CARING FOR NEWBORNS AND CHILDREN IN THE COMMUNITY

PLANNING HANDBOOK FOR PROGRAMME MANAGERS AND PLANNERS

PLANNING HANDBOOK

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Acronyms

ANC	Antenatal care
BCG	Bacillus Calmette-Guérin (vaccine)
CCM	Community case management
CHW	Community health worker
C-IMCI	Community-based IMCI
HIV/AIDS	Human immunodeficiency virus / acquired immunodeficiency syndrome
HMIS	Health management information system
HSA	Health Surveillance Assistant (a type of CHW in Malawi)
iCCM	Integrated community case management
ID	Identification
IMCI	Integrated management of childhood illness
IMNCI	Integrated management of neonatal and childhood illness
ITN	Insecticide-treated bednet
LiST	Lives saved tool
LQAS	Lot quality assurance sampling
MICS	Multiple-indicator cluster survey
MNCH	Maternal, newborn and child health
MOH	Ministry of Health
MUAC	Mid upper arm circumference
NGO	Non-governmental organization
ORS	Oral rehydration salts
PHC	Primary health care
RDT	Rapid diagnostic test
TAG	Technical Advisory Group
TB	Tuberculosis
TWG	Technical Working Group
UN	United Nations
UNICEF	United Nations Children's Fund
WHO	World Health Organization

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A. INTRODUCTION

The number of children dying worldwide decreased to an historic low of 6.6 million in 2012. While this is encouraging, in many countries this decline is slow, stagnating or even reversing. Coverage of high-impact interventions is still low: many newborns and children still do not have access to the interventions that protect their survival, and that promote their healthy growth and development. Coverage is often lowest where the needs are greatest, putting poor and disadvantaged children at highest risk.

Families are on the front line of care for their babies and young children. Especially in poor and difficult conditions, families need support—skills, encouragement, confidence, and essential supplies—to care for their children. Prevention and treatment services need to be brought closer to children who are not adequately reached by the health system.

To help meet this need, WHO and UNICEF have developed state-of-the-art packages to enable community health workers to care for pregnant women, newborns and children. Evidence has shown that home visits by community health workers (CHWs) during pregnancy and in the first week after birth can make a significant difference in reducing neonatal mortality. There is also evidence that community health workers can play a key role in helping caregivers implement appropriate home care practices for healthy growth and development of their offspring. Community-based treatment of diarrhoea, pneumonia and malaria can significantly reduce childhood mortality in populations who lack access to facility-based services.

In the move towards universal coverage of quality health care, many countries are strengthening the role of CHWs to deliver basic health services, in the community and in the home. Some countries formally recruit a cadre of CHWs, while others engage a variety of established community workers who serve as volunteers or are remunerated by the health system or other sectors.

Purposes of this Planning Handbook

- To **inform** managers and planners about *Caring for Newborns and Children in the Community*, its three community-based packages, their benefits and requirements
- To guide them in **selecting** the best mix of interventions and packages to expand or add in their country
- To **guide** them through key decisions and actions in planning and implementing the packages in the context of current country activities

Who are the community health workers? These providers go by different names, such as community health workers, community-owned resource persons, health surveillance assistants, field or extension workers. Most are embedded within the communities they serve and are leaders in organizing efforts to improve health. CHWs are an effective option for investment as part of a comprehensive primary health care system.

The WHO-UNICEF set titled **Caring for Newborns and Children in the Community** comprises three packages of materials for training and support of CHWs. Countries will assess their current community-based services and choose to what extent they are able to implement these packages for improving child and maternal health and survival. The three packages are described briefly below.

1) **Caring for the Newborn at Home:** The CHW counsels women during five home visits: two during pregnancy; one on the day of birth if the mother gave birth at home, or soon after she has returned home from the health facility; and one each on days 3 and 7 after birth. Additional visits are proposed for low-birth-weight babies. The CHW:

   - promotes antenatal care, and skilled care at birth
   - teaches good self-care during pregnancy

- counsels on care for the newborn in the first week of life
- recognizes and refers any pregnant woman or newborn with danger signs to a health facility
- provides special care for low-birth-weight babies

2) **Caring for the Child's Healthy Growth and Development:** The CHW counsels families on practices that they can carry out at home. This counselling can be done during home visits, in a village clinic, or during other opportunities in which the community health worker interacts with families and communities. Contacts are proposed at critical times when children are in need of immunization and caregivers can benefit from counselling on feeding practices and how to interact and stimulate the young child. The CHW teaches and supports specific practices for:

- infant and young child feeding
- child development through communication and play
- family's response to a child's illness
- illness prevention (immunization, handwashing, sleeping under a treated bednet)

3) **Caring for the Sick Child in the Community:** The CHW assesses, classifies and treats sick children aged 2 months to 5 years. The treatment interventions include the use of five simple medicines: an antibiotic, an antimalarial, Oral Rehydration Salts (ORS), zinc tablets and rectal artesunate suppositories. For countries whose policies do not permit the use of antibiotics by CHWs, the package can be adapted to include the management of diarrhoea at home and referral of children with signs of pneumonia or fever. The CHW:

- assesses sick children
- identifies children with danger signs, gives pre-referral treatment, and refers them to a health facility
- treats (or refers) pneumonia, diarrhoea and malaria
- identifies and refers children with severe malnutrition
- advises on home care and prevention of illness
- refers children with other problems that need medical attention

The packages are designed for workers who can read and who have completed at least six years of basic education. These workers must be considered part of the health work force whether they are volunteers or are employed by the government or supported by non-governmental organizations. They must be linked to higher levels of health services that support their training and help maintain performance through regular follow-up, periodic skills reinforcement, and continuous flow of medicines and supplies.

How does a country decide how to improve care at the community level?

Current facility-based and community-level activities in different countries vary in scope, scale, and effectiveness. Implementing the packages in *Caring for Newborns and Children in the Community* is a way to introduce new interventions and/or make current activities more accessible and effective.

Your country has made or is considering a decision to improve or expand community-based services, perhaps as an outcome of strategic planning or a programme review. This strategic decision leads to the next question:

- Which community-based package or combination of packages will be implemented?

This selection should be made based on the current health situation, the nature of the problems contributing to neonatal, child and maternal death, the country's current community-level activities, and its capabilities to improve or expand services provided by community-based workers.

Note that caregivers need support to implement good caregiving practices. Therefore, the packages on caring for the newborn at

home and caring for the child's healthy growth and development are universal and relevant for caregivers and families in many settings. The package on community case management of childhood illness is needed in situations where access to clinic-based health services is limited and coverage of treatment interventions is low.

The Planning Handbook

This planning handbook is designed to help national and district managers and planners of programmes for maternal and child health to decide how to improve community-based care and to plan and implement the chosen packages.

The Planning Handbook has three purposes:

1. To inform managers and planners about the three community-based packages in *Caring for Newborns and Children in the Community*, their benefits and requirements
2. To guide them in **selecting** the best mix of community-based interventions and packages to expand or add in their country
3. To guide them through **key decisions and actions** in planning and implementing the packages in the context of current country activities

This handbook assumes that the target audience of managers and planners is familiar with health programme planning and management. For example, most planners and managers have experience with introducing and/or scaling up programmes, such as IMCI or HIV/AIDS, and managing ongoing programmes with new initiatives. It also assumes that they are familiar with perhaps one of the community-based packages, but not all 3 of them.

This handbook will not outline all the steps to plan, implement and evaluate a programme or new activities. Instead, the handbook will focus on **issues that are particular to successful implementation of the community-based interventions in these three specific packages**. Other references and specialists should be consulted as needed for the principles and procedures of health programme planning and to carry out detailed planning.

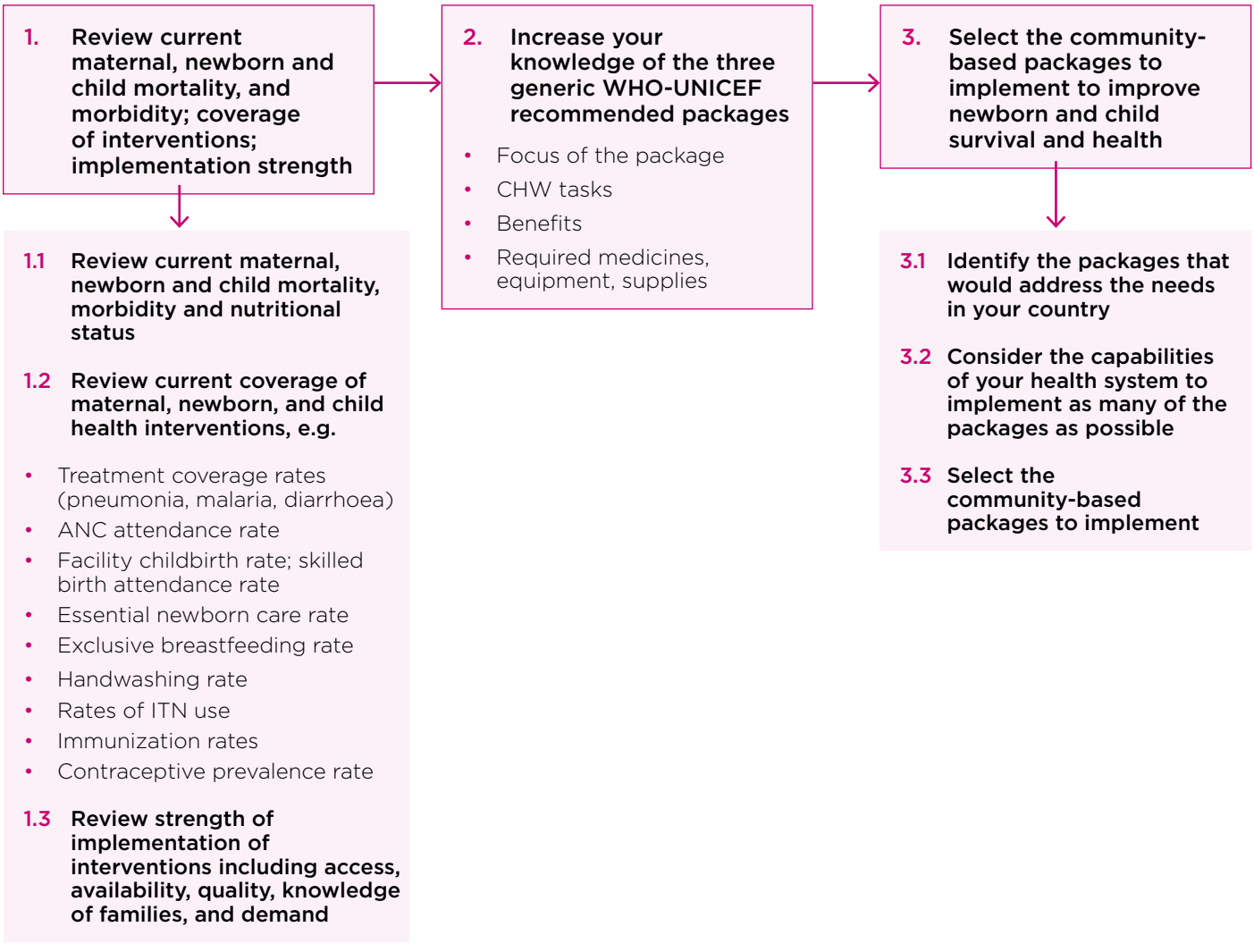
The suggested method for managers and planners to select the packages to implement and to make decisions and begin planning key actions is a workshop. A suggested workshop schedule is in Annex A. Guidelines for preparing and conducting a workshop using this handbook are provided in the separate booklet titled *Facilitator Guidelines for using the Planning Handbook*.

B. SELECTING COMMUNITY-BASED PACKAGES TO IMPLEMENT

On the next page is a diagram of a process to select the package or combination of packages to implement or expand in your country or district. Making this decision will require a good understanding of what the packages include in terms of services and communication with community members as well as their potential benefits, requirements and costs. You will also need to know the current health status of newborns and children, factors that contribute to the health problems, your country's current programmatic efforts to address the problems, and the feasibility of improving community-based services. The suggested process includes the following steps:

1. Review your country's current maternal, newborn and child mortality, morbidity, and nutritional status; coverage of maternal, newborn, child health interventions; strength of implementation of the interventions including access, availability, quality, knowledge of families, and demand.
2. Increase your knowledge of the 3 generic WHO-UNICEF recommended packages: *Caring for the Newborn at Home*, *Caring for the Child's Healthy Growth and Development,* and *Caring for the Sick Child in the Community*.
3. Select the package or packages to implement to improve newborn and child survival and health in your country.

Figure 1: Steps to select community-based packages to improve newborn and child survival and health



1. Review your country's current maternal, newborn and child mortality and morbidity; coverage of interventions; and implementation strength

Workshop process: *To accomplish this first step, you will hear presentations on the health status of women, newborns and children in your country and the current coverage of MNCH interventions. You will also review and discuss indicators of implementation strength of current interventions.*

This information is compiled from several sources. If your country recently completed a programme review, situation review, or bottleneck analysis, most of the relevant information will be collected and summarized. If not, gather the necessary information and organize it. Reviewing the information listed in the steps below will give a picture of the most important health problems and the home care practices that may need to be improved (e.g. attending ANC, breastfeeding, use of ITNs, seeking care for childhood illness).

1.1 Review current maternal, newborn and child mortality, morbidity and nutritional status

- Maternal mortality rate and main causes
- Neonatal mortality rate and main causes
- Infant mortality rate
- Under 5 year mortality rate and main causes
- Geographic areas or social groups with high maternal, newborn or child mortality
- Incidence of pneumonia, diarrhoea, malaria
- Rates of stunting, wasting, severe malnutrition

1.2 Review current coverage of maternal, newborn, and child health interventions

- Treatment coverage rates (pneumonia, malaria, diarrhoea)
- ANC attendance rate
- Facility childbirth rate; skilled birth attendance rate
- Essential newborn care rate
- Exclusive breastfeeding rate
- Handwashing rate
- Rates of ITN use
- Immunization rates
- Contraceptive prevalence rate

1.3 Review strength of implementation of interventions including access, availability, quality, knowledge of families, and demand

There are many possible indicators to review for the different interventions. For example:

- Access to health facility services for mothers, newborns and children
- Access to a community health worker offering particular service
- Availability of necessary supplies and medicines at community level for particular interventions
- Underserved populations (who do not use facilities)
- Quality of care (e.g. proportion of sick children needing antibiotic and/or antimalarial who are prescribed the medicine correctly in the community)
- Health workers supervised in previous 3 months
- Community health workers supervised in previous 3 months
- Family knowledge of danger signs of child illness and how to respond
- Family knowledge of recommended home care practices
- Policies enable and support home visits by CHWs
- Policies enable and support CHW's delivery of community case management for diarrhoea, malaria and pneumonia, including use of antibiotics

2. Increase your knowledge of the three generic WHO-UNICEF recommended packages

Workshop process: *Your facilitator will ask you to read the descriptions of each package on the next pages in this Handbook. You will also complete some exercises from the training courses, so that you will be more knowledgeable about each of the WHO/UNICEF packages in Caring for Newborns and Children in the Community.*

On the next 7 pages are descriptions of the three recommended packages. Read these pages to become familiar with the CHW's tasks to deliver each package, the potential benefits and the requirements.

Summaries of the three packages in *Caring for Newborns and Children in the Community*

1) Caring for the Newborn at Home

When delivering this package, the CHW focuses on teaching the pregnant woman and her family what to do to have a healthy pregnancy and safe birth. After the child is born, the CHW teaches and supports the family in providing the best care for the newborn.

The community health worker's tasks to implement this package include:

- Identify pregnant women in the community and visit their homes
- Use good communication skills and build a good relationship with the family when making a home visit
- Meet with the pregnant woman and her family to promote antenatal care and birth in a health facility and help the family prepare for birth; teach home care for pregnant women and danger signs that should prompt her to go quickly to a health facility; and teach appropriate newborn care practices for immediately after birth
- Assess a newborn for danger signs and measure weight to identify a small baby
- Support the mother to initiate and sustain exclusive breastfeeding; assess attachment and suckling and help her to improve position and attachment if necessary
- Advise families on optimal care practices for the newborn including exclusive breastfeeding, keeping the newborn warm, using good hygiene to prevent infections, and watching for signs of illness
- Identify when a newborn or woman needs referral and assist the family in going to a health facility
- Assist families to provide extra care for the small baby including frequent feeding and skin-to-skin care

Benefits of this package can include:

Increased ANC attendance, increased facility childbirths, reduced incidence of emergencies and complications during childbirth, increased breastfeeding rates, reduced neonatal illness, and increased competence and confidence of families caring for the newborn, all leading to reduced maternal mortality and reduced neonatal mortality.

Scheduled home visits:

1st pregnancy visit: *as early in pregnancy as possible*

2nd pregnancy visit: *about 2 months before delivery*

1st postnatal visit: *on Day 1 after birth*

2nd postnatal visit: *on Day 3 after birth*

3rd postnatal visit: *on Day 7 after birth*

For small babies, 2 extra visits: *on Day 2 and Day 14*

To deliver this package, the CHW needs the following equipment, medicines and supplies:

- One of each of the following items, to be replaced when damaged or lost:
- One-minute timer
- Digital thermometer
- Hand-held weighing scale with sling
- *Counselling Cards: Caring for the Newborn at Home*
- *CHW Register* (to record pregnant women visited, newborns and their mothers visited, referrals, and appointments. Should be replaced periodically.)
- *Caring for the Newborn at Home: CHW Manual* (one copy for reference)

A supply of:

- *Mother and Baby Cards* (so that each pregnant woman can be given a copy)
- *CHW Referral Notes*
- Birth plan form or sample format

Your facilitator will lead you through an exercise from this package. When it is time, turn to Annex B.

2) Caring for the Child's Healthy Growth and Development

This package focuses on teaching families how to feed the child for optimal growth and health at different ages. It teaches specific things that they can do to improve the child's development at different ages. It also teaches how to prevent illness and what to do when a child gets sick.

Scheduled home visits:

Visit 1: *Age 1 to 2 months*

Visit 2: *Age 3 to 4 months*

Visit 3: *Age 5 months*

Opportunity contacts:

Multiple contacts from age 6 months up to 5 years

The community health worker's tasks to implement this package include:

Teach and support families to:

- Provide good nutrition in infancy and childhood by breastfeeding exclusively until age 6 months and then also feeding nutritious complementary foods.
- Communicate and play with the child in ways that improve caregiver child interactions, stimulate the child and improve the child's healthy development, and strengthen their relationship with their children.
- Prevent childhood illness (by breastfeeding, vaccination, handwashing, sleeping under a bednet).
- Recognize when a child becomes ill and seek prompt and appropriate care.

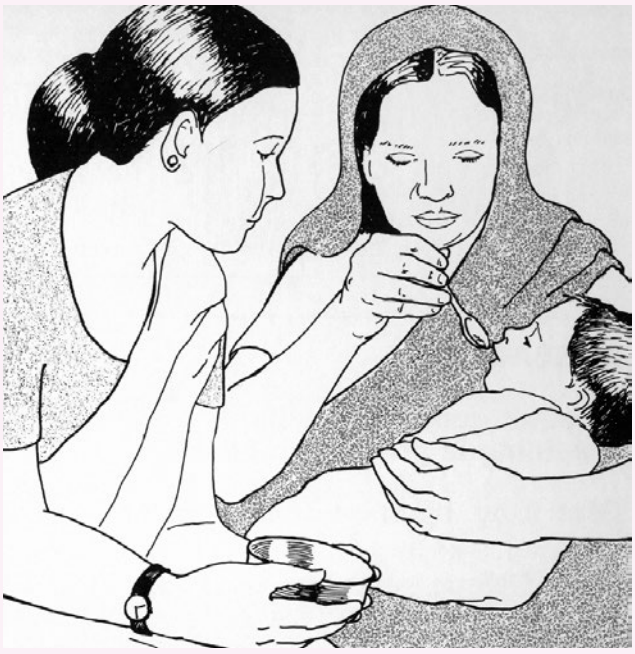
Benefits of this package can include:

Increased breastfeeding rates, decreased undernutrition rates, improved communications with children, improved child development, earlier recognition by the family when a child is sick, prompt care-seeking for illness, increased immunization rates, decreased malaria, decreased diarrhoea.

To deliver this package, the CHW needs:

- *Family Counselling Cards: For the child's healthy growth and development*
- Record of when to conduct home visits or establish a contact
- Set of play and communication materials

Your facilitator will lead you through an exercise from this package. When it is time, turn to Annex C.



3) Caring for the Sick Child in the Community

When delivering this package, the CHW focuses on assessing a sick child who is brought for care, and determining whether the CHW herself can provide the needed care and the child can be treated at home, or whether the child must go to a health facility for care.

The community health worker's tasks to implement this package include:

- Assess a sick child to identify signs of common childhood illness, test children with fever for malaria (where malaria is a problem), and identify malnutrition (by measuring upper arm circumference with a MUAC strap).
- Decide whether to refer the child to a health facility, or to help the family treat the child at home.
- For children who can be treated at home, help their families provide basic home care and teach them how to give ORS solution and zinc for diarrhoea, an antimalarial medicine for children with fever who test positive for malaria, and an antibiotic for cough with fast breathing.
- For children who are referred to a health facility, begin treatment and assist their families in taking the children for care.
- Counsel families to bring their children right away if they become sicker, and to return for scheduled follow-up visits.
- On a scheduled follow-up visit, identify the progress of children and ensure good care at home; and, if children do not improve, refer them to the health facility.

- Advise families on sleeping under a bednet.
- Use a Sick Child Recording Form to guide the tasks in caring for a sick child and to record decisions and actions.

Benefits of this package can include:

Better access and availability of effective treatment for childhood illness, increased knowledge of families of the signs of illness in children, less delay in care-seeking, better care of children during illness, increased compliance with referral, decreased child mortality due to pneumonia, diarrhoea, and malaria.

Schedule of contacts:

- **ANYTIME** that a sick child is brought to the CHW, or the CHW visits a home and a child is sick
- **Follow-up visit:** 3 days later
- **If child was referred, follow-up visit** on child's return home and once per week until child is well

To deliver this package, the CHW needs the following equipment, medicines and supplies:

- *Sick Child Recording Form* (one for every sick child)
- *Referral note from CHW: Sick child*
- *Chart Booklet* (one copy for reference)
- Pencil
- Watch or 60-second timer (for counting respirations)
- MUAC strap
- Supply of medicines
  - ORS packets
  - zinc dispersible tablets
  - antimalarial tablets (artemisinin-combination therapy or ACT)
  - oral antibiotic (amoxicillin) tablets
  - rectal artesunate suppository (for pre-referral treatment for child with fever who cannot drink/swallow an oral antimalarial)
- Rapid diagnostic tests (RDTs) for falciparum malaria and supplies for doing the RDT:
  - Timer (up to at least 15 minutes)
  - Sharps box
  - Non-sharps waste container

  And for **each** test:
  - New unopened test packet
  - New unopened spirit (alcohol) swab
  - New unopened lancet
  - New pair of disposable gloves
  - Buffer
- Utensils to prepare and give ORS solution
  - A 1-litre bottle or other measuring container
  - A container and spoon for mixing the ORS solution
  - A cup and small spoon for giving ORS
  - A jar or bottle with a cover, to send ORS solution with the caregiver on the trip to health facility or home
- Utensils to prepare and give other medicines such as zinc, antibiotics, antimalarial
  - Spoon
  - Small cup or bowl
  - Water, breast milk or banana (to mix with crushed tablet)

Your facilitator will lead you through some exercises from this package. When it is time, turn to Annex D.

Caring for Newborns and Children in the Community—all three packages

In summary, if a community health worker will implement all three packages, she will have the following contacts with families in her community:

A. Pregnancy

When a CHW identifies a pregnant woman in the community, she will:

- Visit the woman as early in pregnancy as possible
- Visit her again about 2 months before expected delivery

B. Birth

As soon as the CHW learns that the baby has been born (in facility or at home), she will visit the home to assess the baby for signs of illness; initiate/support breastfeeding; advise on care for the normal baby including exclusive breastfeeding, warmth, and hygiene; counsel to seek care promptly for illness; advise mother on her own care.

- Visit the mother and new baby right away – on day 1 after birth
- If baby is small – visit again on day 2
- Visit on Day 3
- Visit on Day 7
- If baby is small – visit again on day 14
- Anytime the CHW refers a baby to a facility for illness, she will visit the home on the next day to check whether the family went to the facility and the outcome; if not, she will assess the baby and refer again if needed.

C. Make scheduled visits to baby's home to teach the family the care practices they can do at home for the child's healthy growth and development

- Visit 1—Age 1 to 2 months
- Visit 2—Age 3 to 4 months
- Visit 3—Age 5 months

D. ANYTIME, when a sick child is brought to the CHW for care, or when the CHW visits a home and a child is sick, she will assess the child and decide whether to refer or treat.

- If no danger sign, treat child at home; give oral medicine and advise the caregiver (also see F below)
- If any danger sign, refer urgently: begin treatment and assist referral.

E. When a sick child is brought for follow up or the CHW visits the home of the child (3 days later), the CHW will reassess the child.

- If child has improved, advise caregiver on healthy growth and development (also see F below)
- If child is sicker or did not improve, refer urgently; begin treatment and assist referral.

When a child who was referred to a health facility returns home, the CHW will make a follow-up visit. She will reassess the child, provide care and advise the caregiver, or refer if the child is worse or does not improve. The CHW will visit once weekly until child is well.

F. At any opportunity contact with a child up to age 5 years (when child is sick or when you see a sibling, etc.), the CHW will give the caregiver advice on healthy growth and development appropriate for the child's age.

Different counselling cards provide:

- Advice when child is age 6 to 8 months
- Advice when child is age 9 to 11 months
- Advice when child is age 1 year (up to 2 years)
- Advice when child is age 2 up to 5 years

Now that you have a good understanding of the three packages, go to the next step.

3. Select the community-based packages to implement to improve newborn and child survival and health

Workshop process: *You will consider the three community-based packages, their benefits, the needs in your country, and the capabilities of your health system to implement them. Then you will work as a group to select the packages to implement.*

3.1 Identify the packages that would address the needs in your country

Consider all the information on the health needs of pregnant women, newborns and children, the coverage of current interventions and the strength of their implementation, and the potential benefits of the different packages. Table 1 is a decision table to help identify package(s) that could address different problems.

Table 1: Selecting packages for Caring for Newborns and Children in the Community

If One or More of These Problems Exist, Then →	This Package Can Help to Reduce the Problem
☐ Neonatal mortality is high ☐ Maternal mortality is high ☐ ANC attendance is low ☐ Facility-based childbirth is low/Skilled birth attendance is low ☐ Postnatal care coverage in the first week of life is low ☐ Essential newborn care is rarely given at home ☐ Early and exclusive breastfeeding rates are low ☐ Families do not know/recognize danger signs in the newborn ☐ Sick newborns are not taken promptly to a health facility for care	*Caring for the Newborn at Home*
☐ Exclusive breastfeeding rates (<6 months) are low ☐ Nutrition and growth are poor in young children (6 months to <2 years); there is stunting and wasting ☐ Immunization rates are not high enough ☐ There are high rates of diarrhoea, malaria, other illness ☐ Families do not know signs of illness and danger signs in young children ☐ Caregivers are slow to recognize signs of illness in children ☐ Families do not bring sick children to the health clinic for care or bring them only after they are very sick ☐ Children are slow to develop communication skills ☐ There is no mechanism to teach and support caregivers about healthy growth and development	*Caring for the Child's Healthy Growth and Development*
☐ Childhood mortality is high ☐ Children are dying from pneumonia, diarrhoea, malaria, or severe malnutrition ☐ There are pockets of high childhood mortality ☐ Health facilities are not accessible/available to some (because of geography, cost, cultural barriers, etc.) ☐ Selected parts of the population are hard to reach with health services ☐ Some families do not bring sick children to a facility for care ☐ There is a need to extend access to care to additional communities	*Caring for the Sick Child in the Community* (and determine which interventions will be included)

3.2 Consider the capabilities of your health system to implement as many of the packages as possible

Workshop process: *To accomplish this step, you will review current policies and plans for community-based activities in your country that would affect implementation of the packages. You will also examine the capabilities of the health system that would be needed for implementation.*

Consider the efforts currently being made to address maternal, newborn and child mortality and morbidity. In what ways are these efforts working well and what are the shortcomings? Areas with known weaknesses will have to be strengthened. Also consider the capabilities of your country to add implementation of the packages to current efforts. This must include the capacity to recruit and train sufficient numbers of CHWs, to pay them or give other remuneration, to supervise them regularly, and to maintain a supply chain for CHW medicines and supplies to the community level.

Consider the capacity of health facilities to provide support to CHWs as a source of training and skills reinforcement, medicines and supplies, supervision, and as a place to refer women, newborns, and children. Implementation of community-based packages may promote and accompany strengthening of facility-level care for children through IMCI[1]. Caring for Newborns and Children in the Community complements IMCI in health facilities.

Examine current policies and plans

Countries have policies in place that will affect implementation of community-based newborn and child care. It is important to be fully aware of and up-to-date on these policies as well as any relevant policies that may be in process of development or adoption. Locate all relevant policy documents, such as on IMNCI, community case management, home visits, ANC, PHC, and CHWs. Policies may specify or describe the role of CHWs, what they are authorized to do (home visits, administer some medicines), how they are to be compensated, etc.

Also review health plans that will affect community-level implementation. Locate any relevant plans, such as the national RMNCH Road Map document, Community Health Strategy, MNCH biennial plan, human resources development plan, etc. These plans may describe how many CHWs are planned to be recruited, what the supervisory structure looks like for the community level, plans for distribution and supply of medicines and other logistics, or a reporting system.

Workshop process: *There will be a presentation on the current policies and documents that that provide guidance and structure for implementation of community-based activities in your country. The group may then ask questions about these policies or documents and their implications for plans for these packages.*

In what ways are the packages different from each other?

Caring for the Newborn at Home and Caring for the Child's Healthy Growth and Development:

These two packages are primarily educational, supportive and motivational. CHWs teach and support good care practices starting in pregnancy and moving through early childhood. These packages are recommended to be implemented throughout the country, because all pregnant women, caregivers and children have a right to receive this type of support. They require the CHW to take the initiative to seek out each pregnant woman, newborn, or young child in the community and provide the appropriate counselling and support. When implemented together, they are the foundation for building a continuum of care in which caregivers and families have periodic contacts with health workers and receive support to implement recommended care practices. **Thus, implementation of one or both of these packages**

1 IMCI refers to Integrated Management of Childhood Illness, a strategy to address the five major causes of child mortality -- diarrhea, pneumonia, malaria, measles and malnutrition. The cornerstone of the IMCI strategy was the development of standard treatment guidelines and training of facility-based health workers.

in a country should, in time, target all families and all communities.

To provide care for the pregnant woman and newborn, and to provide counselling for each child's healthy growth and development, a CHW must usually make 8 visits to the household during the period from early pregnancy until the baby is 5 months old. The CHW's workload will depend on the number of families that she is expected to care for, and the birth rate in the community.

To support implementation of either or both of these 2 packages, the health system must have the capabilities to:

- Undertake implementation (over time) in all communities with a sufficient number of CHWs to accomplish the workload
- Implement good quality training and follow-up that results in development of the necessary skills and knowledge to
  - conduct the required home visits, effectively counsel women and their families, and address all the important messages relevant at each visit;
  - identify postnatal complications in mothers and newborns and promote timely referral
  - provide quality postnatal care, supporting improvements in home care.
- Provide equipment to all trained CHWs to enable them to carry out the tasks, including hand-held baby scales, thermometer, timer
- Provide job aids to assist in counselling and remind of all the relevant messages for the visit and replace them when they are lost or worn out
- Regularly supervise CHWs to give them guidance and support
- Encourage the community to promote the services of the CHW to its members and the family practices recommended for pregnancy, care of the newborn at home, and care for healthy growth and development of the child
- Provide support, recognition and incentives to sustain CHWs' interest and motivation to do the job; provide support to help with travel
- Provide clinical services in the area for pregnant or postpartum women and newborns who are referred with danger signs or illness

100% coverage with these two packages would require that every community has a CHW trained to provide these packages, and that the CHW visits ALL the pregnant women in the community and their newborns, and visits the homes of ALL the babies in the community to counsel their caregivers.

Caring for the Sick Child in the Community:

This package is primarily curative. It is designed to be implemented in communities that have limited access to care from health facilities, thus extending essential services to hard-to-reach populations. It requires a family to bring a sick child to the CHW for care and the CHW to be available, skilled and supplied with the necessary medicines. The family must be aware that the CHW is a good source of help to care for a sick child; the family must realize when the child is sick and seek care from the CHW.

To support implementation of this package, the health system must have the capabilities to:

- Identify communities that do not have access to sick child care in a health facility and undertake implementation of this package in all of them. (Implementation may be phased.)
- Implement good quality training and follow-up that results in development of the necessary skills and knowledge to
  - assess sick children and determine whether they can be treated by the CHW and at home or if they need referral care
  - provide necessary treatment (for diarrhoea, pneumonia, and confirmed malaria) and effectively counsel caregivers on continuing treatment at home and home care for a sick child
  - assist referral including giving pre-referral treatment if appropriate.
- Provide reliable and regular supplies of medicines and other items to all trained CHWs to enable them to carry out the tasks, including timer, RDTs and supplies for doing the test, and medicines (ORS,

zinc, oral antibiotic, oral antimalarial, rectal artesunate suppositories)

- Provide sick child recording forms and job aids to assist in assessment and treatment, and to remind of all the relevant messages for the visit,
- Regularly supervise CHWs to give them guidance and support
- Periodically give refresher training and mentoring to CHWs to ensure maintenance of clinical skills
- Encourage the community to promote the services of the CHW to its members and the family practices recommended for care of sick children
- Provide clinical services in the area for management of sick children who are referred with danger signs or serious illness

100% coverage would require that every community that needs a CHW to provide sick child care has a CHW who is trained and supplied to deliver this package; that families know the signs of illness in small children and when to seek help, and will take a sick child to see the CHW; and that the CHW promptly provides care to (or refers) all of the sick children brought to him.

Community case management of childhood illness is designed to fill the gap in communities where access to clinic-based health services is limited and coverage of treatment interventions is low. Implementation of this package in a country should, in time, target all such communities.

Table 2: Summary comparison of community-based packages

Characteristic	*Caring for the Newborn at Home*	*Caring for the Child's Healthy Growth and Development*	*Caring for the Sick Child in the Community*
Target population of the package	All pregnant women living in the community and their newborns	All caregivers of children age 1 month up to 5 years in the community	Children age 2 months up to 5 years when they become sick in communities with limited access to facility-based treatment services
Stimulus for the contact	CHW seeks out the pregnant woman to visit; CHW visits the newborn and mother within 24 hours of birth	CHW seeks out the caregiver of young child to visit	Caregiver of sick child seeks out CHW
Nature of interaction	Counselling on pregnancy care, delivery, essential care of newborn Assessment of newborn Referral of newborn or mother with danger signs	Counselling on optimal feeding for the infant, communication and play, disease prevention, response to illness	Case management Counselling on giving care at home Follow-up visit to assess whether child has improved and give care as needed
Expected number of contacts per pregnancy/ child	5 home visits: · 2 during pregnancy; · 3 after birth (at day 1, 3 and 7); · plus 2 extra visits if baby is small	3 home visits to caregiver of each young infant/child at: · age 1 to 2 months · age 3 to 4 months · age 5 months	1 visit to the CHW by the caregiver seeking treatment plus a follow-up visit in 3 days for each episode of illness
Package-specific resources needed	· Counselling cards: Caring for the Newborn at Home · Equipment to assess newborn: one-minute timer, digital thermometer, hand-held scale with sling · Register, referral forms, Mother and baby cards, birth plan forms	· Family Counselling cards: For the child's healthy growth and development · Records of home visits made and when due	· Watch or 1-minute timer, MUAC strap, RDTs for malaria and supplies for doing the RDT, pencil · Medicines: ORS packets, zinc tablets, antibiotic tablets, antimalarial tablets, rectal artesunate suppositories · Sick Child Recording Forms, referral forms, CHW Chart Booklet (for reference) · Utensils to prepare and give ORS or other medicines

3.3 Select the community-based packages to implement

Choose one, two or three packages:

- Caring for the Newborn at Home
- Caring for the Child's Healthy Growth and Development
- Caring for the Sick Child in the Community

The recommendation is that countries should implement all 3 packages, as each brings important health benefits. However, as human resources, funding and other elements required for successful implementation are limited, countries must usually make difficult decisions on which package or combination of packages to implement and in which areas. Decision makers must weigh the needs of pregnant women, newborns and children in different areas of the country, or in pockets of the most vulnerable populations, with the country's capabilities to implement the interventions, so that implementation will address areas of greatest need and achieve the greatest impact for the investment.

There is evidence that including a curative role for CHWs (treatment of malaria confirmed with RDT, acute respiratory infection, and diarrhoea) improves trust in and use of CHW services. In some places, community providers of case management have higher use rates than health facilities. This suggests that the increased numbers of treatments are filling a treatment gap, in part at least, between the low number of treatments being provided by health facilities in low resource settings and the high need given the burden of these conditions.

If your country selects *Caring for the Sick Child in the Community*, experience suggests that implementation should include case management of pneumonia, diarrhoea and malaria (where a public health problem) from the outset rather than introducing treatment of each condition at a separate time. Countries that started programmes without treatment of all three conditions suffered from persistent imbalances in the treatment mix, even after the three conditions were eventually introduced.

If you select *Caring for the Sick Child in the Community*, there may be adaptations to be decided to make the package more suitable for your country. The interventions included in the generic package include treating diarrhoea with ORS and zinc, using a RDT to confirm malaria, treating malaria with an oral antimalarial, treating fast breathing with oral amoxicillin, and giving artesunate suppository as pre-referral treatment to a child with fever who cannot swallow a dose of antimalarial. A country may decide not to include all of these interventions, or to use a different antibiotic for pneumonia or a different oral antimalarial.

A country may add interventions to address HIV and TB, such as identification of children with possible HIV or TB for referral, HIV counseling and testing for mother and child, and support for adherence to ARV or TB treatment. The generic materials are undergoing adaptation to incorporate suggested interventions. Other national adaptations include, for example, treating eye infections with antibiotic ointment, and using paracetamol for treatment of fever.

In a country where CHWs do growth monitoring, the counselling messages and visit schedule in *Caring for the Child's Healthy Growth and Development* may be adapted to correspond to the growth monitoring schedule (or vice versa).

If there is a community-based feeding programme, the country may include, for a child who measures in the yellow on a MUAC strap, the advice to refer that child for supplemental feeding.

It is also possible to decide on other adaptations in the packages, such as modifications of messages or recording keeping, etc.

C. OVERVIEW: HOW TO PLAN TO IMPLEMENT THE SELECTED PACKAGES

Workshop process: *A facilitator will guide you through this section of the Handbook. You may be asked to read, listen to a presentation and/or discuss the content of this section as preparation for developing an implementation plan.*

From here on, this handbook will suggest some important issues to consider when planning how to implement the packages that you have selected, whether that is one, two or three packages. The planning of the packages will be integrated, just as the delivery of the services will be integrated. There is no separate plan for one package as compared to another. The tasks that the CHW will perform can be thought of, all together, as the CHW's job. The rest of this handbook suggests important points to plan and implement so that CHWs can effectively perform all the tasks in their job—to provide preventive care for pregnant women, newborns and children, and/or curative care for sick children, as described in the packages.

This handbook uses 8 components of a well-functioning health system as a basis for organizing the analysis, planning and implementation of the community-based packages. This or a similar breakdown will be familiar to those who plan, implement or evaluate health programmes. The 8 components are:

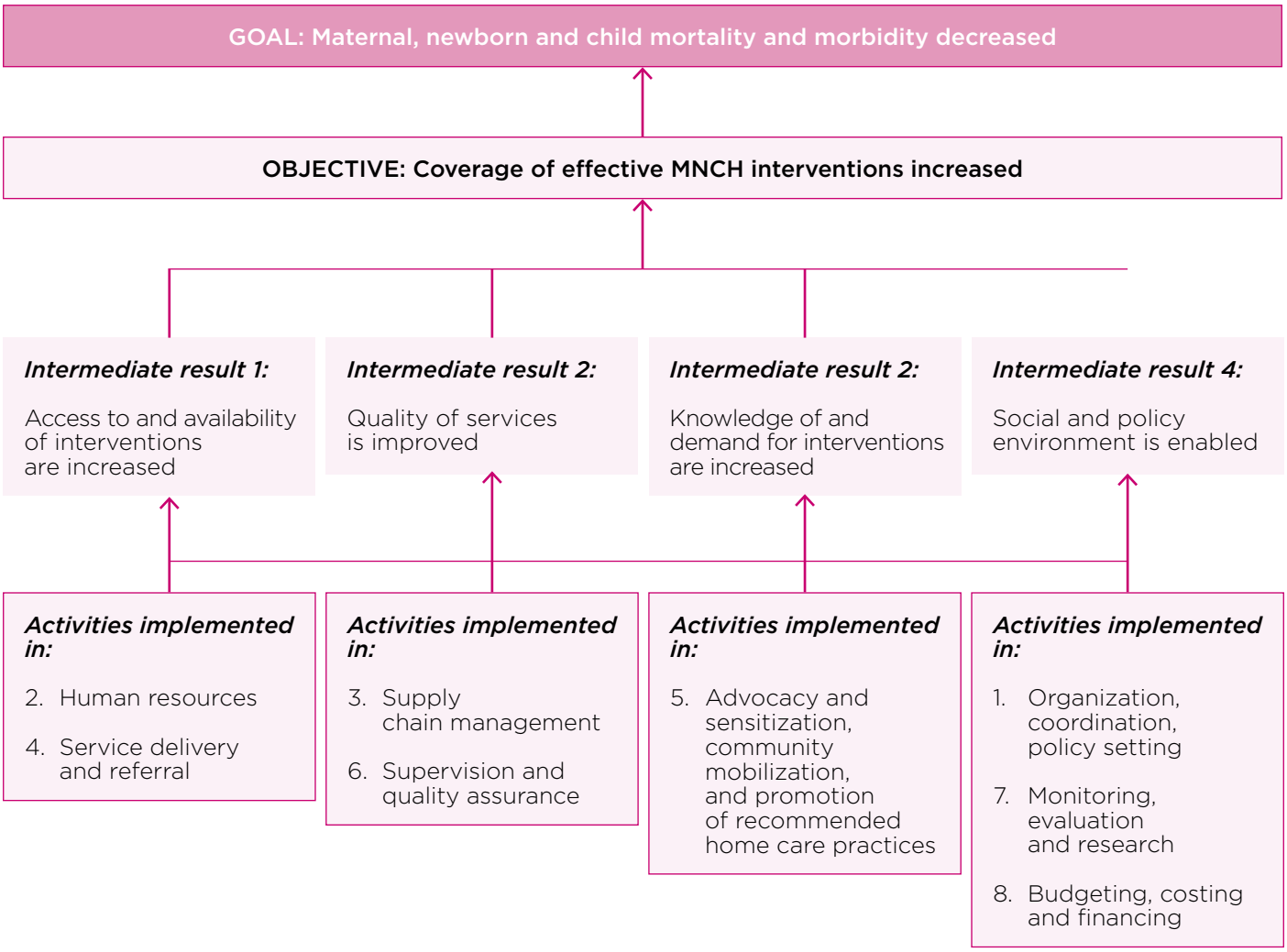
1. Organization, coordination and policy setting
2. Human resources
3. Supply chain management
4. Service delivery and referral
5. Advocacy and sensitization, community mobilization, and promotion of recommended home care practices
6. Supervision and quality assurance
7. Monitoring, evaluation and research
8. Budgeting, costing and financing

Activities and outputs in each of these components impact the intermediate results that are achieved, which in turn affect the coverage, as portrayed in the Figure 2 on the next page. This 'results framework' shows a model framework that is useful to aid programme design; show relationships between activities, results and coverage; and guide selection of indicators.

