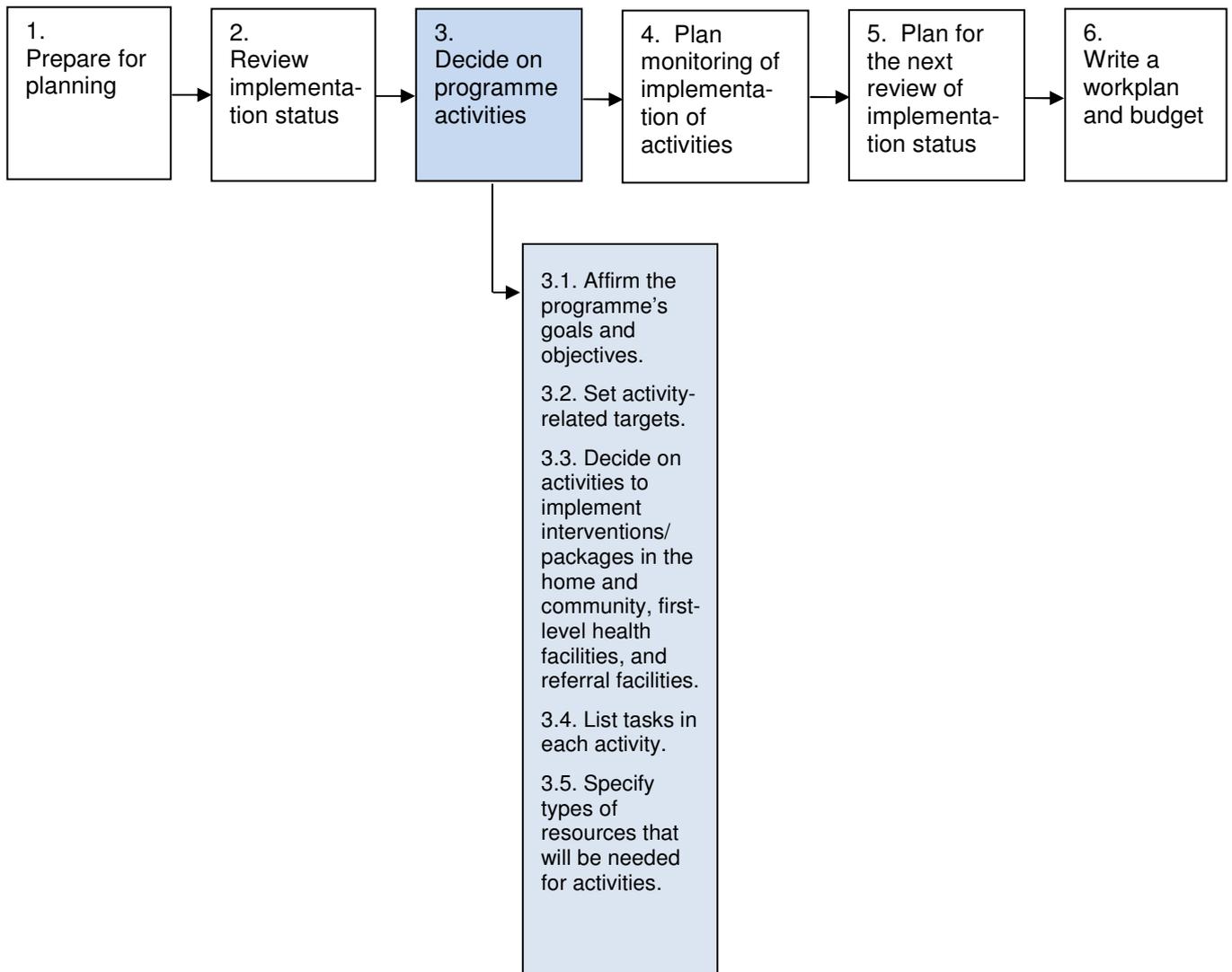


# Step 3

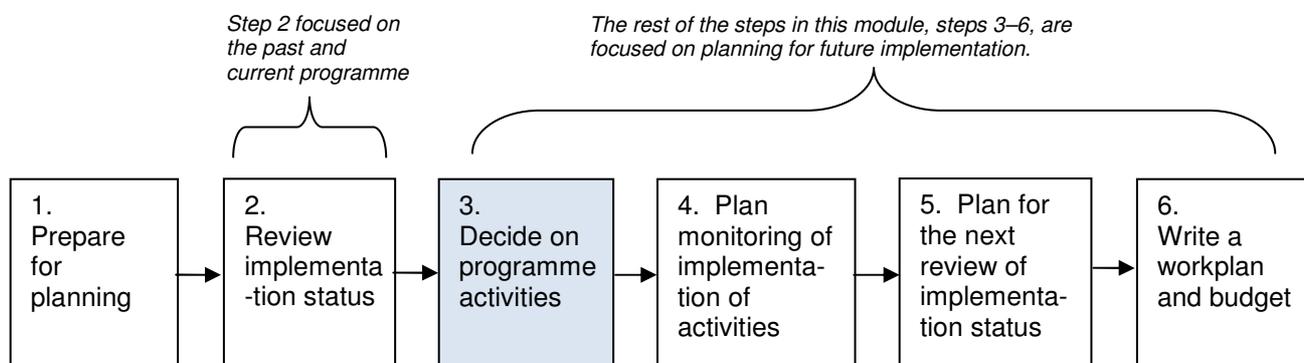
## *Decide on Programme Activities*

Figure 13



### **Step 3. Decide on programme activities**

In step 2, you completed a review of the implementation status of the child health programme including coverage with the current interventions (if possible) and the activities implemented. You also thought about additional activities and resources needed in the next plan. Now you will use that analysis to plan for the future.



In step 3, you will plan for the next year (or next planning period), first affirming the programme's goals and objectives, then setting activity-related targets, and thinking about activities that will be needed to achieve the targets. Because activities need to be appropriate for local conditions, consider local policies and the availability of staff and other resources before deciding on additions or changes in activities.

#### **3.1 Affirm the programme's goals and objectives**

Goals and objectives provide the overall direction for the child health programme. As part of the assessment of the programme, statements of the goals and objectives of the child health programme were found in the national-level strategic plan or implementation plan, and used as milestones for assessing the programme. As a first step in planning for next year, the planning team should review the goals and objectives and affirm them. These should provide a framework and should be kept in mind during all planning for the programme.

Figure 14  
**EXAMPLE**

### **Goals and Objectives of the Integratia Maternal and Child Health Programme**

#### **Goals:**

- To reduce mortality in children under age 5 years
- To reduce the incidence of malaria and diarrhoea in children under age 5 years
- To reduce the prevalence of underweight and stunting in children under age 2 years
- To reduce the maternal mortality rate

#### **Objectives:**

- To increase the proportion of pregnant women who receive antenatal care
- To increase the proportion of pregnant women who have skilled care at birth
- To increase proportion of pregnant women with complications who receive emergency obstetric care
- To increase the proportion of mothers and newborns who receive postnatal care
- To increase the proportion of newborns with complications who receive emergency newborn care
- To increase the proportion of infants under 6 months who are exclusively breastfed
- To increase the proportion of children who are fully immunized at one year of age
- To increase the proportion of children who sleep under an insecticide-treated bednet
- To increase the proportion of children with diarrhoea who receive ORT
- To increase the proportion of sick children who receive an appropriate antibiotic or antimalarial when they need it

### **3.2. Set activity-related targets**

A target is a quantified statement of *desired change* in a key indicator of programme implementation, such as population-based coverage with an intervention or an important activity-related indicator. A target specifies the expected level to be achieved over a given time period in a specified geographic area. The actual level of achievement after the given period of time will be compared to the target to determine whether or not the programme is being implemented effectively.

**Impact targets** are expected changes in under-five mortality, morbidity, or nutritional status as a result of programme implementation. These are long-term targets and will take several years (e.g. 5–10 years) to achieve. Impact targets are set at the national level and appear in the strategic plan for child health.

**Coverage targets** are expected changes in intervention coverage in the target population. These targets are usually medium-term targets because they may take 2–3 years to achieve. Coverage targets for interventions that require significant changes in the knowledge and practices of caregivers or health workers, and which require more health system support, often take longer to achieve. Coverage targets are usually set at the national and/or regional levels and are evaluated by that level. Coverage targets are provided as guidance to lower levels.

**Activity-related targets** are expected changes related to improvements in availability, access, demand, or quality of services, or knowledge of families and communities. These targets should be met as the programme is implemented. For this reason activity-related targets are often short-term (e.g. 1–2 years) targets. Activity-related targets are based on the activities that are planned in a specific geographic area or the **results** that can be expected when planned activities are implemented. They are therefore usually set at the district or other level close to implementation.

