

Chapter 7

Community Health Worker Roles and Tasks

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Key Points

- A number of health care services exist that can make a significant difference to maternal and child health (MCH) in poor settings. Because community health workers (CHWs) are close to communities, both geographically and socially, they could potentially be responsible for a number of these services.
- When planning new CHW roles or expanding the roles of existing CHWs, program planners need to analyze current research evidence and evidence-based guidelines on the effectiveness and safety of relevant tasks performed by CHWs. Planners need to assess whether the recommended CHW roles and tasks are considered acceptable and appropriate by their target population, by the CHWs themselves and by those who support them. Finally, planners need to think about the practical and organizational implications of each task for their particular setting with regard to training requirements, health systems support, work location, workload, and program costs.
- This chapter provides a list of questions that may help program planners think about important issues when determining CHW roles and tasks.

INTRODUCTION

This chapter will focus on a number of considerations program planners need to make when determining the roles and tasks of CHWs. We will discuss the specific roles and tasks that CHWs could potentially have and present a list of questions that can help planners when making these choices.

What Kind of Roles and Tasks Do CHWs Have Already?

Although there are examples of CHWs having a wide range of roles, most CHW programs within the area of MCH and primary health care tend to focus on a few main areas that fall under three broad categories of health promotion, community mobilization, and treatment (see also Table 1):

- Health Promotion and Preventive Care

Perhaps the most common role taken on by CHWs is that of health promoter, where the CHW primarily provides 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 mother and child health. In addition, CHWs are sometimes also used to promote awareness about social welfare issues, such as domestic violence or alcohol and drug abuse.

In a second role, the CHW provides 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. Although this role usually includes promotional activities, the provision of commodities has logistical implications, as well as implications for how the CHW is perceived by the community, making this role different from that of health promoter.

- Community Mobilization

In a third role, 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

Another role involves the provision of curative health care. 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, when needed.

Another aspect of treatment is assistance to women during labor and birth. In some cases, this role may be limited to providing support to the mother in the presence of a skilled birth attendant. In other cases, CHWs are trained to manage uncomplicated labor and to detect high-risk pregnancies and labor complications so that timely referral can be made. This role is often taken on by traditional birth attendants (TBAs) who have received additional training and have been incorporated into a formal health care program.

Table 1. CHW Roles within MCH

ROLE	EXAMPLES OF TASKS AND ACTIVITIES	PROGRAM EXAMPLE
Promoter of Health Behaviors and Social Welfare	Provision of information and counseling with the aim of encouraging particular health behaviors and use of health care, including promotion of breastfeeding, child nutrition patterns, family planning, HIV testing, and immunization. Provision of information about social welfare issues, such as domestic violence and alcohol and drug abuse.	In Malawi, local women are selected to work as peer counselors and to provide support to childbearing women in their community. The peer counselors identify pregnant women, make home visits, and provide health education regarding exclusive breastfeeding, infant care, immunizations, prevention of mother-to-child transmission of HIV infection, and family planning. They also provide support to women experiencing breastfeeding problems. The peer counselors receive five days of training, as well as annual refresher training. In addition to this intervention, other local women are also trained to facilitate women's groups, where group members are encouraged to identify and prioritize problems related to maternal and newborn health, and to identify, implement, and assess strategies to address these problems. ¹
Provider of Preventive Health Care Services	Distribution of interventions, such as bed nets, micronutrients, condoms, contraceptives, and certain vaccines, through community-based distribution programs and social marketing programs.	In rural Kenya, a community-based delivery system operationalized by CHWs and vendors serves to distribute Sprinkles (fortified nutrients) to remote households. To be cost-effective, multiple services and products are distributed in one visit, increasing the acceptability of the products through previously established trust. The distribution system is run by the Safe Water and AIDS Project. It supports community vendor groups with distribution of health products including water storage and disinfectant products, bed nets, contraceptives, deworming tablets, and (as a trial during implementation of the Nyando Integrated Health and Education Project), Sprinkles nutritional products. The Safe Water and AIDS Project trains vendors and health workers so they will be qualified to distribute Sprinkles packets. Vendors purchase Sprinkles and distribute them according to the Safe Water and AIDS Project model. Social mobilization events are then organized to introduce vendors to community members. Promotional songs and peer-to-peer communication are used to promote use of Sprinkles and to establish trust. These events also allow for households to follow up with health workers and vendors should they have any questions or concerns regarding the products. Incentives, such as T-shirts and stickers, are given to providers, while incentives of extra free sachets or calendars are given to consumers to participate in the program. ²
Community Mobilizer	Organization of community health events, such as the digging of latrines, identification of clean water sources, and organization of nutrition and sanitation days	In Rwanda, each village (i.e., <i>umudugudu</i>) has pairs of CHWs who are trained in community-based integrated management of childhood illness and are responsible for promoting the use of bed nets for malaria prevention and kitchen gardens to address widespread nutritional deficiencies, as well as providing messages on family planning and enrollment in a community health insurance scheme (<i>mutuelle de santé</i>). As part of their community mobilization role, the CHW pairs participate in monthly community work meetings (i.e., <i>umuganda</i>), during which they have a few minutes to discuss a health topic. In these discussions, the CHWs identify any serious health issues that require door-to-door follow-up with community