When one or more community-based packages are added, increased coverage of those intervention packages is added to the objectives. Activities are planned and implemented in the 8 component areas with the intention to improve the intermediate results, and thus the use or uptake of services, that is, coverage.

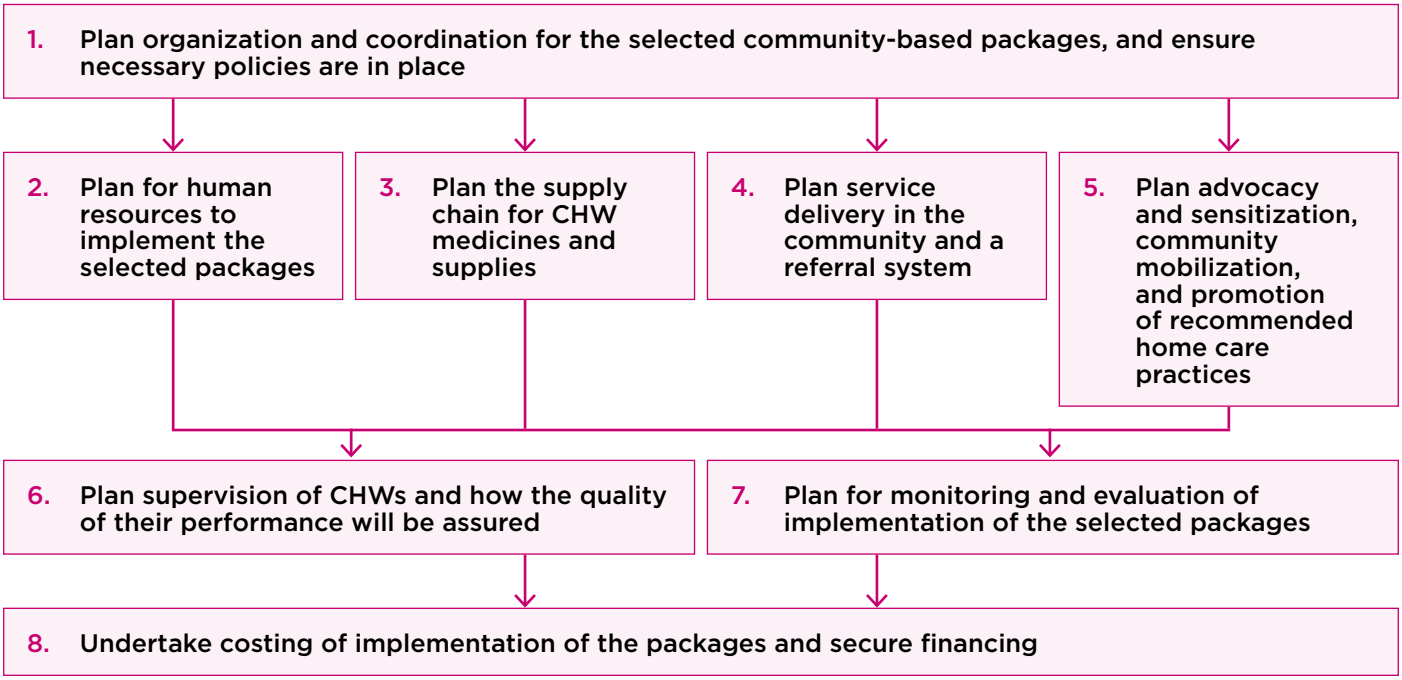
The framework links each component to the intermediate result which it principally influences. For example, component 3, Supply chain management, directly and clearly influences quality of services provided, so it lies directly beneath intermediate result 2. In addition, component 3 influences access to and availability of interventions (intermediate result 1) and demand for them (intermediate result 3). Thus, each component has many effects, some direct, some indirect.

Figure 2: Results Framework



The flowchart in Figure 3 on the next page shows the planning steps for the 8 components. Though shown in a sequence from top to bottom, the steps are not strictly sequential but may overlap and be going on at the same time. However, some decisions earlier in the sequence (e.g. what type of CHW will deliver the package and how many CHWs will be needed) must be made before later steps can be completed (e.g. planning their training, quantities of supplies needed and how CHWs will be supervised).

Figure 3: Overview: Planning for Community-level Implementation of the Selected Packages



Workshop process: *A facilitator will lead a discussion of the points below. You will comment on whether these issues will be or are challenges in your country. You will also share any positive experiences. The challenges you identify are important to remember when writing plans for implementation.*

What is unique about implementing interventions for community-based care?

The provider

- The provider is a community-based worker (called in this document a community health worker, or CHW) who usually is **specially recruited by or through the community**, but could also be hired and paid through the health system.
- The CHW commonly **works from home**, rather than reporting to a health facility to work.

The CHW's work

- The interventions require that the worker learns and **stays informed about her**[2] **community's members** so that she knows whom to visit and when. Who is pregnant? Is the baby born yet? Who has children under 5 years of age?
- The CHW must take the initiative to **make her own schedule of home visits** to pregnant women and families with young children and then follow through to make all those visits. (This requires more **self-discipline and organization** than reporting to a health facility daily where other people are expecting you.)

2 Though a CHW may be male or female, feminine pronouns will be used in this document for simplicity.

- The CHW must be **available in her home or community around the clock** (or nearly), 7 days per week, and willing to attend to any sick children who are brought to her for care. (This is more demanding than being on duty a specified number of hours a week at a health facility.)
- The CHW must **maintain an adequate stock of medicines and supplies** in her home. She may need to maintain supply records and may have to travel to a health facility to pick up supplies on her own. (This requires more responsibility than relying on other staff at a health facility to maintain stocks which are delivered there.)
- The CHW must **maintain records** of her clients and their care, and must **report on her work to a supervisor** in the health system and also (perhaps) **to a community leader**, for purposes of accountability, monitoring quality of performance, and resupply of medicines.

The CHW's skills

- The CHW must **learn and maintain complex technical skills** (e.g. case management). Since she often **works alone** and may only be able to get advice periodically, she will need opportunities for skills reinforcement, supportive supervision, and mentoring.
- The CHW must **learn and maintain communication skills**. CHW must perform all her counselling tasks competently and reliably. (Note the counselling tasks are prone to being shortened or omitted by many facility-based public and private health workers).
- The CHW must build **credibility and maintain a good relationship with individuals** in the community so that they will welcome her into their homes and they will bring her a sick child for care. (This requires that an individual maintains a more positive relationship and continuity in the community than a worker in a health facility. Community members usually come to a health facility because of the services there, independent of whether they have a pre-existing relationship with the staff.)

Conditions required

- There must be **conditions that motivate the CHW** both to treat sick children who are brought to her and also to go out to make home visits to community members. She must receive acknowledgement for her services, satisfaction from visiting pregnant women and families with young children, having their respect, knowing she is helping, and seeing results of her work. She should receive payment or other compensation and recognition from the community and its leaders.
- There must be a process of accountability that involves community leaders and enables the **community to have modes of recourse and remedy when the CHW does not perform** as intended, to identify a non-performing CHW, attempt to solve the problem, and if necessary, recruit a replacement.

Health system requirements

- The health system must **provide CHWs specific training** to perform these interventions, and **periodic refresher training**.
- The health system must find a way to **remunerate and motivate large numbers of CHWs**; this may be a significant new personnel expense. (If CHWs are not paid, they may have insufficient time and incentive to do all the tasks assigned in addition to necessary income-generating tasks.)
- The health system must find a way to **recruit, train, deploy and retain appropriate CHWs in sufficient numbers and in all communities** in the area of implementation, and to replace them when needed.
- The distribution system for **medicines and supplies** must reach to the **community level with reliable supply** through links with health facilities (which it may or may not do now).
- A **system of supervision** must include a **supervisor visiting the CHW**. Because the CHW works on her own, supportive supervision is extremely important for ensuring correct performance of the CHW, helping her to solve problems and maintaining her motivation. (This is likely a new task for a health facility staff member that requires new skills and knowledge, allocation of time and transport, and possible increases in facility personnel and funding.)

The need is unique to plan new ways to recruit CHWs, pay them, train them, supply them,

supervise them, motivate them, monitor their performance and use of medicine and other supplies, provide a referral system so that serious cases they identify can receive care, and replace them when they quit or do not perform their job. All of these functions require a strong and seamless link between the community and the health facility care.

Research has shown that the interventions in these three packages are effective. However, experience is limited in implementation of multiple community-based packages at scale including the mechanics of training, supply chain, supervision, monitoring and evaluation of CHW interventions. Research, followed by publication of what works, is needed so that countries can learn and improve implementation of these packages.

D. PLANNING FOR COMMUNITY-LEVEL IMPLEMENTATION OF THE SELECTED PACKAGES

When a country has selected the combination of the community-level packages that will be expanded or added, a new round of planning must begin. To prepare for implementation of the packages, there are decisions to make such as how the CHWs will be selected (if they are not already in place), trained, how medicines and supplies will be provided to them, how they will be supervised, what data they will track and how it will be used.

The next 8 chapters will suggest **key decisions to make and actions to consider in order to plan and implement the selected community-based package(s)**. This is not a complete guide to planning any package or component. There are already strategies, complex plans and ongoing activities in place to implement MNCH interventions in health facilities and perhaps also in the community. Instead, this handbook suggests important steps and decisions on how your country's combination of community-based packages will be integrated into the ongoing work of improving maternal, newborn and child health.

The WHO-UNICEF training courses that have been developed to support implementation of the three packages are helpful in that they provide the standard guidelines for the work of the community health worker and ready-to-use training courses and job aids. However, it is clearly recognized that training is only one aspect of a programme for delivering effective interventions at community level. Enabling policies, government commitment, sufficient funding, and support of stakeholders are essential. Once trained, community health workers require supplies, regular supervision and support from the health system to provide consistent and high-quality services. Monitoring and evaluation are necessary to track and understand what occurs and how to make improvements. All of these components are essential for implementation of the selected packages and must be carefully planned.

The 8 chapters that follow correspond to the 8 components. These are constructed to guide planners and managers to make key decisions and begin writing an implementation plan. At the beginning of each chapter, the corresponding step from the overview flowchart (Figure 3, page 19) is further broken down into sub-steps. (Annex E shows the flowchart of all 8 steps with the sub-steps of each.)

The next page in the chapter is titled **Situation description**. It lists questions about the current situation for that component. Every country is different in the nature and extent of the facility-based and community-based activities that have already been undertaken or planned. The answers will help determine what needs to be changed or put into place to enable implementation of the selected community-based packages.

The main section of each chapter is titled **Key decisions and actions**. It is organized according to the steps shown in the flowchart. For each step, the handbook suggests decisions to make, and provides relevant guidance and examples. When writing the implementation plan, planners and managers will document their decisions and actions to accomplish it. The details of how to accomplish the steps may be worked out and written later by other experts in the various disciplines (e.g. training, logistics, costing, monitoring, etc.)

An example outline of an implementation plan is in Annex F. Annex G contains a 'Checklist of progress initiating and implementing packages in Caring for Newborns and Children in the Community.' It can be used to track your country's achievement of important accomplishments (benchmarks) in planning and implementing the selected packages. It lists benchmarks for each component during the Planning, Introduction, and Scale-Up phases of a programme.

Components and Chapters

1. Organization, coordination and policy setting
2. Human resources
3. Supply chain management
4. Service delivery and referral
5. Advocacy and sensitization, community mobilization, and promotion of recommended care practices
6. Supervision and quality assurance
7. Monitoring, evaluation and research
8. Budgeting, costing and financing

Workshop process: *The facilitators will divide the workshop participants into small groups and will assign one or more components to each group. Each small group will complete a situation description and an implementation plan for the assigned component(s).*

The general process for the rest of the workshop is that you will hear instructions in the plenary group about the small group's assignment and will be given a time limit; your small group will meet to complete the task, including documenting your findings; and a reporter from each group will present your findings to the plenary group, who may ask questions and discuss the findings. Then all the groups will be given instructions for the next task.

Refer to the instructions on the next 4 pages as a guide to your work during the next few days.

Participants' Instructions: Planning Implementation of the Selected Packages Component by Component

How to Do a Situation Description

1. In your small group, first select a participant to be the rapporteur of your group for this task. Select another participant to be the reporter to present the results to the plenary group. You will take turns filling these roles for small group work when doing subsequent tasks. Your facilitator will help to guide the group, but will not serve as rapporteur or reporter.

   Turn to the chapter in the Handbook for your assigned component. Then review the flowchart to understand the steps involved in planning for that component.

   Do a situation description for the assigned component using the questions in the handbook chapter. Use your own knowledge plus any information brought with you. Discuss answers to each question and agree on answers.

   The rapporteur should document your answers in a template like the one below. (He or she can create the template by copying the table containing the situation description questions for your component, and then adding a right column for answers.) Complete your work within the time limit given by the facilitator.

Theme	Question	Answer
	a.	
	b.	
	c.	
	d.	
	e.	

When your group has completed the situation description, review it together and agree on the key points. Document these points as the highlights of your situation description; the reporter should present these highlights in plenary.

2. When the groups are ready, reassemble in plenary. In turn, the reporters from the small groups present the highlights from the component's situation description to the plenary group. Listen to all of the presentations to learn about the current situation in the country. The plenary group may ask questions and discuss the situation described.

3. Repeat steps 1 and 2 as needed until all 8 components are addressed.

How to Develop Plans for Implementation

1. In your small group, select a rapporteur and a reporter, as previously.

   Read and familiarize yourselves with the key decisions and actions in the chapter. Your facilitator may ask the group members to review the chapter together using guided reading, or individual reading with reports back to the group, or another method.

2. List the steps in the chapter (shown in the flowchart) in a table such as the one below. Discuss whether each of the steps has been done in your country for the selected packages. Rate each step as either *Completed; In process; Done but needs improvement/updating; Needs to be done;* or write in another designation in the *Other* column.

Status of Planning Steps

STEP	PACKAGE(S)	Completed	In process	Done, but needs improvement or updating	Needs to be done	Other
2.1						
2.2						
Etc.						

3. Review your situation description again. What are the few main issues that your group identified that need to be addressed in the plans? Come to agreement and list them.

4. Draft a plan for the component on the Planning Template (shown on page 26) as follows:

   a. Identify key steps and main issues to be addressed in the plans (column 1)

- First, look at the table for the Status of Planning Steps. Identify any **step** that you rated as *Needs to be done*, or *Needs to be improved or updated*. Enter each of these in column 1 of the Planning Template.
- Second, indicate which package or packages each step applies to.

- Third, look at your list of main issues from the situation description. Are any of them logically included in one of the steps? If so, it would be addressed as part of the step. If not, add the issue to column 1.

b. Identify actions to take to address each of the key steps and issues
   - For each step and issue listed in column 1, discuss in your group how to address it. Briefly list the actions to take in column 3. Note: You will need to spend adequate time to identify reasonable and effective actions, but manage your time so that you will be able to discuss all the steps and issues in column 1.

c. Then specify, if possible, who will undertake the actions (column 4) and when (column 5).

d. If possible, estimate a budget for the actions and specify a source or possible source of funding (column 6).

e. Indicate whether technical assistance will be needed to complete the action (column 7).

Note: Be sure to consider each step and issue in relation to all of the selected packages.

5. When the groups are ready, reassemble in plenary. In turn, the reporter from each small group presents the plans for implementation including each step or issue and the actions that your group suggests to address it, projecting the planning template for their component. Listen to all of the presentations to learn about plans proposed for other components. The plenary group may ask questions and discuss the plans.

6. Steps 1 through 5 are repeated until all 8 components are completed.

Planning template: Planning implementation of community-based packages for caring for newborns and children

Group: _____ Component: _____

1 **Key steps to be addressed** (Key steps to be done, or main issues identified in situation description)	2 **Package**(s)	3 **Actions to take to address issue**	4 **By Whom**	5 **When** (in next year)	6 **Budget and Source**	7 **TA needed?**

E. STEPS TO PLAN IMPLEMENTATION OF THE SELECTED PACKAGES IN 8 COMPONENTS

Chapter 1. Plan organization and coordination for the selected community-based packages, and ensure necessary policies are in place

Selection of the community-based package or packages to implement Caring for Newborns and Children in the Community

1. Plan organization and coordination for the selected community-based packages, and ensure necessary policies are in place

- **1.1** Plan how the implementation of community-based packages will be administered or organized
- **1.2** Specify who will be partners, stakeholders, and donors contributing to implementation of the selected packages and their roles
- **1.3** Agree on national coordinating mechanisms for initiating/improving and maintaining community-based health activities
- **1.4** For each policy that is needed, plan steps to have it written, approved, put in place and disseminated
- **1.5** For each of the selected packages, summarize the extent of current implementation and specify the focus of next efforts
- **1.6** Determine advocacy needs for coordination and policy

Situation description

As a basis for planning implementation, answer the questions below about the current situation as regards policy, coordination and advocacy. The answers will help determine what needs to be changed or put into place to enable implementation of the selected community-based packages.

Theme	Question
Organization	a. What is the current organizational structure at the national level for community health? At the state or regional level? At the district level, sub-district, and community? What entity is responsible for delivering curative care for young children? What entity is responsible for preventive and promotive interventions? What entity is responsible for pregnancy, childbirth, newborn care? b. Is there a budget line for community health in the MOH budget? c. Describe the Ministry of Health leadership relevant to MNCH activities at the community level. d. Is there an organization in villages/neighbourhoods or communities that oversees health issues (e.g. village health committee)? If so, what is its composition and role? Is there training for members? How well do the committees perform?
Coordination	a. List the partners working in MNCH and their roles. List the partners working in health at community level and their roles. b. Does the private sector provide a significant proportion of community-based health services? Do NGOs? Does the private sector or NGOs mobilize significant resources? c. Describe how the MOH coordinates with private sector and NGO providers. d. Is there a stakeholder group for MNCH activities? If so, how frequently do they meet? Who are the members? Is the community level represented at meetings? Who represents the community? e. Does the stakeholder group discuss CHW roles and policies? f. Is there a technical advisory group or technical working group for community-based MNCH? If so, who are the members and what are the terms of reference?
Policy	a. Is there knowledge of the WHO/UNICEF Joint Statements relevant to MNCH community-level intervention packages among programme managers, partners, stakeholders, donors? Is there any support at this time for implementing one or more of the packages? b. What policies are in place and what additional policies are needed to allow community-based treatment of sick children according to the package? For example, are there policies that enable CHWs to treat pneumonia with an antibiotic, diarrhoea with ORS and zinc, malaria with ACTs? To use a rapid diagnostic test (RDT) to confirm malaria? c. What policies are in place and what additional policies are needed to allow and support home visits by CHWs to pregnant women, newborns, small children and their families? d. Are the policies in 'official' policy statements, reflected in training materials with government logo, in a memorandum of understanding, in an official letter, or in a strategy document specifying details?

Theme	Question
Implementation status	a. Have any of the packages already been introduced? Or have parts of any of the packages been introduced? b. Are there plans for how to phase implementation of the packages, either geographically, package by package, or otherwise?
Advocacy	a. Has a needs assessment, situation analysis or gap analysis been done to document the need for community-based interventions for pregnant women, newborns and children? Is one needed for purposes of promoting new policies? For purposes of advocacy for the packages? b. Has advocacy for any of the packages already begun? Describe it (target, messages, channels, materials). c. What are current advocacy needs? Specify the target populations and objectives that need to be achieved through advocacy.

Key decisions and actions

1. Plan organization and coordination for the selected community-based packages, and ensure necessary policies are in place

Organization

1.1 Plan how the implementation of community-based packages will be administered or organized

Confirm MOH leadership for implementation of the selected packages. Administration can be complex involving different government entities and other partners, but successful programmes have high level support and leadership from the MOH. Specify the relevant government entities and what each will do at the community level. For example, in Uganda, the overall CHW programme is housed in the Division Health Promotion and Education of the Ministry of Health. Meanwhile, the technical home for Care of the Sick Child in the Community (iCCM) is in the Ministry's IMCI Programme, the technical home for newborn health is Reproductive Health Programme, and major resources come through the Malaria Control Programme.

In most countries the administration is centrally driven. However, in some, the states, regions, or provinces control resources (budgets, supply chain) and therefore administer implementation.

Often one entity claims the CHWs, while other entities help guide the tasks or provide medicines or other resources.

Also specify what entity in each community, village or neighborhood will represent the community in communications and coordination with the health system to implement the selected packages.

Coordination

1.2 Specify who will be partners, stakeholders, and donors contributing to implementation of the selected packages and their roles

Specify partners, stakeholders and donors at national level and at the sub-national level. Include not only MOH and other government programmes but also private sector, NGO and faith-based organizations. Consider whether additional stakeholders, partners or donors should be added to those currently participating in health activities.

For example:

Table 3: Partner List in Ethiopia

Component	Institution	Roles
Policy and coordination	FMOH	Develop policy on iCCM and coordinate child survival partners through the national child survival TWG
Costing and finance	FMOH and partners especially UNICEF, USAID, WHO, Bill & Melinda Gates Foundation	The FMOH is responsible for the overall operation of the community health services while partners support the costing of national strategies & plans, avail additional resources.
Human resources	FMOH and partners especially UNICEF, USAID, WHO, Bill & Melinda Gates Foundation, JSI/L10K (Last 10 Kms), IFHP (Integrated Family Health Program), Save the Children International	FMOH is responsible for the pre-service training, deployment & salary of health extension workers. Partners plan the design and implementation of the health extension program including in-service trainings, refresher trainings and supportive supervision.
Supply chain management	PFSA (Pharmaceuticals Fund & Supplies), FMOH, UNICEF, SC4CCM (Supply Chain for CCM), Deliver/USAID	National-level specifications and procurement UNICEF primarily responsible for procurement while others mainly provide technical assistance.
Sub-national level	Merlin, AMREF, IRC (International Rescue Committee)	Implement iCCM activities at sub-national level through UNICEF funding

Successful programmes have had clear leadership of the MOH and an understanding of partners about their roles and responsibilities. There is strong MOH support for both the policy and practice of community case management. A national planning and adaptation workshop has sometimes been used to help reach consensus moving forward.

1.3 Agree on national coordinating mechanisms for initiating/improving and maintaining community-based health activities

A coordinating committee is an advisory committee of high level stakeholders and/or experts who provide guidance on important issues. Terms of Reference should specify criteria for membership, members, roles and responsibilities, frequency of meetings, leadership, etc. Specify how the community level will be represented on the committee.

Each programme, partner or other entity should be included in the coordinating committee and participate in coming to agreement on assignments of responsibilities and use of resources.

Plan for partner or stakeholder meetings for planning and coordination, which may be ad hoc gatherings of partners with the time, interest, and/or expertise relevant to the agenda, or they may be a series of periodic gatherings. Ensure that an agenda is prepared for each meeting and action-oriented decisions (specifying who, what, when) are recorded. Meetings should include timely reports on progress of activities such as training, supervision, and particular issues being addressed such as quality of care, retention, etc. Meetings should review status of disbursement of budget and status of progress toward meeting targets.

Plan for a technical advisory group (TAG) or technical working group (TWG) to advise on policy, strategy, practice standards, relationships, etc. relevant to implementing the 3 packages (may be the same as or different from an existing TAG). Plan the membership and terms of reference for the TAG. Members need:

a. Technical skills to:
   - critically review and synthesize global publications and original research reports – commonly obtainable through in-country WHO or UNICEF representatives
   - obtain, assess the quality and generalizability of, and summarize national experience
   - propose policy positions for discussion

b. Other expertise, depending on the task, such as pharmacy, logistics, behaviour change, clinical care, programme planning, nutrition, and human resources, among others.

   Note that there is more to setting policy than presenting evidence. At least one member of the TAG needs to have links to the policy-making apparatus, which commonly has a **political dimension**, a calendar, and one or more champions. Presenting the issue concisely, at the right time, to the right individual(s) can make the difference in getting a policy adopted or not.

Policy

1.4 For each policy that is needed, plan steps to have it written, approved, put in place and disseminated

As part of the process to establish or update needed policies, necessary steps may include TAG review and recommendation, stakeholder consensus meetings and advocacy. Evidence-based advocacy may be needed to overcome reluctance to allow CHWs to use RDTs, antimalarials, antibiotics, etc. Advocacy may also be needed to overcome reluctance to support home visits by CHWs to provide education and counselling on pregnancy, childbirth and newborn care.

Table 4: Policy Table (example)

Package	Needed policies	Current status	Document that states or reflects the policy
Caring for the Sick Child in the Community	Identification and treatment of pneumonia with oral antibiotic by CHW	Adopted	iCCM Policy Statement 2010
	CHW use of RDT to confirm malaria	Under review	
	CHW use of medicines to treat diarrhoea, malaria, pneumonia	Under review	Essential medicines list, list of CHW medicines
	CHW treats diarrhoea with low osmolarity ORS and zinc	Adopted	iCCM Policy Statement 2010
	Adding home visits to pregnant women to CHW duties	Needed	
	Adding counselling on feeding the sick child to CHW duties	Needed	
Caring for the Newborn at Home	Adding home visits to the newborn and mother to CHW duties	Needed	
	Promotion of skilled birth attendance at health facilities	Supported	Reproductive health strategic plan 2010
	Endorsement of the steps of essential newborn care in the home	Needed	
	Adding counselling on the child's healthy development to CHW duties	Needed	

Package	Needed policies	Current status	Document that states or reflects the policy
Caring for the Child's Healthy Growth and Development	Adding scheduled home visits to the caretakers of young children to CHW duties	Needed	
	Updating of the previously endorsed feeding guidelines for children from birth up to 5 years of age	Needs to be updated	National Policy on Feeding Infants and Young Children 2005
	Endorsement of the recommended family care practices to improve the child's communication and development	Needed	

Key documents to support the interventions in ***Caring for the Sick Child in the Community*** include:

- WHO-UNICEF Joint Statement, Integrated Community Case Management (iCCM): An Equity-Focused Strategy to Improve Access to Essential Treatment Services for Children, June 2012
- UNICEF, Pneumonia and Diarrhea – Tackling the Deadliest Diseases for the World's Poorest Children, June 2012
- UNICEF Community Based Infant and Young Child Feeding Package, 2012 http://www.unicef.org/nutrition/index_58362.html
- WHO-UNICEF-WFP Joint Statement, Community Management of Severe Acute Malnutrition, May 2007
- WHO-UNICEF Joint Statement, Management of Pneumonia in Community Settings, May 2004
- WHO-UNICEF Joint Statement, Clinical Management of Acute Diarrhoea, May 2004

In addition, LiST, the Lives Saved Tool[3], can estimate the lives saved if coverage with life-saving interventions were increased from current to better levels.

A key document to support the interventions in ***Caring for the Newborn at Home*** is:

- WHO/FCH/CAH/09.02, WHO-UNICEF Joint Statement, Home Visits for the Newborn Child: A Strategy to Improve Survival, 2009

Key documents to support the interventions in ***Caring for the Child's Healthy Growth and Development*** are:

- UNICEF, Inequities in Early Childhood Development – what the data say – evidence from the Multiple Indicator Cluster Surveys, February 2012
- WHO, A Critical Link: Interventions for physical growth and psychological development, 1999

When policies are approved, they must be disseminated to districts, health facilities, NGOs and others so that the policies are known and understood by all implementers of the packages.

Implementation Status

1.5 For each of the selected packages, summarize the extent of current implementation and specify the focus of next efforts

For example, three phases of implementation can be described as follows:

- Planning (includes advocacy and planning)
- Introduction (includes early implementation)
- Scale-Up (includes geographic expansion and review and refinement of implementation)

Implementation can also be phased in terms of sequencing the implementation of the different packages, or geographic sequencing of implementation.

An example of a brief summary of status is in Table 5.

3 LiST, the Lives Saved Tool: http://www.jhsph.edu/departments/international-health/IIP/list/ The LiST software is free, and training is commonly available.

Table 5: Planning and implementation status (example)

Package	Planning	Introduction	Scale-Up
Caring for the Newborn at Home	Planning is ongoing and will continue. Key stakeholders identified. Capacity building is planned.	Next focus is to introduce implementation throughout region B	
Caring for the Child's Healthy Growth and Development	Assessment of current counselling and recommended home practices Planning is ongoing and will continue	Next focus is to introduce in limited area to test feasibility to add this package to CHW duties for two other packages	
Caring for the Sick Child in the Community	Planning has been completed Policies are updated Logistics not yet planned	The package was pilot tested in two regions and some adjustments made.	The next focus is to expand geographically to other targeted communities

Another possible way to summarize the extent of current implementation is to complete the benchmarks checklist (see Annex G) for each of the selected packages; the benchmarks that have not been achieved may indicate the next focus needed.

As an example, below are benchmarks from the human resources component, several from each phase. They demonstrate the progression of activities as implementation progresses and then expands to additional geographic areas in the scale-up phase.

Planning phase

- ☐ Roles of CHWs, communities and referral service providers defined by communities and MOH
- ☐ Criteria and procedure for CHW recruitment defined by communities and MOH
- ☐ Training materials for selected packages adapted, translated, as needed
- ☐ Training plan developed for CHW training and refreshing (modules, training of trainers, monitoring and evaluation)
- ☐ CHW retention strategies, incentive/motivation plan developed

Introduction phase

- ☐ Role and expectations of CHW made clear to community and health facility providers
- ☐ CHWs recruited with community participation
- ☐ CHWs trained with facility staff/ supervisor's participation
- ☐ CHWs deployed after training with medicines/ supplies
- ☐ CHW retention strategies, incentive/motivation plan implemented and made clear to CHWs; community plays role in providing rewards; MOH provides support

Scale-up phase

- ☐ Process in place for discussion and update of CHW role/expectations
- ☐ Initial training conducted regularly for CHWs in additional districts/areas of implementation on tasks/skills to deliver packages and on resupply process and procedures
- ☐ Initial training conducted regularly for replacement CHWs
- ☐ On-going (refresher) training provided to update CHWs on new skills, reinforce initial training

- ☐ CHW retention strategies reviewed and revised as necessary

Turn to Annex G now to review some of the benchmarks appropriate for each phase.

Advocacy

1.6 Determine advocacy needs for coordination and policy

Advocacy may be needed to convince important persons or groups at the national or regional level of the need for the intervention packages so they will enable a new budget line, support updated policies, provide resources, or coordinate with others. Specify what is needed (e.g. particular policy change, certain resources) and the target audiences (e.g. the institution, groups, or individuals). Work with a specialist to plan the information needed and how to present the information persuasively.

An effective way to create awareness among relevant stakeholders is to conduct a demonstration course (e.g. *Management of the Sick Child in the Community*) for national and district managers.

Also identify sources of likely resistance to implementation (e.g. private providers, professional medical organizations, health facility staff). Plan advocacy to engage them, develop their understanding of the packages and earn their support.

Chapter 2. Plan for human resources to implement the selected packages

2. Plan for human resources to implement the selected packages

- **2.1 Assess the extent that current CHW practices would need to change to implement the selected packages**
- **2.2 Determine the type of community-based provider(s) who will deliver the selected packages and revise job descriptions as needed**
- **2.3 Determine the number of CHWs needed to deliver the packages and their locations**
- **2.4 Define roles and expectations of the community health committee and community members, and their expectations of CHWs**
- **2.5 Develop a plan for delivering initial and refresher training on the selected packages to CHWs**
- **2.6 Plan CHW recruitment, retention and incentives**
- **2.7 Plan who will be the supervisors of CHWs**

Situation description

As a basis for planning implementation, answer the questions below to describe current human resources at the community level. The answers will help determine what needs to be changed or put into place to enable implementation of the selected community-based packages.

Community-based health workers are increasingly recognized as critical to the effective delivery of packages of interventions as close to the household as possible.

Theme	Question
CHW roles	a. Who are first-line health workers in the community relevant for maternal, newborn and/or child health? Consider all CHW cadres, both volunteer and compensated. b. Are there significant private sector providers in communities, e.g. drug sellers, private clinics? c. What activities does each cadre do currently and which interventions does each deliver? Exactly how do they deliver them—counsel, provide a service or product, refer? Do they make home visits? d. What technical guidelines do CHWs follow now? e. Compare the current technical guidelines to those reflected in the WHO/UNICEF training packages. · Are there tasks in the WHO/UNICEF packages that are not in current technical guidelines? · Are there important recommendations in the WHO/UNICEF packages that are not given by CHWs now? f. Does your country want to adopt the WHO/UNICEF technical guidelines/improve your guidelines? g. Of the CHW tasks in the WHO/UNICEF training packages, · Which tasks are CHWs currently performing? · Which tasks are they not performing? h. Describe each cadre and their capabilities (e.g. literate, illiterate, trained in clinical tasks or not). i. Does it seem feasible to add new tasks/duties to each CHW cadre? j. Do policy statements enable CHW cadres and define their scope of practice? Their relationship with the formal health system? k. Do CHW cadres have job descriptions? Describe any integration across packages of interventions. Are the job descriptions shared with the CHWs? With facility providers? With their communities? l. What are the numbers of each cadre of community health workers and their locations? Are there vacant CHW positions? m. What is average population in a community? What is the population that a CHW is expected to serve?
Community roles	n. What is the relationship of current CHWs to their community health committees? o. What do community members expect of the CHWs? Are the expectations clear to the CHWs? To the health facility workers? To the government? p. What are the CHWs' expectations about their work and role? Are they clear to the community? To health facility workers? To the government? q. Describe any work done so far to review and update CHW roles and expectations.
CHW training	r. Are CHWs adequately trained to do their current duties? s. How did they acquire the necessary skills (e.g. through training courses, mentoring, peer learning, job aids, etc.)? t. Are adequate numbers of CHWs trained?

Theme	Question
CHW recruitment and retention	u. What are the criteria for CHW recruitment?
	v. Are CHW cadres currently provided with needed medicines and supplies? Are they supervised regularly?
	w. What problems and frustrations do CHWs have? What are reasons that CHWs quit or move?
	x. What are the current strategies to retain CHWs?
	y. What are the factors that motivate CHWs? What incentives are in place? Are there cash incentives?
	z. Do communities provide support for their CHWs?
	aa. What is the effect of the available incentives and support on retention? On performance?
	ab. Describe any current opportunities for CHW promotion, education, or retirement.
Supervision	ac. Who are supervisors of CHWs currently? Do they have clinical expertise?
	ad. Who are currently the managers of the CHW's work, resources, data?

Key decisions and actions

2. Plan for human resources to implement the selected packages

While every component is essential, the human resources component is perhaps the most important for the success of the community-based packages. The chosen community health workers will be the deliverers of the interventions, teachers of the messages, the face of the government's efforts to provide better care in the community, and will largely determine the community's perception of the services. CHWs need to perform their tasks correctly and in a timely manner. They must build a relationship of trust and cooperation with community members, and they must do all this without frequent support and guidance, often working from their own homes.

The success of community-based packages depends on the effectiveness of the CHWs recruited, trained, supervised, and supported to deliver quality interventions.

When planning for the cadre(s) of CHWs who will deliver the selected packages, consider including important members of your country's Human Resources for Health (HRH) team to sit on committees or working groups. It will be helpful to have their input in discussions and planning for CHWs who will deliver community-based packages; it will also help them to stay informed about the packages and their implementation.

CHW roles and training

2.1 Assess the extent that current CHW practices would need to change to implement the selected packages

When choosing the packages to implement in your country, decision makers have a vision of the benefits of each package and the services that CHWs will perform. However, it is necessary to make a more detailed examination of the WHO/UNICEF technical guidelines and CHW tasks in order to plan for implementation of the packages.

Compare your country's technical guidelines and the tasks that CHWs perform currently with those recommended in the packages to help you determine the extent of changes that will be needed for successful implementation. Changes may or may not be needed in your country's

policies and guidelines. If CHW tasks will change, CHW job descriptions will require revision. Depending on the extent of change, CHW training may need to be revised, or entirely new training courses may need to be implemented.

A. Caring for the Newborn at Home

If CHWs currently do not visit pregnant women or newborns, or if you believe that the visits that they make are inadequate, you know that your country's relevant technical guidelines, CHW job descriptions, and training for CHWs and their supervisors will need to be substantially updated and revised to reflect the WHO/UNICEF package *Caring for the Newborn at Home*.

The package recommends the following tasks and visits, and the WHO/UNICEF training course prepares CHWs to perform them:

1. Identify pregnant women and newborns and schedule visits — Actively identify pregnant women in the community, visit them as early in the pregnancy as possible, and revisit 2 months prior to delivery; find out as soon as the baby is born and make the home visits on the recommended days.

2. First pregnancy visit — as early in pregnancy as possible — Encourage the pregnant woman to go for antenatal care, promote birth in a health facility, help the family prepare for birth, and teach home care for the pregnant woman.

3. Second pregnancy visit — about 2 months before delivery — Review antenatal care visits, home care for the pregnant woman, and plans for the birth; and encourage the family to follow optimal newborn care practices immediately after birth.

4. First postnatal visit — on Day 1 after birth — Assess for signs of illness, weigh the baby, and help the mother with early and exclusive breastfeeding and keeping the baby warm; assess the woman and newborn for danger signs and refer if present.

5. Second postnatal visit — on Day 3 after birth — Assess for the newborn for signs of illness, help the mother to sustain breastfeeding and prevent breastfeeding problems, and advise on optimal care for the mother and her baby.

6. Postnatal visit 3 — on Day 7 after birth — Assess for signs of illness, and advise on optimal care beyond the first week of life.

7. Two extra home visits after birth for small babies (birth weight less than 2.5 kg) — on day 2 and day 14 —Provide and advise on the extra care that small babies need.

8. At each home visit use these counselling steps:

   - Greet and build good relations
   - Ask questions and listen; understand the situation
   - Give relevant information
   - Check understanding
   - Discuss what the woman and family will do
   - Together, try to solve any problems
   - Thank the family

9. Use the counselling cards during each home visit. The cards are labelled for each visit (i.e. First Pregnancy Visit, Second Pregnancy Visit, First Postnatal Visit, etc.) There are two to four cards per visit which display photographs and messages for the CHW and family members to discuss.

However, if in your country CHWs currently make home visits to pregnant women and/or to newborns, you may think that they already perform all or most of the tasks included in the package. In this case, you will need to assess in some detail what CHWs are actually doing during those visits. Review any technical guidelines, training materials, and job aids that are provided currently for CHW contacts with pregnant women and newborns. You may also interview CHWs or CHW supervisors to learn what CHWs actually do. Then compare these visits, tasks and messages with those described above and in the WHO/UNICEF package. Assess the situation by asking questions such as:

- Do CHWs actively identify pregnant women in the community and visit them as early in the pregnancy as possible?

- Do they meet with the woman and her family to promote antenatal care and childbirth in a health facility?
- Do they counsel families on making preparations for birth and ensuring good home care for the pregnant woman?
- Do they have the counselling skills to approach a subject which may meet resistance, such as whether the woman will come to a facility for childbirth, in a way that will help the family explore the issue and make a good choice?
- Do they teach the essential messages on immediate care of the newborn (initiate breastfeeding within 1 hour of birth, keep the baby warm, delay bathing, wash hands, keep the cord clean and dry, look for signs of illness and promptly seek care)?
- Do CHWs currently have the skills to assess a breastfeed and counsel a mother how to improve attachment and suckling?
- Do they know the danger signs in a newborn and how to assess for them (not able to feed, convulsions, fast breathing, chest indrawing, high or very low temperature, yellow soles, movement only on stimulation or no movement even on stimulation, local infection of skin, umbilicus or eyes)?
- Do they weigh the newborn, using a hand-held scale, and determine if the baby is small?
- Do they provide or advise extra care for the small baby, that is, giving extra support for breastfeeding, extra care for keeping the baby warm including skin-to-skin, extra attention to hygiene?
- Do they refer very small babies–weight in red zone–to a health facility as these babies may have breathing problems and may not be able to feed?

Your assessment of these questions will help determine the extent of changes or improvements that will be needed so that CHWs will correctly implement this package in the future.