For example, one district set the activity-related targets listed below.

*In the Mira District, by the end of 2009:*

- *75% of health facilities (9 out of 12) will have at least 60% of health workers who care for children trained in IMCI*
- *75% of health facilities will have no stock-outs of essential medicines and vaccines in the last quarter of the year*
- *90% of children leaving a health facility will be up-to-date on their immunizations*
- *70% of sick children who come to a health facility and who need an antibiotic and/or antimalarial will be prescribed the medicine(s) correctly*
- *90% of health facilities will have received at least one supervisory visit in the previous 3 months*
- *40% of communities will have a CHW trained to provide community case management of diarrhoea, fever and pneumonia*
- *25% of caregivers will have attended a group meeting about key family and community practices or had a home visit in the previous 6 months*
- *40% of communities will have a local supply of insecticide-treated bednets*

You will revise and add to activity-related targets for your geographic area as the programme adds new activities. However, the list of targets should never become too large. A limited number of targets should be selected and should be kept simple, so that they will be useful for planning activities and resource needs, and feasible to assess.

**What makes a good target?**

To be useful, targets need to be Specific, Measurable, Achievable, Relevant, and Time-bound (SMART). Criteria for reviewing targets are summarized below:

- ✓ **Specific:** This means clear and unambiguous. Targets should express what is expected, by what date, and at what level (e.g. 50%).
- ✓ **Measurable:** This means that it should be possible to collect data to measure achievement using available methods. Numbers and percentages are used to indicate how much change is expected.
- ✓ **Achievable:** This means that it should be possible to reach targets with available interventions and resources, in the amount of time available.

- ✓ **Relevant:** This means that they should be consistent with national objectives and priorities. They should also be appropriate for the scope of the activities planned in the geographic area. For example, only the districts that are planning to train community health workers to do community-based management of pneumonia, malaria, and diarrhoea in the next 2 years would write targets related to availability or quality of, or family members' knowledge about, community-based treatment of these childhood illnesses.
- ✓ **Time-bound:** This means that targets should specify a starting point and an end point. Activity-related targets are set for a relatively short period of time, such as for 1–2 years; coverage targets are usually set for 2–3 years; impact targets are set for 5–10 years. This encourages local planning of activities and setting of activity-related targets that are realistic and meaningful.

### ***General Principles of target setting***

#### **1. Review indicators and select a few for which you will set targets.**

The child health programme needs targets for coverage with key interventions and for a few important activity-related indicators.

**Population-based coverage targets** may be for prevention (e.g. exclusive breastfeeding rate) or for treatment (e.g. ORT use rate). **Coverage targets are usually set at the national level. Regions and districts will aim to achieve those same targets for the target population in their geographic area.**

**Activity-related targets** can be set for completion of important activities, such as supervision or training, or for results of activities, such as improvements in availability of services, access, demand, or quality of care, or knowledge of families and communities. **Activity-related targets can best be set at the district or regional level, where the actual activities will be planned and implemented.**

#### **2. Set targets based on available data, tools and field experience.**

Setting a target requires estimates. Make the following estimates as best you can:

- An estimate of the current level of achievement for the indicator based on available data. It is important that you set a target based on a realistic starting point. Data may be available from routine reports of activities, or they may be available from surveys.
- An estimate of how programme activities will change the current level of the indicator, based on
  - how intensively and effectively the activities will be implemented. Consider the type of activities planned, the geographic scope of implementation, and the extent of human, material and financial resources that will be mobilized.
  - the likelihood that the activities will lead to the desired results, that is, improved availability, access, demand, quality, or knowledge. This estimate is usually based on field experience, programme plans, and reports from staff.

- An estimate of the number of activities planned and their cost. Cost estimates can be produced using specific costing tools developed for this purpose. Examples include the WHO child health cost estimation tool, the Marginal Budgeting for Bottlenecks.<sup>3</sup> Other estimates must be judgments based on field experience. (More information on costing and budgeting is in section 6.3 of this module.)

Then state a target for the level of achievement that is **desired** by a given date and **feasible** to achieve with available time and resources.

The example on pages 37–38 demonstrates a number of factors that must be estimated to calculate a feasible target.

### 3. **Learn from previous targets**

If activity-related targets were not met during the previous year, it is important to understand why, so that future targets and plans can be more realistic. Many factors can influence the speed and effectiveness of programme implementation.

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<sup>3</sup> Marginal Budgeting for Bottlenecks (MBB toolkit) was developed by the World Bank and UNICEF for estimating costs of overcoming barriers to implementing health and nutrition activities in order to improve coverage of interventions. For more information on costing and budgeting, see section 6.3.

## EXAMPLE: Calculating a target for training health facility workers in IMCI

**Indicator:** Proportion of health facilities in the Coastal Region with at least 60% of health workers caring for children trained in IMCI

### Current level of achievement:

- Proportion of health facilities with at least 60% of health workers who care for children trained in IMCI currently = 46% at end of 2007. (See assessment on page 20.)
- There are 13 health facilities in the area (5 districts) and 6 facilities currently qualify to be counted as having 60% of health workers trained in IMCI.
- There has been some staff turnover, so 1 facility that had been counted previously as having at least 60% trained staff now no longer has 60% trained.

At first-level health facilities, usually there are 2 to 4 health workers who care for children. Therefore, if one out of two or three workers (50% or 33%) is trained in IMCI, the facility is not counted in this indicator. If two out of two (100%) or two out of three (67%) workers are trained, then the facility will exceed 60% staff trained. However, if one trained health worker leaves, the facility may no longer have 60% staff trained until a replacement is placed and trained.

The national child health programme set a target for quality of standard case management: *90% of children seen at health facilities who need an antibiotic or an antimalarial will be prescribed the medicine correctly.* Therefore, in order to be able to provide this level of IMCI standard case management, the manager's goal is to train every health worker who manages children in IMCI and to train new health workers as soon as possible.

The manager keeps a chart of training needs (below), which she updates quarterly, to count the workers in need of IMCI training at each health facility.

**Coastal Region IMCI Training Needs -- December 2007**

Facility	Number of health workers caring for children	Number of those health workers trained in IMCI	60% of health workers trained in IMCI?	Number of health workers needing training in IMCI
A	4	3	YES	1
B	5	3	YES	2
C	3	1		2
D	5	2		3
E	3	0		3
F	3	2	YES	1
G	2	2	YES	0
H	4	2		2
I	3	2	YES	1
J	1	1	YES	0
K	2	0		2
L	2	1		1
M	3	1		2
<b>TOTAL</b>	<b>40</b>	<b>20</b>	<b>6 facilities</b>	<b>21</b>

**Planned activities:**

Activities planned for 2008 include conducting two IMCI training courses for 20 health workers (10 at each course) and doing follow-up after training visits to all 20 health workers. Funding is secured for these activities.

**Setting the target:**

The manager hopes to include all the health workers who need IMCI training in the training courses, so that 100% of facilities would have at least 60% of health workers who care for children trained in IMCI and followed-up by the end of 2008. However, in case there is difficulty arranging for health staff from every facility to attend one of the two courses, or in case there is staff turnover and the replacement worker is not trained, the manager decides to allow for one facility to not qualify as having 60% of health workers trained. Therefore, the manager sets the target as follows:

**Target:** By the end of 2008, 90% of health facilities in the Coastal Region will have at least 60% of health workers who care for children trained in IMCI.

Figure 15 shows the other targets set by the manager.



Figure 15

### Example: Targets for Child Health

The national strategic plan for child health in Integratia stated the following impact targets:

- By 2015, under-five child mortality will be reduced by 25%.
- By 2015, neonatal mortality will be reduced by 20%.

The national level also set coverage targets that the programme manager in the Coastal Region will aim to achieve. (See left column below.)

In the Coastal Region, health facilities have good supplies of medicines, and most facilities have at least one health worker trained in IMCI (75% of facilities in mid-2007). However, availability and access to health facilities is a problem for many outlying villages and certain cultural groups, so the programme has been training CHWs and supplying them with antibiotics to provide community case management of pneumonia. At the end of 2006, 35% of villages had a CHW trained in community case management of pneumonia. Most of these CHWs were also trained in infant feeding counselling.