ROLE	EXAMPLES OF TASKS AND ACTIVITIES	PROGRAM EXAMPLE
		members. They also play a big role in health promotion during organized campaigns, such as the national MCH week when they help bring the maximum number of people and provide some services as part of the campaign.
Provider of Curative Health Care Services	Diagnosis and management of common childhood illnesses, for example, diagnosis of malnutrition, diarrhea, and pneumonia. Provision of timely referral when needed.	In Nepal, female community health volunteers (FCHVs) perform a number of tasks, including the detection and treatment of common childhood illnesses, provision of directly observed treatment short-course (DOTS) for TB, distribution of oral rehydration solution and zinc for diarrhea, and provision of pediatric cotrimoxazole tablets for children with symptoms of pneumonia. FCHVs are also trained to identify and resuscitate infants with birth asphyxia. They play an important role in maternal health as well with the provision of family planning supplies and medication for reduction of postpartum hemorrhage. ³⁻⁶
Assistant to Women during Labor and Birth	Provision of continuous support during labor. Management of uncomplicated labor. Detection of high-risk pregnancies and labor complications so that timely referral can be made.	In Ethiopia, TBAs are trained as home-based lifesaving skills (HBLSS) guides. Trainers use a combination of teaching methods, including discussion, demonstration/ drama, pictorial “Take Action Cards,” and practice to teach TBAs how to manage normal deliveries and how to recognize and deal with obstetric and newborn emergencies, including when to make referrals. TBAs also pass this knowledge on to mothers and members of the community during community meetings, women’s association meetings, antenatal outreach sessions, and when fetching water or firewood. ⁷

WHAT KEY QUESTIONS DO PROGRAM PLANNERS NEED TO CONSIDER WHEN SELECTING CHW ROLES AND TASKS?

When planning new CHW roles or expanding the roles of existing CHWs, program planners need to think about several key questions, including:

- How effective and safe will it be to use CHWs to perform a specific task?
- Are CHWs’ roles and tasks likely to be regarded as acceptable and appropriate by CHWs and their target population?
- How many tasks and activities should each CHW take on?
- When and where will each task be performed and how much workload will it require?
- What kinds of skills and training will the CHW require when performing specific tasks?
- What type of health system support will the CHW require when performing the task?
- How much will it cost to use CHWs to perform the task?

Each of these questions will be discussed in greater detail in this chapter. Decisions regarding these issues are highly contextual, and our goal is not to offer a prescriptive method for assigning roles and tasks. Instead, this chapter seeks to explore key areas of consideration when selecting roles and tasks and how decision-makers could consider these issues when assigning tasks.

HOW EFFECTIVE AND SAFE WILL IT BE TO USE CHWS TO PERFORM A SPECIFIC TASK?

Several health care interventions exist to have a positive impact on some of the most common causes of serious illness and death among mothers and children in low- and middle-income countries. Some of these interventions are already commonly provided by CHWs, such as breastfeeding support and certain childhood immunizations. Other services that are not frequently provided by CHWs but are also known to have an important impact on the health of mothers and children include kangaroo mother care, newborn resuscitation, and the provision of oxytocin and misoprostol for postpartum hemorrhage, magnesium sulfate for eclampsia, and antibiotics for neonatal sepsis. Although we know these interventions can save lives and improve health, 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 says about the effectiveness and safety of tasks when performed by CHWs. The World Health Organization (WHO) has recently published guidance about the types of tasks for mother and newborn health that CHWs and other health worker cadres can perform.⁸ This guidance is based on a thorough examination of the available evidence regarding the effectiveness, acceptability, and feasibility of these options, and was created by a panel of global stakeholders. The WHO has also developed similar guidance concerning the use of CHWs and other health worker cadres for the care of people with HIV/AIDS.⁹