If the answers to some of these questions are no, and if your country has decided to adopt the WHO/UNICEF package, your country's technical guidelines and CHW job descriptions must be updated accordingly. Then CHWs will need to be fully trained or retrained in the necessary skills and knowledge to perform the tasks to implement this package. This can best be done using the training course materials and counselling cards developed by WHO/UNICEF.

B. Caring for the Child's Healthy Growth and Development

In many countries CHWs teach caregivers about child nutrition, promote breastfeeding, promote immunization, and give other messages such as on water and sanitation. Most countries already have policies promoting breastfeeding, good child nutrition, disease prevention, etc. Does this mean that your country is likely already implementing the package, *Caring for the Child's Healthy Growth and Development*?

Caring for the Child's Healthy Growth and Development is a new WHO/UNICEF package which combines good counselling skills with essential messages for care of young children. These messages are presented by CHWs to caregivers, one-on-one, on a schedule optimized for adoption of the recommended home practices. The training materials for CHWs include tested counselling cards that standardize and support the counselling methodology and content.

This package recommends that a CHW makes 3 scheduled visits to each infant's home—at age 1 to 2 months, 3 to 4 months, and 5 months—to teach the caregiver age-appropriate messages for the infant's feeding and care. The counselling cards for each visit support important care tasks appropriate for the age of the child including how to:

- Feed the child
- Play and communicate with the child
- Prevent illness
- Respond to illness

The cards also guide CHWs to follow an effective interactive process to counsel the caregiver about the messages, not to just tell her what to do. In the early visits, the CHW helps a child get a good start with effective breastfeeding and checks whether the child has been immunized. At every visit the CHW delivers the most important and relevant

messages at or just prior to the age when the mother should begin the behavior (e.g. at age 3 to 4 months, continue exclusive breastfeeding; at age 5 months, continue exclusive breastfeeding until 6 months when the caregiver should introduce safe, nutritious complementary foods).

The CHW also helps mothers learn care skills including feeding young infants on demand, recognizing and responding to signs of illness, helping children learn, and being alert to protecting children from harm.

The package also provides counselling cards with age-specific recommendations for later contacts with caregivers—at age 6 to 8 months, 9 to 11 months, 1 year, and 2 years or older. These counselling cards guide the CHW to counsel the caregiver on the most important age-specific issues when she happens to meet the caregiver in the community as the child is growing up, that is, at opportunity contacts.

To assess whether implementing the WHO/UNICEF package will require significant change in CHW tasks and training, compare the WHO/UNICEF technical guidelines and training materials to the tasks that CHWs do now and the messages that they teach to caregivers of small children. Assess questions such as:

- Do CHWs currently make any scheduled home visits for one-on-one counselling of caregivers?
- Do CHWs teach child care and development only or primarily in group sessions?
- How many contacts do CHWs have with each caregiver during the first year of the child's life and when are these contacts?
- Is there a schedule of recommended home visits to caregivers?
- Are there specific messages to be taught at each visit?
- Is there assurance that all of the key messages are taught to every caregiver?
- Are CHWs taught skills for effectively counselling and giving advice?
- Do CHWs have knowledge on age-specific feeding recommendations? On feeding during illness?
- Do they make specific recommendations for communication and play?

If the answers to some of these questions are no, and if your country has decided to adopt the WHO/UNICEF package, your country's technical guidelines and CHW job descriptions must be updated accordingly. CHWs will need to be fully trained or retrained in the necessary skills and knowledge to perform the tasks to implement this package. This can best be done using the training course materials and counselling cards developed by WHO/UNICEF.

C. Caring for the Sick Child in the Community

If CHWs do not currently treat children for illness, you will need to update your country's policies and technical guidelines to make it possible for CHWs to assess sick children and treat or refer them as needed. Implementation plans will need to include training the CHWs and their supervisors, and supplying the CHWs with necessary medicines, RDTs, job aids, sick child forms, etc., as well as other matters as described in other chapters of this handbook.

If CHWs currently treat some illnesses, such as diarrhoea, but do not treat other conditions, you will want to compare your country's current technical guidelines for treatment of sick children in the community with the WHO/UNICEF guidelines to determine the differences. The Chart Booklet outlines the process for assessment and treatment and gives specific treatment guidelines.

Also examine any training materials, job aids, case recording forms, and inventory records currently used by CHWs to determine what they actually do and to find out what medicines and supplies they use. This comparison will help to determine the areas in which your country's policies and technical guidelines will need to be updated, and how CHW job descriptions and training will need to be revised.

Assess questions such as:

- How do CHWs assess each sick child? Do they assess for several signs, or just one or two? Do they use a MUAC strap to check for malnutrition?
- Do they check for these danger signs: Cough for 14 days or more, diarrhoea for 14 days or more, blood in stool, fever for last 7 days or more, convulsions, not able to drink or feed anything, vomits everything, chest indrawing, unusually sleepy or unconscious, red on MUAC strap, swelling of both feet?
- Do they check for other signs of illness: Diarrhoea (less than 14 days and no blood in stool), fever (less than 7 days) in a malaria area, fast breathing, yellow on MUAC strap?
- Do they use a rapid diagnostic test (RDT) to check for malaria in a child with fever?
- Do they treat a child with diarrhoea with ORS and zinc? Do they teach the mother how to mix and give ORS, and how to give zinc (how much and for how long)?
- Do they treat a child with confirmed malaria with the recommended antimalarial (an ACT) and teach the mother how to give the treatment at home?
- Do they treat fast breathing with an antibiotic (amoxicillin?) and teach the mother how to continue the treatment at home?
- What treatments do they currently give or recommend for different illnesses?
- Do they teach the mother how to give good home care including increasing liquids, continuing feeding, and watching for signs that the child needs more care?
- What messages do they currently teach mothers about caring for a sick child at home?
- Do they use good counselling skills so that the mother understands the guidance and remembers what to do to care for the child? Do they ask checking questions to determine what the mother remembers?
- If a child has any danger sign, do they refer the child including giving pre-referral treatment for some signs and assisting the referral?
- Do CHWs follow up each sick child in three days?

If the answers to some of these questions are no, and if your country has decided to adopt the WHO/UNICEF package, your country's technical guidelines will need to be updated to include recommendations for how CHWs should assess and treat sick children consistent with the WHO/UNICEF guidelines. CHW job descriptions will need to be updated accordingly. CHWs will need to be fully trained or retrained in the necessary skills and knowledge to perform the tasks to implement this package, which can best be done using the training course materials developed by WHO/UNICEF.

Note that when new tasks contradict current tasks or messages (e.g. to confirm malaria using rapid diagnostics before giving treatment, instead of giving antimalarials to any suspected case of malaria), the training will need to clarify what CHWs should do and what they should no longer do.

2.2 Determine the type of community-based provider who will deliver the selected packages and revise job descriptions as needed

Considering the tasks that CHWs will do to deliver the selected packages, decide whether and how CHW responsibilities should be redefined or redistributed to enable implementation of the selected packages.

Work from the information on current CHWs in the situation description and consider what cadre(s) of community workers will be suitable to deliver the selected packages. It is possible to estimate current activity levels of CHWs by a rapid time study in which a sample of CHWs are interviewed about their tasks and the time spent on each.

It may be that one CHW cadre will be expected to carry out all the tasks of the selected packages, or the tasks may be divided among CHWs in the same or different cadres. Will a new CHW cadre be created? Will a team of CHWs be created? Will an existing cadre be significantly expanded in responsibilities and/or numbers? Choose and describe the cadre(s) who will deliver the selected packages.

Develop a job description(s) for the CHW cadre(s) who will deliver the selected packages. Based on

the assessment of the extent of change needed in CHW performance (step 2.1) and their current activities, examine their current job descriptions and modify them as needed to include the selected packages and updated tasks. The new job description should be clear about the new tasks that are being added. Also determine whether the selected cadre(s) of CHWs will need to perform tasks in addition to those for the selected packages, for example, tasks that they do now and will need to continue.

Be cautious about adding too many tasks to the CHW's job. In one country where CHWs were assigned too many tasks, they were expected to do community case management only 2 days per week—this was obviously inadequate for life-saving interventions that need to be available 7 days per week.

Job descriptions are essential for an effective cadre. They should be shared with CHWs at important opportunities, such as recruitment, training, and performance appraisal. They should be available to communities and facility-based providers with whom they work and by whom they are supported, supplied, and supervised. They should be accompanied by clear guidelines for how the government expects or requires NGOs, international organizations, donors, and other partners to engage with CHWs, including processes for adding tasks, duties, and packages.

Job descriptions should be updated with experience and when additional tasks are added. Processes to officially review and update the job description should be specified to prevent partners or other stakeholders from changing them in unhelpful ways.

Identify the **health providers at community level** *relevant for maternal, newborn and child health. These workers are a family's first point of contact with the health system. Found both at first-level facilities and in the community itself, these trained providers may be professional or paraprofessional. They are recognized as part of a country's formal health system. They may work in tandem with other workers in the community or may form part of informal or formal teams with other community-based workers such as volunteers, model community members or families, mentor mothers, support groups, etc. They are often referred to as Community Health Workers (CHWs), but their titles differ from country to country. In some countries, CHWs volunteer their time, although evidence shows they perform better when compensated or rewarded for their work. CHW pre-service training varies widely from 6 weeks to 12 months.*

Figure 4: Suggested Content of a Job description

A. Qualifications, for example,

- Schooling level, gender, residence, community endorsement
- Training and certification to deliver package of services

B. Duties, skills, and time expected to be dedicated, for example, conduct:

1. Sick child clinic for community case management (Mon-Fri, 0900-1200) and be available for emergency care of sick children
2. Home visits to pregnant women to promote ANC, planning for birth, and self-care during pregnancy (2 visits to each pregnant woman in community)
3. Postnatal care visits to assess for danger signs and to counsel on essential newborn care (Days 1, 3, 7 following birth)
4. Additional postnatal care visits to small babies (Days 2 and 14) to advise on special care for the small baby
5. Maintenance of medicines, supplies, counselling cards, forms, registers
6. Group health education talks with flip-chart (weekly x 1 hour)
7. Campaigns/outreach for growth monitoring, immunization, and other preventive activities as planned by health facility (monthly or semi-annually all-day)
8. Periodic meetings with the community health committee to report on work accomplished and to discuss needs and problems in the community

C. Expectations regarding attitudes, appearance, and grooming

D. Support, such as

- Compensation
- Identification (e.g. ID badge, uniform, cap, etc.)
- Transport (e.g. bicycles, public transport, etc.)
- Communication (e.g. land line, cell phone, messages)
- Supervisor to provide guidance and support
- Recognition by community structure (e.g. Neighbourhood Health Committee)

E. Management

- Performance review procedure
- Procedures for dispute resolution, arbitration, and termination

2.3 Determine the number of CHWs that will be needed to deliver the packages and their locations

The packages selected for CHWs to deliver, whether the CHWs will be paid or volunteer, and their other duties will affect the amount of CHW time that will be required. The planned workload of each CHW must be reasonable in order to avoid overwork and 'burn out'; the workload must not be too light as this would risk decay of skills and motivation. The number of communities that will be targeted (depending on the stage/extent of planned implementation) will also determine the numbers of CHWs needed in a geographic area.

The number of working CHWs per number of the population (e.g. 1 per 1000 population) is a commonly measured '*implementation strength*' indicator. CHWs typically serve total populations of 500-1500 (e.g. 600 in Nepal, 750 in Brazil, 1000 in Bangladesh, 1200 in Pakistan). A team of two paid Health Extension Workers in Ethiopia serve a total population of about 5000 (2500 each) and are assisted by a Health Development Army of volunteers trained to teach and model recommended household and community practices.

A study in Sierra Leone found a strong correlation between a larger number of children in a CHW's catchment area and lower treatment rates.

For CHWs who had more than 50 children in their care, rates of community-based treatment of sick children were well below the expected. Perhaps when the CHWs had more than 50 children to care for, they were less well known to caregivers and/or less able to provide service to all the children who needed it.

You can estimate future time required of CHWs to deliver the selected packages by a method such as shown in Figures 5 and 6 below. These estimates will guide decisions on the numbers of CHWs to be deployed.

The following steps suggest one way to determine the number of CHWs that will be needed in a district and where they will be needed:

2.3.1 Calculate the number of CHW hours needed to deliver the packages in a community

2.3.2 Estimate the number of CHWs needed in each community to deliver the packages

2.3.3 Determine the locations (communities) where CHWs will be needed to deliver the packages

2.3.4 Calculate the total number of CHWs to be trained and supplied in the district

2.3.1 Calculate the number of CHW hours needed to deliver the packages in a community

To implement one or more of the community-based packages successfully, there must be sufficient numbers of CHWs working to provide the services to those who need them.

Remember that when implementing **Caring for the Newborn at Home** ("the Newborn package") and **Caring for the Child's Healthy Growth and Development** ("the Healthy Child package"), CHWs teach and support good care practices during home visits starting in pregnancy and moving through early childhood. These packages are recommended to be implemented in all communities, because all pregnant women, caregivers and children have a right to receive this type of support. Though implementation of the packages may be scaled up in a country in a stepwise manner, usually starting in some geographic areas and later expanding to others, the goal should be to train and enable sufficient numbers of CHWs to deliver these 2 packages to **all families in the country.**

On the other hand, the package **Caring for the Sick Child in the Community** ("Sick Child package") is only implemented in those communities where health facility services for children are limited, and therefore community-based services are needed to care for sick children. Implementation may be scaled up over time, but the goal should be to train and enable CHWs to deliver sick child care in **all communities that have limited access to care for sick children**.

It should be the goal that CHWs will deliver the Newborn and Healthy Child packages in every community throughout the country, and that CHWs will, in addition, deliver Sick Child care in communities that have limited access to care for sick children.

Estimating CHW time required to deliver the Newborn and Healthy Child packages

Estimate time required of CHWs to deliver the selected packages to pregnant women, newborns, young children, and sick children in a community; then use this as a factor when determining the number of CHWs needed.
The example calculations in Figures 5 and 6 show a possible methodology to estimate CHW time (hours) needed in a country that has chosen to implement all 3 packages.You can estimate the CHW time required to deliver these 2 packages in a community as shown in Figure 5 below.

Figure 5: Simplified calculations of time required for CHWs to deliver the Newborn and Healthy Child packages in a community in country X

Assumptions:

- In this example, a community is considered to be about 1 000 total population.
- The crude birth rate is 39/1000. This means there will be about 39 newborns per year which also means about 3–4 births a month in a community.
- The proportion of the total population that is under 5 years is 16.3%. So there will be at any point in time about 163 children under age 5 years.
- Travel to and from each home requires, on average, 1 hour.
- In the two WHO-UNICEF packages in Caring for Newborns and Children in the Community which are recommended for all communities, the recommendation is that a CHW makes the following contacts:
  - As described in Caring for the Newborn at Home:
    - ↗ 2 home visits to each pregnant woman
    - ↗ 3 home visits to each newborn
    - ↗ 2 additional home visits to newborns who have low birth weight (about 20% of the 39 newborns = 8 newborns with LBW)

  In this community, 39 mothers will require home visits during pregnancy, and 39 newborns will require home visits during the neonatal period.

  - As described in Caring for the Child's Healthy Growth and Development:
    - ↗ 3 home visits to counsel the caregiver of each infant at 1, 3, 5 months of age.

  In this community there will be 39 infants that will require home visits at 1, 3 and 5 months of age.

    - ↗ Periodic meetings with community members to counsel on care of the child (e.g. 1 per month)

Calculation of CHW contacts per year:

1. HOME VISITS to pregnant women and newborns

39 pregnant women require 2 home visits = 39 x 2 = 78 visits

39 newborns require 3 home visits = 39 x 3 = 117 visits

20% of newborns may have LBW and require 2 additional home visits = 8 newborns x 2 visits = 16 visits

Total home visits to pregnant women and newborns = 211

2. HOME VISITS for counselling caregivers of infants

39 infants x 3 home visits (at 1, 3, 5 months of age) = 117 visits

Total home visits to caregivers of infants: 117

3. MEETINGS to counsel community members

1 meeting a month for a year = 12 meetings

CALCULATION OF CHWs TIME TO DELIVER THE TWO PACKAGES IN THIS COMMUNITY (Newborn and Healthy Child packages)

Activity	Number of Contacts x	Time per contact =	Time per year	Time per week
Home visit to pregnant woman/newborn	211	2 hours (including travel time)	422 hours	8.12 hours
Home visit to caregiver of young infant	117	2 hours (including travel time)	234 hours	4.5 hours
Meetings	12	2	24 hours	0.46 hours
Administrative activities (20% time for planning, supplies, supervision, reporting)			136 hours	2.62 hours
TOTAL			**816 hours**	**16 hours**

So, in this example community of 1 000 population, approximately 816 CHW hours per year are required to deliver the Newborn and Healthy Child packages, which is about 16 hours per week (816 ÷ 52 weeks = 15.7, which is rounded up to 16).

If CHWs are expected to spend time on other activities as well (e.g. education on prevention of STDs, community mobilization on hygiene and sanitation, provision of family planning counselling and supplies), hours must be added to the total for these activities.

In the example, if 8 hours per week are required for other activities, a total of 24 CHW hours will be needed per week in this community.

Estimating CHW time required to deliver the Sick Child package in addition

Because the reason to implement **the Sick Child package** is to bring care for sick children to communities and children who otherwise do not have it, the goal should be implement this package in all communities **who currently lack access to care.** You will not need to train and support CHWs to provide care for sick children in communities that have easy access to health facilities.

Figure 6 shows how to estimate the CHW time required to deliver **Caring for the Sick Child** in addition to the other two packages in communities that need it, by adding time for sick child contacts to the calculations above.

Figure 6: Simplified calculations of time required for CHWs to deliver the 3 packages in *Caring for Newborns and Children in the Community* in country X

Assumptions:

- The same assumptions as described in Figure 5, plus
- As described in *Caring for the Sick Child in the Community*:
  - Each sick child brought for care will be assessed by the CHW and given treatment and advice on home care or referred.
  - Each sick child should have a follow-up visit in 3 days

  In this community, there are about 163 children under age 5 years.
- Each child under age 5 years will have on average 8 episodes of illness per year
- 30% of these sick children will seek care from a CHW

Calculation of sick child contacts per year:

163 children under age 5 years will have 8 episodes of illness per child per year =

163 x 8 = 1304 episodes

30% of these episodes will seek care from a CHW = 1304 x 0.30 = 391 contacts

All sick child contacts will be followed up after 3 days = 391 additional contacts

TOTAL SICK CHILD CONTACTS = 391 + 391 = 782 contacts

Then add the CHW time for these Sick Child contacts to the CHW time required per year to deliver the Newborn and Healthy Child packages as calculated in Figure 5:

CALCULATION OF CHW TIME REQUIRED TO DELIVER ALL THREE PACKAGES

Activity	Number of Contacts x	Time per contact =	Time per year	Time per week
Home visit to pregnant woman/newborn	211	2 hours (including travel time)	422 hours	8.12 hours
Home visit to caregiver of young infant	117	2 hours (including travel time)	234 hours	4.5 hours
Meetings	12	2	24 hours	0.46 hours
Sick child contact (initial and follow up)	782	1 hour (many will come to visit the CHW)	782 hours	15.0 hours
Administrative activities (20% time for planning, supplies, supervision, reporting)			292 hours	5.62 hours
TOTAL			**1 754 hours**	**33.7 hours**

So, in this example community with 1000 population, approximately 1754 CHW hours per year are required to deliver all 3 packages, which is about 34 hours per week (1754 ÷ 52 weeks = 33.7, which is rounded up to 34).

If different cadres will be used to deliver the packages, specify the numbers of CHWs in each cadre needed in a community. If multiple CHW cadres operate as a team, the ratio amongst cadres should be fixed; these numbers may vary somewhat due to local context, like accessibility of terrain.

Figures 5 and 6 have demonstrated a possible method to calculate CHW time required to deliver 2 or all 3 packages. Make these or similar calculations for your country using the:

- Average total population in a community
- Birth rate in the community, and proportion of the total population under age 5 years
- Average travel time to make home visits to pregnant women, newborns, and caregivers of infants (based on distances between homes and difficulty of travel)
- Best estimates of the prevalence of childhood illness, the proportion of episodes for which caregivers will bring their sick children to the CHW for care, and whether families bring sick children for a follow-up visit or the CHW travels to the home for follow-up.

For example, where the average population of a community is 3 000, and the other factors remain the same, 3 times as many CHW hours would be required to deliver the packages in that community. Annex H includes Worksheets 1 and 2 for making these calculations; you may insert your own data to estimate the amount of CHW time required to deliver 2 or 3 packages.

2.3.2 Estimate the number of CHWs needed in each community to deliver the packages

The number of CHWs needed is determined by dividing the number of CHW hours required to deliver the packages (and accomplish other duties) by the average number of hours that a CHW is expected to work as shown in Figure 7.

Figure 7: Estimation of the number of CHWs needed in each community

This example uses the results from Figures 5 and 6 (in row a). In this district, CHWs are volunteers, and are expected to work an average of 12 hours per week.

	In communities where 2 packages will be implemented	In communities where 3 packages will be implemented
a. CHW hours required per week to deliver packages	16 hours	34 hours
b. CHW hours per week required for other duties	8 hours	8 hours
c. Total CHW hours required per week (a + b)	24 hours	42 hours
d. Number of hours CHWs are expected to work each week	12 hours	12 hours
e. Number of CHWs needed in each community (c ÷ d)	2 CHWs	4 CHWs

How many hours is each CHW reasonably expected to work? If CHWs are paid and part of the health system, they can be expected to work 40 hours per week. A paid worker is able to devote more time each week than a volunteer CHW who must generate income in another way. If CHWs are volunteers, find out the average number of hours that CHWs will work. This is sometimes determined in negotiations between CHWs and their community health committee. If there will be other CHW duties, such as for other programmes, be sure to include time required for them when calculating the CHW's work hours per week.

So, 2 CHWs are needed in each community implementing 2 packages, and 4 CHWs are needed in each community implementing 3 packages.

CHW deployment ratios, like 1 CHW/1,000 total population, are good overall measures of implementation strength, but they can mask small, isolated communities that may completely lack CHWs despite their increased vulnerability. Providing the selected packages to a very small community still requires one CHW.

Be aware that adding the tasks in these packages is adding a lot to the CHW's job. CHWs cannot do everything that the MOH and other entities would like to assign to them. When selecting what CHWs will do, planners must prioritize and focus on high impact interventions.

2.3.3 Determine the locations (communities) where CHWs will be needed to deliver the packages

Plan where the implementation activities will begin for the selected packages. In a country that has selected all 3 packages, it should be the goal that CHWs will deliver the Newborn and Healthy Child packages in **every** community throughout the country, and that CHWs will, in addition, deliver Sick Child care in those communities that lack access to care for sick children.

However, it is not likely to be possible to introduce or improve this care in all the underserved communities at once, so a stepwise approach to implementation is reasonable. When planning geographic expansion, the national or regional level may prioritize districts according to their needs, their populations, and the feasibility of supporting implementation of community-based activities. These plans should indicate where to focus implementation now, how many communities to target, and where to expand later.

Note that implementation of these packages does not mean that new CHWs will be assigned in all these locations. In many countries, CHWs already work in communities throughout the country; these CHWs may be assigned new duties, retrained, and provided additional supplies and support. However, when a targeted community lacks a suitable CHW, a new CHW will need to be recruited.

Within a district, planners should select the locations and numbers of communities to target for implementation in the short term based on where support of CHWs will be **feasible** and on where the **potential for impact** on newborn and child health is great. For the Newborn package, they may first target communities with particularly high maternal or newborn mortality; and for the Healthy Child package, they prioritize communities with high child malnutrition and poor family practices. For the Sick Child package, they should target communities with high rates of untreated childhood illness and mortality. In either case, priority should be given to communities with limited access to health services.

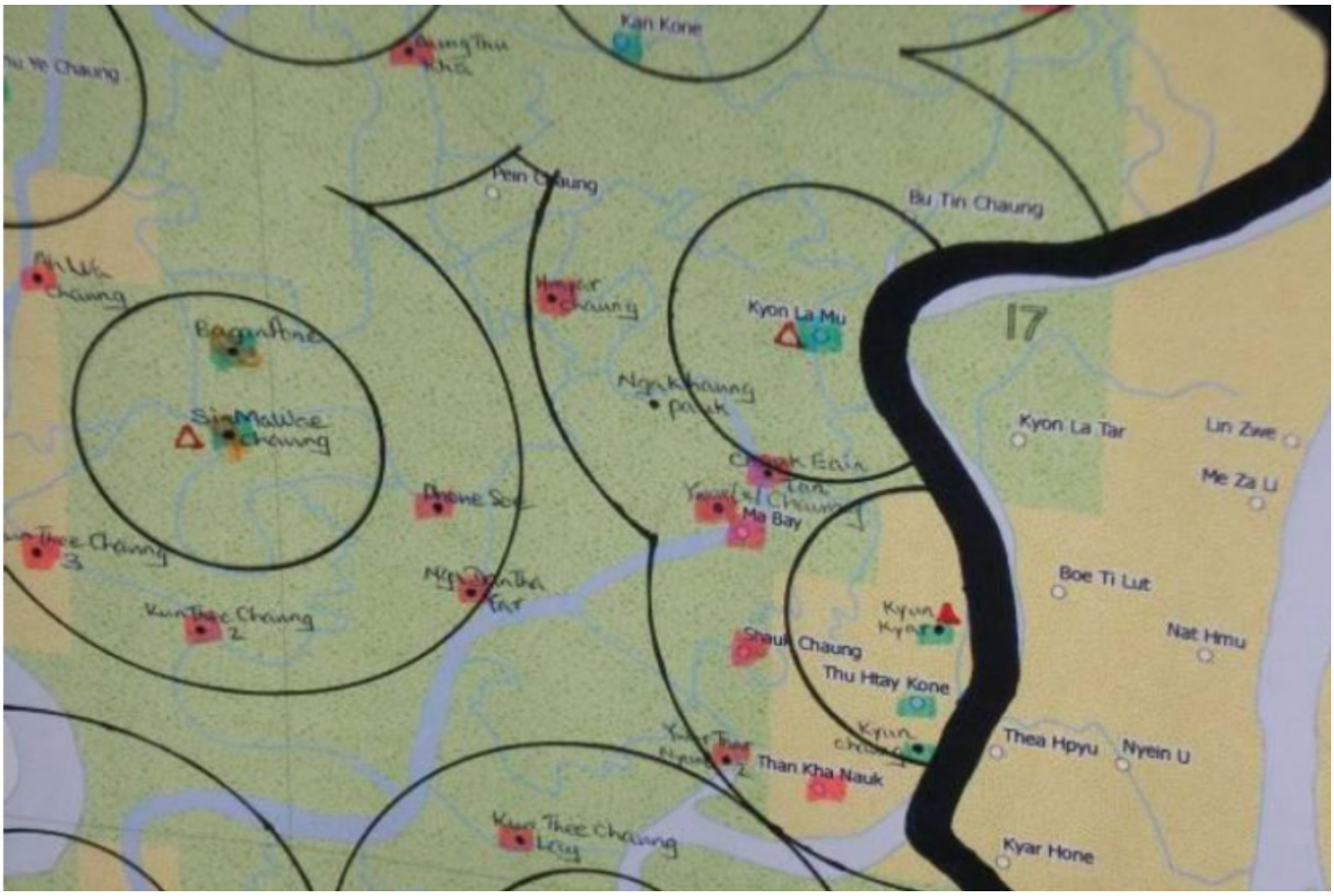
District community health management teams usually know which areas lack access to facility-based care and the needs of different communities, such as communities with high incidence of neonatal mortality. Orient the district community health management teams on the selected packages to be implemented, and then obtain their help to map communities and do joint planning. Obtain their input to identify the communities most in need of CHW services, communities who lack access to facility-based care for sick children, and communities who could be linked with a nearby health facility for supply and supervision of CHWs.

Table 6: Decision table for selecting communities for implementation in the short term

IF → your country will implement this package:	THEN → identify some of these communities for introduction and early implementation:	THEN → scale-up implementation so the package will be delivered to:
Caring for the Newborn in the Home	Communities with high maternal mortality and/or newborn mortality AND a link with a nearby health facility for support of a CHW	All communities
Caring for the Child's Healthy Growth and Development	Communities with low breastfeeding rates, poor child nutrition, high childhood morbidity and mortality AND a link with a nearby health facility for support of a CHW	
Caring for the Sick Child in the Community	Communities with high childhood mortality and morbidity where families lack access/ availability of care at health facilities AND a link with a nearby health facility for support of a CHW	All the communities that need community-based access to care for sick children

Figure 9 on the next page demonstrates using a map to identify communities suitably located to have a CHW to deliver the Sick Child package.

Figure 9: Planning map of district in Myanmar[1]



- The people from communities within a circle drawn 5 km from a health facility (shown as a red triangle) are usually able to travel there for care of a sick child.
- Communities located in the band between 5 and 10 km are far enough from a facility that it will be difficult to take a sick child for care, but are near enough to a facility that a CHW could receive support (training, medicines, supervision) from facility staff. These communities (marked by a red square) will have a trained and supplied CHW.
- Communities located more than 10 km away from a facility (with no colored markings) will be most difficult to reach for supply and supervision, so establishment of CHWs in those communities is being delayed until later stages of expansion.

2.3.4 Determine the total number of CHWs to be trained and supported in the district

Use your estimates of the number of CHWs needed in each community, and the number of communities targeted for implementation in the next year (or in the short term), to calculate the total number of CHWs to be trained and supported.

1 Save the Children, Tools to Introduce Community Case Management (CCM) of Serious Childhood Infection, March 2011

Example

Figure 10: Phased plans for training and supporting CHWs to deliver selected packages in the Central District

The community health planning team in the Central District used a map of the district and list of communities and health facilities. They determined the total number of communities in the district and their proximity to health facilities. They also used available data and experience to consider the conditions and needs in different communities. They planned implementation of *Caring for Newborns and Children in the Community* during the next few years as follows:

Of the 325 communities in the Central District, 150 have access and 175 lack access to health facilities for sick child care.

In the next year (2015), the Central District's Community Health Department will:

- Target 50 communities that have access to a health facility for implementation of 2 packages: Newborn, and Healthy Child. These communities were listed and marked on the map. In these communities, 2 CHWs are needed per community, so 100 CHWs will need to be trained and supported in the next year. (50 x 2 = 100 CHWs)
- Target 75 communities (that lack access to facility care) for implementation of all 3 packages. These communities were listed and marked on the map. In these communities, 4 CHWs are needed per community, so 300 CHWs will need to be trained and supported.
- (75 x 4 = 300 CHWs)
- Thus:

  50 communities targeted for 2 packages x 2 CHWs each = 100 CHWs

  75 communities targeted for 3 packages x 4 CHWs each = 300_CHWs

  Total CHWs to be trained and supported in Central District by the end of 2015 = **400 CHWs**

Expansion plans are to double the number of target communities within 2 additional years (that is, 800 CHWs will be trained and supported CHWs by the end of 2017).

The remaining 75 communities will be targeted in a final scale-up effort.

Turn to Annex H now. It provides a series of worksheets that may be used with your country's or district's data. Worksheets 1–3 can be used to determine the number of CHWs that will be needed to deliver the selected packages in each community. Then when planners have decided the number of communities in your district or country to be targeted for implementation in the short term, Worksheet 4 may be used to calculate the total number of CHWs to be trained and supported.

2.4 Define roles and expectations of the community health committee and community members, and their expectations of CHWs

Communities should participate in the selection of CHW candidates; they will then have greater interest in supporting them. The community should have a well-defined role in identifying CHW candidates and/or selecting a CHW from possible candidates selected by the health facility staff.

The CHW will be accountable to both the health system and to the community, which may have advantages, but will lead to problems if expectations are not clear. For example, what are the CHW's and the community's expectations?

- Will the CHW meet regularly with the community health committee to report on her work and discuss their concerns?
- Will the community health committee assist the CHW, such as by managing supplies of medicines, or informing community members about her services?
- Will the CHW provide services in her home or in a work area provided by the community, or both?
- Will the community provide housing for the CHW?
- Will the community provide in-kind support (seasonal tending to CHW's field, etc.)?
- Will the community health committee or leaders affirm the CHW in the face of the inevitable complaint?
- Will the community accommodate the CHW's need for compensation time when sick or for holidays or going out of town?
- What steps will the community health committee take if they feel that the CHW is not performing the work?
- Like job descriptions, expectations may change over time and should be reviewed and updated. Consider conducting a three-party meeting to specify expectations of each party for the others—CHW, community and health facility personnel. Record the expectations in an agreement for a limited period of time (e.g. one year) and then review and update the document after that time.

2.5 Develop a plan for delivering initial and refresher training on the selected packages to CHWs

The three WHO-UNICEF packages in the set *Caring for Newborns and Children in the Community* are designed to enable CHWs to implement packages that will reduce newborn and child mortality and promote the healthy growth and development of young children.

2.5.1 Review the skills needed by CHWs who will deliver the selected packages

The WHO-UNICEF training materials for the three packages were developed to teach the skills and knowledge that a CHW must have to carry out the work. Lists of those skills are included in each training package.

Study the lists of skills and knowledge needed to carry out the tasks of the selected packages. Any skills and knowledge that CHWs do not have will need to be taught, and the simplest way to teach them is to use the WHO training packages, which have been tested and proven effective.

However, the set does not teach **all** the skills that CHWs will need, for example, managing medicine supply or reporting data according to the requirements of the programme. The set does not teach how to gather information and learn promptly about pregnant women or the birth of a baby in the community, so that timely home visits can be made. It does not teach CHWs how to balance making home visits (for care of the newborn at home, or care for the child's healthy growth and development) with time to provide curative services for sick children or other duties. Develop a list of the additional tasks and skills that CHW will require. Then use this list to guide development of additional training materials and activities to teach these country-specific procedures.

2.5.2 Review and adapt WHO-UNICEF training courses and job aids

The WHO-UNICEF training materials consist of three courses, namely

- *Caring for the Newborn at Home*
- *Caring for the Child's Healthy Growth and Development, and*
- *Caring for the Sick Child in the Community.*

The training materials and job aids may need to be adapted at country level to ensure that they are consistent with national policies, care standards, and the health system.

If the programme has decided to modify the CHW's tasks from those described in the generic training materials, adapt the materials accordingly.

For example, you may need to insert the name and dosages of the recommended antibiotic or antimalarial that will be used. You may delete some tasks which will not be used in your country (e.g. to provide artesunate suppository as pre referral treatment to a child with fever who cannot swallow an oral antimalarial). You may decide to revise some words, drawings or photographs on the counselling cards to be more culturally appropriate.

Also plan how to teach additional tasks and skills that your CHWs will be expected to perform. For example, add examples of the records or registers that CHWs will be asked to keep, with learning activities to provide practice using them.

2.5.3 **Develop a training plan** (methods, materials, sequencing)

The three WHO-UNICEF training courses teach community health workers the knowledge and skills to implement the three intervention packages. The training materials listed under each package below are used to conduct the training course. The items in bold type are also used by the CHWs as job aids when they return to their communities to work.

1) Caring for the Newborn at Home: A training course for community health workers

- Community Health Worker Manual
- **Counselling Cards: Caring for the Newborn at Home**
- **Mother and Baby Card**
- **CHW Referral Note**
- **Community Health Worker Register**
- Facilitator Guide
- Training DVD: Caring for the Newborn at Home

2) Caring for the Child's Healthy Growth and Development: A training course for community health workers

- Participant Manual
- **Family Counselling Cards: Caring for the child's healthy growth and development**
- Facilitator Notes
- Training DVD

3) Caring for the Sick Child in the Community: A training course for community health workers

- Manual for the Community Health Worker
- **Chart Booklet**
- **Sick Child Recording Form**
- Photo Book: Identify Signs of Illness
- Facilitator Notes
- DVD: Identify signs of illness (demonstrations and exercises)
- DVD: Rapid Diagnostic Test for Malaria

The WHO-UNICEF training courses apply adult learning principles to achieve the required competencies. The training methods include reading, classroom learning, group discussions, games, role plays, use of job aids, and most importantly, hands-on supervised hospital/clinic and field practice. Unlike professional training, CHW training courses target individuals with little prior experience, so much is new. The methods and materials have been tested and proven effective, when the guidelines provided for training facilitators and conducting the course are followed.

Any of the courses is complete on its own, if your country will implement only one of the packages. They can also be used in combination, according to a country's needs. If different cadres of CHWs will be responsible for different sets of tasks, you will need to plan which courses or parts of the courses will be used with each cadre.

If your country will implement two or three packages, it is recommended that CHWs be trained in the different courses **sequentially**, not all at once, e.g. in a 4-week block. A longer block of training is pedagogically less effective than short courses separated by time to let the learning 'sink in.' CHWs will need opportunity to apply what has been learned, given the newness of the material, before learning additional tasks.

It is never recommended to shorten any of the training courses drastically to fit it into a given block of time or at the end of another training course. The training for any package should include time for teaching the essential skills and knowledge, having CHWs practice using the

relevant job aids, reinforcing the skills through clinical practice sessions (including counselling), and assessing whether the CHWs have acquired the skills and knowledge they need to perform the tasks.

Table 7: Training Courses in *Caring for Newborns and Children in the Community*

Course title	Content	Duration
Caring for the Newborn at Home	Option A (two units separated by a few weeks): • Unit 1: Home visits during pregnancy • Unit 2: Home visits after birth Option B (continuous): Units 1 and 2: • Home visits during pregnancy and after birth	 3 days 4 days 6 days
Caring for the Child's Healthy Growth and Development	Counselling on feeding, communication and play for healthy development, preventing and responding to illness	5 days
Caring for the Sick Child in the Community	Identify illness, refer the child for danger signs, treat diarrhoea, confirmed malaria, and fast breathing at home	6 days

2.5.4 Plan the training process from initial training through refresher training

The process of training a CHW should include:

- **Initial training**—Completing the training courses to learn the knowledge and skills needed to perform the CHW's tasks to deliver the selected packages
- **Certification** upon demonstration of required knowledge and skills either at the end of training or shortly after beginning work. Direct observation of complex skills is essential to assess competence. A written post-test is helpful for testing knowledge (non-literate workers can complete pictographic forms or be interviewed). Do not equate a 'certificate of attendance' with certification of skills.

  It must be possible for a participant to fail, but this should be rare. High failure rates suggest inappropriate candidate selection criteria, ineffective training methods, or insufficient time. It is important to specify a procedure to help candidates who need additional support; such support may be given through targeted educational outreach, ideally linked to other supervisory or mentoring activities. However, when a candidate does not acquire the necessary skills, he or she should not be placed in the job.
- **Deployment** of the certified CHW on the job in her community with the necessary equipment, supplies and medicines, so that she can be begin to use the newly acquired skills right away.
- **Follow up after training:** This should be accomplished by the trainer or supervisor completing a systematic schedule of visiting each of the CHWs in their community to reinforce new skills learned in the training, identify problems quickly, and coach CHWs with difficulties.
- **Periodic refresher training**, yearly or more often through supervision. It should refresh skills, teach any new tasks, and may include re-certification. It can also boost motivation when CHWs can share experiences and receive feedback from supervisors and each other.
- Volunteer CHWs may be unable to spare long periods of time for training and may require more frequent refresher training and supervision models that emphasize clinical supervision on site.

2.5.5 Plan how to deliver the training to CHWs

Preparing multiple levels of trainers and delivering training is sometimes called a 'training cascade.' This includes activities at multiple levels, usually national, district, health facility and community. MOH staff and NGO partners could be involved. The more levels, however, the greater the chance of a loss of training quality.

The common steps in the cascade are:

Step 1. National master training of trainers, who in turn conduct

Step 2. Regional and/or district training of trainers, who in turn conduct

Step 3. Training for health facility staff who will be CHW trainers or supervisors, who in turn, often with district support, conduct

Step 4. CHW training

The numbers of participants and the number of training courses that must be conducted increase with each step. Planners must specify:

a. Selection criteria for each level of trainee

   For step 2, select district personnel (in every district implementing the packages) who will become master trainers in their districts.

   For step 3, plan to train all health facility staff who will be trainers or supervisors of CHWs. (See Chapter 6 of this handbook for more on training of CHW supervisors.) If NGO facilities will supervise some CHWs, their staff should be included in this training.

   For step 4, trainees will be CHWs; health facility staff and CHW supervisors will train the CHWs in their catchment area. Note that if private providers, such as drug sellers are expected to provide community case management, they will need to be trained as well.

b. Number of trainees to be trained in each step

   Conduct a quick situation analysis to determine how many of the stated trainees at each step are already trained and how many need to be trained.

   Step 1: National level master trainers

   Step 2: District personnel who will be master trainers for their district

   Step 3: Health facility staff who will be CHW trainers or supervisors

   Step 4: CHWs who will implement the selected packages

   You should repeat this analysis each year to assess how many trainees still need to be trained at each step, and plan how many will be trained in the coming year.

c. Type of venue for each training course (e.g. busy clinical facility)

   Caring for the Newborn in the Home can be taught in a health facility or in the community where trainees can practice talking with pregnant women and their family members, and where they can assess a newborn and counsel its mother and other family members on newborn care.

   Caring for the Child's Healthy Growth and Development can be taught in the community or at a facility—where CHWs can practice counselling caregivers of small children.

   Caring for the Sick Child in the Community must include clinical practice with sick children and must therefore be conducted in a health facility where sufficient numbers of sick children will attend, including numerous children with signs of severe illness. Conducting training at large health facilities (with guaranteed case-loads) is costly, but training at the nearby smaller facilities risks insufficient cases and consequent lack of practice recognizing danger signs.

d. Ratio of trainer to trainee with number of each per round of training courses

e. Number of times each training course will be conducted (during the year)

f. Duration of each training course

g. Training materials, equipment and supplies (and quantities of each of these) that will be needed at each level.

Then summarize the training plans. For example:

We will train ____national-level trainers/focal persons by __(date)___.

National-level trainers will train ___ regional and/or district trainers by __(date)___.