In 2008, the child health programme in the Coastal Region plans to increase the number of facilities with at least 60% IMCI-trained staff and ensure the quality of case management. There will also be significant efforts to further increase the number of villages that have a CHW who is trained and supplied to manage pneumonia and to give infant feeding counselling. Some catch-up training activities will be needed to identify and train about 10% of the CHWs who received training only in pneumonia management and who need to be trained to do infant feeding counselling. An NGO plans to provide significant support to help establish breastfeeding and nutrition support groups.

At the end of 2007, after making careful estimates, the programme manager for the Coastal Region set activity-related targets for the end of 2008 for the child health programme in her region. These are listed in the right column.

Coverage targets (set by national level)	Activity-related targets for the end of 2008 in the Coastal Region
By 2010, 70% of children under 5 years of age with pneumonia will receive an appropriate oral antibiotic.	By the end of 2008, 90% of health facilities will have at least 60% of health workers caring for sick children trained in IMCI. 75% of health facilities will have received at least one supervisory visit that included observation of practices in the previous 6 months. 50% of villages will have at least one CHW trained in community case management of pneumonia. 100% of trained CHWs will have antibiotics available for treatment of pneumonia.
By 2010, 60% of children aged 6-9 months will receive breast milk and appropriate complementary feeding.	By the end of 2008, 65% of villages will have at least one CHW trained in infant feeding counselling. 100% of trained CHWs will have child health counselling materials available and in use. 50% of villages will have breastfeeding/nutrition support groups established. 75% of caregivers of infants will have received at least one child nutrition counselling session at home or in a health facility in the previous month.



## ***EXERCISE D – Set a target for improved quality of care***

In Part 1 of this exercise you will review some statements and select the ones that would be good example targets for the programme in a region.

In Part 2, you will use a worksheet to set a target for improved quality of care in the Metropolis Region of Integratia.

### **Part 1: Answer questions about target setting.**

1. It is the end of 2007, and the child health programme in the region is setting targets for quality of care at health facilities. The 2006 health facility survey showed that 35% of sick children under 5 years of age with diarrhoea received ORT correctly. Which of the following would be a good example of a target for the programme, and why?
  - a. Improve services at all health facilities.
  - b. By the end of 2008, 50% of children under age 5 sick with diarrhoea and seen at health facilities will receive ORT.
  - c. By the end of 2012, 80% of children under age 5 sick with diarrhoea and seen at health facilities will receive ORT.
  
2. It is the end of 2007, and the child health programme in the region is setting activity-related targets for improving prevention and treatment of illness at home and in the community. Which of the following would be the best example of an activity-related target for the programme, and why?
  - a. By 2009, 80% of villages will have at least one community health worker trained in promoting key practices.
  - b. By 2009, 80% of health facilities will have immunization services available daily.
  - c. By 2009, 80% of children coming to the health services will receive correct treatment for pneumonia.

## Part 2: Set a target for improved quality of care in the Metropolis Region

Read the following background information, which you will use to set a target.

At the end of 2007, the programme manager of the Metropolis Region of Integratia wants to set targets for the quality of case management provided to children coming to first-level health facilities. In the first phase, IMCI is being implemented in 4 of 10 districts in the region. She decides to write a target for the proportion of children needing an antibiotic and/or antimalarial who will be prescribed the medicine correctly, by the end of 2009.

### Baseline health facility survey:

A baseline health facility survey was conducted in late 2005 in the 4 focus districts before training was begun. The survey randomly selected 8 facilities and observed 200 health worker–sick child interactions. An indicator of quality of care was calculated:

- Number of sick children (aged 1 month to 5 years) needing an antibiotic and/or antimalarial = 110
- Number of these sick children correctly prescribed an antibiotic or antimalarial = 30
- In 2005, 27% of sick children attending a health facility (30/110) needing an antibiotic or antimalarial were prescribed the medicine correctly

### Training activities completed:

One IMCI training course was conducted in 2006 and included health workers from the four focus districts. Another training course was conducted in 2007. A total of 24 health workers have been trained in IMCI. (Two of them no longer work in the district).

#### Metropolis Region December 2007

##### Health workers who care for sick children at first-level facilities

District	Number of staff who care for children	Number trained now	Number needing to be trained
Bahari	25	7	18
Tesh	12	7	5
Muta	19	4	15
Zimba	23	4	19
Total	79	22	57

### Follow-up after IMCI training:

Observation-based data on case management practices of IMCI-trained health workers are available from follow-up visits to 22 of the health workers trained in 2006 and 2007. After training, 87.5% of sick children (14/16) needing an antibiotic or antimalarial were prescribed the medicine correctly.

Number of trained health workers observed	Number of sick children seen	Observations where children needed an antibiotic and/or antimalarial	Observations where child was prescribed medicine(s) correctly
22	22 (one per worker)	16	14

**Plans for 2008:**

The programme manager plans to conduct an additional four IMCI training courses in 2008 and 2009 (2 each year) and conduct follow-up visits to all trainees. The standard 11-day IMCI training course will be conducted for 10 staff each time.

**Use the preceding information to complete the target worksheet below for the 4 IMCI Districts in the Metropolis Region of Integratia.**

**TARGET WORKSHEET:**

**Proportion of Children Coming to First-Level Health Facilities in the 4 IMCI Districts Who Need an Antibiotic and/or Antimalarial Who will be Prescribed the Medicine Correctly**

1. Estimate the proportion of health workers at all health facilities in the 4 IMCI districts that will have been trained 2 years from now.

( \_\_\_\_\_ + \_\_\_\_\_ ) divided by \_\_\_\_\_ = \_\_\_\_\_  
number of health workers trained now      number to be trained in the next 2 years      total number of health workers who treat children

**Enter this proportion in box A. in the table below.**

2. Expected proportion of trained health workers who will prescribe antibiotics and/or antimalarials correctly (from follow-up of IMCI-trained health workers) = \_\_\_\_\_

**Enter this proportion in box B. in the table below.**

3. Estimate proportion of health workers at all health facilities who will **not** have been trained 2 years from now.

1.0 minus proportion that have been trained (see 1, above) = \_\_\_\_\_

**Enter this proportion in box D. in the table below.**

4. Estimate the proportion of health workers not trained in IMCI but who will prescribe antibiotics and/or antimalarials correctly (from baseline health facility survey) = \_\_\_\_\_

**Enter this proportion in box E. in the table below.**

**Children coming to first-level health facilities in the 4 IMCI districts in 2 years who will see a trained worker**

A.	B.	C.
Proportion of health workers trained in IMCI in 2 years	Proportion of trained health workers who will prescribe antibiotics and/or antimalarials correctly	Proportion of children who need an antibiotic and/or antimalarial who will be seen by a trained provider and prescribed the medicine correctly
_____	_____	A. x B. = _____

**Children coming to first-level health facilities in 2 years who see an untrained worker**

D.	E.	F.
Proportion of health workers not yet trained in IMCI in 2 years	Proportion of health workers not yet trained in IMCI but who will prescribe an antibiotic and/or antimalarial correctly	Proportion of children who need and antibiotic and/or antimalarial who will see an untrained health worker and be prescribed the medicine correctly
_____	_____	D. x E. = _____

**For all children coming to health facilities in 2 years**

Overall proportion of children coming to health facilities who need an antibiotic and/or antimalarial who will be prescribed the medicine correctly
C. + F. = _____

**QUALITY OF CARE TARGET**

Complete the target below:

By the end of the year \_\_\_\_\_ in the 4 IMCI districts of the Metropolis Region, \_\_\_\_\_% of children coming to health facilities who need an antibiotic and/or antimalarial will be prescribed the medicine correctly.

When you have completed this exercise, discuss your work with a facilitator.

### 3.3 Decide on activities to implement interventions/packages in the home and community, first-level health facilities and referral facilities

Activities describe how interventions will be implemented and what will be done **by the programme** to enable health staff or the community to implement the interventions. Common types of activities are advocacy, pre- and in-service training, communication, improving supply of medicines and equipment, and supervisory visits. The main activity areas are listed in Figure 10 (page 22).

#### 3.3.1 Think about the key interventions to implement along the two continua of care

To start planning programme activities, keep in mind that these should:

- increase coverage of interventions (see Figure 16 below)
- relate to the achievement of activity-related targets
- increase equity and
- contribute to the two continua of care.

