily disaggregated from health facility-based provision. For many other programs, however, services provided by CHWs frequently are not captured at all. There is a general principle that what gets measured gets attention. Health facility and program managers at all levels are only empowered to actively and effectively manage performance of their services if they have a good idea how things are actually going. That requires selection of meaningful indicators, appropriate ongoing measurement, review of the collected information, and actions taken in response to the information collected.

What are the methods for routine monitoring and performance management?

Virtually all PHC services have routine health information systems, consisting of registers, forms, and reports. They may also include standardized case records, patient-held cards/records, and more specialized information

sub-systems, for example, for health facility level supply chain management. Some systems have provision for capturing services delivered at outreach sessions or at the household level, with dedicated registers or forms used at that level. In most instances, there are no institutionalized provisions for processing and using information collected through these various tools other than for extracting certain items for submission in monthly or quarterly reports. Although there may be integrated information systems that consolidate across all or some programs or services at the PHC level, the more usual situation is a multiplicity of documentation tools associated with different programs. This system imposes a documentation and reporting burden on health workers and CHWs (to the extent that they, too, are obliged to record such information). It also contributes to problems of data quality and completeness and further reduces the likelihood of active data use for quality improvement. Integration of the CHW health information system into the system for the health center to which CHWs are attached ensures that CHW work is part of the national health information system. There are other possible data sources for routine monitoring and performance management. These sources can include documentation arising from supervisory contacts, individual patient records, and material generated from institutionalized death audit processes.

When is routine measurement not enough?

Measurement related to health program performance has several important functions, including as a basis for developing strategy, understanding the current situation to help in prioritizing, directing design decisions, and determining resources needed. But there are also important dimensions of performance and of drivers or determinants of performance that cannot be readily measured through the normal means available to us for routine monitoring. For example, an important target of many CHW programs is changes in specific household practices. If part of a CHW's role is to promote exclusive breastfeeding at the household and community levels, the most important measure of effectiveness is what is actually happening with breastfeeding rates. Normally, that cannot be measured any other way than by a representative household level survey of the whole population. Similarly, if an important focus of CHW work is to promote appropriate care seeking for danger signs, we will not be in a position to properly measure this practice based only on public sector service delivery statistics. For important aspects of program performance that do not lend themselves to routine measurement, periodic surveys and special studies can provide valuable information on what CHWs are doing and on factors influencing performance.

Examples of measurement and data use in specific CHW programs

This section presents three examples of data use in large-scale CHW programs. The first example describes how CHWs in Ethiopia tally up their daily work and then consolidate their data into a monthly report for submission to the next higher level in the system. This community-based health information system has the advantage of guiding the CHW in his or her daily work and providing the capacity for calculation of coverage of services in the CHW's catchment area. The second example describes how information about CHW performance collected by supervisors in India is passed up through the system for monitoring purposes. The third example describes evaluations of national CHW programs in India and Pakistan.

Conclusions

Measurement and use of data for strengthening community health services at the local level can strengthen the performance of CHW programs. In addition, well-developed national CHW program evaluations conducted at 5- to 10-year intervals can serve to guide national program strengthening. For CHW programs to remain relevant and effective and to maintain political and governmental support for their long-term sustainability, well-developed M&E activities will be essential.

Chapter 16 | Wrap-up

Given the recent re-emergence of interest in large-scale CHW programs, we have taken the opportunity to take stock of issues and challenges that these programs face and what might be done to make them as effective as possible. The *CHW Reference Guide* is intended to be a practical guide for policymakers and program managers who wish to develop or strengthen a CHW program, drawing lessons from other countries that have implemented CHW programs at scale. We have discussed major policy and programmatic issues that decision-makers and planners need to consider when designing, implementing, scaling up, or strengthening a national-level CHW program. We have offered an overview of specific challenges CHW programs face, country lessons, tools, and other resources that may be helpful for policymakers and program managers. As much as possible, we have brought in relevant programmatic examples.

For more than 50 years, as leaders in PHC have tried to elaborate strategies to better meet population health needs, they have gravitated repeatedly to solutions that have involved recruiting and training local people to play roles complementing and supplementing those of health professionals, encouraging healthier practices and care seeking and, in some instances, providing services that otherwise would fall within the responsibility of health professionals through task-shifting.
Strategies have varied considerably by place and time.