For maternal and newborn health programs, the WHO primarily recommends the use of CHWs for promotional tasks (Box 2). These recommendations are supported by 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.¹⁰ Far fewer studies have, however, explored whether CHWs can effectively perform more curative or invasive tasks.¹⁰⁻¹² For this reason, the WHO has recommended that a number of tasks should be performed by CHWs only in the context of either monitoring and evaluation or rigorous research (Table 2). In other words, policymakers and program planners are encouraged to pilot the intervention and to conduct a rigorous assessment of its effectiveness, acceptability, and feasibility in their setting so that more evidence is available regarding the effectiveness, safety, and feasibility of CHWs performing these interventions.

Table 2. Current WHO Recommendations Concerning the Use of CHWs for Maternal and Newborn Health⁸

RECOMMENDED INTERVENTIONS TO BE PROVIDED BY CHWS FOR MATERNAL AND NEWBORN HEALTH:
<p>Promotion of the uptake of health-related behaviors and health care services for maternal, HIV, family planning and neonatal health, including:</p> <ul style="list-style-type: none"> ▪ Promotion of appropriate care-seeking behavior and antenatal care during pregnancy ▪ Promotion of companionship during labor ▪ Promotion of sleeping under insecticide-treated bed nets during pregnancy ▪ Promotion of birth preparedness ▪ Promotion of skilled care for childbirth ▪ Promotion of adequate nutrition and iron and folate supplements during pregnancy ▪ Promotion of reproductive health and family planning ▪ Promotion of HIV testing during pregnancy ▪ Promotion of exclusive breastfeeding ▪ Promotion of postpartum care ▪ Promotion of immunization according to national guidelines ▪ Promotion of kangaroo mother care for low birth weight infants ▪ Promotion of basic newborn care and care of low birth weight infants ▪ Administration of misoprostol to prevent postpartum hemorrhage ▪ Provision of continuous support for women during labor in the presence of a skilled birth attendant

RECOMMENDED INTERVENTIONS TO BE PROVIDED BY CHWS FOR MATERNAL AND NEWBORN HEALTH:

Intervention recommended only in the context of monitoring and evaluation:

- Distribution of oral supplements to pregnant women (e.g., calcium supplementation for women living in areas with known low levels of calcium intake; routine iron and folate supplementation; vitamin A supplementation for pregnant women living in areas where severe vitamin A deficiency is a serious public health problem)
- Intermittent presumptive therapy for malaria for pregnant women living in endemic areas
- Provision of injectable contraceptives

Interventions recommended only in the context of rigorous research:

- Oxytocin administration to prevent postpartum hemorrhage - standard syringe
- Oxytocin administration to treat postpartum hemorrhage - standard syringe
- Oxytocin administration to prevent postpartum hemorrhage - CPAD*
- Oxytocin administration to treat postpartum hemorrhage - CPAD*
- Misoprostol administration to treat postpartum hemorrhage
- Low-dose aspirin distribution to pregnant women at high-risk of pre-eclampsia/eclampsia
- Puerperal sepsis management with intramuscular antibiotics - standard syringe
- Puerperal sepsis management with oral antibiotics
- Puerperal sepsis management with intramuscular antibiotics - CPAD*
- Initiation of kangaroo mother care for low birth weight infants
- Maintenance of kangaroo mother care for low birth weight infants
- Injectable antibiotics for neonatal sepsis - standard syringe
- Antibiotics for neonatal sepsis -CPAD*
- Neonatal resuscitation
- Insertion and removal of contraceptive implants

The WHO does not recommend using CHWs for the insertion and removal of intrauterine devices.

*CPAD: compact, prefilled auto-disabled, injection device

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. In instances where task shifting takes place, acceptance and support from the health system and its representatives, particularly health professionals working alongside the CHWs, are also important for program success, and is discussed later in the chapter.

Is the Community Satisfied with CHW Roles and Tasks?