Figure 16

#### Plan activities that will contribute to increased coverage

Coverage Target	Results	Activities
70% of children who have pneumonia will receive treatment with an antibiotic	Increase knowledge of when to seek care	<ul style="list-style-type: none"> <li>• Train CHWs in counselling on key family practices</li> <li>• Meet with village/community health committee to introduce community case management of pneumonia.</li> </ul>
	Increase availability of community case management of pneumonia	<ul style="list-style-type: none"> <li>• Recruit and train CHWs in community case management of pneumonia.</li> <li>• Provide regular supportive supervision to trained CHWs.</li> <li>• Ensure supply of antibiotics to trained CHWs.</li> </ul>
	Increase availability of case management in health facilities	<ul style="list-style-type: none"> <li>• Train health workers in additional health facilities in IMCI.</li> <li>• Do follow-up visits after IMCI training.</li> <li>• Ensure regular supplies of essential medicines in health facilities.</li> </ul>
	Increase quality of case management in health facilities	<ul style="list-style-type: none"> <li>• Conduct supportive supervision of case management in health facilities.</li> </ul>
60% of children will be exclusively breastfed up to age 6 months	Increase availability of counselling on infant feeding in the community	<ul style="list-style-type: none"> <li>• Train CHWs to provide counselling on breastfeeding.</li> <li>• Provide health staff or CHWs with materials on infant feeding and support to use with women's support groups.</li> </ul>
	Increase exposures of the community to messages on exclusive breastfeeding	<ul style="list-style-type: none"> <li>• Provide posters promoting exclusive breastfeeding for posting at health facilities, health posts, government office, shops, public places.</li> <li>• Establish women's support groups.</li> </ul>
	Increase quality of counselling at health facilities	<ul style="list-style-type: none"> <li>• Provide training in infant feeding counselling with emphasis on exclusive breastfeeding to health facility staff.</li> <li>• Provide supportive supervision of health staff doing infant feeding counselling.</li> </ul>
	Increase baby-friendly practices at the district hospital	<ul style="list-style-type: none"> <li>• Introduce 10 Steps to Successful Breastfeeding in the hospital.</li> </ul>

Plan who will deliver the interventions/packages at each level of the health system, and what type of activity they will do (e.g. provide information, provide care, counsel). Figure 17 shows an example of how one programme planned to deliver key interventions along the two continua of care. Across the top of the table are the levels of the health system, and down the left side are the life stages.

Figure 17

**EXAMPLE WORKSHEET: Who Will Deliver Interventions along the Continua of Care**

Continua		Who will deliver interventions		
Pregnancy	Interventions/packages*	In the home and community	At first-level health facilities	At referral facilities
		ANC	CHWs promote ANC- seeking and birth preparedness	Nurses and health assistants provide ANC and refer for complications
Birth and Immediate postnatal period	<i>Skilled care at birth</i> <i>Emergency obstetric and newborn care</i>	CHWs promote skilled care at birth	Skilled birth attendants assist at delivery, give immediate newborn care, detect obstetric complications and refer	Skilled birth attendants assist deliveries and manage complications of labour and birth
Newborn period	<i>Routine postnatal care of mother and newborn</i>	Skilled birth attendants and/or CHWs do home visits to provide care, counsel and refer if needed	Nurses and health assistants give postnatal care, refer for complications	Nurses, doctors manage postpartum complications and severe newborn illness
Infancy and childhood	<i>Community case management</i> <i>IMCI (at first-level facilities)</i> <i>Community promotion of key family practices</i> <i>Immunization</i>	CHWs manage illness  CHWs provide education to individuals and groups on key family practices	Health workers manage illness, immunize, provide care for HIV-exposed and HIV-infected children, and refer for severe illness	Nurses and doctors implement ETAT and manage severe childhood illnesses

\* Packages are defined in Annex B, page 118.

### 3.3.2 Plan activities in the major activity areas

The main activity areas are listed in Figure 18. (To review details of what may be included in each area, see Figure 10, page 22).

Implementing child health interventions will include providing services (such as immunization, or case management of illness), providing education or counselling, and providing commodities (such as insecticide-treated bednets or ORS).

You must plan in detail **for all activities at each level of the health system.**

Community-based intervention packages will involve more activities in the areas of improving community supports and communication with families, in addition to training of CHWs. Facility-based intervention packages will involve more work on training staff, strengthening supplies of medicines and equipment, and supervision.

Figure 18

<b>Major activity areas for delivering child health interventions</b>	
1.	Advocacy/Resource mobilization
2.	Training/Human resource development
3.	Strengthening supplies of medicines and equipment
4.	Strengthening referral pathways
5.	Communication/Developing community supports
6.	Supervision
7.	Monitoring progress
8.	Other

When planning activities, you will need to ensure that activities will be of good quality, so that they will result in interventions being delivered effectively. Annex C provides questions and criteria for planning or reviewing the quality of activities in each of the main activity areas. For example, training will be more effective when appropriate technical guidelines are used, when the time allocated to training is adequate, when training involves practice, and when there is follow-up after training.

### 3.3.3 Plan activities that will contribute to increasing availability, access, demand, or quality of services or knowledge of families and communities

Plan activities that will contribute to increasing one or more of the following aims:

- a) availability of services
- b) access to services
- c) demand for services
- d) quality of services
- e) information and knowledge of families and communities

Eliminate or revise activities that do not contribute to one or more of these aims.

#### a) Increase availability of services

Availability means that the health services (preventive and treatment) are available for those who need them. For example, an activity to increase the availability of health education on breastfeeding could be teaching village health committees to run health education groups on this topic. Building new infrastructure (such as a community health facility), increasing the opening hours of a health facility, or increasing the number of health workers available to



provide the service would increase the availability of services. Recruiting, training and supplying community health workers with insecticide-treated bednets and training them in malaria and pneumonia case management can improve the availability and access to services.

Increasing the availability of services, health education, or commodities does not ensure that the target population will use them.

#### **b) Increase access to services**

Access means that caregivers are able to reach the health services, when they are available. Possible barriers to access include:

- distance (too far away)
- finances (unable to afford costs of transport, goods or services)
- culture (husband or other family members may not agree for women to take their sick children to a health facility on their own)
- time limitations (women may have other duties in or outside of the household that limit their ability to come to the health services)
- limited opening hours of the facilities

Plan activities that will remove or decrease the barriers. For example, helping the community establish a transportation fund for referral of mothers and children will increase access to referral facilities. It is important that the health services are both available and accessible.

#### **c) Increase demand for services**

Demand for services means that clients are motivated to use the health services. Activities that increase the knowledge of family and community members about the availability of the health services and their benefits are likely to increase demand. Providing quality services including counselling is likely to increase community members' motivation to use services. Reduction of fees for poor families, or insurance schemes, may also increase demand and use.

#### **d) Improve quality of services**

Quality means that the health services are provided according to technical standards, and in a way that is appropriate for the target population. Clinical care should be provided using standard case management approaches, and health workers should listen and be respectful of clients. Commodities such as bednets should be available and appropriately priced. Key child health messages should be consistent with WHO norms and standards; those delivering messages should do so in a way that is understandable and relevant to local communities.

Training health workers can improve the quality of services. Activities to ensure that facilities have all the medicines and other supplies needed to provide services are also needed for quality. Supervision, which is in many places performed inadequately and too infrequently, is an essential activity for increasing and maintaining quality.

Improved quality is associated with improved client satisfaction and an increased likelihood that the client will return. Services can be available and accessible, but if they are poor quality, they are less likely to be used and the programme will not increase coverage.

#### e) Increase knowledge of families and communities related to child health

In order to improve the health of children, the caregivers of young children must:

- provide good nutrition (exclusive breastfeeding and safe complementary feeding)
- practise behaviors in the home that will prevent illness (e.g. sleep under an insecticide-treated bednet, use potable water and covered latrines, wash hands before preparing food and after using the latrine, seek birth support from a skilled attendant)
- seek preventive services when appropriate (e.g. immunization)
- recognize when their child is sick and provide good home care for illness (e.g. give sick children increased fluid and continue feeding)
- seek care for a sick child when needed (e.g. bring a sick child with fast or difficult breathing to a trained provider)

Improving the knowledge of caregivers and other community members is one step towards changing the behaviours of family and community. They will also need to be convinced, motivated and have the necessary resources to practise the new behaviours.

**For each activity that you decide to include in your plan, you should be able to explain which of the above aims it contributes to.**

#### **3.3.4 Also consider feasibility of the activities**

When deciding on activities:

- Consider what has worked or not worked in the past. When you assessed programme status, you reviewed the previous activities and how well they were done. Take your assessment into account when planning future activities. You may continue some of the same activities, make improvements in others, or initiate new activities.
- Ask for input from experienced local staff and others with knowledge of local conditions.
- Keep in mind how much time will be needed to complete an activity adequately.

On the next page is a sample *WORKSHEET: Plan Activities to Implement Intervention Packages* that was completed by a manager in the Mira District. She planned activities for delivering c-IMCI and promoting skilled care at birth in the home and community, and for delivering IMCI at first-level health facilities.