Regional and/or district trainers will train ____ CHW supervisors by __(date)___.

CHW supervisors will, in turn, train _____ CHWs over ____ months. CHW training will have a trainer/trainee ratio of ___ to ____.

Then prepare a training schedule with detail on dates and venues for each training course, the trainers, and the CHWs to attend (by name or by community).

Similar planning will be needed for refresher training also.

Note that CHWs who are selected and trained must also be equipped and supplied to begin their new tasks on return to their communities. Enlisting and training workers who lack the necessary tools and medicines to perform is disheartening and wasteful; the workers often require retraining after supplies are made available.

2.6 Plan recruitment, retention and incentives for CHWs

Recruitment

The criteria for CHW recruitment must reflect what is both desirable and feasible to sustain. For example, better-schooled applicants may be more likely to pass competency-based training, but less likely to remain in the community if distant job opportunities arise. Some recommendations include:

a. **Communities should have a role** in recruiting CHWs. They can nominate a panel of candidates from whom the district or health facility selects one or more (or vice versa).

b. CHWs should be **respected** individuals in their communities, ideally with some experience in community work.

c. CHWs should have the drive to both provide a service to their community and share their knowledge.

d. CHWs should work **where they reside**, which has many advantages: availability; acceptability; knowledge of local language and culture, conditions, and challenges; knowledge of their neighbours and which families have small children; local accountability; greater probability of staying in place. Where CHWs reside in their community, access to case management extends beyond village health clinic hours, and community members can consult the CHWs more frequently or on need.

e. The approach to CHW **gender** should be decided, based on the cultural context. Men may have had more schooling, but they are apt to be more mobile (or prone to evening alcohol intake which is a barrier to care-seeking). Women may be less well schooled, but more stable and credible as maternal and child health workers. Semi-literate women often prove to be better CHWs than their literate male counterparts, but training and supporting them may require more time both to prepare training materials and job aids and to teach the skills. On the other hand, their mobility may be constrained in some settings.

   Male-female teams may provide advantages of differing capabilities and experiences, but may be culturally unacceptable. For example, Ethiopia's Health Extension Workers are 100% female, except for those in pastoralist areas. Malawi's Health Surveillance Assistants and Zambia's CHWs include both men and women.

f. The **literacy or schooling** criteria should reflect both the required skills and the planned training approach. Some countries specify required years of schooling (Pakistan's Lady Health Workers: 8 years); others specify "read and write" (Thailand, Brazil, Haiti, Uganda, Mozambique). Non-literate Female Community Health Volunteers in Nepal successfully deliver community case management for pneumonia and complete the required documents for tallying cases and making referrals. Non-literate training packages and recording tools exist.

g. Plans should include recruitment of replacement CHWs. Under the best circumstances, attrition will occur, even among paid cadres. Identifying the attrition problem early and formulating a plan to address it is important for sustainable effective programmes.

   For example, Ethiopia's paid workers experience about 10% attrition annually due to taking jobs elsewhere (even out-migration to the Persian Gulf), career advancement or marriage. Ethiopia addresses this by making the recruitment criteria clear to all ("resident females with

grade 10 and 3 O-Levels"), and accepting nominees at age 17; communities can then watch for suitable prospects who may be trained when attrition occurs, so the community has uninterrupted service.

Having functional CHWs select and mentor their replacement results in continuity of CHW service delivery. It also enhances the probability of recruiting individuals who are willing and able to perform the role. It manages new CHWs' expectations by supplying a clear and experienced-based role description, and increases the likelihood of establishing community support for the new CHW through familiarization.

Retention

It is important to consider what will motivate CHWs so that you can plan incentives and strategies to retain them. Consider incentives including:

a. Those that are provided as part of the job, such as: remuneration, non-salary financial incentives (food and travel allowance for attending meetings), training, attractive job aids, community 'status,' reliable supplies (especially of medicines), reimbursement of expenses and travel costs incurred when collecting supplies, and supportive supervision.

   Technically strong and relevant training that is valued by CHWs and respected by the community is important for retention and motivation. Some consider supportive supervision to be the most important factor for maintaining a functional cadre of motivated CHWs, stressing its potential for conveying a sense of belonging and connectedness to the programme. Small incentives such as travel allowance or reimbursement for transport are important for CHWs who must pick up their medicines and other supplies, and essential for volunteer CHWs who may have to pay for transport from their own pockets.

   CHWs who work full time or nearly full time should be paid. Volunteers will be unlikely to be able to sustain the commitment of time required. Payment may be based on the number of home visits made so that increased work results in increased payment. CHWs may make some income where the supply system allows selling medicines for a small mark-up.

   Supervision and continuously available medicines are nearly universally recognized as CHW motivators, but they are also among the most difficult for a health system to deliver reliably. Seek affordable, effective approaches to deliver regular supervision and supplies.

b. Those that enable a CHW to gain respect and/or facilitate the CHW's performance. These may include an identification badge and/or t-shirt that identifies the CHW's role, a certificate to display in their house, a rain jacket and torch which enables case management after sundown, gum boots which may facilitate travel to remote homes or in bad weather, literate or non-literate job aids that help the CHW perform according to standards, a mobile phone and airtime in lieu of a salary.

c. Those that result when the CHW is able to perform their job well, such as community recognition, stimulation from working as part of a team, and the satisfaction of treating and saving the lives of sick children or caring for a pregnant woman and helping her give care to a healthy baby.

d. Those that remove negative factors, such as limits to prevent unrealistic workloads, norms that forbid public shaming by supervisors, and procedures to minimize stock-outs of medicines.

e. Additional benefits that may be earned, such as recognition for good performance, a bonus payment for good outcomes (e.g. immunization coverage, number of newborns and pregnant women visited, incentive payments to CHWs for each woman brought to a health facility for childbirth), or opportunities for career development.

f. Those available to a few high-performing CHWs, such as opportunity to progress to be a trainer, a peer supervisor, or a career pathway for CHWs to a paid role within the health system.

g. A 'culture of quality' which includes:

- Not hiding problems but wanting to identify and solve them
- Praising one another's improvement and performance, as appropriate
- Training communities to expect, demand and recognize good quality

Periodic brief formative research can identify incentives and retention strategies that will be effective for a particular cadre. However, what works today may not work tomorrow as contexts, opportunities, standards of living and prices change; periodic reassessment of actual conditions, motivations, and disincentives will be important.

2.7 Plan who will be supervisors of CHWs

CHWs are linked to a health facility for supervision. Commonly, staff from health facilities will supervise, support and supply CHWs in the catchment area. However, when supervisors are supervising CHWs, they are not present at the health facility and this may compromise the health facility's care services. Some settings address this problem by choosing a dedicated, full-time supervisor for CHWs; however, the demands of travel (often on foot) may become demotivating, as is the loss of income opportunity from providing clinical services at the health facility with their colleagues. Other settings share supervision duties among staff by assigning groups of CHWs to different supervisors. There is no one arrangement for supervision that is best.

Avoid selecting cadres of supervisors who may be more clinically qualified but who are located farther from the CHWs they supervise, because availability of transportation, travel time required and travel costs will become a serious limitation. It is better to select supervisors located closer to the CHWs, such as junior health facility workers or senior CHWs, and provide them the necessary training to do the supervisory tasks.

In Malawi, because of problems including lack of support for travel, lack of clinical skills, and overly brief supervisory visits, district level and health facility staff were not providing adequate supervision (qualitative or quantitative assessments) to HSAs providing community case management. To address this, supervisory tasks were divided between cadres. Some senior HSAs were trained in supervision to decentralize some supervisory responsibility to a cadre based closer to the HSAs. These senior HSAs made visits to HSAs to do regular supervision (e.g. monthly data review, reporting and checking medicines and supplies) and provided supervision complementary to that provided by heath facility-based supervisors.

For a mentorship programme, developed for supervision of care of the sick child in the community, clinical and nursing staff in facilities were trained to check performance and quality of care provided by each HSA when he or she visited the facility four times each year. During the one-day mentoring visit, the clinical staff member demonstrated good practices, observed the HSA providing care, and provided timely and constructive feedback. This mentorship increased self-confidence, motivation, and job satisfaction among HSAs and was a cost effective way of ensuring quality of CHW community case management.

Remember that CHWs will usually have several 'supervisors'. The community health committee will have some responsibility to oversee the CHW's work. In some countries, they even decide on pay for the CHWs. In some areas, a CHW may be supervised by staff from an NGO instead of a MOH health facility. CHWs may have a different supervisor for tasks related to other responsibilities, such as water and sanitation. A trained birth attendant who will make pregnancy and postnatal home visits (implementing *Caring for the Newborn at Home*) may have a different supervisor from maternal health. In these situations, it will be important for supervisors to communicate and coordinate their supervision so that CHWs are not overwhelmed and do not receive conflicting directions or demands.

Supervisors' clinical skills will vary according to their previous training and designations: for example, clinical officer, nurse, and midwife vs. non-clinical environmental health officer. All supervisors will need to be trained in the tasks and skills taught to CHWs, so that they know exactly what performance is expected. Some individuals will require more training or guidance than others to bring them up to competence. They must also be trained in supervisory skills. (See Chapter 6: Plan supervision of CHWs and how the quality of their performance will be assured.)

Chapter 3. Plan the supply chain for CHW medicines and supplies

3. Plan the supply chain for CHW medicines and supplies

- **3.1 Specify the child-friendly medicines and formulations needed for community-based treatment, and packaging for efficient distribution to and use at community level**
- **3.2 Specify additional supplies and equipment required for implementation of the selected packages**
- **3.3 Develop a plan for the supply chain including financing, quantification and procurement, and inventory management and control for medicines and supplies for CHWs**
- **3.4 Plan the logistics information system up from the community level and procedures for resupply of CHW medicines and supplies**

Situation description

Answer the questions below to describe the current situation with the supply chain for medicines and supplies to the community level.

The answers will help determine what needs to be changed or put into place to enable implementation of the selected community-based packages.

Theme	Question
Medicines and supplies needed	a. What is currently in the CHW supply package or kit? Does it include ORS, zinc, antibiotic for pneumonia, antimalarial, RDTs, supplies for doing RDTs such as gloves? If not, what needs to be added? b. Are the needed medicines on the national essential medicines list? Are they registered for use in the country? c. Do you have special packaging of child-sized doses and child-friendly formulations of medicines (e.g. dispersible tablets in blisters) for community-level use? d. Are CHWs who visit newborns provided thermometers, minute timers, hand-held weighing scales?
Financing	e. Are there currently cost-recovery schemes for essential medicines? Describe them. f. Does the CHW pay for the medicines and supplies or receive them free? g. Do CHWs sell medicines at a small profit?

Theme	Question
Quantification and procurement	h. Are any medicines and supplies currently provided to community-level workers? If so, describe how quantification of medicines and supplies for the community level is done, by whom and at what frequency. i. Describe how medicines and supplies for community level have been procured. What is the source (or sources) of the medicines? Of resupply for the medicines? Describe any parallel procurement systems (e.g. MOH and NGO) and their effects. j. If products used at the community level are also used at other levels in the system, are is the quantification effort coordinated to ensure that sufficient quantities will reach community-level workers?
Inventory management and control	k. Describe how medicines and supplies are currently distributed to community level. Describe any parallel distribution systems and their effects. l. Estimate current distribution costs to the community level. m. Describe the current supply system from the central or regional/district warehouse to the community level. Is there a problem of stock-outs? If so, where? Is loss of medicines and supplies (theft, wastage) a problem? What inventory control procedures are in place?
Logistics information system and resupply procedures	n. Has a system for resupply to the community level been implemented? Describe it. Is there real-time information available to the district level so they can determine community-level needs for resupply? o. Describe if and how the stocks of medicines and supplies and consumption are monitored at district, health facility, and community levels.

Key decisions and actions

3. Plan the supply chain for CHW medicines and supplies

Medicines and supplies needed

3.1 Specify the child-friendly medicines and formulations needed for community-based treatment, and packaging for efficient distribution to and use at community level

Note: Plan for these medicines to be provided at the community level if CHWs will deliver the package *Caring for the Sick Child in the Community*.

Select products in paediatric dosages and formulations to reduce waste, reduce dosing errors, and increase compliance because they are easier to measure and administer. For example, if CHWs are supplied with a large jar of amoxicillin tablets in an adult dosage, these will need to be repackaged for each client, then split and crushed to be given to a child. Supplying medicines in pediatric dosages (e.g. 250 mg amoxicillin) in dispersible formulations and blister packs will reduce the amount of handling required by the CHW and caregiver. Blister packs greatly simplify dispensing and supply management; dispersible tablets remove the need to crush tablets and simplify administration by the caregiver.

To be appropriate for the community level, packaging should be designed for:

- Transport to community level
- Storage conditions
- Volume of clients
- Unique needs of infants and children
- Easy disposal

Syrups are easy to administer to children but are very bulky to ship and store. Avoiding bulky and heavy packaging facilitates transport, especially for CHWs or others who must walk to collect or deliver supplies, and storage.

Zinc tablets will absorb moisture and so should not be left open or repackaged as they turn into a paste rapidly. Specifying zinc 10 mg tablets avoids the need to break tablets in half and leave partial tablets in the bag or blister when administering to children under age 6 months.

When rapid diagnostic tests for malaria are to be used at community level, specify individual test kits. The logistics of distribution are complicated when there is only one bottle of diluent for a box of 25 test kits as the whole box has to be distributed because the diluent cannot be divided. This can be problematic for the re-supply system as a greater quantity is needed than the actual consumption. This is particularly a problem in areas of low usage of malaria tests.

Ensure that the medicines, formulations and packaging (pediatric dosages in dispersible formulations and blister packs) are on the national essential medicines list and that they are appropriately registered in country. Currently WHO recommends amoxicillin (250 mg) as most effective for treating pneumonia in children under five and low osmolarity ORS and zinc dispersible tablets for treating diarrhoea. Policy should permit (or at least not forbid) use of antibiotics at community level by trained and supervised CHWs.

3.2 Specify additional supplies and equipment required for implementation of the selected packages

A CHW needs equipment, supplies and medicines, depending on the community-based packages that are delivered. See the lists of medicines, equipment, and supplies needed to deliver each package on pages 9–13. For example, the package Caring for the Newborn in the Home requires a one-minute timer, digital thermometer, and a hand-held weighing scale with sling, Counselling Cards-Caring for the Newborn at Home, CHW Register, CHW Manual (for reference), as well as a supply of Mother and Baby cards, referral forms and birth plan forms . The medicines and RDTs are used only if the CHW delivers the package Caring for the Sick Child in the Community.

Any of the packages require that the CHW has the appropriate job aids (e.g. Sick child recording form, counselling cards, Mother-Baby Cards, referral forms) as well as forms and registers to make records of care and counselling provided. The public health supply chain usually delivers medicines and related consumables, but may not manage or distribute some other supplies. For those, other supply mechanisms must be identified.

The following list illustrates a range of additional supplies that may be considered to help the CHW to do their work:

a. For **identification**: name tag/identification card; sign at residence; T-shirt, shawl, cap, coat with programme or position name or logo—according to culture and environment
b. To improve **mobility**: shoulder bag or backpack with small storage box for medicines; bicycle; torch (essential since children commonly fall ill after dark)—either wind-up, solar or with spare batteries; hat or plastic head-cover, raincoat, umbrella, gum boots
c. For **dispensing medicines** and other care (which vary in type, formulation and amount by country); pill bags or envelopes for medicines if blister packs are not available; utensils for preparing ORS solution and spoons and cups for giving prepared ORS, bottles for sending home prepared ORS; gloves; other materials for the CHW's other tasks, such as wound care (scissors, forceps, gauze, cotton).
d. For **referring**: identifying tool (scarf, badge) facilitating urgent care
e. For **documenting** families seen, other work, supplies used: logistics records and reports (bin/stock cards, logistics report/order forms); accordion file to organize forms; pen, pencil, eraser; stapler, calculator
f. For **storage**: medicines box (Photograph 1) or cabinet suitable for medicine and equipment storage (protected from the elements, cross-ventilated, preferably non-metal). These should be large enough to hold medicines, equipment (e.g. thermometer, timers), registers, reports and money, and should have a lock and key.

Photograph 1. Secure medicine boxes from Rwanda. (Credit: SC4CCM, 2012)

g. **Waste management**: "sharps" disposal box and a means for emptying it.

Select the supplies that will be provided through the regular MOH supply chain and add them to the list of what should be procured and distributed.

3.3. Develop a plan for the supply chain including financing, quantification and procurement, and inventory management and control for medicines and supplies for CHWs

Financing

Determine whether there will be cost-recovery of essential medicines. To increase resources for the supply of essential medicines in the public health supply chain, many countries have a mechanism for cost-recovery at system levels higher than the community level. Donors sometimes supply funds for medicines to the MOH; sometimes donors procure the medicines and supply them to the MOH.

If there will be cost-recovery at the community level, selling medicines for a small profit can be a source of financial motivation for the individual or the local association of CHWs. Provide CHWs with adequate seed stock to allow them to recapitalize and order new stock before using up their initial stocks entirely. Provide clear procedures and guidance on the sales price and markup to be applied to ensure the price is not higher than the health facility's. Also provide clear guidelines on when to reorder and how to manage their money, so that they know how much money to hold to obtain a resupply and how much they may keep as their profit.

Quantification and procurement

Forecast CHW-specific requirements regularly, ideally as part of national quantification exercises. Quantifying CHW requirements as a subset of national requirements will increase the chances that there will be enough medicines in the supply chain for the community level. Advocating for national quantification exercises to include CHW-specific estimates on a regular basis is an important step in this process. Integrating CHW needs into national quantification exercises will ensure that all levels are captured, and that stakeholders appreciate the portion of total need represented by the community level.

There is generally a lack of visibility into CHW-level logistics data at higher levels of the supply chain when processes and reporting forms are not standardized. When data are therefore not available, national level cannot define the actual community level need for procurement, and CHWs are unlikely to obtain the correct quantity of supplies.

Policies should support the idea that the programme's greatest chance of success in reducing child mortality and morbidity is when products are continuously available at the community level, which requires that products are **in full supply throughout the system**.

It is important, therefore, to

- advocate for sufficient funding for these products throughout the health system and/or
- differentiate these products (such as by packaging) from what is in use at other levels.

Quantification involves:

- forecasting use based on past consumption or other data to estimate expected consumption for each illness (Note that data on number of episodes/child/year for each illness is only used alone at the beginning of a programme when there is no consumption data. Historical consumption data should be used once the programme has more experience. A simple worksheet for forecasting a rough estimate of the need for ORS and zinc is in Annex I.)
- planning for adequate inventory at all levels of the system and
- subtracting supplies on hand, if there are any.

The output of a quantification exercise should be a **supply plan** that indicates when products are required in country to meet the forecasted need. This would take into account: 1) timing and availability of funding, 2) stock on hand of products currently in the system and any orders already placed and 3) estimated supplier lead-time for each product. This supply plan, not the forecast, should guide procurement.

When forecasting and developing a supply plan for CHWs, consider the following issues:

a. Historical data are ideal for forecasting, but if community level interventions are new, this data will not be available.
b. For new programmes, be realistic about scale-up rates and patterns of use of services. Assuming immediate availability and use at scale will likely—and perhaps grossly—overestimate need and risk misuse, diversion and/or expiry of supplies.
c. Annual procurements, especially for a new programme with uncertain demand, should have staggered delivery dates in procurement contracts to allow for accelerating or postponing future shipments, or changing quantities, as trends in demand become more evident.
d. Include technical specifications for child- and supply chain-friendly packaging and formulation (e.g. blister packs, dispersible tablets) as part of the technical specifications for procurement.
e. During the year, conduct quantification reviews regularly to compare actual consumption trends against forecasts and adjust supply plans as necessary. This is especially important to ensure product availability in the pipeline for new programmes.

Coordinate procurement and supply information. Good communication, information sharing and coordination are critical to maximize resources and ensure that needs at all levels of the system are considered. Sharing information among partners and programmes is the best way to get complete information to cope with the complexities of the changing supply-chain environment such as

- gradual, sometimes irregular, increases in supply and demand in a new programme,
- use of essential medicines for the community level by other levels,
- multiple sources of funding or multiple budget lines.

New community-level programmes may have partners who will conduct direct procurement (and sometimes distribution) of products to ensure that the programme can be successfully introduced and scaled up. Coordinating and sharing procurement information between the MOH and partners will help ensure that

- the MOH has enough information for effective planning
- the technical specifications are respected in the procurements
- forecasting is realistic
- supply gaps can be filled and
- supplies can be sustained when partner support ends.

Determine cost of distributing medicines, equipment and supplies to the community health worker and budget for distribution to

the community level. In some countries, the cost of distribution by the public sector is factored into procurement planning, but this cost may have to be adjusted if the community is a new distribution level. The central medical stores in Ethiopia and Rwanda factor in an estimated management fee that includes distribution costs based on product value at a range of 12 - 17% and 5 - 10%, respectively. Not all products are charged the same percentage fee, since some products are much higher in value than others. Some distribution fees are calculated based on product volumes.

Inventory management and control

CHWs compete with health workers at all levels of the system to get enough of the medicines they need, because most medicines used at the community level are used at other levels of the system, and essential medicines are often under-funded. CHWs are the last links of the supply chain and CHWs—as the last point of distribution—may not receive enough. Also CHWs are likely to experience the greatest shortages because they have little power to obtain medicines or supplies from other sources.

Develop a plan for the resupply of CHW medicines, equipment and supplies with CHW needs in mind. Often the community level of the supply chain has procedures and tools that are only an extension of higher levels of the system, which are not appropriate for the literacy level of CHWs or their unique situation. The community level needs its own deliberate system design that has processes and tools that are simple to use, and reflect the reality of CHWs' skills, locations and mobility patterns. Information and product flow procedures need to be harmonized with higher levels that resupply CHWs.

Stock outs are a challenge at the community level for many programmes and in the majority of places. There is no one cause of stock outs, but understanding the major driver of stock outs is the critical first step to designing a reliable supply chain. There are a number of tools to help understand the root cause of stock outs at the community level and design your resupply procedures and logistics information system:

- Logistics System Assessment Tool (LSAT)[5] to conduct a qualitative assessment
- Logistics Indicators Assessment Tool (LIAT)[6] to conduct a quantitative assessment
- Theory of Change (TOC)[7] to help identify priority issues to be addressed.

For example, the TOC, LSAT and LIAT were used to assess community supply chains in Ethiopia, Malawi and Rwanda, identify factors influencing product availability, prioritize significant bottlenecks to address, and develop interventions to significantly improve performance.
Supply chains that go directly to the community level, by-passing the national supply chain, while effective for short-term product availability, are rarely sustainable and can undermine performance of the emerging national supply chain. Effort should be made to strengthen the supply system, train and supervise workers, and improve motivation of CHWs to manage products correctly at the time of implementation by keeping processes simple and efficient, but effective.

Medicines, a major programme budget item, are valuable and thus liable to diversion. The inventory control and distribution system must be designed with appropriate security and controls from point of receipt at the Central Medical Stores until reaching the CHWs. Ensuring a simple basic recording and reporting mechanism for stock management also adds a level of accountability and reduces the chance of product diversion.

Storage is an important consideration at every level in the system, from the central level all the way to CHWs to maximize product shelf life and preserve product quality. It is important to equip CHWs with secure storage to ensure that

5 USAID Deliver Project Task Order 1, 2009. Logistics System Assessment Tool (LSAT). Arlington, VA: USAID http://pdf.usaid.gov/pdf_docs/PNADO527.pdf

6 USAID Deliver Project Task Order 1, 2008. Logistics Indicators Assessment Tool (LIAT). Arlington, VA.: USAID http://deliver.jsi.com/dlvr_content/resources/allpubs/guidelines/LIAT.doc

7 SC4CCM 2012. A Theory of Change: An effective tool for finding community supply chain solutions (video). http://sc4ccm.jsi.com/news-media/multimedia-esources

once products reach them, they are able to store medicines in their house or community without fear of theft or accidental ingestion by children.

a. CHWs should store products in a place where they are protected from water, sunlight, heat, humidity, rodents and insects and out of the reach of children.

b. Medicines and supplies should be stored in a lockable, dry, dark container that avoids extremes of temperature. Metal boxes heat up more than wooden ones.

c. Products should be arranged so that identification labels and expiry dates and/or manufacturing dates are visible to facilitate first-to-expire, first-out counting and general management.

Logistics information system and resupply procedures

3.4. Plan the logistics information system up from the community level and procedures for resupply of CHW medicines and supplies

The plan should include procedures for transportation and inventory management at every stop from procurement by the national level to arrival in the hands of the CHW. The supply chain from national level to health facilities may or may not already be in place. If it is in place you should consider how to extend it to individual CHWs, and how to fix or prevent supply problems along the chain that may result in stock-outs at the community level.

a. **Define the resupply points** clearly. Create procedures that clarify how the resupply point orders sufficient medicines to accommodate their own needs as well as those of CHWs. Supplying medicines for CHWs through the nearest health facility or existing resupply point strengthens the local supply chain.

b. **Determine how medicines will be distributed.** Some successful procedures have included CHWs picking up medicines during a monthly visit to the designated health facility, **and** supervisors carrying medicines and supplies when they visit CHWs to alleviate stock outs. A system for the CHW to pick up or receive products should be implemented based on solutions appropriate to the local conditions, e.g. by motorbike or bicycle, or on foot. CHWs who are located farther away from their resupply points are significantly less likely to have essential products in stock. Their top obstacles to maintaining product stocks include transport challenges (no transport, transport always broken down, resupply point too far away, rainy season) and lack of incentives to pick up products because of lack of travel reimbursement.

c. **Specify the resupply procedures** for CHWs. The inventory control system should guide the resupply process, help facility staff and CHWs determine when to routinely order and how much of each product to order with the goal of ensuring a continuous supply. A 'push' system may be simpler in early implementation, but the system should evolve to a 'pull' system, where resupply quantities reflect actual consumption data from individual CHWs, when the flow and use of accurate data is functioning well.

   Many systems use a max-min inventory control to help storekeepers know when to order and how much to order, based on stock on hand, average monthly consumption of each product, and lead time. A 'safety stock' should be built into the supply system to eliminate stock outs. A larger amount of safety stock or more flexible resupply may be necessary when implementation is beginning and demand is uncertain. The desired safety stock can be determined during the supply planning process. Alternatively, a set order frequency is established and an easy formula employed to replace the stock used, e.g. quantity to order = quantity used x 2 minus stock on hand

d. **Develop a logistics management information system** (LMIS) to strengthen the management of medicines and other supplies. The LMIS is a system to collect, organize and report data so that managers can make effective supply chain decisions for routine resupply, respond to emergency situations (e.g. stock outs), monitor performance, and forecast quantities required nationally. The LMIS generally requires collecting three essential data items: (1) stock on hand, (2) consumption data, and (3) losses and adjustments.

Recording demands of community-based services can be extreme: sick child register, pregnant women and newborn registers, inventory control, and monthly reports. Where community-based care is most needed, literacy skills are likely to be scarce. Simple tools that collect only the most critical pieces of data will minimize the burden on CHWs. Determine the fewest data items needed; for CHWs it may be possible to reduce to stock on hand and consumption data.

Design a simple stock register for the CHW and a stock report/ordering form which may also serve as a monthly report. Ensure that the forms and procedures are simple and clear, so that they can be completed by CHWs without likely error.[8]

CHW training for Caring for the Sick Child in the Community should include the resupply process and reporting procedures, as well as receipt of their initial supply of medicines.

In Malawi, the community case management programme introduced an SMS-based reporting system called 'cStock' in which CHWs use their mobile phones to report 2 pieces of data: stock on hand of the products they manage and quantities received. Then the higher level calculates consumption and sends a resupply as needed. If CHWs have mobile phones and service, a system such as this can prevent stock-outs.

Aggregation of data by higher levels should maintain separate numbers on supplies used at the community level and those used by health facilities. Decision makers need this data to analyze consumption and availability and take appropriate decisions at each level.

8 Consult the CCM Central webpage. www.CCMcentral.com The Supply chain management subgroup of the CCM taskforce is developing a set of tools which will include supply chain tools for the community level.

Chapter 4. Plan service delivery in the community and a referral system

4. Plan service delivery in the community and a referral system

- **4.1 Specify stakeholders, partners and donors for implementing the community-based packages**
- **4.2 Specify how CHWs and the community will work together to implement the selected packages**
- **4.3 Ensure CHW guidelines for clinical assessment, management, counselling, and referral of pregnant women, newborns and children are in place**
- **4.4 Develop (or clarify) a system for a CHW to refer a pregnant woman, newborn or child who needs care at a facility**

Situation description

Answer the questions below to describe the current service delivery at the community level including referral to a higher level of care when needed. The answers will help determine what needs to be changed or put into place for implementation of the selected community-based packages.

Theme	Question
Working together	a. If there are different cadres of community-level health providers, including volunteer cadres, how do they work together? b. What is the community's role in relation to any current community-based health providers? c. How is it currently determined in which community/areas a CHW provides services? d. What are the current norms for work setting and hours of a CHW? Will this need to be expanded?
Service delivery	e. What is the current plan for the rational use of medicines and supplies at community level and how is it implemented: protocols, guidelines, training, job aides, supervision, mentoring, monitoring? Is it working? f. Which documents currently specify the guidelines for service delivery at community level? Describe their availability.
Referral	g. Is there currently a procedure for a CHW to refer a sick woman or child to a facility? h. Is there currently a procedure for a CHW to refer a person with cough for more than 2 weeks to a health facility for TB screening? i. Are referrals usually completed?

Key decisions and actions

4. Plan service delivery in the community and a referral system

Working together

4.1 Specify stakeholders, partners and donors for implementing the community-based packages

There are likely to be various partners working in the community who will implement the selected packages under the leadership of the MOH. Most often this will include the communities themselves and the local health facility (MOH). In some communities there may also be an NGO clinic that could support community-based workers. At a higher level, there may be donors that will provide financial or other support for community-level activities.

4.2 Specify how CHWs and the community will work together to implement the selected packages

This decision on generally how this relationship will work should be done with representatives of the community level and a sample of specific communities; usually district management provides guidance and individual communities make their own agreements later. Assuming that the services will respond to a felt need, either long-standing or recently highlighted and confirmed through community dialogue, the community will be motivated to participate. (Note: 'The community' is not homogeneous, but for brevity the term is used here. It is important to consider different groups within the community.)

Common roles for the community include:

a. The community nominates and/or approves candidates for CHW training, initially and when replacements are needed.

b. Community health committee (or other community management structure) may oversee CHW performance, review problems, and reward good work, such as with recognition and gifts-in-kind.

c. The community validates the CHW with a measure of respect, one of the major motivations for volunteers.

d. Members of the community work side-by-side with the CHW, for example, they may decide to construct a facility (e.g. health hut) for counselling and curative services, prepare public spaces for outreach, repeat health messages, mobilize neighbours for events, liaise with health facility staff, and find solutions to facilitate referral such as escorts at night and bicycles or ox cart as transport.

If there will be more than one CHW cadre involved in delivering the selected packages, specify how those cadres will work together. For example, one CHW may stay available to treat sick children while the other CHW does home visits to pregnant women, newborns, or caregivers of young children. Some cadres may be salaried and some may be volunteer. For example:

- In Rwanda, there are four CHWs in each village: one pair (one male , one female) of CHWs who are the providers of community case management for sick children, one female CHW (Animatrice de Santé Maternelle) in charge of Maternal and Newborn health, and one CHW in charge of Social affairs. All CHWs are members of cooperatives to ensure income generation and accountability of expected results. The cooperatives implement income-generating projects and are funded by a Performance-Based Financing system.
- Uganda's volunteer Village Health Team consists of a cadre of six members, with identical training but with different tasks distributed among them
- Ethiopia's team of 2 salaried Health Extension Workers with 10 or more volunteer health promoters—recently renamed as the Health Development Army

Plan how, where and when CHWs will deliver services, if this was not already specified in the job description. For example:

- Malawi: Scheduled clinic hours to care for sick children in a designated community structure
- Ethiopia: Scheduled clinic hours to care for sick children in community health post, and home visits in the community
- Zambia: Scheduled availability at home or designated community structure to care for sick children and periodic service at distant health centre, as well as home visits for postnatal care and HIV/AIDS, plus other duties that vary by districts and partners.

Service delivery

4.3 Ensure CHW guidelines for clinical assessment, management, counselling and referral of pregnant women, newborns and children are in place

The WHO-UNICEF training materials for the three generic packages in *Caring for Newborns and Children in the Community* specify clearly the standard guidelines for CHWs through documents and tools. For example:

a. Technical guidance – usually distributed at training. Examples:
   - *Caring for the Newborn at Home*, Community Health Worker Manual
   - *Caring for the Sick Child in the Community,* Manual for the Community Health Worker
   - *Caring for the Child's Healthy Growth and Development, A training course for community health workers,* Participant Manual

b. Job aids for complex services. Examples:
   - *Caring for the Sick Child*, Chart Booklet for the Community Health Worker
   - Sick Child Recording Form
   - Counselling cards: *Caring for the Newborn at Home*
   - Family counselling cards: For the child's healthy growth and development

c. Registers which mirror some or all of the steps of a protocol. Examples:
   - *Caring for the Newborn at Home*, Community Health Worker Register (Annex J)
   - Sick child treatment register (See Annex K)

d. Mother reminder cards. Example:
   - *Caring for the Newborn at Home*, Mother and Baby Card

e. Referral forms which mirror relevant steps of a protocol. Examples:
   - *Caring for the Newborn at Home*, CHW Referral Note
   - *Caring for the Sick Child in the Community*, Referral note from community health worker: Sick Child
   - *Referral note with counter referral: Sick Child* (see Figure 11 on next page)

Ensure that the standard guidelines are approved by the technical advisory group and the MOH. Also ensure that all standard guidelines are dated, so that trainers, supervisors and CHWs know whether their documents are the latest. If old materials become obsolete, they should be recalled to avoid confusion.

Figure 11: Referral note with counter-referral

Referral note from community health worker: Sick Child

Child's name: First ..... Family ..... Age: ..... Years/ ..... Months Boy/Girl
Caregiver's name: ..... Relationship: Mother/Father/Other: .....
.....
Address, Community: .....
.....

This child has: Sign present → Tick ☑ NO sign → Circle ■		**Reason for referral:**	**Treatment given:**
☐	■ Cough? IF YES, for how long? ..... days	☐ Cough for 14 days or more	
☐	■ Diarrhoea (loose stools)? ..... days	☐ Diarrhoea for 14 days or more	☐ ORS solution for diarrhoea
☐	■ IF DIARRHOEA, blood in stool?	☐ Blood in stool	
☐	■ Fever (reported or now)? since ..... days	☐ Fever for last 7 days or more	☐ Oral antimalarial AL for fever
☐	■ Convulsions?	☐ Convulsions	☐ Rectal artesunate suppository for fever if unable to drink
☐	■ Difficulty drinking or feeding? IF YES, ☐ not able to drink or feed anything?	☐ Not able to drink or feed anything	
☐	■ Vomiting? IF YES, ☐ vomits everything?	☐ Vomits everything	
☐	■ Chest indrawing?	☐ Chest indrawing	
☐	IF COUGH, count breaths in 1 minute: ..... breaths per minute (bpm) ■ Fast breathing: Age 2 months up to 12 months: 50 bpm or more Age 12 months up to 5 years: 40 bpm or more		☐ Oral antibiotic amoxicillin for chest indrawing or fast breathing
☐	■ Unusually sleepy or unconscious?	☐ Unusually sleepy or unconscious	
☐	For child 6 months up to 5 years, MUAC strap colour: red..... yellow..... green.....	☐ Red on MUAC strap	
☐	■ Swelling of both feet?	☐ Swelling of both feet	

Any OTHER PROBLEM or reason referred: .....
Referred to (name of health facility): .....
Referred by (name of CHW): ..... Date: ..... Time: .....

Cut Here

FEEDBACK FROM HEALTH FACILITY (Please give feedback to CHW who sent the child)

Child's name:
Child's identified problem(s):
Treatments given and actions taken:

Advice given and to be followed:

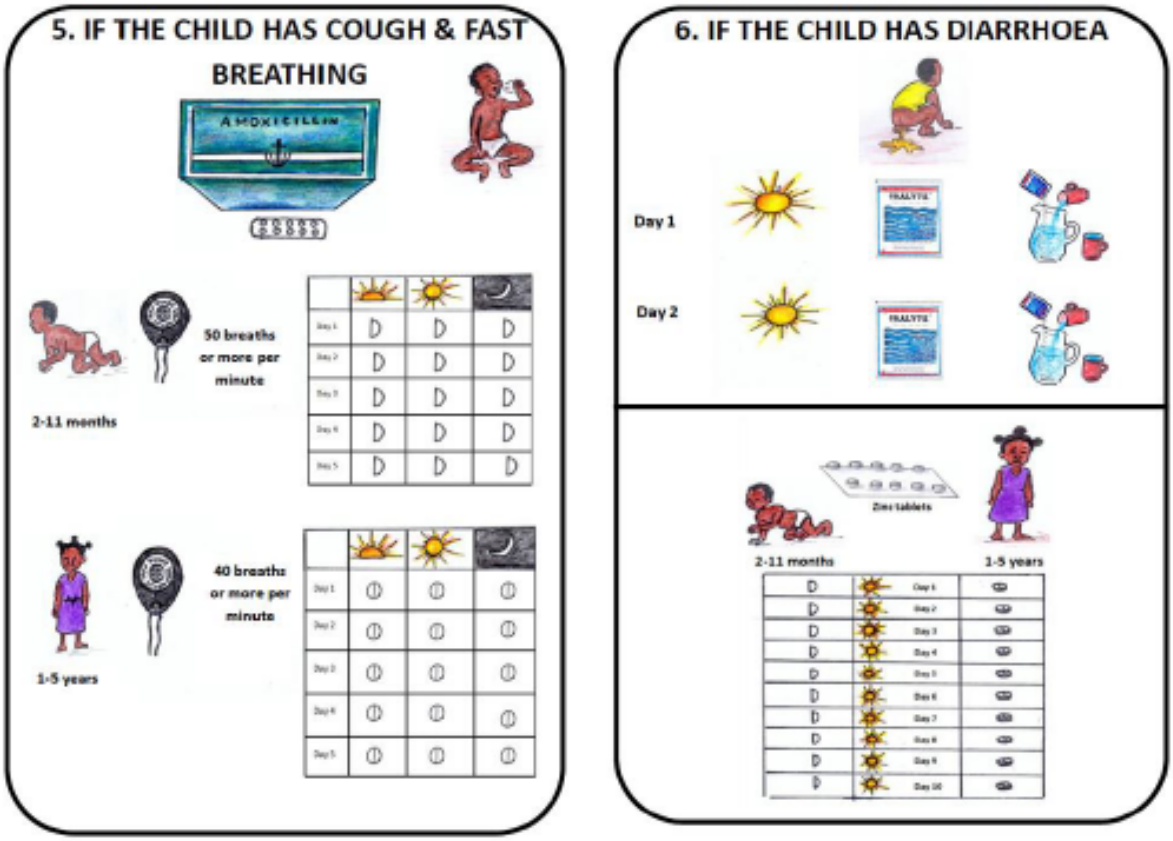
Name of attending clinician:
Signature: Date:

***Special consideration for standard guidelines for Caring for the Sick Child in the Community**:* Ensure that the standard guidelines for treatment of illness by CHWs reflect the latest WHO recommendations (e.g. amoxicillin for pneumonia) and use of child-friendly and supply chain-friendly dosages, formulations, and packaging. Harmonize the national essential medicines list and the standard treatment guidelines, ensuring the levels of use specified for certain medicines are the same in both documents. Even if the appropriate dosage and formulation of a medicine is available in the country, it will be difficult for programmes to procure and use that product if it is not part of the standard treatment guidelines for community-level treatment of that disease.

Versions of these documents can be developed for CHWs who are literate or semi-literate. Female volunteer cadres are likely to be semi-literate. Tested semi-literate and non-literate materials exist, including

- For community management of newborn sepsis in Nepal: birth recording form, registers, classification cards, referral form, monthly reporting form
- For community management of childhood pneumonia in Nepal: register, counselling card, referral form
- For community case management of fever, pneumonia, diarrhoea in South Sudan, job aid (see excerpt in Figure 12 below)
- For community management of the sick child in Uganda: Sick child job aid[9]

Figure 12: Two pages from job aid for semi-literate CHWs in South Sudan



Ensure that CHWs are deployed with all necessary guidelines for service delivery. Standard guidelines for community-level delivery of each selected package (whether it includes counselling, assessment, management, and/or referral of pregnant women, newborns and/or children)

must be clearly stated and **available**. They should be consistently presented in protocols, training, job aides, supervision, mentoring, monitoring, etc. Replacement copies should be easily available to CHWs, supervisors and partners.

Referral

4.4 Develop (or clarify) **the system for a CHW to refer a pregnant woman, newborn or child who needs care at a facility**

a. Referral criteria: The training materials and job aids for the three packages specify the referral criteria; these are the danger signs for a pregnant woman, newborn, or child. The danger signs are listed repeatedly in the referral forms and counselling cards:
   - Referral note for newborn (in *Caring for the Newborn at Home*)
   - Referral note for sick child (in *Caring for the Sick Child in the Community*)
   - Counselling cards: Caring for the Newborn at Home
   - Family counselling cards: For the child's healthy growth and development (in *Caring for the Child's Healthy Growth and Development)*

b. Referral forms or notes: Referrals are more likely to be successful when CHWs use a referral note. The WHO training materials provide example referral note forms that can be used as is, or modified to suit the programme. Or, the CHWs can be taught to write a note that includes certain important pieces of information.

c. Facilitated referral: Any CHW-recommended referral should be facilitated by the CHW. Specify what 'facilitating' means, so that CHWs know the performance expectations. The training materials for the three packages specify:
   - problem-solving with the family to enable the referral (reaching consensus on the importance of referral; mobilizing cash, transport and child care)
   - giving the first dose of treatment (in the case of a sick child)
   - accompanying the family to the facility, if possible
   - following up whether the family complied with the referral and that the woman, newborn or child has improved

   In addition, some countries have made it standard procedure for the CHW to give an item (such as a scarf, or a 'red card') to identify the family as deserving priority care at the receiving facility. Of course, a procedure such as this requires that CHWs be trained and supplied with those items.

d. Designation of health facilities to which CHWs should refer

e. Feedback on referral: Some referral forms include a place for the referral facility to record feedback to the CHW when the patient is released as shown in Figure 11. (This is sometimes called counter referral.) Feedback is very valuable as it helps the CHW know whether her assessment was correct, that the referral was successful, and how the child was treated at the facility. Thus it serves the purposes of both coaching and motivating the CHW.