Although all stakeholders may agree that issues targeted by the program are important, they may disagree about the chosen solutions. For example, community members may agree that maternal deaths are unacceptably high but may disagree with having CHWs who are instructed to accompany all women in labor to facilities. In other cases, problems can occur when CHWs are continuously confronted with issues that are considered more important than the issues that they have been trained to address. For example, in communities where members suffer from a number of health problems not addressed by the program and where they have poor access to other health care services, CHWs may frequently be approached about issues that are outside their scope of training. CHWs may also be confronted with non-health related problems, such as lack of housing, food insecurity, alcohol abuse, and social and domestic violence. This issue is a particular challenge for CHWs whose scope of practice is defined as health-related only. These sorts of problems are likely to influence recipient satisfaction and uptake of services (see Box 1).

Box 1. Recipients' views of CHW roles and tasks in a Brazilian program

In a CHW program in Brazil, CHW tasks included assessing children's nutritional status, enrolling malnourished children into a milk program, and sharing information about nutrition, immunization, hygiene, respiratory infections, breastfeeding, and prenatal care.¹³ According to study authors, the program emphasized education as the key to improving MCH, and program administrators "[assumed that] once people learn how to correctly manage their environment and care for their children, health will improve." Community members disagreed with this assumption, arguing that they knew how to care for their children, but that their income and living conditions prevented them from doing so. Although they accepted those services they perceived to be of use, such as enrollment in the milk program, they regarded most of the services offered as ineffectual, patronizing, and intrusive. As a result, many CHWs who received "less than warm welcomes during home visits" became frustrated and eventually stopped performing their duties.

Are the CHWs Satisfied with their Roles and Tasks?

A mismatch between the needs and wishes of the community and the services CHWs have to offer can also lead to feelings of frustration and impotence among the CHWs themselves.¹⁴ Some CHWs may find it particularly frustrating to deliver promotional services only, and may want to offer "real health care," such as medicines and immunizations.¹⁴

Has the Community Been Involved In Determining CHW Tasks and Roles?

The involvement of community members and CHWs in program planning is critical to ensure that tasks are seen as relevant and useful (See Chapter 13 on relationship with communities). 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.

Past experience suggests that community involvement can lead to an increase in the distribution of commodities or in the number of curative tasks that CHWs perform. In Nicaragua, the tasks of the CHW were extended to include curative health care, which led to an increase in CHW motivation and community respect and satisfaction.¹⁵ However, it is important to note that any transition from promotional to curative tasks can also represent a double-edged sword, as it could leave CHWs vulnerable to blame if things go wrong or if logistical support fails. CHWs offering services that can be perceived as harmful may be in particular need of visible support from community structures and health facilities (see Box 2).

Box 2. CHWs' concerns regarding social blame in Nepal and Papua New Guinea

In Nepal, a study of CHWs offering gentamicin, an antibiotic, through the Uniject device found that CHWs "were afraid that the injection would be given in the wrong location or would result in a wound or local infection; that the full treatment could not be given to the newborn because the birth did not occur at the home or the CHW was not available to provide the injection; that the baby's health would not improve after the first injection; that the family of the sick newborn would be unhappy or dissatisfied if the health of the newborn did not improve; or that giving seven injections would harm the newborn."¹⁶ CHWs were also concerned about their liability if the baby they were treating died. One CHW said: "I was worried because if something goes wrong, then what the community will say."¹⁶

In Papua New Guinea, CHWs' concerns about potential social blame when delivering Hepatitis B vaccines to newborns were met by providing them, and village leaders, with a copy of a letter of formal authorization from the National Department of Health.¹¹

Community involvement may also lead to a broader scope of practice for the CHW, with more attention given to activities that may be outside the health sector, such as awareness raising and prevention of domestic violence or the establishment of microcredit systems or gardening projects. This more holistic approach may be regarded as more satisfying and relevant to the CHW and the community, but may also require a more complex support system because of the needs for training, supervision, and supplies from sources outside the health sector.

Have the Right CHWs Been Selected?

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. For example, some communities may promote the selection of young unmarried women to work with women of reproductive age, only to find that the young women need to be accompanied by older women as they do their home visits to provide credibility. In addition, the closeness of the CHW to recipients may increase or decrease recipients' acceptance. Recipients may prefer to receive services from people they know well and trust. On the other hand, they may not want to accept services from close neighbors if these services are regarded as particularly sensitive, such as the promotion of sexual and reproductive health. When selecting CHWs, program planners need to consider the nature of the tasks they will be expected to deliver. (See also Chapter 8 on recruitment).