Figure 19

**EXAMPLE: Mira District**

**WORKSHEET: Plan Activities to Implement Intervention Packages**

***In the Home and Community***

**Intervention package(s):** *c-IMCI – 1) home visits for newborn care, 2) management of diarrhoea, pneumonia, and fever by CHW, 3) promotion of key practices (exclusive breastfeeding, appropriate complementary feeding, sleeping under an insecticide-treated bednet, immunization, care-seeking for illness) 4) promotion of skilled care at birth*

**Activities:**

<p><b>Advocacy/Resource mobilization</b></p> <ol style="list-style-type: none"> <li>1. Identify possible donors to fund supplies of insecticide-treated bednets.</li> <li>2. Advocate for evidence-based policy on community management of pneumonia.</li> <li>3. Mobilize resources for training of CHWs on community-based management of childhood illness.</li> <li>4. Advocate policy for conducting home visits for postnatal check-up of mothers/newborns in the first two days after birth.</li> </ol>
<p><b>Training/Human resource development</b></p> <ol style="list-style-type: none"> <li>1. Plan recruitment of additional CHWs to cover the villages in the district.</li> <li>2. Assess costs of recruitment.</li> <li>3. Identify CHWs from at least 25 villages to be trained in community case management (of diarrhoea, fever, pneumonia) and c-IMCI counselling.</li> <li>4. Conduct courses to train CHWs to counsel caregivers on selected key family and community practices.</li> <li>5. Conduct CHW courses on management of illness.</li> </ol>
<p><b>Strengthening supplies of medicines and equipment</b></p> <ol style="list-style-type: none"> <li>1. Supply CHWs with ORS and zinc.</li> <li>2. Provide CHWs with ARI timers, thermometers and scales for home visits.</li> <li>3. Ensure that CHWs are supplied with antibiotics and antimalarials.</li> </ol>
<p><b>Strengthening referral pathways</b></p> <ol style="list-style-type: none"> <li>1. Meet with mothers' groups to promote establishment of a transportation fund for when referral is needed.</li> <li>2. Develop use of referral notes at health facilities.</li> </ol>
<p><b>Communication/Development of community supports</b></p> <ol style="list-style-type: none"> <li>4. Develop counselling cards for CHWs to use when counselling on key family practices for child health.</li> </ol>
<p><b>Supervision</b></p> <ol style="list-style-type: none"> <li>1. Improve the quality of the supervisory checklist for CHWs.</li> <li>2. Schedule visits by supervisors to CHWs for follow-up after training and schedule quarterly visits thereafter.</li> </ol>
<p><b>Monitoring progress</b></p> <ol style="list-style-type: none"> <li>1. Develop registers for CHWs to record home visits and sick child consultations.</li> <li>2. Identify indicators to be monitored.</li> </ol>

**EXAMPLE: Mira District (continued)**

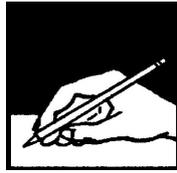
**WORKSHEET: Plan Activities to Implement Intervention Packages**

***In First-level Health Facilities***

**Intervention package(s): *IMCI***

**Activities:**

<p><b>Advocacy/Resource mobilization</b></p> <ol style="list-style-type: none"><li>1. <i>Ask for funds to enable 4 health facilities to open 2 hours earlier on 2 days per week.</i></li><li>2. <i>Mobilize funds for undertaking activities below (i.e. training, fuel for supervision and outreach, etc).</i></li></ol>
<p><b>Training/Human resource development</b></p> <ol style="list-style-type: none"><li>1. <i>Conduct 2 courses to train 20 facility staff in IMCI standard case management.</i></li><li>2.</li><li>3.</li></ol>
<p><b>Strengthening supplies of medicines and equipment</b></p> <ol style="list-style-type: none"><li>1. <i>Review district-level inventory, ordering and distribution practices.</i></li><li>2. <i>Conduct special visits to 5 health facilities to assess causes of frequent stock-outs of medicines.</i></li><li>3.</li></ol>
<p><b>Strengthening referral pathways</b></p> <ol style="list-style-type: none"><li>1. <i>Orient referral-facility staff to use referral notes from first-level health facility workers and to send a counter-referral note back to the health facility, describing care given.</i></li><li>2.</li><li>3.</li></ol>
<p><b>Communication/Development of community supports</b></p> <ol style="list-style-type: none"><li>1. <i>Plan communication with caregivers to be delivered while they wait in health centres.</i></li><li>2. <i>Procure posters (breastfeeding, immunization) for display at all facilities.</i></li></ol>
<p><b>Supervision</b></p> <ol style="list-style-type: none"><li>1. <i>During supervisory visits, alert health staff at facilities to the need to give prompt care to sick children sent for care by CHWs and traditional healers.</i></li><li>2. <i>Do follow-up-after-training visits to 20 health staff who receive IMCI training.</i></li><li>3. <i>Make quarterly supervisory visits to health facilities (supervise IMCI case management, supplies, etc).</i></li></ol>
<p><b>Monitoring progress</b></p> <ol style="list-style-type: none"><li>1. <i>Review patient records and treatment forms and revise if necessary to be consistent with intervention packages.</i></li><li>2. <i>Review indicators and revise if necessary.</i></li><li>3. <i>Designate staff to compile and analyse monitoring data.</i></li></ol>
<p><b>Other – improving availability of and access to services</b></p> <ol style="list-style-type: none"><li>1. <i>Conduct 2 outreach clinics from Health Facility A and Health Facility E during the warm months to provide immunizations, growth assessment, and Vitamin A supplementation.</i></li></ol>



## ***EXERCISE E – Plan activities to implement intervention packages***

In Part 1 of this exercise, you will prepare an overview of how the intervention packages will be delivered across the continua of care (who will do what at each level) in your programme. In Part 2 you will list specific activities to implement at each of the three levels of the health system.

Locate the pages for Exercise E (pages 14–19) in your **Workbook**. Follow the instructions there to:

Part 1: Complete the *WORKSHEET: Who Will Deliver Interventions along the Continua of Care*. (Refer to Figure 17 on page 45 if needed.)

Part 2: Complete the *WORKSHEET: Plan Activities to Implement Intervention Packages*, one page for each level. Decide on key activities that you will include in your plans for the next year.

When you have completed this exercise,  
discuss your work with a facilitator.

### 3.4 List tasks in each activity

Activities and tasks describe how interventions will be implemented and are usually stated in a detailed workplan.

A task list describes in detail how an activity will be conducted. Tasks are the sub-steps of an activity; several tasks may be required to complete one activity. A task list is a useful tool for delegating work to staff, and for monitoring that work. Specifying activities **and** tasks in workplans also helps staff understand what they should do.

Figure 20

**Example activities and tasks**

The interventions are exclusive breastfeeding and complementary feeding. Staff will counsel pregnant women and caregivers of infants and small children on exclusive breastfeeding and complementary feeding.

**Activities** that might be necessary to implement this intervention include:

- *Conduct a Training of Trainers (TOT ) for the course “Infant and Young Child Feeding Counselling”*
- *Train staff at first-level health facilities in “Infant and Young Child Feeding Counselling”*
- *Provide counselling materials to first-level health facilities (posters, flip charts, counselling cards)*

And for the second **activity** listed (Train staff at first-level health facilities in “Infant and Young Child Feeding Counselling”), **tasks** that might be necessary to complete this activity include:

- *Budget and schedule the training course*
- *Designate and schedule trainers*
- *Select and invite participants*
- *Obtain copies of all training materials and other supplies*
- *Secure venue and arrange for lodging, meals and transportation*
- *Conduct training*

Staff who have experience performing a certain type of activity usually know the tasks that should be done. It is important to consult with staff when developing task lists, to make sure that they are accurate, and that no tasks have been overlooked.

How much detail should be specified in a task list? The amount of detail needed will depend on who is responsible for the activity, and how the task list will be used. If the task list will be used to make a schedule or a budget, less detail will be needed. If the task list will be used to describe to staff a new type of activity in a new intervention, more detail will be needed.