   Some countries are finding that using mobile technology (cell phone calls or text messages) is helpful to alert the referral facility about a patient who is coming, to confirm successful referral, and for the facility staff to provide feedback to the CHW.

9 Ministry of Health, Republic of Uganda, Sick Child Job Aids, designed and illustrated by Mango Tree, 2010. http://www.malariaconsortium.org/inscale/downloads/uganda/ICCM-sick-child-job-aids.pdf

Chapter 5. Plan advocacy and sensitization, community mobilization and participation, and promotion of recommended home care practices

5. Plan advocacy and sensitization, community mobilization, and promotion of recommended home care practices

- **5.1 Plan advocacy and sensitization for the selected packages prior to the start-up of new or expanded community-based services**
- **5.2 Plan for community mobilization to support community-based services and increase demand**
- **5.3 Plan for promotion of recommended home care practices**

Situation description

Answer the questions below to describe the status of current advocacy, communications with families, and community mobilization activities. The answers will help determine what needs to be changed or put into place to enable implementation of the selected community-based packages.

Theme	Question
Advocacy and sensitization	a. At what levels (national, district, health facility, community) are leaders and members currently aware of the selected packages, what they provide, and what they require for implementation? (Think about political leaders, policy makers, MOH managers, partners, district management, health facility workers and community leaders.) b. Are community members and community health committees knowledgeable of what services CHWs currently provide? c. Is there likely to be resistance to increasing the work/responsibilities of CHWs or recruiting new CHWs? From whom would this resistance come?
Community mobilization	d. What is the current role of community health committees regarding the work of CHWs? e. Have there been any effective community mobilization activities related to health? If so, describe them.
Promotion of recommended home care practices	f. How are health messages currently delivered to community members? g. Have new health-related behaviours been promoted to community members in the recent past? Were these behaviours adopted? What do you think worked or did not work to change family and individual behaviours?

Key decisions and actions

5. Plan advocacy and sensitization, community mobilization, and promotion of recommended home care practices

Enlist the help of experts in sensitization, advocacy, community mobilization, and behavior change communication. Ask them to review the national MNCH communication strategy, if there is one; if not, encourage them to have one. They should also familiarize themselves with the communications that will take place between the CHW and the individuals and families who receive care services—these are well described in the training materials and counselling cards for each of the packages. Then the experts should design plans for:

- advocacy and sensitization for the selected packages at all appropriate levels
- community mobilization to support the CHW services and increase demand, and
- promotion of the home care practices recommended in the packages, consistent with that overall MNCH strategy.

These activities are important to prepare the social environment in communities for implementation, and to increase community support and demand for services.

Advocacy and sensitization

5.1 Plan advocacy and sensitization for the selected packages prior to the start-up of new or expanded community-based services

When a programme has new elements and needs buy-in, efforts for sensitization are valuable. For example, when Uganda added *Care of the Sick Child in the Community* to the responsibility of the Village Health Teams, the Ministry of Health planned multi-level sensitization activities at national, district, health facility and community levels to explain the rationale for and the elements of community-based care for sick children.

Advocacy and sensitization activities for the selected packages are aimed at influencing relevant stakeholders to create an enabling environment for effective implementation at all levels. Primary target audiences are political leaders, policy makers, MOH, partners, district management, health facility workers and community leaders, because they play important roles in planning, implementation and monitoring of programme activities.

The **national level** should develop and disseminate advocacy materials for implementation of the packages by CHWs. These could include policy briefs, messages for orienting and sensitizing key players, handouts describing the packages, and any additional background information on CHWs. Advocacy is commonly needed to support the necessary policies, increase budget, and obtain the endorsement of influential groups. As part of the implementation strategy, the national steering committee should visit districts to sensitize them on policy, and reach consensus on a plan to roll out the selected packages in the districts, including funding sources. The visits should include the extended district health team as well as partners involved in community mobilization activities.

The **district** should ensure hospitals and health facilities will be ready to support communities and CHWs providing the services. Health facilities will need to manage and monitor CHW activities. The district will need to create awareness of the benefits or spill-over effects to the health facilities when CHWs implement the packages. CHW activities will be complementary to the health facility's services and not in competition with them. The district may organize sensitization workshops to identify and mobilize existing resources to support health facilities' role in implementation. Resources will be needed for training and supervision of CHWs, procurement of medicines and supplies, and care of referred patients.

The **health facilities** should sensitize communities on the purpose and availability of CHW services, and encourage timely use. Sensitization can be done through outreach to community health committees, community members and through individual contacts with parents, families and community members at the health facilities.

When health facility staff conduct health talks, such as on the importance of the recommended home care practices and prompt care-seeking for the sick child, they can promote the locations and use of CHWs.

Community mobilization

5.2 Plan for community mobilization to support community-based services and increase demand

Plan activities to prepare communities to support and use CHW services. The **community health committee** should mobilize community leaders, opinion and religious leaders, health providers, household members, and community-based organizations for community involvement and ownership of implementation of the packages. **Community leaders** should mobilize communities to select individuals to be trained to be CHWs.

When implementation begins, it is expected that planning will be done in collaboration between communities and their CHWs. Common roles for the community were described in section 4.2 and are repeated in the box below. **Communities** may be mobilized to undertake activities to create awareness about the nature and availability of CHW services (including medicines), promote the home care practices taught by the CHW, and help motivate their CHWs. Activities such as these are important to fuel positive attitudes, dispel myths and improve access to information, thus generating demand for the CHW services and sustaining the relationship between the community and the CHWs.

Common roles for the community include:

a. *The community nominates and/or approves candidates for CHW training, initially and when replacements are needed.*

b. *Community health committee (or other community management structure) may oversee CHW performance, review problems, and reward good work, such as with recognition and gifts-in-kind.*

c. *The community validates the CHW with a measure of respect, one of the major motivations for volunteers.*

d. *Members of the community work side-by-side with the CHW, for example, they may decide to construct a facility (e.g. health hut) for counselling and curative services, prepare public spaces for outreach, repeat health messages, mobilize neighbours for events, liaise with health facility staff, and find solutions to facilitate referral such as escorts at night and bicycles or oxcart as transport.*

Experience in Malawi has shown that community dialogue and engagement of the village health committees in planning and managing the community service have been critical for the initiation and sustainability of the services. Where communities were involved from the start, they mobilized to establish housing for the CHW, identified the location of the village health hut (where the CHW would provide services), constructed the health hut, and assisted in managing the service, including monitoring the medicines box.

Plan the role of CHWs and/or other community agents in mobilizing community members to support improved community-based care. Determine whether CHWs will do community mobilization tasks, such as facilitating group discussions, in addition to the service delivery tasks for each selected package taught to them in training. See the examples below in Figure 13.

Figure 13: Examples: CHW Role in Community Mobilization

In Malawi, health surveillance assistants (HSAs) facilitate group discussions for community mobilization as part of their job description. This has been a subject of debate because some people felt that facilitating distracted HSAs from their main duty of providing service to families and individuals in the community. However, HSAs reported that MNCH community mobilization groups with whom they worked often tracked pregnancies and deliveries and shared that information regularly. This information enabled the HSAs to target services more efficiently.

In Bangladesh, the *Mamoni* project engaged local community-based organizations to lead MNCH-focused community discussions, leaving CHWs free to focus on door-to-door services. However, the project found that including CHWs in community mobilization actually greatly helped the analysis of local MNCH problems and helped strengthen the linkages between families and CHWs.

If CHWs will conduct group discussions, they will need to be prepared for that function. Interpersonal communication skills are taught in the training courses *Caring for the Newborn at Home* and *Caring for the Child's Healthy Growth and Development*, but skills for group discussions are not included. They include:

- selecting a suitable venue
- establishing a positive and respectful tone
- asking open-ended questions
- encouraging shy or quiet participants to speak
- 'bouncing' questions back to attendees
- using visual aids
- clearly, correctly and concisely delivering technical information
- checking understanding
- encouraging participants to contribute to problem-solving.

Training may also suggest appropriate possible community mobilization goals and activities.

Promotion of recommended home care practices

5.3 Plan for promotion of recommended home care practices

Counselling cards are used by CHWs to discuss recommended home care practices with pregnant women and their families (in *Caring for the Newborn at Home*) and with caregivers of young children (in *Caring for the Child's Healthy Growth and Development*). They may be used during home visits, group talks and contacts for sick child care. The recommended care practices that will be taught by a CHW to families are summarized in Annex L.

As part of the work of preparing to train CHWs to perform the tasks in selected packages, the counselling cards should be translated and adapted to reflect any modifications of the packages that your country has made, and pretested with the target audience.

The care practices on the counselling cards will also serve as the basis for the development of other communications to families, community members and other groups. Experts should use formative research to analyze the behaviours that are being promoted, reasons that families may or may not perform them, and ways that families may be reached with messages.

Using communication channels in addition to the CHW's contacts with caregivers and families can increase the knowledge of families, uptake of the home care practices in the community, and demand for CHW services, thereby increasing the coverage and effectiveness of the packages.

The MOH should supply health facilities and communities with appropriate charts and posters for awareness raising and health education. Additional communications may range from a celebrity endorsement on television, to a mobile theatre group, to group discussions, to a song. Target groups may be the people who should carry out the care practices, and they may also be influential people in the household or the community, such as senior women or grandparents.

It is important to ensure that all communication materials are well designed and pretested. Involve key stakeholders—CHWs, supervisors of CHWs, and members of the target audiences—in design workshops to ensure that the end products meet their needs. Use illustrations to help explain text, one message per illustration. Make job aids and materials durable enough to stand up to daily transportation and use outdoors where they are exposed to weather. It is good to date all materials to be able to ensure that the most recent are being used. Whatever materials are designed and produced, budget for sufficient resources for periodic reprinting and re-supply of materials.

Chapter 6. Plan supervision of CHWs and how the quality of their performance will be assured

6. Plan supervision of CHWs and how the quality of their performance will be assured

- **6.1 Plan how CHW performance will be assessed, and how a non-performing CHW can be helped or replaced**
- **6.2 Develop a supervision plan and appropriate tools to support effective supervision of CHWs**
- **6.3 Plan to train supervisors**
- **6.4 Ensure that supervisors have resources** (transportation, time, tools) **to conduct regular supervision and coaching of CHWs**
- **6.5 Plan how supervisors of CHWs will be supervised**

Situation description

Answer the questions below to understand the current situation as a basis for planning supervision of CHWs who implement the selected packages. If there is no supervision of community-level workers now, consider supervision of health facility-based workers to identify its strengths or weaknesses to imitate or not.

Theme	Question
Supervision	a. How is supervision of community-level workers currently done? b. How frequently? How does the actual frequency of supervision compare with the planned frequency? What accounts for the discrepancy, if any? c. Does supervision occur in the community? d. How frequently do they visit the CHWs or do the CHWs visit them? e. Does supervision involve observation of case management or counselling? Observation during a home visit? f. What are the strengths and weaknesses of current supervision of community-level providers? Consider these common bottlenecks that undermine the supervisory process: · Unavailable supervisory job aids and tools · Supervisors trained to complete checklist but not to use it for problem solving or coaching · Supervisors not able to perform tasks of supervisees · Supervisors not trained in interpersonal communication · Lack of transportation · Lack of time (e.g. can't leave health facility) g. What checklists or other tools are used? h. Are CHWs ever replaced because of non-performance?
Supervisor skills	i. Are supervisors currently being trained to perform tasks of supervision? j. Is the number of supervisory staff adequate to supervise community-based workers now? Will additional supervisory staff be needed to supervise the planned number of CHWs who will deliver the selected packages? k. How are supervisors supervised?

Key decisions and actions

6. Plan supervision of CHWs and how the quality of their performance will be assured

Good performance by CHWs requires considerable initiative and skills, yet CHWs lack the structure and support that facility-based health care providers have. (See 'What is unique about implementing interventions for community-based care?' on pages 19–21)

Supervision

6.1 Plan how CHW performance will be assessed and how a non-performing CHW can be helped or replaced

Supportive supervision is the only way to ensure each CHW can perform correctly and effectively.

Supportive supervision *should provide:*

- ***technical guidance*** *to enable CHWs to build and sustain skills that they acquired during their training*
- ***support*** *including*
  - *interacting with CHWs in a friendly way*
  - *motivating CHWs (which helps assure the quality of performance and retain effective CHWs)*
  - *ensuring they are supplied*
  - *problem solving*
  - *team building*
  - *supporting their role with the community, and*
  - *building linkages between communities and facilities.*
- *a* ***'culture of quality'*** *in which*
  - *CHWs are willing to identify and solve problems, not hide them*
  - *The focus is on improving a system, not blaming individuals*
  - *Team members praise one another's improvement and performance, as appropriate*
  - *Communities are trained to expect, demand and recognize good quality*

6.1.1 Plan how CHW performance will be assessed

Just as direct observation of skills is necessary to certify that a CHW is competent at the end of training, direct observation by a supervisor is also necessary to assess the CHW's skills and on-going performance of her tasks with members of the community.

Occasionally, however, when direct observation is not possible, either because the supervisor is not able to be present in the community or an infrequent event (e.g. a severely ill child, a newborn baby) does not correspond with the supervisor's visit, the supervisor can use case scenarios to explore the CHW's knowledge of what she should do in given situations.

A supervisory checklist will act as a guide to and reminder of the items and performances to assess and the information to be recorded at each visit.

When mistakes or omissions are identified, the supervisor should identify gaps in the CHW's skill or knowledge and attempt to remedy them through feedback and individual coaching. When other problems seem to be diminishing the CHW's performance, the supervisor should identify them (e.g. lack of medicines, unsupportive community health committee) and help to find and implement a solution. Finally, the supervisor should follow up to ensure that the coaching or other problem solving activities have remedied the gaps and enabled the CHW to subsequently perform her tasks. Some CHWs require more follow up than others; the supervisor should be prepared to give more time to some in order to assure quality of performance.

When a CHW needs additional training or coaching beyond what the supervisor can give during the visit, some possible approaches include peer-to-peer coaching in which a good performer works for some days with a less skilled one, and attaching a CHW to a health facility for several days or weeks to work alongside staff there.

Formal performance appraisal

A formal appraisal of performance should be conducted periodically, such as annually. Written guidelines for the appraisal should specify the criteria for sufficient performance, based on the tasks that CHWs should perform to deliver the selected packages. For example, standards may include whether each pregnant woman has a birth plan, number and timing of visits to the newborn, timeliness of sick child care (within 24 hours), correctness of treatment selected based on assessment of the child, completeness of registers of visits and treatments. There may be additional criteria related to management of medicine supplies, and building relationships in the community.

Plan how the criteria will be assessed. Again, a checklist (the same or a different one than is used during other supervision) is an ideal way to structure what is assessed. Additional instructions may be given on how to score the CHW and what score is required to 'pass'.

One country conducted annual 'Performance review and clinical mentoring meetings' for groups of about 20 CHWs during which one day was devoted to review of registers and cases, and a second day was spent doing direct observation of management of sick children with feedback on clinical performance.

The implication of the appraisal score for the individual should be clearly specified -- continued employment, praise, promotion, recognition for a good score; on the other hand, for a poor score, further training, or replacement.

6.1.2 Plan how a non-performing CHW can be helped or replaced

When CHWs do not pass a performance appraisal, the supervisor will need to determine whether there is a problem that is likely to be remedied with additional coaching or not. As described above, gaps in performance should first be addressed through feedback and individual coaching. However, if the CHW is motivated but even after coaching seems unable to perform certain tasks, limit her job to tasks that she is able to do. If a CHW is working as a volunteer, it may be tricky to remove and replace her; redistribution of tasks may be facilitated by involving the community health committee.

Also plan what should be done when a supervisor learns that a trained CHW has stopped performing, for example not making home visits to pregnant women. This may occur at any time, not just as a result of performance review. It may be that a trained CHW becomes unable to spend the time required, or moves away, or decides to no longer participate. The supervisor should quickly identify the situation, and with the community, select a new CHW for training.

6.2 Develop a supervision plan and appropriate tools to support effective supervision of CHWs

Plan the routine supervision of CHWs: who, how and where, what, when. An essential issue for community-based care for pregnant women, newborns and children is that **supervision must be well planned and carried out** if CHWs are going to perform effectively. However, supervision of health workers inside and outside of facilities is often irregular, underfunded, undervalued, and performed by individuals who are not trained for the tasks of supervision.

If community-based providers are supervised currently, consider how that approach can be improved. If the current approach is clearly not working, or if there will be a new cadre of CHWs delivering the selected packages, take the time to plan a new supervision approach that will assure that CHWs retain their skills and are well supported. Regardless of the context and arrangement that is selected, the supervision plans should emphasize the importance of supervision by providing the necessary time, financial support, technical support and feedback to enable and motivate the supervisor to do the job well. This is likely to mean that **supervision will need to be given increased emphasis and allocated increased levels of personnel and funding.**

6.2.1 Plan the number of supervisors that will be needed

The **recommended ratio of CHWs to supervisors** will depend on the packages that will be implemented and the number and complexity of

the tasks that CHWs will be expected to perform. The ratio will also depend on the frequency of planned supervision, as well as the distances and conditions of travel required to reach CHWs and communities. Planning for too few supervisors, and thereby an impossible supervisory workload, results in failures of supervision, loss of CHW motivation, deterioration of CHW performance, and insufficient delivery of the community-based packages.

The community will also supervise CHWs through its own structures. For example:

i. CHWs reporting to community health committee

ii. Community meetings with CHWs to discuss problems and plan how to achieve and sustain quality services

iii. Joint review meetings of community, CHWs and health facility

6.2.2 Plan how and where supervision will be done

Table 8 provides some familiar supervision models. Programmes should use combinations depending on the context, resources available and tasks to be included, but methods that allow individual attention are essential. The right mix is very context-specific and may vary according to the CHW's competencies and the issues being addressed at the time.

Table 8: Common Supervision Models

Model	Pro	Con
Supervisor visits one CHW at a time in the community	· Likely to allow observation of CHW's performance during a home visit to a pregnant woman or caregiver of young children, with some planning · Individualized attention: Enables assessment of performance by observation or discussion, individualized feedback and coaching on performance · See CHW 'in context' · Liaise with community	· Time consuming · Transport costs · Possible but not certain will observe CHW caring for a sick child · No peer learning or support among CHWs
Supervisor visits a group of CHWs gathered in one community	· Can refresh or update several CHWs efficiently · CHWs can learn from each other · Can build 'team' feeling and demonstrate 'culture of quality' · See one CHW 'in context' · Liaise with one community · Less travel cost for supervisor	· Most CHWs out of context · Little community context · CHWs may forget to bring registers · Low probability will observe care Little chance to understand each individual's work/problems or give individual feedback · Unless handled well, CHW who has a problem may 'lose face'
CHWs travel to supervisor, one at a time	· Easier to accommodate individual CHW's schedule · Individualized attention in discussion · Could include observation of CHW's performance in supervisor's health facility · Access to all training tools · Per diem is motivating to CHW	· CHW is away from community and cannot provide services there · CHW may forget to bring register · Per diem for each CHW · Time consuming for supervisor · No learning among CHWs · No opportunity to liaise with community
All or many CHWs travel to meet with supervisor at the same time	· Can refresh or update efficiently · Access to all training tools · CHWs can learn from each other · Depending on time allowed, may include observation of each CHW or just a few CHWs providing care at the supervisor's facility and receiving feedback · Per diem is motivating to CHWs	· May be inconvenient for CHWs · CHWs may forget date · CHWs may not have transport · CHWs may forget to bring registers · Per diem for each CHW · Depending on time allowed, may be insufficient chance for supervisor to understand each individual's work/problems or give feedback · No opportunity to see the CHWs in context · No opportunity to liaise with communities

6.2.3 Plan what will be included in supervision

The content of regular supervision (e.g. monthly, bi-monthly) can include:

- Reviewing CHW registers for completeness, accuracy, etc. To the extent possible, determine appropriateness of treatment or other response by analysing register entries.
- Observing the actual environment where the CHW operates (e.g. how they store medicines)
- Observing performance of the CHW providing service during a home visit or at her home or community health hut (or using a case scenario to review the CHW's knowledge when observation is not possible)
- Giving feedback on performance (acknowledge what was done well; in a friendly way point out any errors and agree on areas of improvement)
- Discussing with the CHW the work done, significant constraints, problems encountered and solutions
- Reinforcing training, particularly for recently trained CHWs, by ascertaining knowledge gaps and reinforcing one or two competencies (e.g. knowledge of danger signs, how to complete register)
- Replenishing medicine stocks and other supplies as needed
- Completing the supervisor's summary form and submitting it

Additional supervision tasks that require spending more time in the community and thus may be feasible less often (e.g. quarterly) include:

- Technical updating and refreshing (e.g. mobilizing communities to use insecticide-treated nets)
- Gathering community input (e.g. supervisor interviews recent clients, conducts exit interviews, liaises with the community health committee)
- Liaising with the community members, including providing a constructive channel for addressing problems identified by community.

Common grievances noted by families include:

1) **CHW non-availability** (due to holiday, resignation, family commitment, residence outside of catchment area, or other work)**;**
2) **medicine stock-outs;**
3) **unacceptable CHW behaviour** (evening drinking – a time when children are apt to develop fevers)**;**
4) **bad outcomes – including death; and**
5) **lack of services at referral facility, among many others.**

> *The supervisor should support the CHW in the presence of the community – especially when a problem occurs for which the CHW was not responsible, but the community may assign blame to the CHW (e.g. death of a premature baby, medicine stock-out, non-availability of referral services, etc.)*

Because monitoring data collected by CHWs or specific to CHW activities is often poor quality and aggregated, it becomes minimally useful for assessing or improving performance. Therefore, supervision that focuses on assessing performance by observation and providing feedback and guidance to individual CHWs is extremely important. Also, newer and more complex tasks may require more frequent supervision and coaching (e.g. assessment of the sick child or the newborn).

6.2.4 Plan the frequency of supervision

Frequency of supervision may vary according to its purposes. However, the main issue is how to ensure supervision occurs **frequently enough to ensure effective performance of CHWs**.

Supervision should be more intense (e.g. monthly for 3 months) after initial training and deployment, and may be less intense thereafter (e.g. shorter visits) especially for well-performing CHWs. CHWs who have difficulty performing tasks will need more frequent supervision and extended coaching.

Globally recommended implementation strength indicators for *Caring for the Sick Child in the Community* suggest **quarterly** supervision at

a minimum. Data from Sierra Leone show that supervision is strongly and temporally associated with improved quality, including more accurate classification and treatment of childhood illness. Regular supervision—at a more intense level than most current community case management programmes—significantly improves quality. Therefore, the standard to strive for should be one supervision visit per CHW per month.

6.2.5 Choose or design each supervision checklist

Specify the purpose of each checklist, the context to use it, and content areas. The checklist is a good way to structure both what to check and record and the frequency. A monthly checklist may include certain items (e.g. register review, count number of sick children seen and home visits made, count supplies), while a quarterly checklist may include items that require different methods (e.g. meeting with the community, direct observation of care). Modularization of checklists based on technical area or expected CHW competencies may minimize the burden of relying on one comprehensive long checklist.

In a country where community-based care of sick children is on-going, and caring for the newborn at home is introduced later, the potential problem is to continue using just the supervision checklist that focuses on observation of a sick child, with no specific provision for a routine newborn care visit. In this situation, CHWs' performance of the tasks for newborn care is not assessed and will likely deteriorate. The supervision checklist must be expanded to include those tasks.

Checklists may include information intended for local use (e.g. coaching around register completion), data for aggregation (e.g. counts of sick children, treatments given, referrals), and data for both purposes (e.g. medicine availability, which provides data on consumption for local supply in a 'pull' system, and data on stock-outs for a national implementation strength indicator).

Turn to Annex M now to see an example of a CHW supervision checklist used in Malawi only for supervising Caring for the Sick Child in the Community. (The CHWs are called HSAs and the package is called Community Case Management.) You can see that supervisors should be trained in how to collect the information required to fill out the checklist as well as how to mark the checklist.

6.2.6 Plan special supervision approaches to assess and sustain performance of case management of sick children in the community and other complex skills

Poor performance of CHW tasks can have serious consequences

A CHW who misses fast breathing and chest indrawing in a young child, and sends that child home without treatment, has performed poorly with dire consequences—the child dies of pneumonia.

A CHW who has made home visits to pregnant women but has not increased their attendance at the ANC clinics or deliveries at the health facility is not performing her job, with dire consequences—neonatal mortality remains high.

Special supervision approaches are especially warranted for those tasks where poor performance may have serious consequences.

For supervision of management of sick children, a clinically trained supervisor is required. Effective, cost-effective, and affordable approaches to assessing and sustaining clinical skills are an area of ongoing research. Current approaches to this type of supervision, sometimes called mentorship, include:

- Assessment of a CHW's performance by a clinically trained supervisor including:
  - Reviewing the CHW's treatment register (to assess for consistency among recorded assessment, classification and treatment steps)
  - Orally administering structured case scenarios (to test knowledge)
  - Directly observing case management (to assess knowledge and practice)
  - Conducting exit interviews (to assess client's understanding and adherence)
  - Directly observing with re-examination by assessor to validate the CHW's decisions against a 'gold standard.'
- Feedback and coaching to remedy skill or knowledge gaps and build competency and confidence by:
  - Demonstrating correct performance of a clinical task or particular skills
  - Giving feedback on the CHW's performance with advice on improvements
  - Working side by side with the CHW to give in-the-moment guidance
  - Arranging for additional practice of clinical tasks in the facility, with clinical supervisor or competent peer to give feedback and encouragement
- Periodic (e.g. quarterly) repeat of the mentoring visit of the CHW to the health facility for assessment of performance and improvement of skills as described in the bullets above in order to:
  - Sustain skills and knowledge, or refresh seldom-used skills (e.g. recognition of certain danger signs), or skills that have deteriorated
  - Build a relationship between the CHW and the health facility staff and supervisor to foster understanding of the others' work and to aid working together (e.g. for care of referrals, problem solving)
- An example plan for clinical supervision of care of sick children in the community is summarized in Table 9.

Table 9: Clinical supervision approaches to assess quality of community management of the sick child by HSAs in Malawi

Type	Who	How	Where	What	When
Routine	Senior HSA	One-on-one	Community	Case scenarios or direct observation (if sick child available)	Monthly
Clinical	Clinical Officer	One-on-one	Health facility	Direct observation using Mentoring Checklist	Quarterly

In the plan above, routine supervision employs a set of 12 case scenarios matched to the month of administration. The supervisor asks the CHW to record the given IDENTIFYING information, and ASK and LOOK findings on a Sick Child Recording Form. Then the CHW completes the DECIDE, TREAT and/or REFER steps based on the information. The supervisor gives feedback on the CHW's responses.

Clinical supervision employs a Mentoring Checklist for direct observation of case management of a sick child followed by feedback and coaching during a quarterly visit to the supervisor's facility.

Supervisor's skills

6.3 Plan to train supervisors

6.3.1 Specify required skills for all supervisors, including those of the CHWs plus those for supervision

Supervisory skills include, for example:

- Planning periodic supervision schedule that reaches each CHW
- Implementing monthly supervision schedule
- Using supervision checklists and tools correctly
- Encouraging a CHW to identify any problems and frustrations
- Problem-solving, together with the CHW
- Reviewing registers to identify any problems in filling the register or with the CHW's work
- Cross-checking inventory of medicines with register and resupplying medicines, supplies, job aids as needed
- Observing service delivery (during home visit or other setting; observe counselling, case management) to assess the CHW's performance
- Administering case scenarios to identify any knowledge gaps
- Providing performance feedback in a constructive, friendly way and providing extra coaching for those who need it
- Providing or planning for support to strengthen any identified weaknesses
- Liaising with community leadership (asking about the CHW's performance and the community's satisfaction, discussing how to solve any problems)
- Completing supervisory checklist
- Planning for next supervision
- Aggregating several CHWs' activities on the relevant form

CHW skills required to deliver the services of the selected packages are specified in the training materials for each package. Even if supervisors are clinically competent, they will need to learn the procedures to be used by CHWs so that they can assess performance according to those standards.

6.3.2 Plan training of supervisors

Plan how supervisors will be trained in supervisory skills and also taught the skills and knowledge that CHWs should use when performing the tasks for the selected packages.

Probably the best way to train supervisors to perform the CHW's tasks for the selected packages is to conduct the training course for them, including the exercises and clinical practice. It may be that because of their prior skills, they can complete the training more quickly; however, it is a mistake to expect any trainee to read the materials on their own and acquire the necessary skills and knowledge. Practice is a necessary part of any effective training.

Supervisors must be trained to master the supervisory skills listed above. Supervisors cannot just be handed a checklist. They must be trained how to use it as well as in the skills of planning, analysing, communicating, and motivating. Supervision training should include both theory and practice of supervisory tasks, with feedback.

Trainers should also assess the attitudes of supervisors toward supervision and improve them. Some individuals will be technically competent but not demonstrate patience and other attitudes required for supportive supervision. The helpful attitude considers the supervisor as part of a team that is committed to good performance and values improvement; the supervisor helps by providing coaching and facilitating improvements.

Some less helpful but commonly observed attitudes include impatience and arrogance. Some see the role of the supervisor as policing, fault-finding and shaming into compliance. Supervision by fear is the antithesis of the desired 'culture of quality' which values not hiding problems but wanting to identify and solve them.

These unhelpful supervisory practices and attitudes should be dispelled, such as by teaching the positive outcomes of supportive supervision and clarifying that abuse and shaming are not acceptable supervisory approaches. Some supervisors report boredom. This may arise from not knowing what to do and can be prevented by good training and job aids.

6.4 Ensure that supervisors have resources (e.g. transportation, time, tools) to conduct regular supervision and coaching of CHWs

Considerable **resources** are required to conduct supervisory visits to CHWs, conduct meetings with groups of CHWs, spend time with community health committees, etc. These activities are doomed if the resources are lacking: vehicles and petrol, public transport, per diem, time dedicated to that purpose, checklists. Budget cuts and scarce resources work against supervisors; however, we know that without supportive supervision, CHW performance quality and motivation are likely to deteriorate.

Some supervisors report frustration with their job, which can result from knowing what to do but not having the support to do it. Lack of support (e.g. transport, per diem, time, acknowledgement from superiors) should be prevented by a good and well-funded supervision plan. When problems occur, they should be addressed through on-going problem solving by supervisors and their superiors to make the essential resources available.

6.5 Plan how the supervisors will be supervised

Just as supervisors should be trained, they should also be supervised. This is currently uncommon and rarely systematic. Higher-level supervisors, often district personnel, should check the supervisor's performance for several specified tasks and skills. They should track the number of supervisory contacts and ensure that they are of good quality. For example:

- Are supervisors making supervisory visits to CHWs with sufficient frequency?
- Do visits to CHWs include review of registers?
- Do supervisors observe the CHW at work, providing service to a pregnant woman/ newborn/caregiver of infant/sick child?
- Do supervisors provide feedback, coaching, problem solving, and other help to CHWs? Are supervisors ensuring CHWs receive medicines regularly? Have there been stock outs?
- Are supervisors ensuring CHWs have job aids, forms and registers?

- Are supervisors assessing CHWs' data and compiling it appropriately?
- Are supervisors also liaising with the community—gathering information, listening to problems, and working to support the CHW with the community?
- Are the CHWs performing well, or are there numbers of CHWs who quit or did not pass the performance review which may indicate a lack of supportive supervision?

A supervisor from the district should visit each health facility to hold a meeting with the supervisor(s) of CHWs. The CHW supervisor should show the district supervisor completed supervisory checklists, reports of supervisory visits, monthly data reports, referral records, and medicine and supplies records, so that the supervisor may review and comment on them. Also, the district supervisor should once or twice a year directly observe a supervisory visit to a CHW in order to monitor the content and quality of supervision (technical and supervisory skills).

NOTE ON INFORMATION TECHNOLOGY:

Because supervision is so critical for successful implementation of community-based care, implementation of the selected packages in an environment of limited resources presents a challenge and an opportunity to try innovative approaches using technology.

For example, use of cell phones, smart phones or tablets can allow for simultaneous 'real-time' flow of data (e.g. for supply chain), and reciprocal communication (e.g. for referrals/counter-referrals). Support for supervisors may include a mobile device with a content library or tools that would otherwise be difficult to access or manipulate, such as comprehensive or linked checklists and job aids.

Chapter 7. Plan for monitoring and evaluation of implementation of the selected packages

7. Plan for monitoring and evaluation of implementation of the selected packages

- **7.1 Select indicators to measure progress of implementation and coverage of the selected packages**
- **7.2 Specify data sources and tools for routine monitoring of community-based packages**
- **7.3 Plan methods to collect data to monitor activities and calculate indicators**
- **7.4 Specify methods for analysis and use of data**
- **7.5 Describe responsibilities by level and outline training and capacity-building requirements**
- **7.6 Plan evaluation including main questions, methods and general timelines**
- **7.7 Plan for research on implementation of the selected packages**

Situation description

Answer the questions below to describe current monitoring and evaluation of activities at the community level. The answers will help determine what needs to be changed or put into place to support implementation of the selected community-based packages.

Theme	Question
Monitoring	a. Do CHWs currently record any information on clients, services provided, or supplies? If so, review registers or forms used currently. Are they standardized? b. How is CHW data collected by or sent to a higher level? c. How is CHW data aggregated? Is it combined with health facility data? d. How is community data used at the community level? e. How is it used at health facility level? f. How is it used at the district level? g. How is it used at the national level?
HMIS	h. Do any aspects of the indicators and standards of the HMIS apply to the community level? i. Do any apply to the tasks that CHWs will perform to deliver these packages? j. Do any apply to the behaviours taught to families in the selected packages?

Theme	Question
Evaluation	k. Specify any community-level indicators that the national level requires/suggests be evaluated. l. Describe any external evaluations relevant to community-based care. m. Describe the date, scope and general methods of the next evaluation planned.
Research	n. Describe the current process to prioritize questions for implementation research (or operations research, or action research). o. Are there priority questions related to the selected packages? What are they? p. Describe any planned or on-going research relevant to the selected packages (partners, roles, status, results)

Key decisions and actions

7. Plan for monitoring and evaluation of implementation of the selected packages

Monitoring

7.1 Select indicators to measure progress of implementation and coverage of the selected packages

Selection of indicators is the necessary first step for planning data collection, analysis and use. The indicators should be clearly linked to the Results Framework (Figure 2, page 18). A good place to start is with the indicators that have been suggested for the selected packages by working groups with global orientation.

- The Interagency Newborn Indicators Technical Working Group has recommended a set of **newborn care indicators** that can be measured through household surveys and health facility assessments. Available resources include indicator definitions and recommended questions.[10]
- WHO, UNICEF and other agencies have agreed on a set of 8 core indicators and 7 optional indicators for assessing **infant and young child feeding practices**. These indicators can be measured through population-based household surveys; full definitions and measurement guidelines are provided.[11]
- UNICEF has also defined a list of **child health, nutrition and development indicators** that it captures through the Multiple Indicator Cluster Surveys (MICS). The latest list of indicators and questionnaire modules are available online and regularly updated.[12]
- The CCM (Community Case Management) Taskforce proposed a list of suggested indicators to measure **care of the sick child in the community.**[13] The list is in Annex N. The CCM Central website also suggests country indicators for use and adaptation by country programme managers. The indicators are categorized into three groups: implementation indicators from routine sources; special indicators from household surveys or other periodic studies; and national milestone

10 Newborn care indicators for household surveys & Newborn Services Rapid Health Facility Assessment, Newborn Indicators Technical Working Group, November 2012 (http://www.healthynewbornnetwork.org/page/newborn-indicators)

11 WHO Indicators for assessing infant and young child feeding practices: Part 1: definitions (http://whqlibdoc.who.int/publications/2008/9789241596664_eng.pdf) and Part 2: Measurement (http://whqlibdoc.who.int/publications/2010/9789241599290_eng.pdf)

12 UNICEF Multiple Indicator Cluster Survey (MICS) Round 4 indicators and modules, January 2012. http://www.childinfo.org/mics4_questionnaire.html

13 CCM Indicators; CCM Central Benchmarks and Indicators tab http://ccmcentral.com/benchmarksandindicators

indicators from document reviews and key informant interviews.

Managers at all levels will need **implementation strength indicators** to monitor progress of the selected packages. These are routine indicators that measure strength of implementation of the interventions including access, availability, quality, knowledge of families, and enabling environment (intermediate results in the Results Framework shown on page 18). You may also choose to monitor indicators of activities including proportion of CHWs trained (in a given package), deployed, equipped with required supplies, regularly supervised, or supported by the community health committee.

Given that supportive supervision is essential to sustaining CHW performance and motivation, it is important to monitor both that supervisors of CHWs carry out supervisory visits and some measures of quality of their supervision (e.g. includes register review, observation, feedback, coaching, problem solving).

7.2 Specify data sources and tools for routine monitoring of community-based packages

The most important data sources for monitoring include registers and reports (described below) and supervision checklists and reports (described in Chapter 6). Monitoring tools should be as simple as possible so that CHWs do not have to spend too much time on them and are unlikely to make mistakes.

a. **Develop or revise CHW Registers and ensure they are suitable for the CHWs who will use them** (literate, semi-literate, non-literate)

Design simple CHW recording forms and registers that track the CHW's work and results for the selected packages. CHW registers may be separate for different packages, but the CHW monthly report can and usually should be integrated if the same CHW delivers more than one package.

Refer to examples from WHO-UNICEF, Save the Children and other countries to guide development:

- *Caring for the Newborn at Home*: The WHO-UNICEF training materials include a CHW Register with several sections with different purposes. See Annex J.
  - Section 1–List of Pregnant Women and Home Visit Record: to register pregnant women and record dates of 2 home visits during pregnancy, outcome of pregnancy, place of birth, birth attendant, and status of mother after birth.
  - Section 2–List of Mothers and Babies and Home Visit Record: to register newborns and record information on date of birth, sex, birth weight, dates of 3 postnatal home visits (or 5 if baby is small), and status of mother and baby at last visit.
  - Section 3–List of Referred Pregnant Women/Mothers, and Section 4: List of Referred Babies records the reasons for referral, whether a follow-up visit was done, and whether the woman or baby who was referred was actually taken to health facility.
  - Section 5–Calendar for Scheduling Home Visits: to track completed visits and schedule next visits to all pregnant women or mothers and babies at the recommended intervals
- *Caring for the Child's Healthy Growth and Development*: One purpose of the register is to track children age 2 to 6 months and record home visits made to counsel the caregivers on optimal feeding, and communication and play for healthy development. Another purpose could be to register children under five and track receipt of routine, scheduled preventative services such as immunizations, growth monitoring, vitamin A, de-worming and other services.
- *Caring for the Sick Child in the Community*: The register's main purpose is to record each sick child encounter. Well-designed registers can also serve as job aids and sources of data for supervision and monitoring. See the example in Annex K. Common elements in community case management registers are: child's age, sex, assessment results, classification, treatment(s) given, and referral. Sick child registers may track patient outcome (including death),

compliance with treatment and/or referral. Information on stock is often captured in a separate register.

b. **Develop CHW and health facility reports to summarize data on CHW activities and services**

These reports will be the main tool for relaying critical service data and indicators onward for use by programme managers. Only data that are required for indicators or decision-making should be included in reports. Typically, CHWs submit reports to a health facility where they are aggregated across CHWs and then submitted to the district level. In some programmes, especially those with illiterate CHWs, CHW supervisors may review each CHW's registers and summarize the information.

Examples of what data reports should capture by package are given below. Consider how data will be aggregated in reports. While different registers are needed for different packages, in most cases subsequent aggregation and reports can and should be integrated to capture data across packages. Ensure that CHW data can be kept separate from health facility data--not aggregated with it--so that analysis can determine community contribution to overall service levels.

- For *Caring for the Newborn at Home*, reports should summarize the data collected through the pregnancy and newborn registers. Required data elements will vary according to programme interventions and priorities, but should include information to assess birth registration rates, pregnancy outcome, and coverage of key interventions (e.g. delivery by skilled birth attendant) and activities (e.g. postnatal care home visits).
- For *Caring for the Child's Healthy Growth and Development*, reports should summarize data collected in the under-five register. As with the other packages, it should include data to help assess activities (e.g. home visits to counsel caregivers of infants), and utilization of preventative services promoted by CHWs (e.g. immunization, use of treated bednets).
- For *Caring for the Sick Child in the Community*, reports should summarize the data collected through the CHW's treatment register and stock register (some programmes may have separate reports for treatment data and supply management).

7.3 Plan the methods to collect data to monitor activities and calculate indicators

The main data collection methods are described below. Data can, and should be, collected using multiple methods as each approach has strengths and limitations.

a. **Routine sources** such as Health Management Information Systems (HMIS), project reports, government databases, supervision reports, and supply information system reports can capture many indicators needed for routine monitoring of community-based packages, especially those for implementation strength. Integrating community data on CHW services, activities, medicine supply and consumption can present challenges that may take time to address, and these should be outlined in the monitoring plan.

For example, definitions or terminology for classifications/diagnosis of childhood illness may differ between the community and the facility levels making it impossible to integrate without reconciling terminology. In Malawi, CHW registers use the IMCI classifications for pneumonia, while in health facility registers, all ARIs are grouped together.