Gender considerations can also go beyond patient preference. Traditional gender roles may affect CHW mobility, workload, hours of work, and incentives. For example, female CHWs may face varying degrees of time constraint because of traditional family duties and roles. Their level of mobility is also likely to depend on permission from spouses or other family members. Families may not be comfortable with female CHWs undertaking certain roles. Furthermore, providing women with a title and career can lead to female empowerment, potentially causing a ripple effect in terms of education and equality. These considerations are context-specific and culture-dependent; a general understanding of gender roles and expectations in the community is critical to program sustainability. Program planners and managers should approach this issue with care in order to ensure that empowerment and change happens in a way that can be effectively integrated into the society rather than quickly rejected, leading to dissolution of CHW programs.

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.

Do Recipients and CHWs Prefer "Specialist" or "Generalist" Roles?

From the 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 a continuity of care, including basic health promotion, preventive care, and the management of common health problems. For MCH, this care could include services tied to family planning, antenatal care, birth preparedness, labor companionship, and postnatal and routine newborn 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. The establishment of male-female pairs of CHWs may also be helpful in settings where it is not safe or socially acceptable for women to travel alone. This system is now being implemented in Rwanda.

Both CHWs and target populations need to be involved in these decisions. Community involvement in program planning may help ensure that the correct balance has been achieved (see Box 3).

Box 3. Community involvement in CHW roles and tasks

In a community-directed intervention strategy, the role of the community is to design an approach to implementing an intervention using the resources available in that community. The logistics, including who will be responsible for implementation, supervision, and monitoring, will also be decided by the community in a way that is perceived as fair and evenly distributed among health workers. This approach has been used for the delivery of ivermectin, an anti-parasitic used for treatment and prevention of onchocerciasis (river blindness), as CHWs and the selection of new CHWs when needed may make decisions more balanced and realistic.¹⁷

What Is Most Practical for the Health System?

In addition to the recipients' and CHWs' views about the breadth of tasks, program planners also need to consider the practical implications of this decision for the health system. For example, CHWs who are expected to deliver a wide range of tasks will require more training and supervision than CHWs with fewer tasks. This decision also has implications for CHW payment and other incentives, as more tasks may lead to longer working hours and CHWs can reasonably expect some form of acknowledgement for additional training and skills. In contrast, it may be more efficient to train, supervise, and support a fewer number of "generalist" CHWs than to have the same number of tasks delivered by a greater number of "specialist" CHWs. Decisions regarding the number of tasks a CHW should have are also closely related to decisions regarding when and where each task will be performed and the workload each task entails, as discussed below.

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.

The level of influence and flexibility a CHW has regarding *when* and *where* a task is performed can vary considerably. Some tasks, such as certain promotional tasks, can often be done in between a CHW's other tasks, at his or her own convenience, and the CHW may also have a lot of flexibility regarding where the task can be done. For example, some CHWs may choose to use ad hoc opportunities and chance meetings, such as social or community events, to deliver

certain promotional services. For other tasks, the CHW may have little influence on when and where they perform the task or how long it will take to complete the task. These include tasks such as continuous support during labor or other childbirth-related tasks. It may also be necessary or preferable to perform other tasks inside the recipient's home, while some tasks may need to be performed in clinics where CHWs can access supplies or need to be supervised by health professionals.

If the task requires the CHW to move around the catchment area, then the program planners will need to consider the need for transportation. In some settings, CHWs traveling around the community or making home visits may be exposed to violence, so safety issues need to be carefully considered. This may include an examination of whether it is appropriate for female CHWs to travel unaccompanied or to enter strangers' homes (see Box 4). Suggested solutions include being accompanied by another individual, working in pairs, and having access to mobile phones. All of these considerations are particularly important if the task requires the CHW to travel at night or for long distances.

Box 4. Problems encountered when CHWs move around the community

A qualitative study of CHWs in South Africa¹⁸ graphically portrays the challenges of working in violence-prone communities:

As a reflection of the South African context in which the intervention was implemented, one of the tasks for supervisors was to ensure that their peer counselors remained safe. This issue was particularly important because peer counselors travelled on foot to visit mothers who lived in poor socio-economic areas prone to violence and drug abuse. One CHW reported the following:

The areas are not safe for peer supporters.... We had a peer supporter who went visiting the house and somebody was shot... in her presence.... When you live in the community there's no way we can separate these things. We live with this kind of life in townships and you just need to be very careful when you there.... I said maybe you should avoid that visit, phone her and ask if you can meet somewhere, or just avoid going there because if you get assaulted we will not be able to handle that, it might just be difficult for us.