In Figure 20, some tasks listed are:

- *Budget and schedule the training*
- *Designate and schedule trainers*
- *Select and invite participants*

This is probably sufficient detail for the MOH training director to understand what is needed in order to make plans and delegate steps. The individual who will “Budget and schedule the training” may make a more detailed task list for that step, such as:

- *Select the desired dates of training and number of participants and trainers*
- *Determine availability of suitable venue and trainers on those dates*
- *Set dates for training; prepare training schedule*
- *Determine number of sets of training materials needed and cost (printing, shipping)*
- *Determine support to be provided to trainers (stipend, per diem)*
- *Determine costs of venue, other supplies (projector), other costs (meals, coffee/tea breaks)*
- *Determine per diem for participants, travel costs of participants*
- *Prepare budget document*

The example worksheet below shows two activities from the Mira District child health manager’s plans and the tasks in those activities. The manager will need to list key tasks for each activity that will be included in the implementation plan.

Figure 21

**EXAMPLE WORKSHEET: List Tasks in Key Activities that You have Planned**

Activity	Tasks
<p><b>1.</b> <i>Conduct 4 c-IMCI counselling courses to train CHWs to provide health education to caregivers on key family and community practices.</i> <i>Train CHWs from 25 villages to promote ANC and skilled care at birth (add to c-IMCI counselling course).</i></p>	<p>Specify all messages/behaviours that should be included in training; specify counselling skills to be taught.</p> <p>Review and adapt counselling training materials, counselling cards for CHWs.</p> <p>Make or obtain sufficient copies of print materials including counselling cards; obtain other supplies.</p> <p>Identify trainers, schedule time of trainers/assistants.</p> <p>Set dates and determine locations for 4 courses.</p> <p>Assign villages/CHWs to one of 4 courses and invite CHWs to attend training on assigned date/location.</p> <p>Travel to training location with materials and supplies.</p> <p>Set up for training: venues, seating, refreshments, materials, supplies.</p> <p>Conduct training course.</p>
<p><b>2.</b> <i>Conduct special visits to 5 health facilities to assess causes of frequent stock-outs of medicines.</i></p>	<p>Schedule dates for special visits to the 5 facilities and confirm with the facility’s in-charge and supply officer.</p> <p>Before visits, review monitoring reports regarding medicine and supplies and discuss possible causes of stock-outs with any knowledgeable district staff.</p> <p>Obtain copies of training/reference materials on supply management and ordering of medicines; obtain quantities of stock cards, ordering forms, etc.</p> <p>Visit each facility on the scheduled date. Meet with the in-charge and then with the person responsible for supply to discuss stock-outs, possible causes, concerns.</p> <p>Assess appearance of the facility, ordering procedures, stocks of medicines and supplies, records.</p> <p>Discuss results with staff; discuss problem and causes; provide instruction and materials, as needed; plan next steps.</p> <p>Write report and send copy to each facility.</p>

### 3.5 Specify types of resources that will be needed for activities

Resources include the financial, material and human resources that are needed to carry out activities. The type of resources required will depend on the activity; the quantity needed will depend on the scope of implementation. As an example, Figure 22 lists types of resources needed for the activity of training CHWs.

Figure 22

**Types of Resources Needed for Activities**

Activity	Types of resources needed
<i>Train CHWs in 40 villages in case management of diarrhoea and pneumonia</i>	<i>CHWs who are actively working in their communities</i> <i>Trainers who will run the courses, and upgrading of their skills</i> <i>Training materials for CHWs and trainers</i> <i>Financial resources for 3 courses during in the year</i> <i>Venue for classroom and clinical training</i> <i>(Availability of supplies of necessary medicines for treatment of diarrhoea and pneumonia for these CHWs during training and on an ongoing basis)</i>

At this point in planning, it is sufficient to list types of resources that will be needed. Quantities of specific resources required and budget will be planned later.





## ***EXERCISE F – List tasks in activities and types of resources needed***

In this exercise, you will practise listing the tasks required to implement an activity. You will work in teams of three and will compete against the other teams to write the best list of tasks within the time limit. Then the teams will compete again to list the types of resources needed to implement the activities.

1. Locate the pages for this exercise in your **Workbook** (pages 21 and 22): *WORKSHEET: List Tasks in Key Activities that You Have Planned*, and *WORKSHEET: List Types of Resources Needed for Activities*. The facilitator will divide the group into teams.
2. Discuss and agree how the exercise will work—like a game show. The facilitator will be the timekeeper and will tell the teams when to start and when to stop. The teams may choose to develop their lists of tasks by writing on a flipchart, or writing on the worksheet, or by typing on a computer. The teams will have to think quickly and write quickly to develop a thorough list of the tasks required to implement the given activity. After 5 minutes, the facilitator will call time, and all teams must stop working. Then the lists will be reviewed by the group and **the group will vote on the best list of tasks**. This process will be done twice, for two different activities.
3. Agree on the activities to be planned. Look back at the pages for Exercise E in your **Workbook** (pages 17–19) on which you listed activities to implement your intervention packages. The facilitator will ask the group for some suggested activities to use in this exercise and will then choose two that will be used.
4. Sit together with your team, and prepare for the exercise (for example, get the flipchart and pen ready, and appoint the person who will write the list). At the top of the page, write down the first activity to plan.
5. **START** when the facilitator says to, and brainstorm with your team to **list the tasks that would be involved in performing the activity well**. A good list of tasks should be complete and state the tasks in sufficient detail that one could delegate each task and monitor whether it is done. Tasks should also be listed in a reasonable sequence. **STOP** when the facilitator calls time.
6. Each team will present their task list. Then the whole group will vote on the best list.
7. Repeat the process for the second activity.

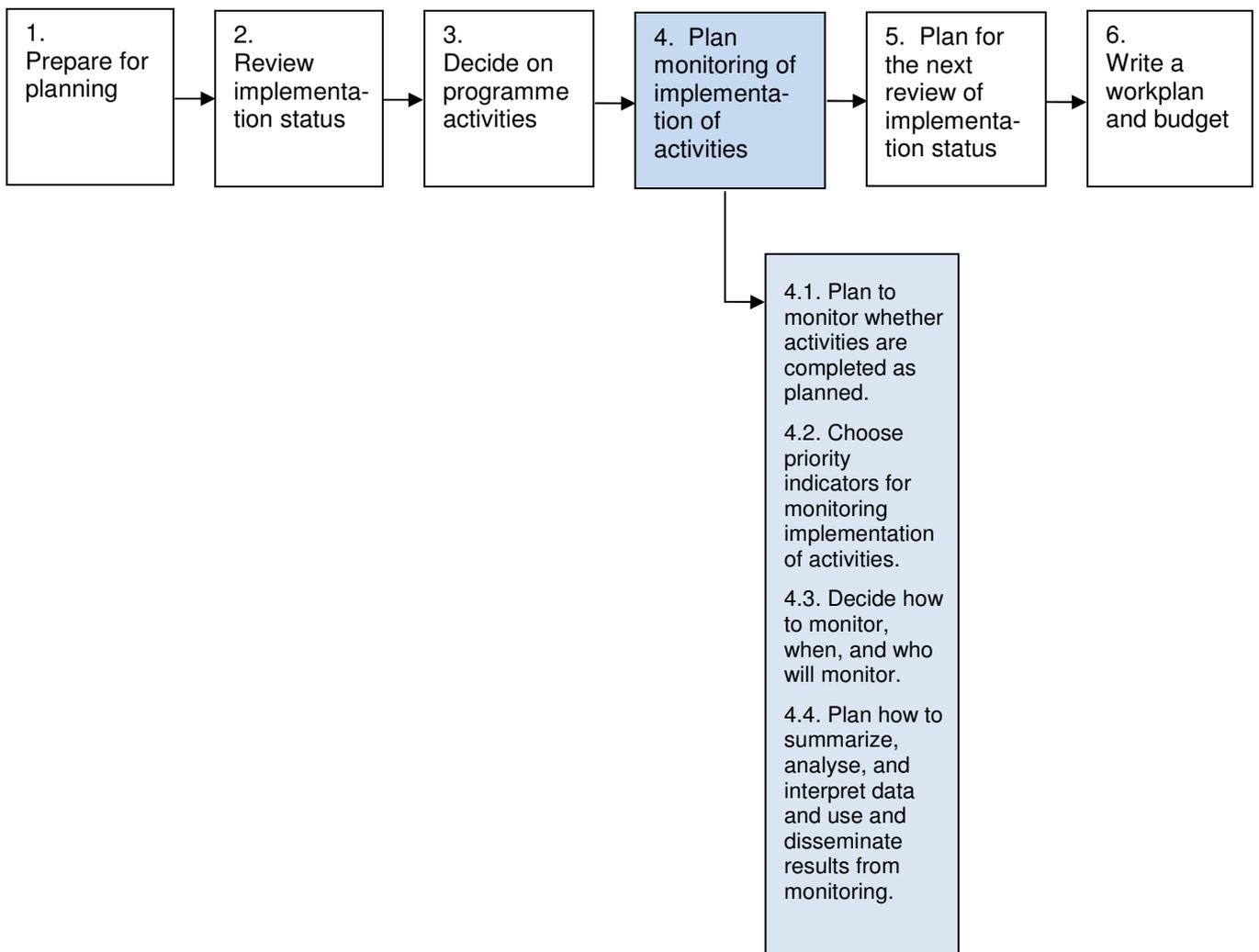
8. Now repeat the process once more to list types of resources needed for the **two** activities. Use page 22 of the **Workbook**, *WORKSHEET: List Types of Resources Needed for Activities*, or a flipchart page formatted similarly. You may want to review Figure 22 on page 54 of the module. The facilitator will tell your team when to **START** and when to **STOP**.
9. Each team will present their lists of resources. The group will vote on the best list.
10. Based on the three parts of this exercise, one team is declared the winner!