However, opportunities to modify the HMIS may be limited, and the timeframe may not align with requirements to monitor new community-based services. A temporary parallel system may be needed for community data.

Innovative approaches, including the use of mobile technologies, should also be explored to enhance the timely availability and use of routine data. For example, the mTrac[14] system in Uganda enables Village Health Team (VHT) members to submit data weekly using SMS

14 http://www.mtrac.ug/mtrac-faqs

(text messaging) on 10 indicators including cases treated, newborns seen within 24 hours of birth and stock levels for medicines. District health teams are able to view the data online in real-time and respond. Other examples include c-Stock[15] to strengthen supply chain management in Malawi and RapidSMS Rwanda[16] for tracking maternal and newborn health services provided by CHWs.

b. **Periodic sources** such as district level household surveys, health facility assessments and CHW surveys can be used to generate data for indicators such as coverage of key interventions, reported care-seeking, knowledge of danger signs, and quality and use of CHW services. These surveys are critical to understand programme coverage and provide an important source of information to help fill gaps and triangulate data collected through routine sources.

   Examples of periodic data collection approaches include:

   - Lot quality assurance sampling (LQAS) methods for household surveys are applied in several countries at the district level to provide more frequent data on coverage and practices. The LQAS survey findings, combined with data from HMIS, facility assessments and focus group discussions, enable an analysis of bottlenecks and solution identification.
   - Telephone surveys with HSAs in Malawi capture information on supplies, supervision, and other indicators.

c. **Complementary methods** such as special studies, document reviews, and key informant interviews will be required to provide data on other indicators, especially qualitative indicators tracking achievement of policy or health systems milestone indicators. In addition, partner mapping and context documentation efforts are needed to track what interventions are being implemented beyond the community packages, as well as major events, such as natural disasters or disease outbreaks, which might affect outcomes.

d. **Specify procedures to assure data quality**, particularly for data collected though routine systems. Mechanisms can include ensuring that supervision assesses data quality at lower levels, training on data collection at different levels, and formal quality assessments. For example,

   - Supervision of CHWs should include reviewing records and validation of reports to ensure data quality and completeness and reinforce good practices.
   - Facility staff who compile CHW data must be trained how to review and validate community-level data so that errors and problem areas can be identified and resolved before reporting the data to higher levels. Tools for data review, display and use should be developed in collaboration with facility-based staff to facilitate this (see Malawi example, page 155).
   - In Ethiopia, the national health MIS plans to use LQAS to assess community data.
   - In Malawi, periodic rapid data quality assessments (RDQA) help determine data availability, completeness and quality and assess the use of community level data in programme management and decision making.

   A wide range of tools for data quality assurance are available through Measure Evaluation: http://www.cpc.unc.edu/measure/tools/monitoring-evaluation-systems/data-quality-assurance-tools.

7.4 Specify methods for analysis and use of data

a. **Specify how data will be analyzed** to show progress towards targets and action thresholds. Where possible, databases should be designed to automatically generate data displays (dashboards) to show key indicators that will aid data interpretation by all users. Examples of dashboards for data display are included in Annex O.

   At lower levels where electronic databases are unlikely to be available, simple tools for **manual**

15 http://sc4ccm.jsi.com/files/2012/10/cStock-Using-data-visibility-as-a-tool-to-improve-HSA-logistics.pdf
16 http://rapidsms.moh.gov.rw/

calculation and displays can be used to show performance against targets. For example, the Improving Data to Improve Programs (CCM-IDIP) project in Malawi is training and equipping HSA supervisors to review case management data from HSAs and then to track and display selected implementation strength indicators. HSA supervisors are provided with calculators and simple templates to summarize priority data by HSA on a monthly basis and to display quarterly data compared to targets and thresholds.

UNICEF's *The Guidebook: Strengthening district management capacity for planning, implementation and monitoring for results with equity* outlines a four-step monitoring and quality improvement approach to strengthen the capacity of district management to analyse and use data from multiple sources. The approach emphasizes use of multiple sources and application of a bottleneck analysis to systematically identify areas for improvement. For each bottleneck, the root causes are explored using approaches such as '5 Whys' or fishbone diagram analysis and potential solutions identified. Another training package on using monitoring and evaluation data is *M&E for program managers – HIV/AIDs*.[17]

b. **Plan how to share results with stakeholders**. The results and information products for each package must be tailored to the audience: national and sub-national MOH partners, communities, donors, and other agencies. For example, a two-page monthly or quarterly District Child Health Services Report could display 12 months of data on 8–10 priority indicators of implementation strength, show use of services on bar-charts with high and low action thresholds, and provide notes about use of data.

7.5 Describe responsibilities by level and outline training and capacity-building requirements

Develop a table specifying the roles and responsibilities for each level in monitoring and evaluation. The indicators matrix should also include a column to specify who is responsible for data collection at what level. These roles and responsibilities will help define the training and capacity building requirements.

Describe current capacity for monitoring and evaluation by level and identify gaps.

- **Given the community focus, the immediate priority is to strengthen capacity of lower level staff (CHWs, CHW supervisors and first level facility staff) to collect, manage and use data.**
- Outline how CHWs will be encouraged to share their monitoring data, especially on use, referral, and outcomes, with the local health committees so their work is valued and understood. This could be during regular review meetings with community members to assess the progress of implementation and identify opportunities, challenges and solutions. Sharing experience, success stories, good practices and lessons learnt can facilitate local solutions in such meetings.
- Also outline any capacity strengthening needed at the district and national level to maintain databases, conduct appropriate analysis and interpretation for evidence-based decision making, and provide supportive supervision to lower levels. However, human resources at national and district levels for monitoring and evaluation, and particularly for data use, are often limited and overstretched.
- In addition to training needs, the plan should outline other requirements (e.g. infrastructure, computers, mobile telephones) for monitoring and evaluation.

17 https://www.globalhivmeinfo.org/CapacityBuilding/Pages/ME_for_Program_Managers.aspx

Case Study: Strengthening Routine Monitoring of Community-Based Maternal and Newborn Care Programmes in Malawi

To improve maternal and newborn survival in Malawi, the Reproductive Health Unit of the Ministry of Health, with its partners (Save the Children, Saving Newborn Lives, UNICEF and others) designed and implemented a package for Community-based Maternal and Newborn Care. This programme, which trained HSAs to conduct home visits during pregnancy and the first week after childbirth, was piloted in three districts (Chitipa, Down and Thyolo) starting in 2008.

The HSAs were provided with registers, trained to record their pregnancy and postnatal home visits, and submit completed forms to the nearest health facility every month. However, a mid-term assessment in 2009 highlighted several bottlenecks in the routine monitoring system. The pilot registers were very complex and difficult for community health workers to fill in. Also there was no system established for aggregation of data between the community, facility and district levels, and no core list of indicators that the system was designed to track. As the pilot aimed to develop a package that could be scaled up across the country, these bottlenecks in the routine monitoring system needed to be addressed before further expansion.

In early 2010, the MOH and partners (UNICEF, W HO, Save the Children and MCHIP) reached consensus on a list of priority indicators (4 national and 10 programme) related to coverage. The tools and data flow system were revised to focus on these indicators.

The revised tools include a simplified home visit form and monthly report completed by HSAs which captures the agreed indicators, a monthly report for health facilities to compile HSA data and submit to the district, and a district level summary form. The national level indicators are tracked and reported by the Central level, and the programme indicators are tracked and monitored by the Reproductive Health Unit in collaboration with the central level.

The revised system was piloted in the three districts in 2011 and data flow and quality improved. The indicators and tools have been integrated within the revised district HMIS that will be rolled out across Malawi with partner support.

[Sources: Save the Children, Community Based Maternal and Newborn Data Flow System, May 2011]

Evaluation

7.6 Plan evaluation of CHW work including main questions, methods and general timelines

Evaluation questions and methods should be identified early to plan for adequate resources and to ensure that baseline assessments collect the required data.

Involve a wide range of stakeholders to refine and prioritize the questions for evaluation (See Table 10). The evaluation design should specify what comparisons will be made and how. For example, comparisons may be made over time (before and after the programme) and/or between populations exposed to the programme and those not exposed. Evaluation should be an activity planned with a time frame and budget.

Table 10: Illustrative evaluation questions and methods

Evaluation questions	Data Collection Methods
· What was the impact of implementation of Caring for the Sick Child in the Community on care of sick children? Did more sick children receive care? In what communities was the coverage (care given by the CHW) the most? The least? · What was the impact of implementing home visits for Care of the Newborn at Home? Did attendance at ANC increase? Did skilled birth attendance increase? Did facility births increase? Did neonatal mortality decrease?	· Representative household survey comparing baseline to end line - ideally with comparison area · Qualitative interviews with families to assess knowledge and perceptions of services
· What proportion of children was brought to a CHW when they were sick? What proportion was brought to a health facility for care? · What was the use of recommended practices? Did exclusive breastfeeding increase? Did thermal care of newborns improve? Were sick children given increased fluids and fed during illness? How did use of recommended practices vary in different communities and why?	
· What was the level of demand for services? Were there changes in care-seeking for newborn and child illness? How effective were the behaviour change strategies?	
· How well did referral from CHWs to facilities and from first level to higher level facilities work? What was the range of experience? What were the challenges?	· Special study tracking referrals made by CHWs to assess referral compliance and outcomes · Qualitative interviews with CHWs and families to understand referral barriers and facilitators
· What was the quality of services provided by CHWs? What was the range of quality across CHWs and what are the factors associated with quality of care? · How did families view home visits by CHWs? · How did families view care for sick child provided by a CHW?	· Special study of CHWs with direct observation and clinical re-examination · Qualitative interviews with families to assess perceived quality of care
· How was the supply of commodities at various levels (CHW, facility)? What was the range of stock-outs and the reasons for stock-outs?	· Review of routine records and reports on commodity supplies at CHW and facility levels · Periodic CHW/facility surveys to assess availability of supplies and stock-outs
· What are the major factors that are critical to expand or scale up the programme at various levels?	· Qualitative interviews with staff at various levels (community, facility, district, national)
· What was the cost of introducing services? What was the annual recurrent cost? What did the costs include and what were the main cost drivers?	· Special costing study

The evaluation questions explore whether the CHW services are reaching those in greatest need, whether the implementation is strong enough to produce an impact, and what approaches to delivery are the most effective in reaching families who need the service. They ask, in the longer term, whether changes in coverage resulted in a change in mortality and whether any alternative explanations for the change exist.

Evaluations should employ a combination of qualitative methods (focus group discussions, key informant interviews, document reviews, etc.) and quantitative methods (household or health facility surveys, surveys and observations of CHWs, etc.) to explain progress in implementing the packages and overall effectiveness or lack thereof. They should also compare routine monitoring data for consistency with findings from these evaluation methods. Careful and on-going documentation of the programming context and changes to the context are critical to include in the evaluation design.

Evaluating the impact on mortality or estimating how many lives have been saved is beyond the scope of most programme evaluations. However, estimates of lives saved can be made based on population-based changes in use (coverage) of evidence-based interventions using LiST, the Lives Saved Tool.

Sometimes costing data are analyzed to estimate the cost per programme unit, e.g. sick child given care by CHW or home visit received, or outcome, e.g. life saved.

Evaluation plans should also specify how and when findings will be reviewed and used to make adjustments to programme approaches and implementation ('reprogramming').

Research

7.7 Plan for research on implementation of the selected packages

Implementation research plays a critical role in improving delivery of health programmes and in strengthening health systems. Community-based care is an important area for research. The importance of research is demonstrated in the Bangladesh example (see box, next page).

Research overlaps with evaluation, but usually involves "inserting" a research protocol within an operating programme to answer a question of interest to a manager and/or a broader audience. Research activities are implemented alongside programme activities, ideally providing a prospective comparison of two or more promising approaches to accomplish a programme target.

Example: Pathways from research to programmatic scale up in Bangladesh

Rationale In 2001, a national situation analysis of newborn health in Bangladesh provided a repackaging of the existing data, including results from household surveys, to describe when, where and why newborns were dying and to highlight opportunities for reducing newborn mortality. The process of developing the report served as a consensus-building mechanism and later that year sparked the creation of a Newborn Working Group comprised of senior government managers, international agencies, local NGOs and professional bodies. To advance the local evidence-base, new studies were launched in partnership with various agencies and the Ministry of Health and Family Welfare. With little understanding about to how to reach mothers and babies at the community level—where most deaths occur—these studies aimed to fill critical knowledge gaps related to household practices and community-based interventions.

Process The Bangladesh newborn situation analysis was critical in increasing attention. Then formative research catalyzed more focus on home practices and led to change in national recommendations. Projahmno, a large-cluster randomized control trial, used specially recruited, single purpose community health workers, adapted the intensive home visit package used by SEARCH (a community-based newborn care study from India) to contain fewer visits, and examined alternative models to home-based injections of antibiotics for neonatal sepsis. The results were influential globally (Baqui et al. 2008) and helped shape the UN joint statement on home visits for newborn care.

Studies which show negative results are as important to guide policy as those which show positive effects. For example, a trial of traditional birth attendants trained in neonatal resuscitation using bag-and-mask showed no significant effect on mortality rates and led to the decision not to pursue this at scale, especially while resuscitation is not yet available for the majority of facility births (Ellis et al. 2011; Lee et al. 2011).

Results Evidence generated by research has contributed to a higher profile for newborn survival, helped build consensus on technical solutions, influenced policies and increased funding. Global and local evidence were used to develop a National Neonatal Health Strategy to guide newborn health programming. Following the integration of newborn health into policy, the professional bodies in Bangladesh worked collaboratively to develop and pilot technical modules that were then endorsed by the government and used to train thousands of service providers throughout the country. Evidence has influenced a series of 13 large-scale newborn programmes—now rolling out in districts with a total population of over 30 million people. The current health sector plan includes hiring and training at least 13 500 community health workers to provide newborn care services (GPRB 2011).

[Source: Rubayet S, Shahidullah M, Hossain A et al. 2012. Newborn survival in Bangladesh: a decade of change and future implications. Health Policy and Planning 27(Suppl. 3):iii40–iii56.]

Global working groups often prioritize implementation research questions. Illustrative implementation research questions for community-based case management have been developed by the Global CCM Taskforce. Similarly, the WHO and the Saving Newborn Lives programme have completed a global Child Health and Nutrition Research Initiative (CHNRI) process to identify and prioritize research questions for newborn health and stillbirths.[18]

A national task force often coordinates implementation research. Begin to plan for research into community-based care issues by specifying the process to prioritize research questions for

18 More information available at: http://www.chnri.org/

your country. The process should take into account global priorities for further research and input from a range of government and other stakeholders. Partner agencies with research capacity should be encouraged to explore how they can address priority **research** questions by embedding them within already funded or upcoming programmes/studies and to include them in their proposals for research or programme funds. Sometimes "outsiders" approach governments to "do research"; in this situation it is helpful to have a national priority list against which to assess these requests.

In Kenya, for example, the monitoring and evaluation subgroup of the national iCCM Taskforce coordinates iCCM research to avoid duplication of efforts and to ensure that available resources are applied to answer priority questions. They also facilitate an annual, consultative process to review results (global and national) and update the research agenda and questions as needed. See box below.

Example: Selecting research questions in Kenya

Through a series of workshops led by the Ministry of Public Health with participation from a wide range of government and NGO stakeholders, participants considered the global CCM Taskforce list of research questions and identified 24 questions relevant for Kenya. They then selected the 10 priority questions (result shown below) by applying the following criteria: answerability by research; likelihood of reducing mortality; addressing scale-up barriers; originality; likelihood of promoting equity; and likelihood that policy makers will use the research findings.

Priority implementation research questions for iCCM selected in Kenya

Research Question	Rank
How can care seeking for sick newborn be improved?	1
What is the effectiveness of different approaches for scaling up CHW perinatal home visits?	2
How can care seeking for child with cough or difficult breathing, fever and diarrhoea be improved?	3
How can we improve early postnatal care for mothers and newborns?	4
How can care seeking for early antenatal care be improved?	5
Can the use of different technological modalities (mobile phones-based algorithm, computer-based algorithm, treatment charts, etc.) improve health worker performance and increase compliance with standard management guidelines?	6
What is the effectiveness of different options (financial and non-financial) to attract, and retain skilled doctors, nurses, technicians and community health workers in rural areas and in hard-to-reach areas?	7
What is the effectiveness of different approaches (e.g. health facility boards, village health committees) to enhance community–health facility linkage for improving MNCH service utilization?	8
Can trained, supervised and well supplied community health workers perform iCCM correctly, including pneumonia management with antibiotics, in hard-to-reach areas in order to increase coverage with effective interventions, within the context of the MOH community strategy?	9
What is the appropriate delivery channel of health service to ensure equity of service for hard-to-reach populations (urban and rural)?	10

Chapter 8. Undertake costing of implementation of the packages and secure financing

8. Undertake costing of implementation of the packages and secure financing

- **8.1 Develop a budget for community-based care of pregnant women, newborns and children (per the selected packages) with detailed, activity-based, bottom-up budgeting methodology**
- **8.2 Develop a costed plan for implementing the selected packages**
- **8.3 Commit funding for sufficient numbers of CHWs, community-level medicines and supplies and their cost to distribute to community level, training and supervision of CHWs, monitoring, and evaluation**

Situation description

Answer the questions below to describe current monitoring and evaluation of activities at the community level. The answers will help determine what needs to be changed or put into place to support implementation of the selected community-based packages.

Theme	Question
Budgeting	a. Describe the currently used budget formats. Do budgets show 'top line' activities (e.g. 'community' at national level or 'training' at district level) as well as details and assumptions?
Costing	b. Do you have a strategic plan for *(what)*? Is it costed?
Financing	c. What financing is secured or expected to support implementation of the selected community-based packages? d. How much financing is expected from government sources? From other sources (the absolute amount and proportion)? e. Describe current tools or mechanisms to track disbursement or 'burn rate.'

Key decisions and actions

8. Undertake costing of implementation of the packages and secure financing

Budgeting and costing are both essential for community-based programmes to control their finances and help reduce the risk of unrecoverable losses. Budgeting is an allocation of funds to a planned set of activities. Costing involves calculating the cost of resources that should be used or were used.

Budgeting

8.1. Develop a budget for community-based care of pregnant women, newborns and children (per the selected packages) **with detailed, activity-based, bottom-up budgeting methodology**

Developing a budget for the selected packages must be done in conjunction with—and not after—developing the implementation plans. This will ensure that the plans are feasible from both a technical and cost/financing basis. When developing the plans and budget there must be good coordination between all the relevant actors. List all the relevant administrative units, ministries, partners and other organizations and invite key staff from each to participate in the planning and budgeting process. Partner NGOs should be included if they are significant contributors to the programme.

It is important to develop detailed, activity-based, bottom-up budgets that can be consolidated at the 'top line' using the standard budget categories, but that can also be broken down to each health system level, treatment area, type of activity, input, etc. The activity-based budgeting will allow individual activities to be separated in the budget (such as CHW training), but should also be broken down by standard line items/categories (such as salary costs, etc.). In a bottom-up approach to quantifying resources needed, districts convene to determine their needs, based on the plans and information from their facilities and community health workers. This can then be consolidated into a district budget and plan, which is then fed into a regional or national budget plan.

It is also important to develop the budget according to standard budget categories that are used across ministries, so that budgets can be easily compiled and reviewed. This is especially critical when the country uses a Sector-Wide Approach (SWAp).

Sometimes countries do not budget for donated funds, and as a result they severely underestimate the needs for implementing community-based packages. For example, if a donor funds the majority of a country's community case management for sick children, the MOH may not consider the eventual costs they will have to bear to support this package in the future. Also, economic costs, such as time spent by volunteers, may be overlooked.

Costing

8.2. Develop a costed plan for implementing the selected packages

Conducting a full costing of the implementation of the selected community-based packages is a very technically advanced process. Countries need to have the correct tools, training and experience to conduct this type of costing accurately.

Ideally, the entire plan to implement the selected packages should be costed in a defined period of time, to ensure that all components have been identified and accounted for. Economies of scale occur when the average cost per service falls as the number of services increases.

Incremental costs are the costs associated with adding an additional service to an existing package. An example could be the addition of the package Caring for the Newborn in the Home to the current job of the CHW which is primarily giving community-based case management of pneumonia, malaria and diarrhoea to sick children. When a country is considering starting or scaling up a community-based package, it is important to understand the additional costs that will need to be expended to provide these services, and to include them in the budgeting process.

Costing projections should be made for at least 5 or so years into the future. If the programme will be expanding in the future, the cost projections should be based on the increasing targets or scaling up.

Costing the implementation plan for the selected packages will require close coordination amongst all relevant units, ministries, and stakeholders involved in implementation. While the costing should be led by the appropriate unit within the Ministry of Health, it is important to maintain transparency when conducting the costing, and for the results to be validated and accepted by all the parties involved. This way, when the costs are used for future budgeting and planning, the methodology and results from the costing will have already been reviewed and approved.

Also, when advocating for more funding (such as from the Ministry of Finance), it will be best if the costing has already been accepted, so that a stronger case can be made to justify the additional funding.

Countries with district-level planning and budgeting should include representatives from the district in coordination meetings at the national level. The national level should also provide feedback to the districts, to ensure that the district level plans have been taken into consideration.

Costing per meaningful unit

Calculating unit costs, for example, cost per service, cost per capita, cost per CHW, and cost per life saved, is important for a number of reasons. Several different types of unit costs should be included as part of the costing of the implementation plan.

- **Cost per service**: This is the cost of providing an individual service in the package; for example, the cost per diarrhoea service. It is calculated by dividing the total cost by the total number of services. It should be made clear whether indirect costs (supervision, overhead costs, etc.) are included in the cost per service figure, or whether it is purely based on direct costs (medicines, supplies, staff time, etc.). It is best to calculate the cost per service of each service individually (per pneumonia treatment, per malaria treatment, per postnatal visit) and not use an overall average cost per service, because the costs can vary significantly and the service mix will have a significant impact on costs.

  The cost per service is an important calculation and can be used in a variety of different ways. It can be used for budgeting purposes, to estimate the costs of delivering a higher volume of services.

  The cost per service can also be used for advocacy purposes, when comparing the cost of service delivery at the community level with development of a new facility-based service. Presumably, the same treatment for childhood diarrhoea will cost less when provided by a CHW in the community than by a facility-based worker at a newly-built health centre in the hard to reach area, because the staff, construction and overhead costs would be less. This provides advocacy for expanding the community health programme, if it is shown to be more cost-effective than extending facility-based services.

  Finally, cost per service is a globally recognized and comparable figure, which is useful when comparing with other countries and standard costs.

- **Cost per capita**: This is the average cost of implementing the programme per person in the area covered. It is calculated by dividing the total costs by the total population (for newborn and child-specific programmes, it may further be divided by the total population under five). Similar to the cost per service calculation, the detailed assumptions of what costs are included should be stated.

  Costs per capita can also be used for budgeting, planning, advocacy and comparative purposes. The costs of scaling up the programme to reach a larger population can be estimated by multiplying the cost per capita by the total population to be covered. It is also useful to compare cost per capita of CHWs delivering services in the community to the cost per capita if health facilities were built to in all hard-to-reach areas. Once again, if the cost is less for the community provider of service relative to the facility-based service, it may be more cost-effective to divert additional funding towards the community programme.

- **Cost per CHW**: This is the cost to train and equip one CHW. It is calculated by dividing the total relevant CHW costs by the total number of CHWs trained and equipped. This cost is most helpful to use when determining the marginal cost of deploying additional CHWs. (The marginal cost is the cost of the last unit of a good or service that was produced--so, in this case, the cost of adding one more CHW to the programme.)
- **Cost per Life Saved**: The cost per life saved that can be attributed to the implementation of the community-based interventions can be used to compare the cost-effectiveness of different health interventions. Therefore it can be used to compare the country's programme with other country experiences.

Cost per Life Saved can be calculated with the aid of the LiST tool, which allows the user to input the relevant interventions and coverage and calculate their impact on a country's population. The LiST tool estimates the number of lives saved, and this figure can be divided into the total programme costs to determine the cost per life saved. This can be a very useful advocacy tool, as it may be used to present a strong, evidence-based rationale for investing in the community-based interventions.

Financing

8.3. Commit funding for sufficient numbers of CHWs, community-level medicines and supplies and their cost to distribute to community level, training and supervision of CHWs, monitoring, and evaluation

For every cost that has been identified to implement the selected packages, there should also be a source of financing identified for this cost. The financing should extend as far into the future as is reasonably possible, to ensure the sustainability of the programme.

Identify all the **sources of financing**—both confirmed sources and potential sources for the future. Determine the amount of financing available, both the absolute amount and the proportion. In certain cases, the financing may cover an entire component of the programme--for example, if UNICEF were to agree to supply all zinc supplements for treatment of childhood diarrhoea, regardless of the amount needed. Also identify elements that are already being funded, for example, staff costs for supervision visits from the health centre may already be covered in a separate budget for the primary health care system.

Next, a **gap analysis** should be conducted, in which the programme costs are compared with the secured financing to determine where there are gaps in funding. The gap can be identified as a total amount, or for specific areas (for example, funding for CHW training). Any necessary increases in human resources, infrastructure, etc. should be taken into consideration for the gap analysis. The gaps should then be addressed in a plan formulated to overcome them. If additional funding cannot be secured, it may be necessary to reassess the plans and scale back some activities.

The gap analysis should be projected as far into the future as possible, in line with the cost projections. It may be difficult to collect financing information past the initial few programme years, but it is important to be able to foresee when funding may run out (such as in the case of an NGO-run project), and plan accordingly.

When mapping the financing for the community health programme it is important to have good coordination between all the various administrative units, ministries (Health, Planning, Budgeting and Finance) and organizations involved. Any possible source of financing should be included in the discussions to ensure that the programme will be fully funded. Each financing source should clarify whether the funding will be provided for a finite amount of time, and if so, when it would be expected to end.

In countries where community health programmes are predominantly donor-driven, the country should plan an exit strategy whereby the donor funding eventually winds down, and the government would be required to take on the additional funding. This strategy should have ambitious but achievable goals for the country to take over the programme, with a clear timeline that would show when various funding would be phased out, and when the government would take over. Certain elements would no longer need to be funded (for example, many central-level NGO management costs, which would not be necessary to maintain after the NGO's departure).

Once costs and financing have been projected, the country should develop a **resource mobilization strategy** to overcome any remaining financing gaps. A resource mobilization strategy comprises the mix of mechanisms a government can employ in order to directly finance its production and delivery of health care. The principal methods of resource mobilization are: increased allocations from general government revenue; specially targeted public revenue-raising efforts; user fees; social health insurance; private health insurance; and contributions from private donors, and foreign assistance. It is important that the resource mobilization be sustainable, and equitable, so that

populations who need the services most will have access to them for the foreseeable future.

In implementing the resource mobilization strategy, it is important to identify and assess the interests of stakeholders within the government and among the public and plan how to work towards consensus building and public acceptance.

As the selected packages are being implemented, **disbursements** should be closely monitored and reviewed on a regular and frequent basis. Actual expenditure should be tracked alongside the budgeted expenditure, to make sure that the spending does not exceed what was planned. If the spending is not on track, and the programme is significantly overspent, then there needs to be a contingency plan for financing the additional resource needs or cutting other activities to compensate. If the programme is significantly underspent, then there should be an investigation into why; and if there are remaining funds there should be a plan for the money to be diverted elsewhere.

The 'burn rate' is a calculation of the rate at which a programme budget is being burned (or spent). If the programme has a fixed budget, then the burn rate can be used to predict how much longer the programme can operate at the current burn rate. This can be used to adjust spending upwards or downwards, as necessary.

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Annex A: Suggested Workshop Schedule

Day 1: Monday		
Time	**Activity**	**Responsible and duration**
8:30 – 9:00	Registration	Secretariat 30 min
9:00 – 9:20	**Welcome** Administrative announcements	Lead Facilitator 20 min
Introduction		
9:20 – 9:50	**Official opening ceremony with dignitaries**	30 min
9:50 – 10:15	**Coffee break**	25 min
10:15 – 10:45	**Introduction to the Workshop** (Handbook section A)[19] (PowerPoint presentation)	Lead facilitator 30 min
Selecting community-based packages to implement to improve newborn and child survival and health (Handbook Section B) **Step 1: Review current MNCH morbidity, Mortality, Coverage and Implementation Strength**		
10:45 – 11:15	**Presentation**: Global situation: Maternal, newborn and child health	Presenter 30 min
11:15 – 11:45	**Presentation:** National situation: Maternal, newborn and child health in this country and strategies implemented	Presenter 30 min
11:45 – 12:45	**Review of implementation strength** of community-based interventions (Gallery walk, plenary discussion)	Facilitators 1 hr
12:45 – 13:00	Introduction of steps to select community-based packages to implement	Facilitator 15 min
13:00 – 14:00	**Lunch break**	
Step 2: Review of the 3 packages in Caring for Newborns and Children in the Community		
14:00 – 14:15	**Presentation**: Introduction to the 3 packages in Caring for Newborns and Children in the Community	Presenter 15 min
14:15 – 15:15	· Review and exercise from **Caring for the Newborn at Home**	Subgroups 1 hour
15:15 – 16:15	· Review and exercise from **Caring for the Child's Healthy Growth and Development**	Subgroups 1 hour
16:15 – 16:30	· Coffee Break	

19 This introduction may be presented prior to, during or after the opening ceremonies.

Day 1: Monday		
Time	**Activity**	**Responsible and duration**
16:30 – 17:30	· Review and exercise from **Caring for the Sick Child in the Community**	Subgroups 1 hour
17:30 – 18:00	· Brief discussion of participants' thoughts on the 3 packages and what they mean for a country.	Facilitator 30 min

Day 2: Tuesday		
Time	**Activity**	**Responsible**
8:30 – 8:45	Recap of Day 1	Facilitator 15 min
Step 3: Select the Community-based Packages to Implement		
8:45 – 9:30	· 3.1 Identify packages that would address the needs in your country	Facilitator 45 minutes
9:30 – 10:30	· 3.2 Consider the capabilities of your health system · **Presentation:** Current policies and plans relevant to community-based health services and packages for maternal, newborn and child health · **Group discussion:** Implications of the current policies and plans	Facilitator Speaker Faciltator 1 hour
10: 30 – 10:45	**Coffee break**	
10: 45 – 11:30	· In what ways are the packages different from each other?	Facilitator 45 minutes
11:30 – 12:30	· 3.3 Select the packages to implement[20] · Discussion and agreement	Facilitator 1 hour
12:30 – 13:30	**Lunch break**	
Overview of how to plan to implement the selected packages (Handbook Section C)		
13:30 – 13:50	· Review of 8 components · Review of Figure 2: Results Framework · Review of Figure 3: Flowchart of Planning Steps	Facilitator 20 minutes

20 Note: If a country has already decided on which packages to implement, you will not need as much time on day to do the steps presented in section B. However, some time will be spent as it should still be beneficial to inform participants about what is in the different packages (for the future). It should also be helpful to discuss why they have selected the packages; they will need to explain their rationale and expectations for implementation of the packages when they ask for support (financial and otherwise).

Day 2: Tuesday		
Time	**Activity**	**Responsible**
13:50 – 14:30	· What is unique about implementing interventions for community based care? (Brainstorming exercise and implications for planning)	Facilitator 40 minutes
Planning for community-level implementation of the selected packages (Handbook Section D)		
14:30 – 14.45	· Review section D · Explanation of workshop process (small group work and plenary reports) · Explanation of subgroup work on each component (3 main tasks: situation description, study of chapter, outlining implementation plan)	Facilitator 15 minutes
14.45 – 15.00	**Coffee break**	
Situation descriptions		
15.00 – 15:15	· Introduce the task and subgroup work · Assignment of subgroups/meeting rooms/first component (1, 2, 3, 4) · How to do a situation description, page 33	Facilitator 15 minutes
15.15 – 17.00	· Subgroups do situation description of components 1 – 4 and document findings	Subgroups 1.5-2.0 hr

Day 3: Wednesday		
Time	**Activity**	**Responsible**
8:30 – 8:45	Recap of Day 2	Facilitator 15 min
8:45 – 10:00	· Plenary session: Presentations of situation descriptions for components 1 – 4 · Assignment of second components to subgroups (5 – 8)	Facilitator 1 hour 15 minutes
10:00 – 10:15	**Coffee break**	
10:15 – 11:45	· Subgroups do situation description of components 5 – 8 and document findings	Subgroups 1.5 hours
11.45 – 13.00	· Plenary session: Presentations of situation descriptions for components 5 – 8	Facilitator 1 hour 15 minutes
13:00 – 14:00	**Lunch break**	
Planning for implementation		
14:00 – 14:15	· Introduce the task and subgroup work: How to develop plans for implementation (pages 34 – 36) · Assignment of components 1 – 4 to subgroups	Facilitator 15 minutes

Day 3: Wednesday		
Time	**Activity**	**Responsible**
14:15 – 15:45	· Subgroups review chapter, including planning steps with issues and decisions	Subgroups 1 to 1.5 hours
15:45 – 16:00	**Coffee break**	
16:00 – 16:15	· Subgroups select the key steps to develop from the chapter and main issues from the situation description	Subgroups 15 minutes
16:15 – 17:45	· Subgroups outline actions to take to address issues in their assigned components	Subgroups 1.5 hours

Day 4: Thursday		
Time	**Activity**	**Responsible**
8:30 – 8:45	Recap of Day 3	Facilitator 15 minutes
8:45 – 10:15	· Plenary session: Presentations of implementation plans for components 1 – 4 · Introduce the task and subgroup work: Assign implementation plans for components 5 – 8	Facilitator 1.5 hours
10:15 – 10:30	**Coffee break**	
10:30 – 12:00	· Subgroups review chapter, including planning steps with issues and decisions · Subgroups select the key steps to be developed from the chapter and main issues from the situation description	Subgroups 1.5 hours
12:00 – 13:00	**Lunch break**	
13:00 – 14:30	· Subgroups outline actions to take to address key steps and issues in their assigned components	Subgroups 1.5 hours
14:30 – 15:45	· Plenary session: Presentations of implementation plans for components 5 – 8	Facilitator 1 hour 15 minutes
15:45 – 16:00	**Coffee break**	15 minutes
16:00 – 16:30	· Summarize outputs of the workshop · Discuss next steps (continued planning; implementation of actions needed)	30 minutes
16:30 – 17:00	· Official closing · Thank you to the participants	30 minutes

Annex B: Exercise for Caring for the Newborn at Home

Objective of the case study

Trainees will be able to:

- Identify behaviours that keep the baby warm and should be promoted, and those that can be harmful to the baby and should be avoided

Process

a. You will work in groups of 2—3

b. Each group will be given a large sheet of paper and markers

c. Read the case study.

Case study

Matoonda gave birth at night. The baby was dried immediately after birth and given to Matoonda to keep warm through skin-to-skin contact and to breastfeed. After a few minutes the TBA took the baby from Matoonda to bathe her. As the birth was at night there was no fire to heat the water, so the TBA bathed the baby with cold water, dried the baby and gave the baby back to Matoonda to feed.

d. Your group should decide which behaviours were good for keeping the baby warm and what could have been done better.

e. Prepare a chart such as the one below listing:

- 2 good behaviours: reason why each is good
- 2 poor behaviours: reason why each may be harmful

f. After 10 minutes all the groups will meet together to share their answers.

Good behaviours	Reason why the behaviour is good

Poor behaviours	Reason why the behaviour could be harmful

Annex C: Exercise for Caring for the Child's Healthy Growth and Development

Objective of the case study

Participants will be able to:

- Use the counselling cards to counsel a mother about feeding, play and communication, preventing illness, and responding to illness, according to the age of her child.

Stevie

Stevie is one and a half years old. He is well today. You/his mother breastfed Stevie until he was about six months old, and started giving him complementary foods. He started on porridge. He will eat some fruits and vegetables, but he is a fussy eater and prefers breast milk.

Stevie plays by himself a lot with whatever he finds in the yard—stones, sticks, and flowers. You think he understands what you say, but he has not started talking yet.

He has received all of his vaccines, except the final polio vaccine and measles vaccine. He was sick when it was time, and you have not been back to the health facility since for the remaining vaccines.

Annex D: Exercises from Caring for the Sick Child in the Community

(The exercises below are taken from the *Caring for the Sick Child in the Community*: *CHW Manual*, Adaptation for high HIV and TB settings, January 2015)

Exercise: Decide to refer

The children below have diarrhoea, fever, or other problems reported by the caregiver and found by you. Assume the child has no other relevant condition for deciding whether to refer the child.

Does the child have a danger sign?
Circle Yes or No.

Should you urgently refer the child to the health facility? Tick [✔] if the child should be referred.
To guide your decision, use the recording form.

Does the child have a danger sign? (Circle Yes or No.)			**Refer child? Tick [✓]**
1. Child age 11 months has had cough during three days; he is not interested in eating but will breastfeed; grandfather lives in same household and is on TB treatment	**Yes**	**No**	
2. Child age 4 months is breathing 48 breaths per minute	**Yes**	**No**	
3. Child age 2 years vomits all liquid and food her mother gives her	**Yes**	**No**	
4. Child age 3 months frequently holds his breath while exercising his arms and legs	**Yes**	**No**	
5. Child age 12 months is too weak to drink or eat anything	**Yes**	**No**	
6. Child age 3 years with cough cannot swallow	**Yes**	**No**	
7. Child age 10 months vomits ground food but continues to breastfeed for short periods of time	**Yes**	**No**	
8. Arms and legs of child, age 4 months, stiffen and shudder for 2 or 3 minutes at a time	**Yes**	**No**	
9. Child age 4 years has swelling of both feet	**Yes**	**No**	
10. Child age 6 months has chest indrawing	**Yes**	**No**	
11. Child age 2 years has a YELLOW reading on the MUAC strap and does not have HIV	**Yes**	**No**	
12. Child age 10 months has HIV and diarrhoea with 4 loose stools since yesterday morning	**Yes**	**No**	
13. Child age 8 months has a RED reading on the MUAC strap	**Yes**	**No**	

Does the child have a danger sign? (Circle Yes or No.)			**Refer child? Tick [✓]**
14. Child age 36 months has had a very hot body since last night in a malaria area	**Yes**	**No**	
15. Child age 4 years has had loose and smelly stools with white mucus for three days	**Yes**	**No**	
16. Child age 4 months has chest indrawing while breastfeeding	**Yes**	**No**	
17. Child age 4 and a half years has been coughing for 2 months	**Yes**	**No**	
18. Child age 2 years has diarrhoea with blood in her stools	**Yes**	**No**	
19. Child age 2 years has had diarrhoea for one week with no blood in her stools	**Yes**	**No**	
20. Child age 18 months has had a low fever (not very hot) for 2 weeks	**Yes**	**No**	
21. Child in a malaria area has had fever and vomiting (not everything) for 3 days	**Yes**	**No**	
22.Child age 19 months has had diarrhoea for 14 days; his mother has HIV; child has not tested for HIV	**Yes**	**No**	
23. Child age 9 months has coughed for 10 days; she is breastfed; her parents have HIV; child has not tested for HIV	**Yes**	**No**	

Exercise: Decide on and record the treatment and advice for a child at home

Jenna Odon, age 6 months, has visited the community health worker.

1. Use the information on the child's recording form on the next page to complete the rest of the form. Tick [✔] the signs that Jenna has.
   a. Decide whether Jenna has fast breathing.
   b. Identify danger signs, if any, and other signs.
2. Decide to refer or treat Jenna. Tick [✔] the box at the bottom of the form to indicate your decision.
3. Decide on treatment.
   a. Tick [✔] the treatment you would give the child. *Note: The result of the RDT was positive. Select the medicine to give and the dose.*
   b. How many doses should you send home with the caregiver?
   c. Decide on the advice on home care to give the caregiver. Tick [✔] the advice.
   d. At birth, Jenna received her BCG+HepB Birth and OPV0 vaccines. At six and 10 weeks of age, Jenna had her full series of vaccines, but since then she has not received any vaccines. Indicate on the form what vaccines Jenna received. When should she go for the next vaccines?
   e. Indicate when the child should come back for a follow-up visit.
4. Do not complete item 7, the note on the follow-up visit that will happen later.
5. Make sure that you have recorded all the decisions on the recording form.

When everyone is finished, the group will discuss this case.

Sick Child Recording Form

(for community-based treatment of child age 2 months up to 5 years in high HIV or TB setting)

Date: Date/Month/20..... CHW: .....

Child's name: First ..... Jenna ..... Family ..... Odon ..... Age: ..... 0 ..... Years/ ..... 6 ..... Months Boy/(Girl)

Caregiver's name: ..... Peter Odon ..... Relationship: Mother/(Father)/Other: .....

Address, Community: ..... Bird Creek Road .....