A qualitative study of CHWs in Bangladesh speaks of the cultural barriers female CHWs face:¹⁹

Women volunteers are required to go on household visits against the norms of *pardah*. As a result, comments such as "How can *be-pardah* (immodest, shameless) women go house-to-house and roam around?" and "What work do these types of women do?" were commonly expressed by religious leaders and other elders in the village."

When determining where tasks are delivered, it is also important to assess what the target population regards as appropriate. For example, the extent to which home visits are socially acceptable will vary across settings and tasks.

Different tasks also imply different *workloads* and *catchment areas*. Some tasks need to be performed frequently or to large numbers of people, therefore, the size of the CHW's catchment area may need to be relatively small. Some tasks occur infrequently, such as annual immunization campaigns, or they target health conditions that are relatively rare. In these situations, it may seem reasonable to give CHWs a larger catchment area. However, large

catchment areas imply that the CHW will need to cover longer distances, which has implications for transportation needs. In addition, when catchment areas are too large, CHWs may spend too much time getting to the client or spending time on travel only to find that the client is absent²⁰. Another challenge for tasks targeting health conditions that are relatively rare is the issue of quality of care. Although it may seem sensible to train CHWs to deliver antibiotics to treat neonatal sepsis, because he or she may see relatively few cases each year, the CHW has little opportunity to keep his or her skills up-to-date and, therefore, may threaten the quality of care.

CHWs with large workloads are likely to need more incentives than CHWs with lighter workloads. Demands for incentives may also be influenced by the amount of influence the CHW has over his or her working day (see Box 5). Tasks that can be performed within ordinary working hours may require fewer incentives than tasks that need to be performed in response to immediate needs, such as childbirth-related tasks. Tasks that can be done at a time of the CHW's choosing may be particularly appropriate for volunteer CHWs, as this flexibility makes it easier to combine with family and other responsibilities. (See Chapter 11 on incentives.) From a program planner's point of view, however, it is reasonable to expect less from volunteers that work within the constraints of their own daily lives than from salaried CHWs.

Box 5. CHW opinions about the connection between incentives and the tasks delivered in a Nepalese program

In one qualitative study of FCHVs in Nepal,²¹ one FCHV stated the following:

I provide services to the community in my free time, and that's ok. But besides that there are specific days [like when] I need to collect all mothers or kids in my catchment area and [take them] to the health facility. And there are FCHV meetings on specific days at the health facility. So it's not in my free time. I am [tied] to working that day. So for these days, if an allowance is there, that would be good. Jobs like counseling mothers, informing them that tomorrow is immunization day, household visits to pregnant women and the recently delivered, counseling them about nutrition, iron intake, tetanus toxoid vaccinations, and deworming: for these activities remuneration is not needed because we are doing them in our spare time. For Vitamin A distribution, for misoprostol distribution, for all these activities, remuneration is not necessary. I am only saying that for FCHV meetings, for specified days, [and for] support to the outreach clinics, they need to provide (remuneration).

WHAT KINDS OF SKILLS AND TRAINING WILL THE CHW NEED TO PERFORM SPECIFIC TASKS?

Program planners also need to think about the type of skills and training that CHWs will need to perform these tasks. When assessing these issues, program planners may want to think about the following aspects:

- 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?

If the answer is “yes” to any of these questions, the task is likely to require more skills and training. Some tasks, such as the routine distribution of iron folate supplements to pregnant women, are simple to perform, require little or no tailoring or diagnosis, and little knowledge about associated complications. Training may therefore be relatively short. Other tasks, such as training caregivers in the use of kangaroo mother care, are also relatively simple procedures to teach with few components. But, because in this case, CHWs also need to have the skills to detect which infants need additional care and referral, training may be longer. Having well-developed algorithms can, to a certain extent, ease the requirements made of the CHW by providing the CHW with an additional form of support during decision-making. (See Chapter 9 on training).

Promotional tasks are often regarded as simpler to perform than curative tasks. However, in a number of studies, CHWs have particularly emphasized the importance of training in promotional and counseling skills and have viewed health care communication as a complex task for which they often feel unprepared.¹⁴ For example, when promoting family planning methods or HIV testing, CHWs may need to respond to a number of complex questions and concerns and may also experience socially challenging situations (See Box 6). The role of community organizer can also be a challenging one as it is likely to involve complex tasks that need high degrees of tailoring, including the ability to organize and mobilize groups of people and lead them in problem-solving activities. (See also Chapter 9 on training and Chapter 13 on community participation.)