# Step 4

## Plan Monitoring of Implementation of Activities

Figure 23



## **Step 4. Plan monitoring of implementation of activities**

*Monitoring* means checking regularly to see that activities are carried out as planned and to identify and solve problems. Regularly collecting and analysing data on implementation allows programme managers to know whether or not activities are taking place and whether they are implemented effectively.

### **4.1 Plan to monitor whether activities are completed as planned**

Every programme should track whether planned activities are actually carried out. Plan for information to be recorded and provided to the manager to track activities such as training courses conducted, supervisory visits made, medicines and supplies distributed, counselling materials distributed, counselling sessions done, and home visits made. Then the manager can see to what extent the activities were completed.

### **4.2 Choose priority indicators for monitoring implementation of activities**

An *indicator* is a measurement that is repeated over time to track a programme's progress. A plan for monitoring should specify the indicators that will be tracked regularly (e.g. monthly, bi-monthly) through monitoring data.

Activity-related indicators will help measure the results of conducting activities. Results of activities may relate to:

- availability (e.g. the proportion of facilities with essential medicines and vaccines available)
- increases in access (e.g. proportion of communities with a CHW trained in case management of pneumonia)
- demand creation (e.g. communities with at least one mass media communication activity such as radio, TV, groups, etc. for child health in previous 3 months)
- quality of health services (e.g. proportion of health workers observed during a supervisory visit who correctly assessed a sick child)
- knowledge of families (e.g. proportion of mothers of sick children leaving a health facility who can list 2 danger signs).

Management at higher levels will agree on some monitoring indicators that you will measure regularly; others may be added.

Programme records and reports of supervisory visits can usually provide information on activities completed and on indicators related to availability, access, demand and quality (such as supplies available, health workers trained, supervision conducted, observations made during supervisory visits, counselling visits made). In addition, financial indicators can assess to what extent the budget planned for certain activities has been dispersed and spent on those activities.

Some indicators, such as knowledge of caregivers, or proportion of diarrhoea cases in the community that receive ORT, can only be measured periodically when there are resources to do a household survey.

Programmes need to select activity-related indicators that are important and feasible to monitor with the available methods and resources.

***To select indicators for monitoring***

1. Review the activities planned for implementing the interventions. Select priority activities.
2. Write down several possible activity-related indicators that would measure:
  - **completion** of the first activity or
  - its **results**, such as improvements of availability, access, demand, quality of services, or knowledge of families and communities.
3. Then, to choose the best indicator from among those you have listed:
  - a) Consider **how** the data could be collected to monitor each indicator. You must choose an indicator that is feasible to monitor on an ongoing basis.
  - b) Consider which indicator **will tell you more** about the effectiveness or result of the activity.

For example, for the key activity of training CHWs to treat pneumonia, *the proportion of CHWs trained* is a feasible indicator to monitor. However, *the proportion of villages with a trained CHW* is also feasible to measure and will tell you more about the progress made by the programme in making service available to the population.

As another example, instead of tracking *the number of health workers trained*, monitor *the proportion of health facilities that have a trained health worker managing sick children*, because the latter is directly measuring availability of a service to the population.

Figure 24

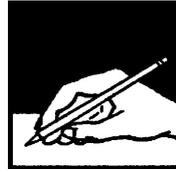
**EXAMPLE: Different types of indicators to track progress of implementation of an intervention**

**Intervention:** Exclusive breastfeeding for infants up to 6 months of age

**In the home and community:** CHWs visit new mothers and counsel on exclusive breastfeeding

<b>Activities planned</b>	<b>Activity-related indicators</b> (to be monitored regularly )
Recruit and train CHWs in 40 villages (availability)	Proportion of 40 villages visited to recruit a CHW Proportion of villages in the district with at least one trained CHW
Train CHWs in counselling skills (quality)	Proportion of planned training courses for CHWs conducted Proportion of CHWs trained in breastfeeding counselling skills Proportion of trained CHWs who have adequate breastfeeding counselling skills ("adequate" to be defined)
Supply trained CHWs with tested counselling cards (quality)	Counselling card for CHWs tested and finalized Number of counselling cards printed (300 planned) Proportion of trained CHWs who reported having used the counselling cards during the last observed home visit
Regularly supervise (visit) trained CHWs and observe their counselling (quality)	Proportion of CHWs that have received a supervisory visit that included observation of a home visit in the previous 6 months
Trained CHWs make home visits in the first week after birth to counsel on exclusive breastfeeding (knowledge)	Number of home visits made in the month by CHW to mothers in the first week after birth as compared to number of births expected per month in the community  During observations of counselling sessions, proportion of mothers of infants counselled by a CHW who can state 2 benefits of exclusive breastfeeding at the end of the counselling

Notice that all the activity-related indicators listed above are possible indicators, but some are better indicators than others, because some more directly measure the **results** of activities in terms of availability, access, demand, quality of services or knowledge of families and communities. However, if an indicator can only be measured in a household or health facility survey, it is not suitable for monitoring. For example, as compared to the last indicator listed in the figure above, *proportion of mothers of infants who know 2 or more benefits of exclusive breastfeeding* would tell you more about the result of counselling in terms of knowledge of all caregivers in the community. However, it would require a household survey to measure and therefore would not be feasible to monitor.



## ***EXERCISE G – Choose priority indicators for monitoring implementation of activities***

In Part 1 of this exercise, your group will choose the best indicators to track implementation of the intervention of standard case management of children with pneumonia.

In Part 2, you will select priority indicators to monitor for the intervention that you planned in Exercise E.

### **Part 1: Work with your group to complete the table on the next page.**

- With your group, list 2–3 possible indicators to monitor each activity. Remember that activity-related indicators may track whether activities are **completed** or may measure **results** of those activities in terms of availability, access, quality, demand, or knowledge of family members.
- Then consider the feasibility of measuring each. Eliminate any that are not feasible to monitor regularly.
- Consider which would tell you more about the effectiveness or result of the activity.
- Put a star by the priority indicators that you choose.

**Intervention:** Antibiotics for pneumonia

**In the home and community:** CHWs provide community case management of pneumonia

<b>A. Activities planned</b>	<b>B. Activity-related indicators</b> (to be monitored regularly)
Recruit CHWs in 45 villages (one per village)	
Train CHWs in 45 villages in community case management of pneumonia	
Supply trained CHWs with timers, counselling cards, and antibiotics	
Supervise trained CHWs quarterly	
Trained CHWs provide group health education on care- seeking for pneumonia	

(exercise continues on next page)



## Part 2: Select indicators for an intervention/package

In this part of the exercise, you will continue planning for the intervention/package in your programme by selecting some indicators to monitor. Work by yourself or with a colleague from your area.

Turn to your **Workbook** and find the *WORKSHEET: Choose Indicators for Monitoring Activities* (pages 25–26). Follow the instructions on page 24 to complete the worksheet.

When you have completed this exercise,  
discuss your work with a facilitator.

### **4.3 Decide how to monitor, when, and who will monitor**

Information on activity-related indicators is usually available in reports of supervisory visits, training reports, and spending reports. They can therefore usually be collected relatively quickly and cheaply.

Managers can collect information in several different ways. Districts (and other administrative areas) need to begin with what is feasible with local systems and resources. The choice of methods depends on the type of information needed, resources available, quality of routine health information systems, and the number of staff available to collect and analyse data. The range and quality of monitoring methods may change over time as implementation expands, and as district and facility personnel gain experience.

#### ***Possible monitoring methods***

##### **Record review**

Useful records may include facility-based morbidity and mortality data, data on referrals, training attendance reports, training post-tests, reports from follow-up after training, medicines stock data, project status reports, and reports of supervisory visits.