1. Identify problems

	ASK and LOOK	Any DANGER SIGN	SICK but NO Danger Sign?
	ASK: What are the child's problems? If not reported, then ask to be sure. YES, sign present → Tick ☑ NO sign → Circle ■		
☑	■ Cough? IF YES, for how long? 3 days	☐ Cough for 14 days or more	
☐	■ Diarrhoea (3 or more loose stools in 24 hrs)? IF YES, for how long? ..... days.	☐ Diarrhoea for 14 days or more	☐ Diarrhoea (less than 14 days AND no blood in stool)
☐	■ IF DIARRHOEA, blood in stool?	☐ Blood in stool	
☑	■ Fever (reported or now)? If yes, started 2 days ago.	☐ Fever for last 7 days or more	☑ Fever (less than 7 days) in a malaria area
☐	■ Convulsions?	☐ Convulsions	
☐	■ Difficulty drinking or feeding? IF YES, ☐ not able to drink or feed anything?	☐ Not able to drink or feed anything	
☑	■ Vomiting? IF YES, ☐ vomits everything?	☐ Vomits everything	
☐	■ Has HIV?	☐ Has HIV and any other illness	
☐	■ At risk of HIV because ☐ One or both parents have HIV and child has not tested for HIV? or ☐ Parents' current HIV status is unknown?		☐ One or both parents have HIV and child has not tested for HIV ☐ Parents' current HIV status is unknown
☑	■ Lives in a household with someone who is on TB treatment?		☑ Lives with someone on TB treatment
	LOOK:		
☐	■ Chest indrawing? (FOR ALL CHILDREN)	☐ Chest indrawing	
☐	IF COUGH, count breaths in 1 minute: ..... breaths per minute (bpm) ■ Fast breathing: Age 2 months up to 12 months: 50 bpm or more Age 12 months up to 5 years: 40 bpm or more		☐ Fast breathing
☐	■ Unusually sleepy or unconscious?	☐ Unusually sleepy or unconscious	
☐	For child 6 months up to 5 years, MUAC strap colour: red..... yellow..... green.... ☑	☐ Red on MUAC strap ☐ Yellow on MUAC strap and has HIV	☐ Yellow on MUAC
☐	■ Swelling of both feet?	☐ Swelling of both feet	
		↓	↓
	2. Decide: Refer or treat child (tick decision)	☐ If ANY Danger Sign, REFER URGENTLY to health facility	☑ If NO Danger Sign, treat at home and advise caregiver

Child's name: Jenna Odon Age: 6 months

3. Refer or treat child (tick treatments given and other actions)

If any danger sign, REFER URGENTLY to health facility:			If no danger sign, TREAT at home and ADVISE caregiver:
ASSIST REFERRAL to health facility: ☐ Explain why child needs to go to health facility. GIVE FIRST DOSE OF TREATMENT:			
☐ If Diarrhoea	☐ If child can drink, begin giving ORS solution right away, as much as the child will take until departure. Give caregiver extra ORS solution to continue giving on the way.	☐ If Diarrhoea (less than 14 days AND no blood in stool)	☐ Give ORS. Help caregiver give child ORS solution in front of you until child is no longer thirsty. ☐ Give caregiver 2 ORS packets to take home. Advise to give as much as child wants, but at least 1/2 cup ORS solution after each loose stool. ☐ Give zinc supplement. Give 1 dose daily for 10 days: ☐ Age 2 months up to 6 months—1/2 tablet (total 5 tabs) ☐ Age 6 months up to 5 years—1 tablet (total 10 tabs) Help caregiver to give first dose now.
☐ If Fever AND ☐ Convulsions or ☐ Unusually sleepy or unconscious or ☐ Not able to drink or feed anything or ☐ Vomits everything --- ☐ If Fever AND danger sign other than the 4 above	☐ Give rectal artesunate suppository (100 mg) ☐ Age 2 months up to 3 years— 1 suppository ☐ Age 3 years up to 5 years— 2 suppositories --- ☐ Give first dose of oral antimalarial AL. ☐ Age 2 months up to 3 years—1 tablet ☐ Age 3 years up to 5	☑ If Fever (less than 7 days) in a malaria area	☑ Do a rapid diagnostic test (RDT). ☑ Positive __Negative ☐ If RDT is positive, give oral antimalarial AL (Artemether-Lumefantrine). Give twice daily for 3 days: ☑ Age 2 months up to 3 years—1 tablet (total 6 tabs) ☐ Age 3 years up to 5 years—2 tablets (total 12 tabs) Help caregiver give first dose now. Advise to give 2nd dose after 8 hours, and to give dose twice daily for 2 more days.
☐ If Chest indrawing, or ☐ Fast breathing	☐ If child can drink, give first dose of oral antibiotic (amoxicillin tablet—250 mg) ☐ Age 2 months up to 12 months—1 tablet ☐ Age 12 months up to 5 years—2 tablets	☐ If Fast breathing	☐ Give oral antibiotic (amoxicillin tablet—250 mg). Give twice daily for 5 days: ☐ Age 2 months up to 12 months—1 tablet (total 10 tabs) ☐ Age 12 months up to 5 years—2 tablets (total 20 tabs) Help caregiver give first dose now.
		☐ If at risk of HIV	☐ Advise caregiver to take the child for HIV test soon, and, if parents' HIV status is not known, advise the mother and father to test for HIV also.
		☑ If living in household with someone on TB treatment	☑ Advise caregiver to take the child soon for TB screening and TB preventive medicine.
☐ For any sick child who can drink, advise to give fluids and continue feeding. ☐ Advise to keep child warm, if child is NOT hot with fever. ☐ Write a referral note. ☐ Arrange transportation, and help solve other difficulties in referral. ☐ FOLLOW UP child on return at least once a week until child is well.		☐ If Yellow on MUAC strap (no HIV)	☐ Counsel caregiver on feeding or refer the child to a supplementary feeding programme, if available.
		☑ For ALL children treated at home, advise on home care	☑ Advise caregiver to give more fluids and continue feeding. ☑ Advise on when to return. Go to nearest health facility immediately or if not possible return if child ☐ Cannot drink or feed ☐ Becomes sicker ☐ Has blood in the stool ☑ Advise caregiver on use of a bednet (ITN). ☑ Follow up child in 3 days (schedule appointment in item 6 below)

4. CHECK VACCINES RECEIVED

(tick ☐ vaccines completed)

Advise caregiver, if needed:

WHEN and WHERE is the next vaccine to be given?

5. If any OTHER PROBLEM or condition you cannot treat, refer child to health facility, write referral note.

Describe problem:

Age	Vaccine	Date given
Birth	☑ BCG + HepB Birth ☑ OPV0	
6 weeks	☑ DTP/Hib1/HepB1 ☑ OPV1 ☑ Rota1 ☑ PCV1	
10 weeks	☑ DTP/Hib2/HepB2 ☑ OPV2 ☑ Rota2 ☑ PCV2	
14 weeks	☐ DTP/Hib3/HepB3 ☐ OPV3 ☐ Rota3 ☐ PCV3	
9 months	☐ MCV1	
18 months	☐ DTP + MCV2	

6. When to return for FOLLOW UP (circle): Monday Tuesday Wednesday Thursday Friday Saturday Sunday

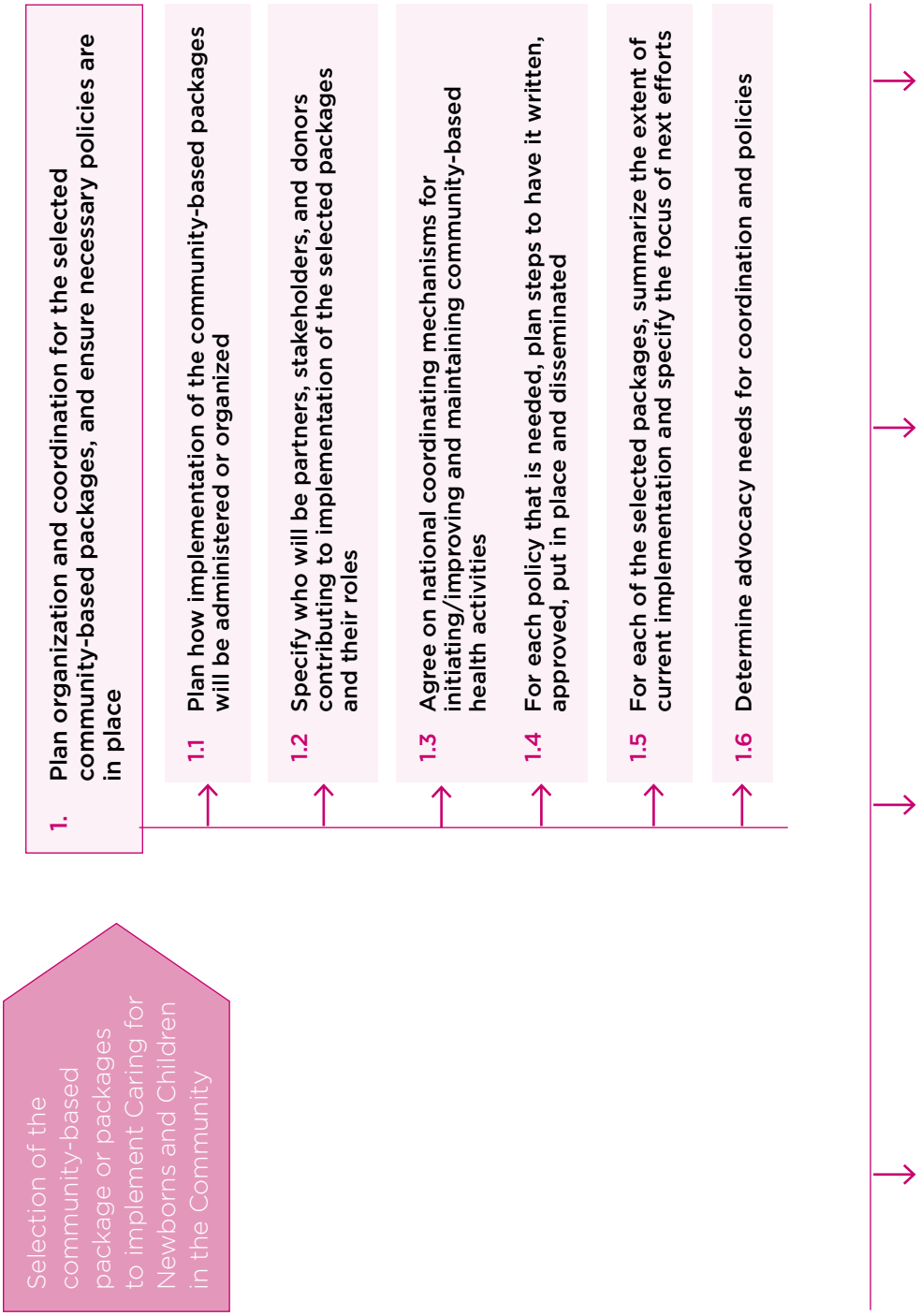
7. Note on follow up:

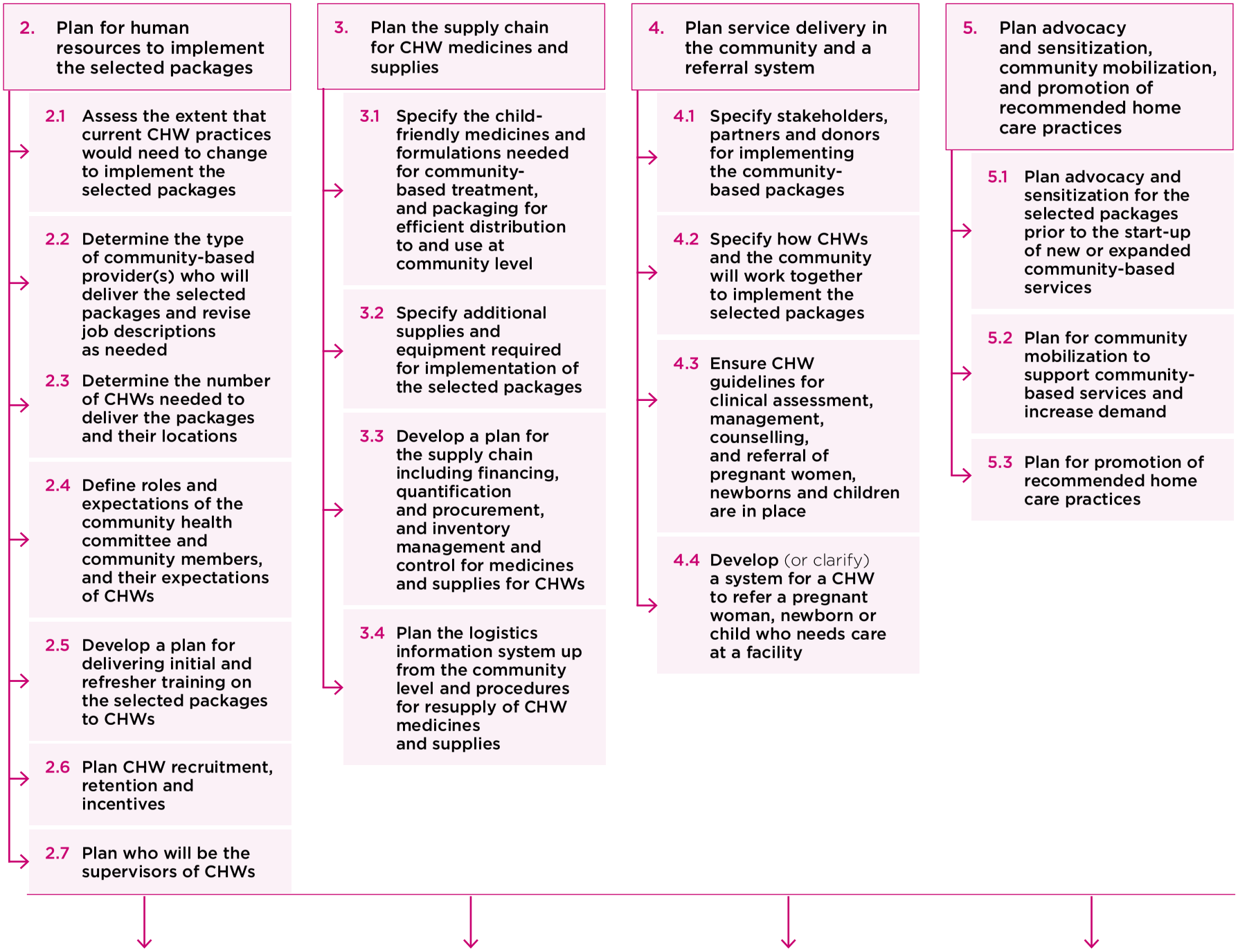
☐ Child is better—continue to treat at home. Day of next follow up: _____.

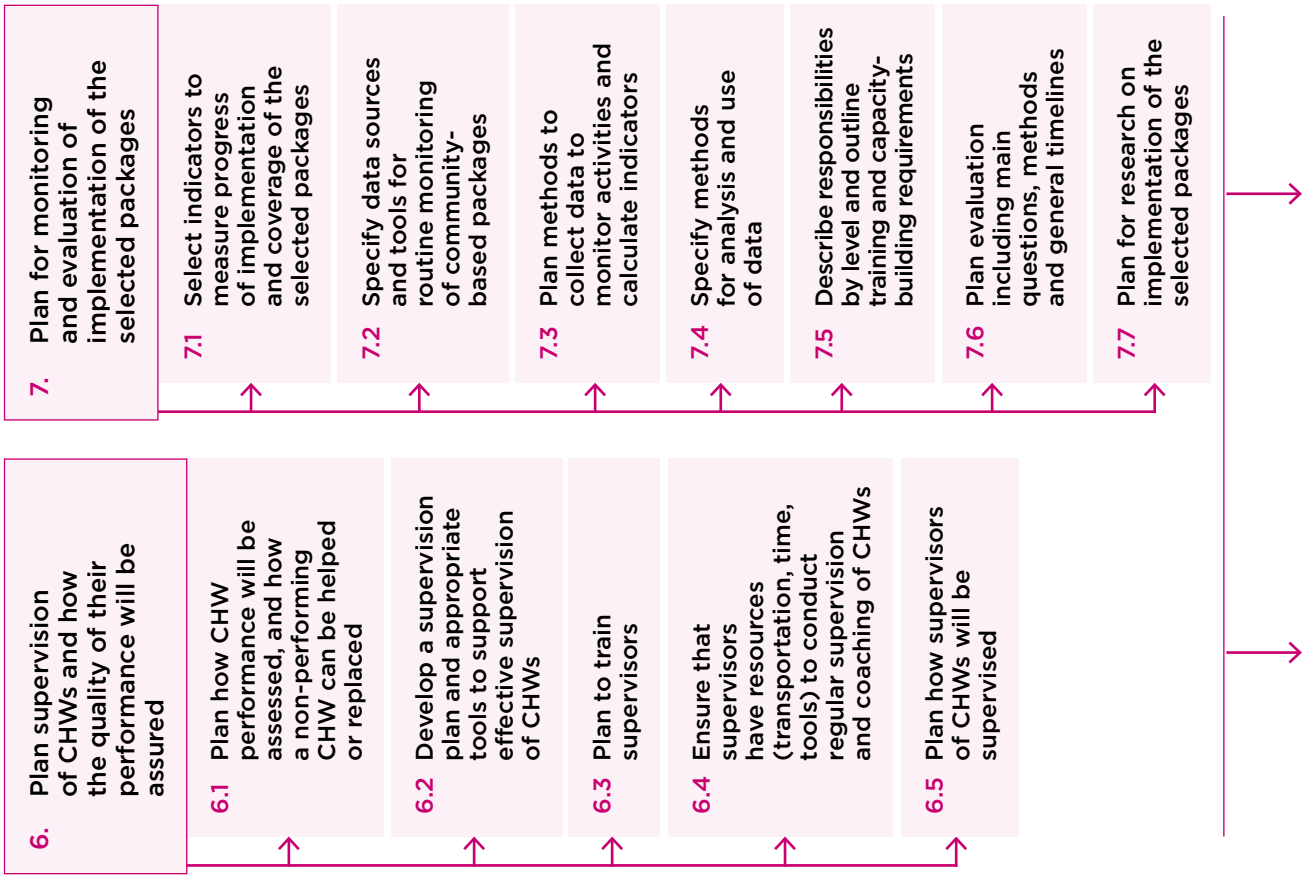
☐ Child is not better—refer URGENTLY to health facility.

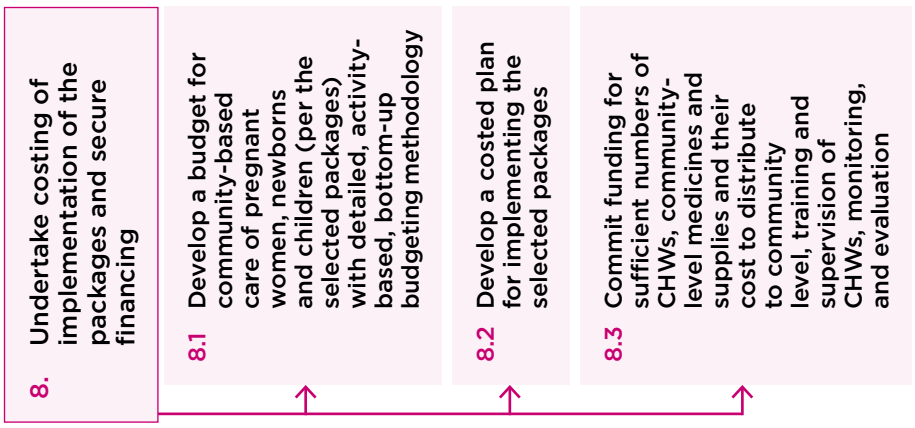
☐ Child has danger sign—refer URGENTLY to health facility.

Annex E: Flowchart for Planning Community-level Implementation of the Selected Packages




2. Plan for human resources to implement the selected packages
2.1 Assess the extent that current CHW practices would need to change to implement the selected packages
2.2 Determine the type of community-based provider(s) who will deliver the selected packages and revise job descriptions as needed
2.3 Determine the number of CHWs needed to deliver the packages and their locations
2.4 Define roles and expectations of the community health committee and community members, and their expectations of CHWs
2.5 Develop a plan for delivering initial and refresher training on the selected packages to CHWs
2.6 Plan CHW recruitment, retention and incentives
2.7 Plan who will be the supervisors of CHWs
3. Plan the supply chain for CHW medicines and supplies
3.1 Specify the child-friendly medicines and formulations needed for community-based treatment, and packaging for efficient distribution to and use at community level
3.2 Specify additional supplies and equipment required for implementation of the selected packages
3.3 Develop a plan for the supply chain including financing, quantification and procurement, and inventory management and control for medicines and supplies for CHWs
3.4 Plan the logistics information system up from the community level and procedures for resupply of CHW medicines and supplies
4. Plan service delivery in the community and a referral system
4.1 Specify stakeholders, partners and donors for implementing the community-based packages
4.2 Specify how CHWs and the community will work together to implement the selected packages
4.3 Ensure CHW guidelines for clinical assessment, management, counselling, and referral of pregnant women, newborns and children are in place
4.4 Develop (or clarify) a system for a CHW to refer a pregnant woman, newborn or child who needs care at a facility
5. Plan advocacy and sensitization, community mobilization, and promotion of recommended home care practices
5.1 Plan advocacy and sensitization for the selected packages prior to the start-up of new or expanded community-based services
5.2 Plan for community mobilization to support community-based services and increase demand
5.3 Plan for promotion of recommended home care practices


6. Plan supervision of CHWs and how the quality of their performance will be assured
6.1 Plan how CHW performance will be assessed, and how a non-performing CHW can be helped or replaced
6.2 Develop a supervision plan and appropriate tools to support effective supervision of CHWs
6.3 Plan to train supervisors
6.4 Ensure that supervisors have resources (transportation, time, tools) to conduct regular supervision and coaching of CHWs
6.5 Plan how supervisors of CHWs will be supervised
7. Plan for monitoring and evaluation of implementation of the selected packages
7.1 Select indicators to measure progress of implementation and coverage of the selected packages
7.2 Specify data sources and tools for routine monitoring of community-based packages
7.3 Plan methods to collect data to monitor activities and calculate indicators
7.4 Specify methods for analysis and use of data
7.5 Describe responsibilities by level and outline training and capacity-building requirements
7.6 Plan evaluation including main questions, methods and general timelines
7.7 Plan for research on implementation of the selected packages


8. Undertake costing of implementation of the packages and secure financing
8.1 Develop a budget for community-based care of pregnant women, newborns and children (per the selected packages) with detailed, activity-based, bottom-up budgeting methodology
8.2 Develop a costed plan for implementing the selected packages
8.3 Commit funding for sufficient numbers of CHWs, community-level medicines and supplies and their cost to distribute to community level, training and supervision of CHWs, monitoring, and evaluation

Annex F: Example Outline of an Implementation Plan

Plan for Developing and Strengthening Community Health Workers to Deliver *Caring for Newborns and Children in the Community* at Scale

A. Executive summary

B. Situation description

Current maternal, newborn and child mortality

Intervention coverage

Implementation strength (availability/access, quality, knowledge/acceptance of/demand for interventions, social and policy environment)

Current community-based interventions and cadres of community-based workers

Significant strengths and weaknesses of the health system components (listed 1 through 8 below) that affect plans for implementing the packages

C. Community-based packages of interventions to be implemented

Process used to make selection

Rationale for selection of the packages that will be implemented

D. Implementation Plan

1. Organization and coordination

1.1 How the community-based implementation of the selected packages will be administered or organized

MOH leadership, different entities involved and the role of each

1.2 Partners, stakeholders, and donors who will contribute to implementation of the packages

1.3 National coordinating mechanisms for initiating and maintaining community-based health activities

Coordinating committee: terms of reference, membership, meetings

Technical advisory group: terms of reference, membership, meetings

1.4 Policies needed and steps to have each written, approved and put in place

Relevant policies in place

Policies needed; plans for writing them, consensus meetings, approval

1.5 For each package, summary of the extent of current implementation and the focus of next efforts (planning, introduction, or scale-up)

1.6 Needs for advocacy (to whom and purpose/content)

2. Human resources to implement the packages

2.1 For each selected package, description of the extent that current practices will need to change

2.2 Cadre(s) **of community-based provider who will deliver the packages and their tasks**

Tasks for CHWs and reasons this cadre(s) is suitable

Revised job description(s)

2.3 The number of CHWs needed and their locations

Number of hours needed to deliver the package(s) in a community

Assumptions involved in calculations (birth rate; volunteer vs. paid CHWs; packages to be implemented)

Locations (communities) where the packages will be implemented

By geographic area, total CHWs needed; number currently in place; number to recruit; number to be trained and supplied in the district

2.4 Roles and expectations of the community health committee and community members and their expectations of CHWs

Who CHW will be accountable to in the community (e.g. community health committee)

How communities will participate in selecting CHW candidates

What community will provide to support the CHW

What the community expects of the CHW

What the CHW expects of the community

2.5 Plans for delivering initial and refresher training to CHWs

Skills needed; WHO-UNICEF training materials and job aids available; plans to adapt as needed

Training plan (methods, materials, sequencing) to be used

Process for training: initial training, certification, deployment, follow-up after training, periodic refresher training

Training cascade for initial training courses and certification: Numbers of participants and schedule of training courses for master trainers; then for regional or district training of trainers; then for health facility staff who will be CHW supervisors and will conduct training for CHWs; number of CHWs to be trained in each district/ area, and schedule of courses

- Criteria for each level of trainee
- Number of trainees to be trained in each step
- Type of venue for each training course
- Ratio of trainer to trainee with number of each per round of training courses
- Number of times each training course will be conducted (during the year)
- Duration of each training course
- Training materials , equipment and supplies (and quantities of each of these) that will be needed at each level

Training schedule with dates, venues for each training course, trainers, and the CHWs to attend

Plans for follow-up after training; plans for periodic training

2.6 Plans for recruitment, retention and incentives for CHWs

Criteria for recruitment

Plans for recruitment of replacements

Incentives and strategies to retain CHWs

2.7 Cadre(s) who will be the supervisors of CHWs

Reasons for selection of cadre(s) (e.g. skills and availability to supervise)

Supervisory tasks to be done by different cadres of supervisors and frequency

Number of supervisors needed and locations

3. Supply chain for CHW medicines and supplies

3.1 List of child-friendly medicines and formulations needed for community-based treatment, and description of packaging needed for efficient distribution to and use at community level

3.2 Additional supplies and equipment required for implementation of the packages

Supplies and equipment to be supplied by the health supply chain

Other supplies and equipment to be supplied by others (what and by whom)

3.3 Description of the supply chain for medicines and supplies for CHWs

Financing: cost recovery, at what levels, other financing

Process and schedule for quantification and procurement

Forecasting and supply plan

Procurement: process and schedules; sharing of information among partners

Costs to distribute to community level

Inventory management and control: Plans for resupply of CHWs, storage at community level

3.4 Description of the logistics information system up from the community level and procedures for resupply of CHW medicines and supplies

Resupply points, how medicines will be distributed,

Resupply procedures for CHWs, stock register for CHWs

Logistics information system to provide information on use and need to storekeepers

4. Service delivery in the community and referral system

4.1 Stakeholders, partners and donors who will be involved in implementing the community-based packages

4.2 How CHWs and the community will work together to implement the selected packages

Roles for the community

How different cadres of CHWs will work together (if relevant)

How, when and where CHWs will deliver services

4.3 Plans for completing CHW guidelines for clinical assessment, management, counselling, and referral of pregnant women, newborns and children; and for putting them in place

- Materials for training courses
- Technical guidance: manuals for CHWs
- Job aids (how adapted for CHWs literacy levels if needed)
- Registers
- Mother reminder cards
- Referral forms
- How materials will be produced, stored, distributed

4.4 Description of the system for a CHW to refer a pregnant woman, newborn or child who needs care at a facility

Referral criteria, referral notes, CHW tasks to facilitate a referral

Designation of facilities to which CHWs should refer

Expectations and procedure for feedback on referral

5. Advocacy and sensitization, community mobilization, and promotion of recommended home care practices

5.1 Plans for advocacy and sensitization at all relevant levels prior to the start-up of new or expanded community-based services

Plans to advocate at national level to support policies, increase budget, obtain endorsement from influential groups; materials needed, activities planned

Plans for districts to sensitize hospitals and health facilities about CHW services planned and benefits to the facilities of CHW's work; materials needed, activities planned

Plans for health facilities to sensitize communities on the purpose and availability of CHW services and encourage their use; materials needed, activities planned

5.2 Plans for community mobilization to support community-based services and increase demand

Plans for community dialogue and engagement of community health committees in planning and managing the community service

Expected roles for community health committees

Whether and how CHWs will be involved in community mobilization

5.3 Plans for promotion of recommended home care practices

Plans for translation and adaptation of counselling cards for the packages to be delivered

Plans for development of other communications with families (using channels other than CHW contacts)(e.g. posters for display at health facilities or public places, songs or messages for mass media); plans for pre-testing materials and messages

6. Supervision of CHWs to assure the quality of their performance

6.1 How CHW performance will be assessed, and how a non-performing CHW can be helped or replaced

Plan supervisory methods (including direct observation)

Plans for how supervisors will identify performance gaps and attempt to remedy them

Plans for formal performance appraisal including criteria for sufficient performance, methods for conducting, and frequency, and consequences of good and insufficient performance

Procedures for coaching and supporting a CHW to improve performance

Procedures for replacing a non-performing CHW (after coaching and support have not remedied the problem) or filling a CHW's empty post

6.2 The supervision plan including appropriate tools (e.g. checklists) **to support effective supervision of CHWs**

Number of supervisors that will be needed, based on the number of CHWs and their tasks and locations

How and where supervision will be done

What steps will be included in the supervision contact and frequency

How frequently the supervision will occur

Supervision checklists (different ones for different times or purposes)

Clinical supervision approach to assess and sustain complex case management skills

6.3 Plan for training supervisors

Skills required for all supervisors (clinical, counselling, and supervisory)

Plans for conducting their training (methods, content, trainers, scheduling)

6.4 Plans to provide supervisors with the resources (transportation, time, tools) **to conduct regular supervision and coaching of CHWs**

Resources required for supervisors to conduct supervision and how they will be provided

6.5 Plans for supervising the supervisors (tasks to be checked, methods, who will carry out the supervision, frequency, consequences of good or insufficient performance)

7. Monitoring and evaluation of implementation of the packages

7.1 Indicators that will be used to measure progress of implementation

List of coverage indicators to be measured

List of indicators of implementation strength of community-level packages

7.2 Data sources and tools that will be used for routine monitoring of community-based packages

Plans for development and testing of routine registers that will be completed by CHWs implementing the packages

CHW and health facility reports that summarize data on CHW activities

Forms or checklists that will be completed by supervisors of CHWs to collect monitoring data and to summarize it

7.3 Methods that will be used to collect data to monitor activities and calculate indicators

Routine sources and innovative approaches that will be used to collect data on activities

Periodic sources planned such community surveys, CHW surveys, document reviews, key informant interviews

Procedures that will be used to assure data quality especially through assessment of data quality at lower levels

7.4 Methods that will be used for analysis and how data will be used

How and at what levels data will be compiled

How data will be analyzed (manual calculation, electronic analysis, displays of results)

How data will be shared with stakeholders

7.5 Responsibilities for monitoring and evaluation at each level; training and capacity-building requirements for each level and plans for filling them

How the capacity of lower level staff (CHWs, CHW supervisors and first-level facility staff) will be developed or improved so that they can do data collection, compilation, analysis and use

7.6 Plans for evaluation including main questions, methods, and general timelines

7.7 Plans for research on implementation of the packages

Administrative mechanism (e.g. national task force) for setting research priorities

How research will be coordinated

8. Costing and financing of implementation of the packages

8.1 Budget for community-based care of pregnant women, newborns and children (per the selected packages) (or the process that will be used to develop the budget using a detailed, activity-based, bottom-up budgeting methodology)

Plan for developing budget along with implementation plans; relevant actors to be included; activities to be budgeted; standard budget categories needed

8.2 A costed plan for implementing the selected packages

How the plans will be costed; by whom, for what time period

Unit costs that will be determined

8.3 Funding committed for implementation (for sufficient numbers of CHWs, community-level medicines and supplies and their cost to distribute to community level, training and supervision of CHWs, monitoring, and evaluation)

Sources of funding both confirmed and potential; amounts of funding available and to what it must be/will be applied

Gaps in funding and plans to mobilize resources to fill those gaps

How disbursements will be tracked to adjust spending as necessary

Annex G: Checklist of progress initiating and implementing packages in Caring for Newborns and Children in the Community

Note that this annex contains 3 tables: I. Planning phase, II. Introduction phase and III. Scale-up phase. Each table lists benchmarks appropriate to activities during that phase.

I. Planning Phase

Component	1) Caring for the Newborn at Home	2) Caring for Child's Healthy Growth and Development	3) Caring for the Sick Child in the Community
1. Organization, coordination and policy setting	☐ Partners mapped ☐ Technical advisory or working group established ☐ Needs assessment and situation analysis conducted ☐ Stakeholder meetings held to define roles and discuss policies ☐ National policies and guidelines reviewed ☐ Criteria established for selection of communities in sequenced introduction		
2. Human resources	☐ Roles of CHWs, communities and referral service providers defined by communities and MOH ☐ Criteria and procedure for CHW recruitment defined by communities and MOH ☐ Training materials for selected packages adapted, translated, as needed ☐ Training plan developed for CHW training and refreshing (modules, training of trainers, monitoring and evaluation) ☐ CHW retention strategies, incentive/ motivation plan developed		

Component	1) Caring for the Newborn at Home	2) Caring for Child's Healthy Growth and Development	3) Caring for the Sick Child in the Community
3. Supply chain management	☐ Equipment for assessment of newborn by CHWs quantified and put into procurement plan ☐ System specified for resupply of equipment when needed		☐ Paediatric-appropriate medicines (and presentations) and supplies (i.e. RDTs) included in essential medicines list and consistent with national policies ☐ Quantifications completed for medicines and supplies ☐ Procurement and supply plan developed for medicines and supplies
	☐ Community level supply system design completed, including identification of inventory control mechanism, and development of simplified stock management procedures and records for CHWs ☐ Plan completed for production and supply of forms and registers for CHWs ☐ Plan completed for providing replacement job aids to CHWs, supervisors, health facilities staff		
4. Service delivery and referral			☐ Plan developed for rational use of medicines (and RDTs)
	☐ Guidelines for delivery of selected packages developed and approved by TAG and MOH ☐ Referral and counter referral system described in standard guidelines		
5. Advocacy and sensitization, community mobilization, promotion of home care practices	☐ Advocacy materials for the packages (policy briefs, sensitization materials, hand-outs on packages) developed for policy makers, local leaders, health providers, CHWs, and communities ☐ Steering committee sensitizes districts on policy and plan to roll out the packages ☐ Districts visit to sensitize and teach health facility staff to manage and support CHWs ☐ Plans made for community mobilization and participation and prepared to distribute to health facilities, community health committees, CHWs; materials (training on group discussions, job aids, etc.) developed ☐ Promotion of home care practices planned, targeting the community and other groups, using variety of channels		

Component	1) Caring for the Newborn at Home	2) Caring for Child's Healthy Growth and Development	3) Caring for the Sick Child in the Community
6. Supervision and quality assurance	☐ Supervision checklists and other tools developed (for quality assurance of each selected package and with indicators relevant to selected packages) ☐ Supervision plan established ☐ Supervisors trained in supervisory skills and equipped with supervision tools ☐ Supervisors trained in CHW tasks/skills		
7. Monitoring, evaluation and research	☐ Indicators specified for measurement by HMIS and by household/community surveys ☐ Monitoring framework developed for all components with information sources specified ☐ Standardized registers and report documents developed (to collect indicator data for all selected packages) ☐ Research agenda for community-based packages documented and circulated		
8. Budgeting, costing and financing	☐ Costing estimates made based on all service requirements ☐ Finances secured for medicines, supplies, and all programme costs		

II. Introduction Phase

Component	1) Caring for the Newborn at Home	2) Caring for Child's Healthy Growth and Development	3) Caring for the Sick Child in the Community
1. Organization, coordination and policy setting	☐ MOH leadership established ☐ Policy discussions (if necessary) completed		
2. Human resources	☐ Role and expectations of CHW made clear to community and health facility providers ☐ CHWs recruited with community participation ☐ CHWs trained with facility staff/supervisor's participation ☐ CHWs deployed post training with medicines/supplies ☐ CHW retention strategies, incentive/ motivation plan implemented and made clear to CHWs; community plays role in providing rewards; MOH provides support		

Component	1) Caring for the Newborn at Home	2) Caring for Child's Healthy Growth and Development	3) Caring for the Sick Child in the Community
3. Supply chain management	☐ Equipment procured consistent with policies and plan		☐ Medicines and supplies procured consistent with policies and plan ☐ Logistic system to maintain quantity and quality of products implemented
	☐ CHWs trained and supervised on resupply process and procedures ☐ Registers, forms and reports printed and distributed ☐ Resupply procedures implemented by CHWs ☐ Supply systems implemented and monitored		
4. Service delivery and referral	☐ Pregnancy and postnatal visits made by CHWs	☐ Home visits to counsel on child care practices made by CHW	☐ Management of sick children by CHWs with rational use of medicines and diagnostics
	☐ Guidelines reviewed and modified based on early implementation ☐ Referral system implemented: Community information on location of referral facility is clear and health personnel clear on their roles		
5. Advocacy and sensitization, community mobilization, promotion of home care practices	☐ Community mobilization plans implemented ☐ Promotional materials (for channels other than CHWs) produced and implemented ☐ CHWs promote home care practices /dialogue with parents and community members about (packages) ☐ Resistance to implementation analysed and addressed through sensitization, advocacy		
6. Supervision and quality assurance	☐ Supervision every 1-3 months, with review of registers, check of supplies, problem solving ☐ Supervisor visits community, observes home visits and care of sick children, coaches ☐ Supervisors report on supervision contacts, assess and compile data ☐ Supervision frequency and tasks are part of supervisor's performance review ☐ On-going training of new/replacement supervisors in supervisory skills and CHW tasks/skills		
7. Monitoring, evaluation and research	☐ Monitoring framework tested & modified accordingly ☐ Registers and reporting documents reviewed ☐ CHWs trained to fill registers and are recording data (pregnancy and newborn register; under 5 register; sick child register) ☐ CHW data collected, compiled in reports and received by district on schedule ☐ Supervisors and monitoring and evaluation staff trained on framework and use of data		

Component	1) Caring for the Newborn at Home	2) Caring for Child's Healthy Growth and Development	3) Caring for the Sick Child in the Community
8. Budgeting, costing and financing	☐ Financing gap analysis completed ☐ MOH funds invested		

III. Scale-up Phase

Component	1) Caring for the Newborn at Home	2) Caring for Child's Healthy Growth and Development	3) Caring for the Sick Child in the Community
1. Organization, coordination and policy setting	☐ MOH leadership institutionalized ☐ Stakeholder meetings regularly held		
2. Human resources	☐ Process in place for discussion and update of CHW role/expectations ☐ Initial training conducted regularly for CHWs in additional districts/areas of implementation on tasks/skills to deliver packages and on resupply process and procedures ☐ Initial training conducted regularly for replacement CHWs ☐ On-going (refresher) training provided to update CHWs on new skills, reinforce initial training ☐ CHW retention strategies reviewed and revised as necessary ☐ Advancement, promotion offered to CHWs who express desire		
3. Supply chain management	☐ Distribution of equipment, medicines and supplies extended to additional districts/areas of implementation ☐ Stocks of equipment, medicines and supplies at all levels monitored to ensure continuous availability ☐ Inventory and resupply system for equipment, medicines, supplies implemented, adapted as needed until effective ☐ No substantial stock-out periods ☐ Consumption data available routinely for monitoring and quantification ☐ Stocks of registers and referral forms available		
4. Service delivery and referral	☐ Timely receipt of 2 pregnancy visits is the norm ☐ First postnatal visit within 24 hours of birth is the norm	☐ CHWs making 3 home visits to caregivers of infants age 1 to 6 months	☐ Timely receipt of sick child services is the norm ☐ Guidelines reviewed and modified by experience
	☐ CHWs routinely referring and counter referring, with patient compliance, information flow from facility back to CHW		

Component	1) Caring for the Newborn at Home	2) Caring for Child's Healthy Growth and Development	3) Caring for the Sick Child in the Community
5. Advocacy and sensitization, community mobilization, promotion of home care practices	☐ Advocacy and sensitization to increase support from national budget, donors ☐ Promotion of recommended home care practices by CHW and through other channels reviewed and refined/scaled up based on monitoring and evaluation ☐ Community mobilization plans implemented in additional districts/areas of implementation		
6. Supervision and quality assurance	☐ CHW supervision includes observation of routine newborn care home visit	☐ CHW supervision includes observation of counselling on care for healthy growth and development	☐ Quarterly supervision includes observation of a sick child visit and clinical mentoring to maintain skills
	☐ CHWs routinely supervised for quality assurance and performance ☐ Supervisors trained and implementing supervisory visits and data collection in additional districts/areas of implementation ☐ Supervisors' performance assessed and feedback given ☐ On-going training of new/replacement supervisors in supervisory skills and CHW tasks/skills ☐ Data from reports and community feedback used for problem-solving and coaching		
7. Monitoring, evaluation and research	☐ Monitoring & evaluation on-going through HMIS data ☐ Yearly evaluation includes individual performance and coverage or monitoring data ☐ Implementation research and external evaluations performed as necessary		
8. Budgeting, costing and financing	☐ Long-term strategy developed for sustainability and financial viability ☐ MOH investment sustained ☐ Updating of costing on a regular (i.e. yearly) basis		

Annex H: Estimating how many CHWs will be needed to deliver the packages

Worksheet 1: Simplified calculations of time required for CHWs to deliver the Newborn and Healthy Child packages in a community

Assumptions:

- In this country a community is considered to be about _____ total population.
- The crude birth rate is _____/1000. This means there will be about _____ newborns per year which also means about _____ births a month in a community.
- The proportion of the total population that is under 5 years is _____%. So there will be at any point in time about _____ children under age 5 years.
- Travel to and from each home requires, on average, _____hour.
- In the two WHO-UNICEF packages in *Caring for Newborns and Children in the Community* which are recommended for **all communities,** the recommendation is that a CHW makes the following contacts:
  - As described in *Caring for the Newborn at Home*:
    - ↗ 2 home visits to each pregnant woman
    - ↗ 3 home visits to each newborn
    - ↗ 2 additional home visits to newborns who have low birth weight (about _____% of the _____ newborns = _____ newborns with LBW)

      This means that in this community _____ mothers will require home visits during pregnancy, and _____ newborns will require home visits during the neonatal period.
  - As described in *Caring for the Child's Healthy Growth and Development*:
    - ↗ 3 home visits to counsel the caregiver of each newborn at 1, 3, 5 months of age.