The initial wave of CHW programs established in the 1960s, ’70s, and ’80s was for a very different world from today. Many of the societies where we work have become more prosperous since then; the standard of education and literacy has improved; economies have evolved in the direction of greater monetization and away from traditional subsistence economies; in many settings, the private sector now accounts for a large proportion of health services provided; road networks have expanded; and new technologies (notably mobile phones) are now in widespread use. Perhaps most importantly, the world today is much more urbanized.

Nevertheless, many of the issues that face policymakers, program managers, and external development partners as they make decisions and as they design and manage community health programs are essentially the same as those faced by their predecessors: how to sustainably finance such a program; how to design it so that it will function effectively; how to select, train, motivate, retain, and supervise CHWs; how to ensure consistent supply of needed drugs and other commodities; and how to monitor and ensure performance. Also, now more than ever, programs need to be resilient and adaptable, adjusting to new evidence and policies to enable them to implement newly approved recommendations. Our goal is for the *CHW Reference Guide* to enable policymakers and program implementers to take into account lessons that can be drawn from past experience.

The accumulating evidence regarding the effectiveness of CHWs in low-, middle- and even in high-income countries provides strong indications that for the foreseeable future CHW programs are no longer just a stopgap solution. Investments in them are, in fact, investments in strengthening the health system. But, to reach their full potential they need adequate financing, just as all essential programs do. Whether emerging large-scale CHW programs can garner the financial resources they need to achieve their full potential is a question that is too early to answer at present.

Each of the chapters in the *CHW Reference Guide* is authored separately, so they may differ in style and approach; however, in each case, authors were asked to present a series of key questions and provide

alternative scenarios that might help decision-makers identify the best solution for their particular challenge. Across chapters, there are key themes that emerge:

- Planning, managing, and financing CHW programs is complex because CHW programs generally fall somewhere between the formal health system and communities, and rely on the involvement of a wide range of stakeholders at local, national, and international levels.
- Careful planning that takes into account the full costs of the program is essential, and a plan for adequate financing that is fair and sustainable must follow. Establishing a strong a base of political support for long-term financing is critical if government funding is required.
- Balancing the inherent tensions of a large-scale CHW program in which the CHW is the lowest tier worker of a national health system and also acts on behalf of the always changing local world of a community will be an ongoing challenge requiring decentralized flexibility in program policy, design, and implementation.
- Attention to human resources, from role definition and recruitment to training, supervision, and incentives must be considered in full at the outset (if possible) of the program.
- Early program quality can generate political support that will be valuable in providing the needed governmental financial support. Strong evidence of effectiveness can help to secure political support for funding and can be achieved by having a strong M&E program.
- Where community or local participation is well established, models of community-driven programs and local accountability may be appropriate and useful for CHW programs. Where local participation in governance is not well established or is weak, stakeholders need to explore other mechanisms for accountability.
- It is challenging to include a very local participatory structure for governing a CHW program within a large-scale program, and there are few sustained examples of this. For large-scale programs, formal local governance structures, such as elected local government councils, may need to be relied on.
- Engaging localities in the governance of large-scale CHW programs is difficult to achieve without substantial resources, adequate planning, and sustained attention to maintaining these structures. Stakeholders need to consider what resources are needed and how these can be made available.

Although many themes and issues have been explored, we have not included a whole range of topics that are of great importance, but must be addressed elsewhere. These include the following:

- The effectiveness of specific interventions and strategies for delivering them in the community.
- Current advances in the application of mHealth for CHW programs and the potential of mHealth.
- The adaptation of CHW programs to urban environments.

Conclusions

Our goal in the *CHW Reference Guide* has been to offer reflection and, hopefully, some guidance for policymakers and program implementers as they begin to plan new CHW programs, scale up existing programs, and/or strengthen existing programs. In 1987, Berman, Gwatkin, and Burger asked if CHWs were a "head start or false start towards Health for All." The scientific evidence and programmatic experience that have accumulated over the past three decades have provided a new and stronger foundation for being certain that CHWs definitely move the world toward Health for All, and not just as a stop-gap measure, but for the

foreseeable future. We hope that the *CHW Reference Guide* will help to enlighten the way—even if just a bit—toward Health for All. We firmly believe that the challenges of CHW programming can be met and that CHWs will not continue to be seen as stop-gap measures in second-rate health programs, but rather as a permanent part of a highly functional and effective first-class health system.