Box 6. CHW opinions regarding training needs in a Pakistani program

A qualitative study of CHWs in Pakistan²² had the following finding:

The respondents suggested refresher training sessions that include role plays on common difficult scenarios as a way to improve communication skills of the workers. They proposed that appropriate information and skills to deal with people who were fixed on strong negative feelings, such as ‘we are poor, we can't do anything’ or ‘a woman's only role is to serve the husband, kids and the family’ or ‘the life or death of the mother or newborn is the will of God, in which the mortals cannot intervene’ would be really helpful. The workers also suggested that information, education, and communication (IEC) materials should be provided to them that could be carried to the households and used for talking about specific health issues.

WHAT TYPE OF HEALTH SYSTEM SUPPORT WILL THE CHW REQUIRE WHEN PERFORMING THE TASK?

Another practical implication that needs to be determined involves the level of health care system support required for each task. Some tasks can be performed by the CHW alone and with very little support from the rest of the health care system. For other tasks, however, successful delivery depends on a well-functioning and responsive health system.

Health system support may primarily involve supervision, typically from facility-based health workers. For example, Nepalese CHWs who identified infants with symptoms of severe bacterial infections were trained to administer gentamicin, but only if they were receiving regular supervision and observation from facility-based staff.¹⁶ For this to work, CHWs need efficient ways of communicating with other health workers, such as through access to transport or mobile phones (see Box 7). (See also Chapter 10 on supervision.)

Box 7. Use of mobile phone systems in Rwanda

In Rwanda, a text messaging system through mobile phones (Rapid SMS-MCH) was implemented to allow CHWs to communicate with the mother-infant pairs they followed in their communities.²³ Rapid SMS-MCH is a free, open-source software that can be customized to allow CHWs to connect to a national centralized database, the health facility, and an ambulance driver for emergencies. This system allows CHWs to keep better track of pregnancies and MCH outcomes in limited resource settings. It also allows for faster response in case of emergencies and improved involvement of CHWs during the critical moments of their patients' pregnancies.

CHWs can also receive supervision through peer support, such as by working together in teams or in pairs. CHWs in some studies have called for the opportunity to meet regularly with other lay health workers to share experiences and give each other support¹⁴ (see Box 8). (See also Chapter 10 on supervision).

Box 8: CHWs working in primary health care teams in Brazil

In Brazil, primary health care is offered through teams of health workers. The *Equipo de Saúde Familiar* health worker teams provide services to 600-1000 families and have four to six CHWs on each team.²⁴ In addition to CHWs, doctors, and nurses, teams also sometimes include dentists, dental assistants, technicians, and social workers. The CHWs focus on promotional activities and particularly on family behaviors essential for child health through the community component of integrated management for childhood illness (IMCI). Although most CHWs feel that they have good communication and respect within their teams, some feel undermined by team physicians. Furthermore, CHWs have little opportunities for career advancement. The mutual support that CHWs are able to provide to each other as a result of their close interactions on a daily basis is important to them.²⁴

Health system support may be required to ensure a well-functioning referral chain. A number of tasks, particularly related to pregnancy and childbirth care, 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. Referral tasks require that the nearest health facility to be sufficiently staffed and equipped, that CHWs have practical ways of contacting facility staff (e.g., by mobile phone, a runner), that a trustful and collaborative relationship exists between the CHWs and the facility staff, and that the beneficiaries themselves are willing to travel to these facilities for health care and have the funds and the means of transport to do so. However, these factors are not always in place.¹⁴ Both CHWs and recipients may have poor relationships with facility staff or may lack the funds or practical means to contact them (see Box 9). In addition, facilities are often under-resourced and under-staffed, and facility staff may feel that CHW programs will increase their workload as a result of supervision requirements or an increase in referrals, or facility staff may fear a loss of authority.¹⁴ Health professionals may be more likely to accept CHW tasks if boundaries are clear and if they feel that the CHWs make sense in their setting (e.g., by easing some of their own busy workload). For these reasons, health professionals and their organizations need to be involved when deciding on the roles and tasks of the CHW.