      In this community there will be _____ infants that will require home visits at 1, 3 and 5 months of age.
    - ↗ Periodic meetings with community members to counsel on care of the child (e.g. _____ per month)

Calculation of CHW contacts per year to deliver the Newborn and Healthy Child packages:

1. HOME VISITS to pregnant women and newborns

_____ pregnant women require 2 home visits each = pregnant women x 2 = _____ visits

_____ newborns require 3 home visits each = newborns x 3 = visits

_____% of newborns may have LBW and require 2 additional home visits each = _____newborns x 2 visits = visits

Total home visits to pregnant women and newborns = _____ visits

2. HOME VISITS for counselling caregivers of infants

infants x 3 home visits (at 1, 3, 5 months of age) = visits

Total home visits to caregivers of infants: _____ visits

3. MEETINGS to counsel community members

_____ meetings per month for a year = _____ meetings

CALCULATION OF CHWs TIME TO DELIVER THE TWO PACKAGES IN THIS COMMUNITY (Newborn and Healthy Child)

Activity	A Number of Contacts	B Time per contact =	C Time per year (A x B)	D Time per week (C ÷ 52)
6. Home visits to pregnant woman/newborn		___hours (including travel time)	___hours	___hours
7. Home visits to caregiver of young infant		___hours (including travel time)	___hours	___hours
8. Meetings		___hours	___hours	___hours
9. Administrative activities (20% time for planning, supplies, supervision, reporting)			___hours*	___hours
10. **TOTAL**			___hours	___hours

* = (Sum of hours in column C above) x 0.20

Statement: In this community of _____ population, approximately _____ CHW hours per year are required to deliver the Newborn and Healthy Child packages, which is about _____ hours per week (_____ ÷ 52 weeks = _____).

Worksheet 2: Simplified calculations of time required for CHWs to deliver the 3 packages in Caring for Newborns and Children in the Community

Assumptions:

- The same assumptions as described in Worksheet 1, plus
- As described in *Caring for the Sick Child in the Community*:
  - Each sick child brought for care will be assessed by the CHW and given treatment and advice on home care or referred.
  - Each sick child should have a follow-up visit in 3 days

  In this community, there are about children under age 5 years.
- Each child under age 5 years will have on average episodes of illness per year
- _____% of these sick children will seek care from a CHW

Calculation of sick child contacts per year:

_____ children under age 5 years will have episodes of illness per child per year =

_____ children x episodes = episodes

_____% of these episodes will seek care from a CHW =

_____ episodes x % = contacts for sick child care

All sick child contacts will be followed up after 3 days = additional contacts

TOTAL SICK CHILD CONTACTS = ___ for initial care **+** ___ for follow-up care **=** ___ **total contacts**

Then add the CHW time for these Sick Child contacts to the CHW time required per year for the Newborn and Healthy Child packages as calculated in Worksheet 1 *(copy values for rows 1–3 from Worksheet 1):*

CALCULATION OF CHW TIME REQUIRED TO DELIVER ALL THREE PACKAGES

Activity	Number of Contacts x	Time per contact =	Time per year	Time per week
Home visit to pregnant woman/newborn		____hours (including travel time)	____hours	____hours
Home visit to caregiver of young infant		____hours (including travel time)	____hours	____hours
Meetings			____hours	____hours
Sick child care (initial and follow up)		____hours (many will come to visit the CHW)	____hours	____hours
Administrative activities (20% time for planning, supplies, supervision, reporting)			____hours*	____hours
TOTAL			____hours	____hours

* = (Sum of hours in column C above) x 0.20

Statement: In this community with ____ population, approximately _ CHW hours per year are required to deliver all 3 packages, which is about __ hours per week.

Worksheet 3: Estimation of the number of CHWs needed in each community to deliver the packages

Assumptions:

- CHWs will devote _____ hours per week to other duties.
- CHWs are expected to work an average of _____ hours per week.

CALCULATION OF CHWS NEEDED IN EACH COMMUNITY

Insert the results from Worksheets 1 and 2 into the table (row a).

	In communities where 2 packages will be implemented	In communities where 3 packages will be implemented
CHW hours required per week to deliver packages	____hours	____hours
CHW hours per week required for other duties	____hours	____hours
Total CHW hours required per week (a + b)	____hours	____hours
Number of hours CHWs are expected to work each week	____hours	____hours
Number of CHWs needed in each community (c ÷ d)	____CHWs	____CHWs

Worksheet 4: Estimation of the number of CHWs needed to deliver selected packages in the next year

Use a map of the area and a list of communities and health facilities to determine the total number of communities and assess their proximity to health facilities. Also use available data and experience to consider the conditions and needs in different communities.

Implementation of *Caring for Newborns and Children in the Community* is planned as follows in the next year:

Of the _____ communities in the_____, _____ lack access to health facilities for sick child care.

In the next year, the community health department will:

- Target _____ communities for implementation of 2 packages: Newborn, and Healthy Child. These communities are listed and marked on the map.

  In these communities, _____ CHWs are needed per community, so _____ CHWs will need to be trained and supported. (_____ communities x _____ CHWS each = _____ CHWs)

- Target _____ communities (that lack access to facility care) for implementation of all 3 packages. These communities are listed and marked on the map.

  In these communities, _____CHWs are needed per community, so _____ CHWs will need to be trained and supported.

  _____ communities x _____ CHWs each = _____ CHWs

_____communities targeted for 2 packages x ____ CHWs each = _____ CHWs

_____ communities targeted for 3 packages x ____CHWs each = _____ CHWs

Total CHWs to be trained and supported = _____ CHWs

Annex I

Worksheet: Estimating Medicine Needs and Costs to Treat Child Diarrhoea

A. Estimate the number of childhood diarrhoea cases that can be treated at first-level health facilities

A-1 Estimate the number of children under age 5 years

population of the region	x	proportion of the population under age 5	=	number of children under age 5 in the region

A-2 Estimate the expected cases of diarrhoea

number of children under age 5 in the region	x	expected cases of diarrhoea per child per year	=	number of childhood diarrhoea cases

_____x _____ = _____

A-3 Estimate the number of childhood diarrhoea cases who will be treated at health facilities

number of childhood diarrhoea cases	x	proportion of all child diarrhoea cases to be treated at first-level health facilities	=	number of childhood diarrhoea cases to be treated at first-level health facilities

A-4 Of the childhood diarrhoea cases to be treated at first-level health facilities, estimate the number that will be given standard case management of diarrhoea (ORS and zinc)

number of childhood diarrhoea cases to be treated at first-level health facilities	x	proportion of cases treated at first-level health facilities that will be treated correctly (with ORS and zinc)	=	number of cases to be given standard case management of diarrhoea (ORS and zinc) at first-level health facilities

A-5 Estimate the number of childhood diarrhoea cases who will be treated by a community health worker (CHW)

number of childhood diarrhoea cases	x	proportion of all child diarrhoea cases to be treated by a CHW	=	number of childhood diarrhoea cases to be treated by a CHW

A-6 Of the childhood diarrhoea cases to be treated by a CHW, estimate the number that will be given standard case management of diarrhoea (ORS and zinc)

_____ number of childhood diarrhoea cases to be treated by a CHW	x	_____ proportion of cases treated by a CHW that will be treated with ORS	=	_____ number of diarrhoea cases to be given ORS by a CHW
_____ number of childhood diarrhoea cases to be treated by a CHW	x	_____ proportion of cases treated by a CHW that will be treated with zinc	=	_____ number of diarrhoea cases to be given zinc by a CHW

B. ESTIMATE QUANTITIES OF MEDICINES NEEDED FOR TREATING DIARRHOEA CASES

For cases of childhood diarrhoea to be given standard case management with ORS and zinc, plan to provide ORS packets, 2 per case, and zinc, one blister of 10 tablets per case.

B-1 Estimate the number of packets of ORS needed to treat childhood diarrhoea cases at health facilities and in the community

(_____ number of cases to be given ORS at a health facility	+	_____) number of cases to be given ORS by a CHW	x	2 packets per case number of diarrhoea cases to be given zinc by a CHW	=	_____ packets of ORS

B-2 Estimate the number of blisters of zinc needed to treat childhood diarrhoea cases at health facilities and in the community

(_____ number of cases to be given zinc at a health facility	+	_____) number of cases to be given zinc by a CHW	x	10 tablets per case number of diarrhoea cases to be given zinc by a CHW	=	_____ tablets of zinc

_____ tablets of zinc	÷	10	=	_____ blisters of zinc tablets

C. ESTIMATE QUANTITY OF MEDICINES TO ORDER AND COST

In column b, enter the required amount of each medicine estimated in section B.

For column c, multiply by 0.5 to estimate the additional amount for reserve stock (for times of unforeseen use such as during epidemics and logistics breakdowns) plus an amount for wastage (due to improper storage or transport, spoilage, etc.)

Record the sum of b + c in column d.

a **Medicine**	b **Estimated amount to treat cases**	c **Proportion added for reserve** (25%) **and wastage** (25%)	d **Amount to order** (b + c)	e **Cost per packet/blister**	f **Total cost**
ORS packets					
Blisters of zinc tablets					

Annex J: Community Health Worker Register: Home Visits to Pregnant Women, Mothers and Newborns

(from *Caring for the Newborn at Home. Each section would begin on a new page.)*

SECTION 1
LIST OF PREGNANT WOMEN AND HOME VISIT RECORD

No	Name of pregnant woman	Age	Address	Expected date of birth (If not known, no. of months pregnant at first visit	Date of home visits during pregnancy		Pregnancy outcome (1= miscarriage, 2= stillbirth, 3= live birth)	Date of pregnancy outcome	Place of birth (1= home, 2= health facility, 3= other)	Birth attendant (1= doctor, nurse or midwife, 2= TBA, 3= other)	Status of mother after birth (1 = alive, 2= dead, 3= not known)
					1st visit	2nd visit					
1											
2											

SECTION 2
LIST OF MOTHERS AND BABIES AND HOME VISIT RECORD

No	Name of mother and baby	Address	Date of birth	Sex of baby	Birth weight (in kg)	Date of home visits after birth			Date of extra home visits for small babies		Status of mother at last visit (1 = alive, 2= dead, 3= not known)	Status of baby at last visit (1 = alive, 2= dead, 3= not known)
						1st visit	2nd visit	3rd visit	1st extra visit	2nd extra visit		
1												
2												

SECTION 3
LIST OF REFERRED PREGNANT WOMEN / MOTHERS

No	Name of woman (and serial number from list of pregnant women)	Date referred	Number of months pregnant/ Number of days after birth	Reason for referral						Woman taken to health facility?
				Bleeding	Severe abdominal pain	Fits	Severe headache	Fever	Fast or difficult breathing	
1										
2										

SECTION 4
LIST OF REFERRED BABIES

No	Name of baby/ mother (and serial number from list of mothers and babies)	Age in days when referred	Reason for referral										Follow-up visit done?	Baby taken to health facility?
			Not able to feed	Fits	Fast breathing	Chest in-drawing	High temperature	Very low temperature	Yellow soles	Movement only on stimulation	Local infection	Weight in red zone		
1														
2														

SECTION 5
CALENDAR FOR SCHEDULING HOME VISITS

JANUARY 2014

Mon	Tue	Wed	Thu	Fri	Sat	Sun
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

(insert 12 months calendar)

Annex K: Sick Child Treatment Register: Example from Zambia

TREATMENT REGISTEIR: ZAMBIA EXAMPLE										
CHW Treatment Register for Children Under Age Five Years (draft October 18, 2010)										
Date	Name	Less than age 2 months ? (Tick)	Village	Age		Sex		Under Five Card Number	Diagnosis	Treatment
				Months	Years	Male	Female			
1	2	3	4	5	6	7	8	9	10	11
Total										

CCM Illnesses																													Remarks
Assessment							Classification						Treatment									Referral			Follow Up				
		MUAC											Amoxycillin			ACT		Zinc		ORS									
Chest Indrawing	Breaths per Minute	Green	Yellow	Rd	Sw,eHing of bo1th fuet	RDT Test Done	Danger sign	RDT + Malaria	Diarrhoea	Fast breathing	Malnutrition	Fever	Less than 2 months	2 Months-12 Months	12 Months-5 Years	2 years-3 Years	3 Yars-5 Years	2 Months-6 Months	6 Months-5 Years		Treated within 24 hours	Referal recommended	Referral Completed	Feedback from facility	Follox up made	Correct treatment on follow up				
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38			39

Annex L: Care practices promoted in *Caring for Newborns and Children in the Community*

1) Caring for the Newborn at Home

Messages taught by a CHW to families include the following:

- What is done during an antenatal care visit and why it is important to go to the clinic for ANC.
- It is important to have the birth in a health facility because complications can happen to any woman and these can be prevented and treated immediately in a health facility.
- Prepare for birth by identifying transport to the facility and deciding who will accompany the woman; saving money for transport and other expenses at the facility; collecting supplies for the woman and the baby; and planning who will care for the household and other children when the woman is at the facility for childbirth.
- The pregnant woman should eat more than usual during pregnancy, avoid heavy work and rest more, take iron-folic acid tablets and follow other advice given at the antenatal clinic, and sleep under an insecticide-treated bednet to prevent getting malaria.
- Danger signs in pregnancy include vaginal bleeding, severe abdominal pain, fits, severe headache, fever, fast or difficult breathing. If any danger sign occurs, go to the health facility immediately.
- Go to the health facility early in labour.
- Immediate care for the newborn should include drying the baby, putting a hat and socks on the baby, placing the baby skin-to-skin on the mother's tummy, and covering them with a blanket to keep the baby warm.
- As soon as the baby is ready, the mother should put the baby to the breast and let the baby suckle as long as the baby wants.
- Wrap the baby well and keep her close to the mother.
- Delay bathing until the next day.
- Give only breast milk to the baby because it is the best food for the baby, and protects against infections.
- Breastfeed during day and night whenever the baby wants, at least 8 times per day. The more the baby suckles at the breast, the more milk is made.
- Keep the baby wrapped and warm and do not bathe the baby until the day after birth.
- Family members should wash their hands before touching the baby.
- Keep the cord clean and dry.
- Look into the baby's eyes and talk to the baby, particularly while breastfeeding.

If the baby is small:

- Breastfeed at least every 2 hours, during day and night.
- If the baby is unable to suckle, the health worker can show the mother how to express breast milk and feed it to the baby with a cup.
- The best way to keep the small baby warm is skin-to-skin contact. Put a nappy, hat and socks on the baby, place the baby between the mother's breasts with legs along her ribs and head turned to the side, and secure the baby with a cloth tied around the mother and baby.
- Delay bathing for several days; instead clean the baby by quickly wiping and drying.
- The family should wash their hands frequently.
- Look into the baby's eyes and talk to the baby.

2) Caring for the Child's Healthy Growth and Development:

Recommendations for Caring for Your Child's Development

Newborn, birth up to 1 week

Your baby learns from birth.

- *Play:* Provide ways for your baby to see, hear, move arms and legs freely, and touch you. Gently soothe, stroke, and hold your child. Skin to skin is good.
- *Communicate:* Look into baby's eyes, and talk to your baby. When you are breastfeeding is a good time. Even a newborn baby sees your face and hears your voice.

1 week up to 6 months

- *Play:* Provide ways for your child to see, hear, feel, move freely, and touch you. Slowly move colourful things for your child to see and reach for. Sample toys: shaker rattle, ring on a string.

- *Communicate:* Smile and laugh with your child. Talk to your child. Get a conversation going by copying your child's sounds or gestures.

6 months up to 9 months

- *Play:* Give your child clean, safe household things to handle, bang, and drop. Sample toys: containers with lids, metal pot and spoon.
- *Communicate:* Respond to your child's sounds and interests. Call the child's name, and see your child respond.

9 months up to 12 months

- *Play:* Hide a child's favourite toy under a cloth or box. See if the child can find it. Play peek-a-boo.

- *Communicate:* Tell your child the names of things and people. Show your child how to say things with hands, like "bye bye". Sample toy: doll with face.

12 months up to 2 years

- *Play:* Give your child things to stack up, and to put into containers and take out. Sample toys: Nesting and stacking objects, container and clothes clips.
- *Communicate:* Ask your child simple questions. Respond to your child's attempts to talk. Show and talk about nature, pictures, and things.

2 years and older

- *Play:* Help your child count, name, and compare things. Make simple toys for your child. Sample toys: Objects of different colours and shapes to sort, stick or chalk board, puzzle.

- *Communicate:* Encourage your child to talk and answer your child's questions. Teach your child stories, songs, and games. Talk about pictures or books. Sample toy: book with pictures.

Give your child affection and show your love.
Be aware of your child's interests and respond to them.
Praise your child for trying to learn new skills.

Recommendations for Feeding Your Child

Newborn, birth up to 1 week

- Immediately after birth, put your baby in skin to skin contact with you.
- Allow your baby to take the breast within the first hour. Give your baby colostrum, the first yellowish, thick milk. It protects the baby from many illnesses.
- Breastfeed day and night, as often as your baby wants, at least 8 times in 24 hours. Frequent feeding produces more milk.
- If your baby is small (low birth weight), feed at least every 2 to 3 hours. Wake the baby for feeding after 3 hours, if baby does not wake self.
- Do not give other foods or fluids. Breast milk is all your baby needs.

1 week up to 6 months

- Breastfeed as often as your child wants. Look for signs of hunger, such as beginning to fuss, sucking fingers, or moving lips.
- Breastfeed day and night, whenever your baby wants, at least 8 times in 24 hours. Frequent feeding produces more milk.
- Do not give other foods or fluids. Breast milk is all your baby needs.

6 months up to 9 months

- Breastfeed as often as your child wants.
- Also give thick porridge or well-mashed foods, including animal-source foods and vitamin A-rich fruits and vegetables.
- Start by giving 2 to 3 tablespoons of food. Gradually increase to 1/2 cup at each meal.
- Give 2 to 3 meals each day.
- Offer 1 or 2 snacks each day between meals when the child seems hungry.

9 months up to 12 months

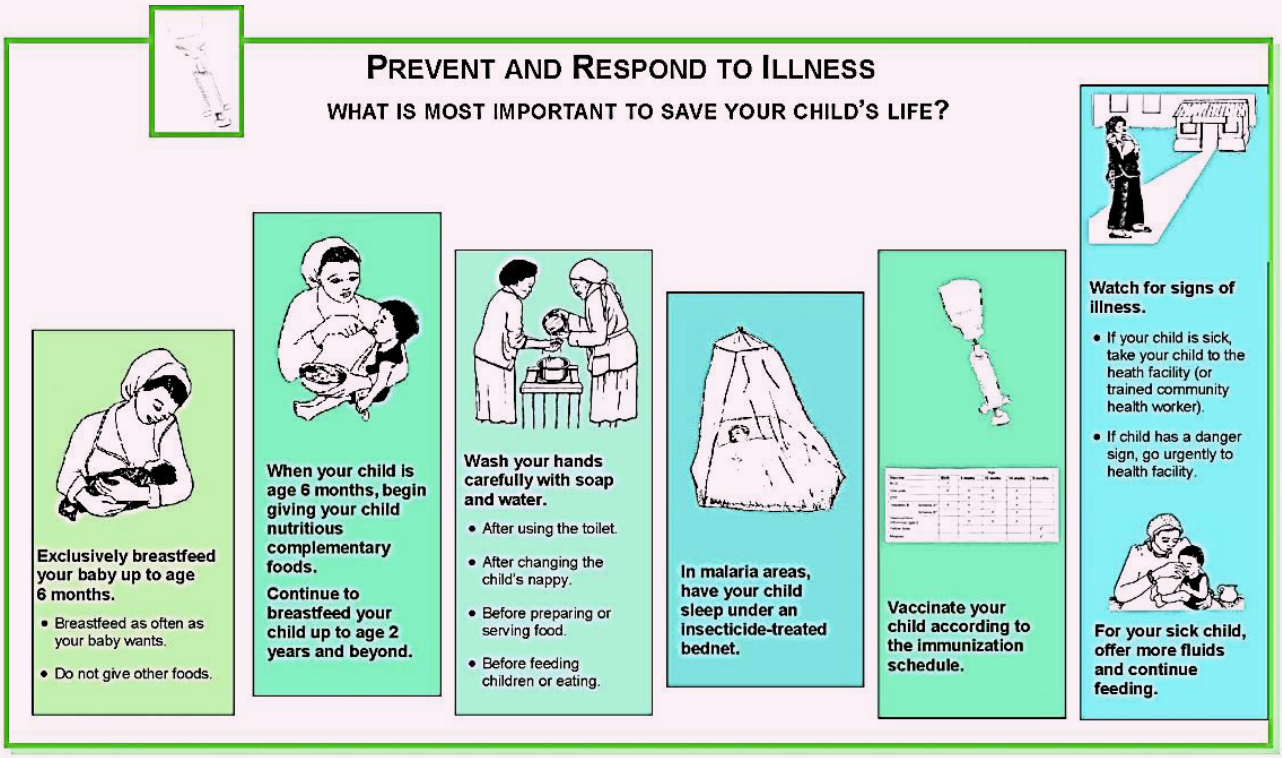
- Breastfeed as often as your child wants.
- Also give a variety of mashed or finely chopped family foods, including animal-source foods and vitamin A-rich fruits and vegetables.
- Give 1/2 cup at each meal.
- Give 3 to 4 meals each day.
- Offer 1 or 2 snacks between meals. The child will eat if hungry.
- For snacks, give small chewable items that the child can hold. Let your child try to eat the snack, but provide help if needed.

12 months up to 2 years

- Breastfeed as often as your child wants.
- Also give a variety of mashed or chopped family foods, including animal-source foods and vitamin A-rich fruits and vegetables.
- Give 3/4 cup at each meal.
- Give 3 to 4 meals each day.
- Offer 1 to 2 snacks between meals.
- Continue to feed your child slowly, patiently. Encourage—but do not force—your child to eat.

2 years and older

- Give a variety of family foods to your child, including animal-source foods and vitamin A-rich fruits and vegetables.
- Give at least 1 full cup at each meal.
- Give 3 to 4 meals each day.
- Offer 1 or 2 snacks between meals.
- If your child refuses a new food, offer "tastes" several times. Show that you like the food. Be patient.
- Talk with your child during a meal, and keep eye contact.



3) Caring for the Sick Child in the Community

Messages taught by a CHW to the caregiver depend on the findings of the assessment of the sick child and how the child should be treated. Possible messages include the following:

- When your child is sick and is being treated at home:
  - Give more fluids and continue feeding
  - Go to the nearest health facility or, if not possible, return to the CHW immediately if the child
    - ↗ Cannot drink or feed
    - ↗ Becomes sicker
    - ↗ Has blood in stool
- Prepare and give ORS (as shown by the CHW). Give as much ORS as the child wants, but at least 1/2 cup ORS solution after each loose stool.
- Prepare and give the zinc supplement (as shown by the CHW). Give one dose daily for 10 days.
- Prepare and give the antimalarial tablet (as shown by the CHW). Give a dose twice daily for 3 days.
- Prepare and give the oral antibiotic (as shown by the CHW). Give twice daily for 5 days.
- Vaccines can protect children from many illnesses. Take the child for immunizations where and when the CHW advises.
- Sleep under an insecticide-treated bednet every night. Children under 5 years and pregnant women are particularly at risk from malaria.
- If the child needs to go to the health facility,
  - The child who has a danger sign must go to the health facility; the CHW does not have adequate medicines to treat the child.
  - If your child can drink, offer fluids and food on the way to the health facility.
  - Keep the child warm, if child is NOT hot with fever.

Annex M: Example Supervision Checklist for Caring for the Sick Child in the Community

COMMUNITY CASE MANAGEMENT H.S.A SUPERVISION CHECKLIST						
Supervisor Name:				Date:		
HSA name:				District:		
Name of village clinic :				Health facility:		
#	Item	Yes	No	NA	Comment	
A. CASE MANAGEMENT (Observe the HSA managing a sick child, or use a case scenario from your supervision materials. TICK if you observed a sick child ___ or if you used a case scenario ___.)						
1	Takes child's identification (name AND age AND sex)?					
2	Assesses for all danger signs correctly					
3	Counts respiratory rate correctly (+/- 2 breaths)					
4	Decides to treat or refer child's illness correctly					
5	Gives correct treatment					
6	Demonstrates how to administer treatment correctly					
7	Counsels (correct messages on feeding, increased fluids and when to return)					
8	Explains how to administer drugs correctly					
9	Asks mother to repeat back how to administer					
10	Asks caregiver to return for follow-up visit					
11	Refers if child has danger sign or condition he/she cannot treat					
12	Facilitates referral (provides referral slip AND first dose)					
	OVERALL SUMMARY ("Yes" for 2, 4, 5 and 7)					
B. INFORMATION-DECISION-TREATMENT CONSISTENCY (Review the 5 most recent cases in the Register.)						
13	Case 1: consistent information, decision and treatment					
14	Case 2: consistent information, decision and treatment					
15	Case 3: consistent information, decision and treatment					
16	Case 4: consistent information, decision and treatment					
17	Case 5: consistent information, decision and treatment					
	OVERALL SUMMARY (4/5 or 5/5 cases correct)					
C. DATA QUALITY						
18	Village Clinic Register filled completely (all blanks filled and all boxes appropriately circled or ticked) for last full sheet (= 2 pages)					
19	Page summaries done correctly for last full sheet (= 2 pages)					
20	Copies of at least previous 3 Monthly Reports kept at clinic					
21	CCM Monthly Report submitted to health facility last month? (Ask for a copy to verify)					
	OVERALL SUMMARY ("Yes" for items 18, 19, and 21)					
D. LOGISTICS (Observe drug box and medicines)						
22	Drugs stored in a 2 lock system drug box					
23	All drugs are valid (unexpired).					
	OVERALL SUMMARY ("Yes" for 22 and 23)					
E. AVAILABILITY OF DRUGS (Check medicines and ask about availability.)						
24	Cotrimoxazole (approximately 60 tablets)					
25	Did you have Cotrimoxazole everyday last month? If no, for about how many days were you without Cotrimoxazole?.....					
26	LA 1X6 (At least 36 tablets = 6 blister packs)					
27	LA 2X6 (At least 48 tablets = 4 blister packs)					
28	Did you have LA everyday last month? If no, for about how many days were you without LA last month?.....					
29	ORS (At least 12 Sachets)					
30	Did you have ORS everyday last month? If no, for about how many days were you without ORS last month?.....					

31	Zinc (Approximately 60 tablets)				
32	Paracetamol (Approximately 36 tablets)				
33	Eye ointment (At least 6 tubes)				
34	Did you have a continuous supply of LA, Cotrimoxazole, and ORS for the last 3 months without any stock-out of those products?				
35	Did you have a timer and a continuous supply of LA, Cotrimoxazole, ORS and zinc for the last 3 months without stock-out of any for 7 or more days?				
	OVERALL SUMMARY ("Yes" for 24, 26, 27 and 29)				
F. AVAILIBILITY OF SUPPLIES (Ask HSA to show you the following.)					
36	Appropriate timer (measures seconds) available and functioning				
37	Blank Monthly Report forms (at least 2)				
38	Village Clinic Register with blank pages (for at least 10 cases)				
39	Laminated Sick Child Recording Form in color				
40	Blank referral slips (at least 3)				
41	Supervision Log Book				
42	MUAC tape				
43	Plastic pail				
44	Basin				
45	Spoons (at least 2)				
46	Cups (at least 2)				
	OVERALL SUMMARY ("Yes" for items 36, 37, 40 and 42)				
G. COMMUNITY INVOLVEMENT (Ask VHC Representative if...)					
47	VHC helps monitor drug availability? (available during clinic OR sign drug order form OR witness re-supply)				
48	VHC member keeps drug box key				
49	VHC held child health mobilization or education session in the last quarter				
	OVERALL SUMMARY ("Yes" for 48 and 49)				
H. WATER and SANITATION at the CLINIC (Observe for...)					
50	Latrine (mud or brick) with drop-hole cover				
51	Hand washing (running water) available at latrine				
52	Safe, protected source of water at the clinic (for first dose)				
	OVERALL SUMMARY ("Yes" for 50 and 51)?				
SUMMARY					
53	What were the HSA's most important concerns (and your responses)? Number by priority.				
54	Observations and recommendations? Also record in Supervision Log Book at Village Clinic				

Annex N: CCM Central's Suggested Indicators of Progress in Planning and Implementing *Caring for the Sick Child in the Community*

Integrated community case management programmes have been implemented in various forms throughout the developing world, ranging from disease-specific pilots to nationwide integrated treatment programmes. Early data from successful community case management (CCM) pilots speak to the necessity of key components such as quality assurance/supervision schemes and an interrupted medicines supply, while data from less successful programmes cite the omission of other key components, such as community sensitization and dialogue, as contributing to programme failure and/or dissolution.

Taken together, the literature suggests that successful CCM programming depends on careful design and monitoring of CCM from a health systems perspective. To provide guidance on how to approach CCM programming from this angle, the CCM Benchmarks Matrix provides an overview of eight components that programme managers must take into account when designing, implementing, monitoring, and evaluating CCM. The matrix outlines benchmarks per component for each stage of programming, according to three phases: planning, introduction, and scale-up. Overall, the tool is meant to provide normative guidance on how to approach CCM, with the goal of improving quality, functionality, and sustainability across the life of the programme.

Summary list of iCCM indicators by Benchmark Component

Note: Global level indicators denoted with an asterisk; NMS = National Milestone; SS = Special Study; RM = Routine Monitoring

Component	Ref No.	Type	Indicator	Definition
Component 1: Coordination and Policy Setting	1.1*	NMS	CCM policy	CCM is incorporated into national MNCH policy/guideline(s) to allow CHWs to give: · low osmolarity ORS and zinc supplements for diarrhea · antibiotics for pneumonia · ACTs (and RDTs, where appropriate) for fever/malaria in malaria-endemic countries
	1.2	NMS	CCM coordination	A CCM stakeholder coordination group, working group or task force, led by the MOH and including key stakeholders, exists and meets regularly to coordinate CCM activities.
	1.3	NMS	CCM partner map	List of CCM partners, activities and locations available and up to date
	1.4	NMS	CCM target areas defined	Target areas for CCM defined based on country-specific criteria

Component	Ref No.	Type	Indicator	Definition
Component 2: Costing and Financing	2.1*	NMS	Annual CCM costed operational plan	A costed operational plan for CCM exists (or is part of a broader health operational plan) and is updated annually.
	2.2	SS	CCM national financial contribution	Percentage of the total annual CCM budget which comes from national funding sources
	2.3	SS	Expenditure (1): CCM proportion of disease program	Average annual recurrent actual expenditure for CCM in geographic target areas as a percentage of total average expenditure on child health, by type of condition
	2.4	SS	Expenditure (2): Average CCM expenditure per capita (child) by disease program	Average annual recurrent actual expenditure in CCM programs per capita (child) under five in target areas by type of condition
	2.5	SS	Expenditure (3): Average per CCM contact	Average expenditure per CCM contact by type of condition
Component 3: Human Resources	3.1	NMS	Training strategy	Existence of comprehensive CCM training strategy that is competency based
	3.2	RM	CCM CHW density	Number of CHWs trained and deployed for CCM per 1,000 children under five in target areas
	3.3*	RM	Targeted CHWs providing CCM	Proportion of CHWs targeted for CCM who are trained and providing CCM according to the national plan
	3.4	RM/SS	Annual CCM CHW retention	Proportion of CHWs trained in CCM who are providing CCM one year after initial training

Component	Ref No.	Type	Indicator	Definition
Component 4: Supply Chain Management	4.1	NMS	Medicine and diagnostic registration	All key CCM medicines and diagnostics are registered with the National Regulatory Authority (NRA) or similar agency.
	4.2*	RM	Medicine and diagnostic availability	Percentage of CCM sites with all key CCM medicines and diagnostics in stock during the day of assessment visit or last day of reporting period, (key products defined by country policy).
	4.3	RM	Medicine and diagnostic continuous stock	Percentage of CCM sites with no stock-outs of key CCM medicines and diagnostics in the past month (key products defined by country policy).
	4.4	RM	Medicine and diagnostic storage	Percentage of CCM sites with medicines and diagnostics stored appropriately
	4.5	RM	Medicine and diagnostic validity	Percentage of CCM sites with no expired or damaged medicine or diagnostics on the day of observation

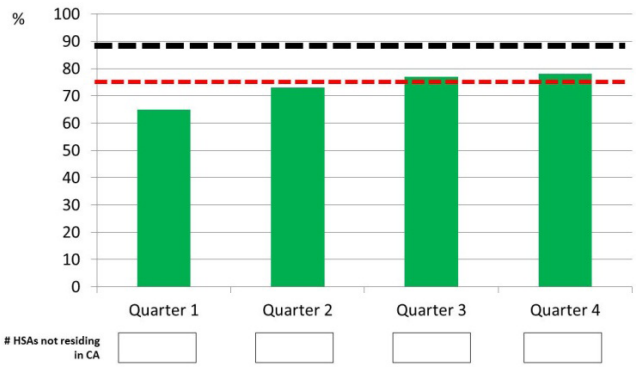
Component	Ref No.	Type	Indicator	Definition
Component 5: Service Delivery and Referral	5.1	RM	CCM treatment rate	Number of CCM conditions treated per 1,000 children under five in target areas in a given time period
	5.2	RM	Case load by CHW	Proportion of CHWs (or CCM sites in cases of multiple CHWs/area) treating at least X cases per month (to be defined locally)
	5.3	RM	Referral rate	Proportion of sick child cases recommended for referral by the CHW
	5.4*	SS	Treatment coverage	Percentage of sick children who received timely and appropriate treatment
	5.5	SS	CCM treatment coverage by CHW	Proportion of overall treatment coverage being provided through CCM by CHWs
	5.6	SS	Timely and appropriate care-seeking	Proportion of sick children taken to an appropriate provider in a timely manner (appropriate provider and timeliness defined by country protocols)
	5.7	SS	First source of care	Proportion of sick children under five in CCM target areas taken to CCM-trained CHWs as first source of care
	5.8	SS	Follow up rate	Number and proportion of cases followed up after receiving treatment from CHW according to country protocol
	5.9	SS	Successful referral	Proportion of children recommended for referral who are received at the referral facility
Component 6: Communication and Social Mobilization	6.1	NMS	Communica-tion strategy	Communication strategy for childhood illness exists and includes CCM
	6.2	SS	Caregiver knowledge of CHW	Proportion of caregivers in target areas who know the presence and role of their CHW.
	6.3*	SS	Caregiver knowledge of illness signs	Proportion of caregivers who know two or more signs of childhood illness that require immediate assessment and treatment, if appropriate
Component 7: Supervision and Performance Quality Assurance	7.1	NMS	Supervision strategy	A national supervision strategy exists and outlines designated cadres, job descriptions and standardized supporting materials (e.g., checklists, training materials)
	7.2	RM	CCM supervisor training	Proportion of supervisors assigned to CCM (at all levels of health system) that were trained in CCM

Component	Ref No.	Type	Indicator	Definition
	7.3	RM	CHW to supervisor ratio	Ratio of CHWs deployed for CCM to CCM supervisors
	7.4*	RM	Routine supervision coverage	Proportion of CHWs who received at least one administrative supervisory contact in the prior three months during which registers and/or reports were reviewed
	7.5	RM	Clinical supervision coverage	Proportion of CHWs who received at least one supervisory contact during the prior three months where a sick child visit or scenario was assessed and coaching was provided
	7.6*	RM/ SS	Correct case management (knowledge)	Proportion of CHWs who demonstrate correct knowledge of management of sick child case scenarios
	7.7	RM/ SS	Correct count of respiratory rate	Proportion of CHWs who correctly count respiratory rate
	7.8	SS	Complete and consistent registration	Proportion of CHWs whose registers show completeness and consistency between classification and treatment
	7.9	SS	Correct case management (observed)	Proportion of sick children visiting a trained CHW who receive correct case management from that CHW
	7.10	SS	Appropriate RDT use	Use of rapid diagnostic tests (for child presenting with fever where RDTs are part of the CCM package)
	7.11	SS	Appropriate prescribing practice for positive RDTs	Appropriate prescribing practices are used when results of rapid diagnostic tests are positive (where RDTs are part of the CCM package)
	7.12	SS	Appropriate prescribing practice for negative RDTs	Appropriate prescribing practices are used when results of rapid diagnostic tests are negative (where RDTs are part of the CCM package)
	7.13	SS	First dose	Proportion of sick children provided first dose of treatment in the presence of a CHW
	7.14	SS	Counseling quality	Among children receiving prescription medicines for a CCM condition, the proportion in which the caregiver receives counseling on how to provide the treatment(s)

Component	Ref No.	Type	Indicator	Definition
	7.15	SS	Correct referral	Proportion of children with danger signs that were correctly recommended for referral
Component 8: Monitoring & Evaluation and Health Information Systems	8.1*	NMS	National monitoring and evaluation plan for CCM	Existence of a comprehensive, integrated monitonring and evaluation (M&E) plan for CCM
	8.2	NMS	CCM utilization indicators included in HMIS	One or more indicators of community-based treatment for diarrhea, pneumonia and/ or malaria are included in the national HMIS system
	8.3	RM	District reporting	Proportion of districts reporting CCM data on time and completely

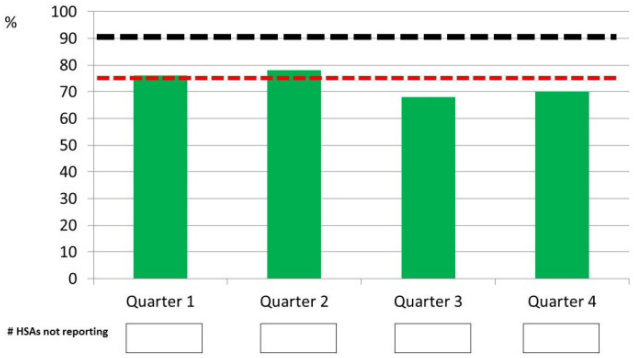
Annex O: Dashboards for Data Display (example)

1) Percent of CCM-trained HSAs residing in their catchment area



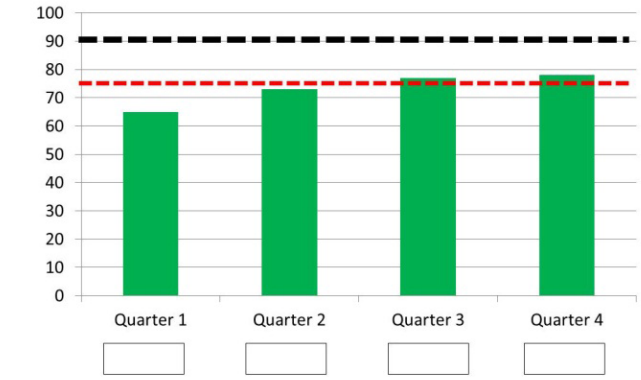
Target ≥ 90% of CCM trained HSAs residing full-time in their catchment areas (at least 2+months during quarter); Action threshold: <75%

2) Percent of CCM-trained HSAs submitting reports complete and on time



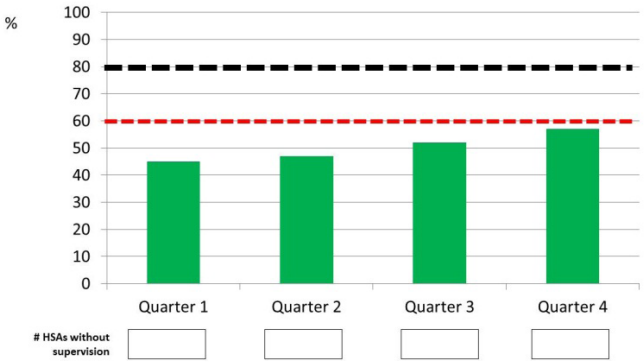
Target ≥ 90% of targeted CHWs trained in iCCM submit 2+/3 monthly reports complete and on time; Action threshold: <75%

3) Percent of CCM trained HSAs with medicines



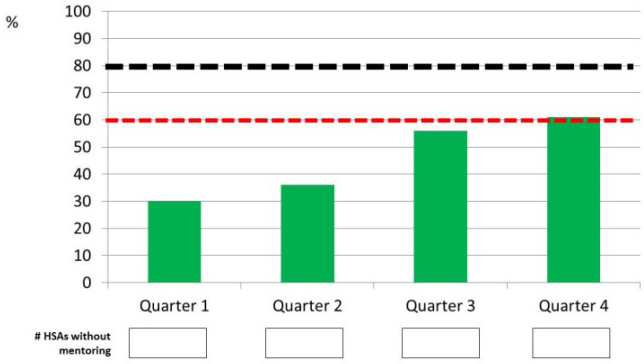
Target ≥ 90% of targeted HSAs trained in iCCM report no stock-outs of LA (or all essential meds) lasting >7 days in quarter; Action threshold: <75%

4) Percent of CCM trained HSAs receiving routine supervision



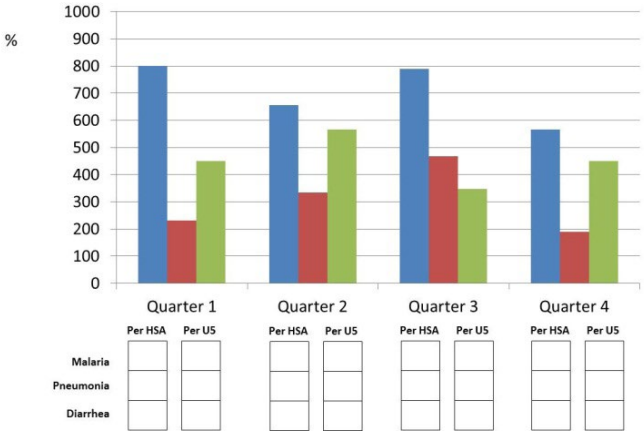
Target ≥ 80% of targeted iCCM-trained HSAs receive ≥ 1 routine supervision/quarter ; Action threshold: <60%

5) Percent of CCM-trained HSAs receiving clinical supervision (mentoring)



Target ≥ 80% of targeted CCM-trained HSAs receive ≥ 1 mentoring session during quarter (or all essential meds) lasting >7 days in quarter; Action threshold: <60%

6) Number of cases treated by CCM-trained HSAs



References and Suggested Reading

Section A

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