Box 9. Problems facing CHW referral in a Zimbabwean program

The excerpt below is from a qualitative study of CHWs in Zimbabwe²⁵ that identified the following set of issues that highlights issues in the referral of sick patients:

Apart from the women's perceptions of arrogant and rude clinic staff, mistrust, and fear of cesarean delivery, women themselves were said to use strategies, for example, coming or calling for the TBA when labor was too advanced to be referred, especially also given the prevailing logistical constraints in the villages. The TBAs do not have any means of transport for such emergency cases nor access to a telephone to call for an ambulance. One TBA explained,

There are some women who come to you or call you to their homes when they are already in labor. So what do you do? I do not have an ambulance to take them to the clinic. The woman is in advanced labor. How do I walk with her to the clinic? You cannot run away from a woman and leave her groaning; you just have to assist.

Health system support may also involve access to supplies. Unreliable access to necessary supplies can threaten the implementation of relatively simple interventions and lead to loss of respect in the community for the CHW and the health system (see Box 10).²⁰ Important considerations include the extent to which certain supplies, such as condoms, can be stored over long periods of time and whether supplies, such as vaccines, require specific storage conditions.

Box 10. Problems facing CHWs in Bangladesh and Pakistan due to a lack of supplies

A study of CHWs in Bangladesh²⁵ and another study from Pakistan²⁶ identified problems in obtaining needed medicines. The Bangladesh study reported the following: "While the worker is capable of identifying a most basic medical need – iron for anemia – she must rely on hospital referral, not because she is incompetent, but because there is currently no provision for field distribution of iron tablets or any other medical supplies in the government program." In Pakistan, lady health workers were expected to provide drugs and contraceptives. However, due to poor supply, they faced a lot of embarrassments and accusations by the community of selling drugs and contraceptives in the market.²⁶

Finally, health system support may be of a regulatory nature. Regulations may need to be changed to reflect CHWs' scope of practice to allow CHWs to perform certain tasks and to receive legal protection should interventions cause harm. A recent study on task shifting among nurses and midwives in 13 African countries suggested that many of the countries had not revised their national regulations to incorporate additional professional roles and responsibilities that negatively impacted the long-term sustainability of their roles.²⁷ Similarly, a lack of regulatory support may impede institutionalization of changes, which may also be an issue for CHW programs.

HOW MUCH WILL IT COST TO USE CHWS TO PERFORM THE TASK?

Finally, program planners need to consider how much it will cost for CHWs to perform specific tasks. There may be an assumption that the use of CHWs is cheaper than the use of other health worker cadres, but this is not necessarily true. For instance, some interventions require well-functioning supply chains, referral systems, and supervision. If these supportive elements do not exist, they will have to be developed (which requires start-up costs) so the CHW will be able to perform the task on an ongoing basis. (See also Chapter 12 on relationship with the

health system.) Program planners need to consider a number of potential costs, including the costs of:

- **Training:** These costs include both initial and refresher training and can include the costs of trainer salaries, training materials, and travel and refreshments for both trainers and participants.
- **Supervision:** These costs can include salaries for supervisors and the cost of transport and refreshments for supervisors making field visits. If health workers are being moved from other tasks to provide supervision, then program planners will also need to calculate any costs associated with replacing these health workers.
- **Transport:** These costs can include the cost of travel and refreshments for CHWs visiting clients, accompanying clients to health facilities, and traveling to health facilities to receive supervision and deliver reports.
- **Wages and other incentives:** The type of incentives that CHWs receive varies across programs, but should reflect the type of tasks that CHWs are asked to deliver and the amount of time they spend performing their duties (see also Chapter 11 on incentives). Costs can include salaries and other monetary incentives, such as lunch money, health insurance, and educational stipends. Many programs also make use of non-monetary incentives, such as bicycles and T-shirts. Formal recognition from the community and the health system may also be an important incentive to the CHW and may incur costs. For example, the Nepal government has attempted to incentivize volunteer CHWs through the production of CHW stamps and postcards, an annual CHW celebration, and the production of a TV drama about the valuable contributions of CHWs.
- **Equipment and supplies:** These costs can include medical supplies and promotional materials, and also bicycles, uniforms, telephones, bags, and signboards. These may not all be necessary items for the provision of specific tasks, but may serve as important motivating incentives to the CHW and may increase their social status and visibility in the community.
- **Referral systems:** These costs include any additional costs to the health system to enable CHW referral, including transportation systems, communication systems, and staffing of facilities. Deployment of CHWs may increase the number of referrals arising from communities, which also will have cost implications. (See Chapter 12 on relationship with health systems.)

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.

Key Resources

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