Training records and medicine stock records may be useful for determining numbers of health staff trained and medicine availability. Administrative reports provide information on resource availability (e.g. numbers of different cadres of health staff, CHWs, and skilled birth attendants; funds; equipment) and spending. Project reports may provide information on activities completed.

In facilities that record the IMCI case definitions, records may be useful for reviewing the number of cases by classification, and the treatment given to these cases, including the number of severely ill cases seen and how they were managed. Facility-based data on antenatal care and postnatal care may also be available. Hospital-based records may allow review of the management of severely ill children and the number and type of referrals over time.

##### **Reports of supervisory visits**

By reviewing reports of supervisory visits, you can count the number of supervisory visits made and whether observation was included. They may describe activities that are going well, problems encountered, and whether those problems have been resolved. Reports may provide information on numbers of health workers and their training status, and the availability of essential medicines, vaccines, supplies, equipment, and health education materials. If supervisors observe the performance of the health worker (or CHW) during visits, then there may be data on case management practices, counselling, supply management, meetings with community groups, or health education sessions. The quality of data collection may vary considerably between supervisors. For this reason, instructions to supervisors, monitoring checklists, and report forms should be carefully designed, and supervisors should be trained in how to use them.

##### **Reports from routine reporting systems**

A routine reporting system is used to collect data regularly from reporting sites in a given area. Ideally, the routine reporting system will provide accurate, complete data from all health

facilities or from community-based workers on the number of cases seen and the treatment received, and will allow estimates of immunization coverage. However, this ideal is rarely achieved. Many routine data are incomplete and unreliable.

### ***When to monitor?***

Data should be collected and analysed frequently enough to allow managers to track the status of implementation and take action to correct problems. For example, managers should review training reports soon after implementation to see whether courses were conducted as planned and to record the number of people trained. If the course was not conducted or there were significant problems, the manager could investigate and try to solve the problem before it impacts future courses. Frequency of monitoring depends on the methods chosen, the availability of staff to collect and analyse data and the timing of activities. Indicators may be calculated on a quarterly basis using data collected during the quarter.

### ***Who will collect the monitoring data?***

Monitoring of implementation is usually coordinated by the district or regional programme manager. Some data must be collected by staff who make supervisory visits or other field visits (e.g. training supervisors). Other data can be collected by staff who review routine reports or records, or prepare reports of activities, or conduct interviews with staff. All data that is collected should be given to the district for summary and analysis. Some of the data may be forwarded from the district to the region.

### ***Linking monitoring for different child health interventions***

Wherever possible, collection of information on child health areas should be incorporated into existing procedures for reporting and supervision such as the Health Management Information System (HMIS) reporting, routine administrative reports, and regular supervision. Monitoring for antenatal and newborn care activities should be linked, where possible, with monitoring of other child health activities. When information on several programme areas can be collected at the same time, systems are more efficient and the demands on staff are reduced.

#### ***4.4 Plan how to summarize, analyse and interpret data, and use and disseminate results from monitoring***

Often data are collected but not used. Sometimes data are summarized and filed; sometimes they are summarized and reported to higher levels. However, the most important step at the district level is for the district programme manager to review the data, analyse and interpret it, and **use** the information to improve the programme.

To ensure that monitoring data will be used, the manager should make a clear plan for how, when and by whom the monitoring data will be collected, summarized, analysed, and given to him or her for review and interpretation on a regular schedule. This plan should also describe how the results will be used to provide feedback and how they will be disseminated. As a principle, a data management system should be simple, feasible with local resources and skills, and not require too much time to complete.

The mechanism for recording monitoring data should be easy to use and should yield reliable and comparable data from different supervisors or staff. Monitoring checklists remind

supervisors of the information to collect. Monthly report forms (such as a training report form) show what data is required. Options for collecting data include:

- A simple paper log-book in which entries are made by hand
- A form which is completed by hand or on a computer
- A computerized database, in which data are entered into a spreadsheet programme

## **EXAMPLE: Mira District Plan for Management of Child Health Monitoring Data**

### **Collection**

- *Supervisors: Complete reports of each supervisory visit conducted and submit them to the district twice a month.*
- *Training staff: Complete a report by the end of each month on courses conducted, health workers trained, health workers awaiting training, visits conducted for follow-up after training, CHWs trained.*
- *Each health facility: Complete the monthly Community Activities Report and submit it to the district office by the 15<sup>th</sup> of the following month.*
- *District supply officer: Prepare a monthly report for the district child health manager on medicine and supply orders received by the district, orders sent to health facilities, and any stock-outs or other incidents.*

### **Summary**

- *District training officer: Summarize data collected by training staff and submit it to the district manager by the end of the month.*
- *At the end of each month, the data assistant (in the district office) will:*
  - *summarize the supervisory reports, based on a set of prototype tables prepared by the manager*
  - *summarize the Community Activities Reports from all health facilities*
  - *prepare monthly data summaries on supervision, training, and community activities, including graphs and other presentations to help to interpret the data*
  - *provide these summaries to the district manager by the first week of the following month*
- *Quarterly, data assistant: Calculate the key monitoring indicators, using data from the reports. (A data management form for a quarterly summary and analysis of monitoring indicators is presented in Figure 25.)*

### **Analysis**

- *District child health manager:*
  - *review summaries each month to understand the progress and constraints of the programme*
  - *track the indicators from quarter to quarter, to assess the extent of progress in implementing activities and the results of those activities over time*
  - *identify any successes and problems that require attention.*

### Use

- *District child health manager:*
  - *discuss problems identified with staff as needed to determine causes and plan solutions.*
  - *assign responsibilities for carrying out solutions.*

### Feedback and dissemination

- *District child health manager:*
  - *prepare a report for the District Health Officer and child health managers at higher levels.*
  - *hold a monthly meeting to disseminate findings to staff, including CHWs, to recognize their accomplishments and discuss with them any problems that need to be addressed*
- *Supervisors: During supervisory visits to health facilities, share feedback from monitoring.*

Computers are changing the possibilities for managing data. Spreadsheet programmes can simplify the tasks of summarizing data and calculating indicators and can save time in data management. They can quickly prepare charts and graphs that help to interpret data. However, interesting spreadsheets, charts and graphs are only useful when they are interpreted and used to improve the programme.

Figure 25: **EXAMPLE: Data Summary Form for Monitoring**

YEAR: \_\_\_\_\_

DISTRICT: \_\_\_\_\_

Training				
Indicator	1 <sup>st</sup> quarter	2 <sup>nd</sup> quarter	3 <sup>rd</sup> quarter	4 <sup>th</sup> quarter
Proportion of training budget spent				
Proportion of planned IMCI courses completed				
Proportion of health staff needing IMCI training who are trained				
Proportion of health facilities that have at least 60% of health workers who care for children trained in IMCI				
Proportion of (recently) IMCI-trained health workers who received at least one follow-up visit				
Proportion of CHWs trained in community case management				

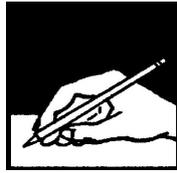
(continued on next page)

## Data Summary Form for Monitoring (page 2)

<b>Medicines and supplies</b>				
<b>Indicator</b>	1 <sup>st</sup> quarter	2 <sup>nd</sup> quarter	3 <sup>rd</sup> quarter	4 <sup>th</sup> quarter
Proportion of medicine deliveries received by district on time during the last 3 months				
Proportion of facilities with all essential medicines available (no stock-outs) during the quarter				
Proportion of facilities with all essential vaccines available				
Proportion of facilities with appropriate record-keeping on medicines and supplies				

<b>Supervision</b>				
<b>Indicator</b>	1 <sup>st</sup> quarter	2 <sup>nd</sup> quarter	3 <sup>rd</sup> quarter	4 <sup>th</sup> quarter
Proportion of supervisors trained to use checklist with observation				
Proportion of health facilities that received at least one supervisory visit in the last 3 months				
Proportion of planned supervisory visits to health facilities completed				
Proportion of CHWs that received a supervisory visit that included observation of a home visit				

<b>Household and Community</b>				
<b>Indicator</b>	1 <sup>st</sup> quarter	2 <sup>nd</sup> quarter	3 <sup>rd</sup> quarter	4 <sup>th</sup> quarter
Proportion of communities with CHW recruited				
Proportion of communities with CHW trained in community case management				
Proportion of communities with CHW trained in counselling skills				
Proportion of villages with village health committee in place				



## ***EXERCISE H – Plan monitoring of implementation of activities***

In this exercise, you will continue to plan implementation of the intervention package by planning **how** to monitor the indicators you specified in Exercise G.

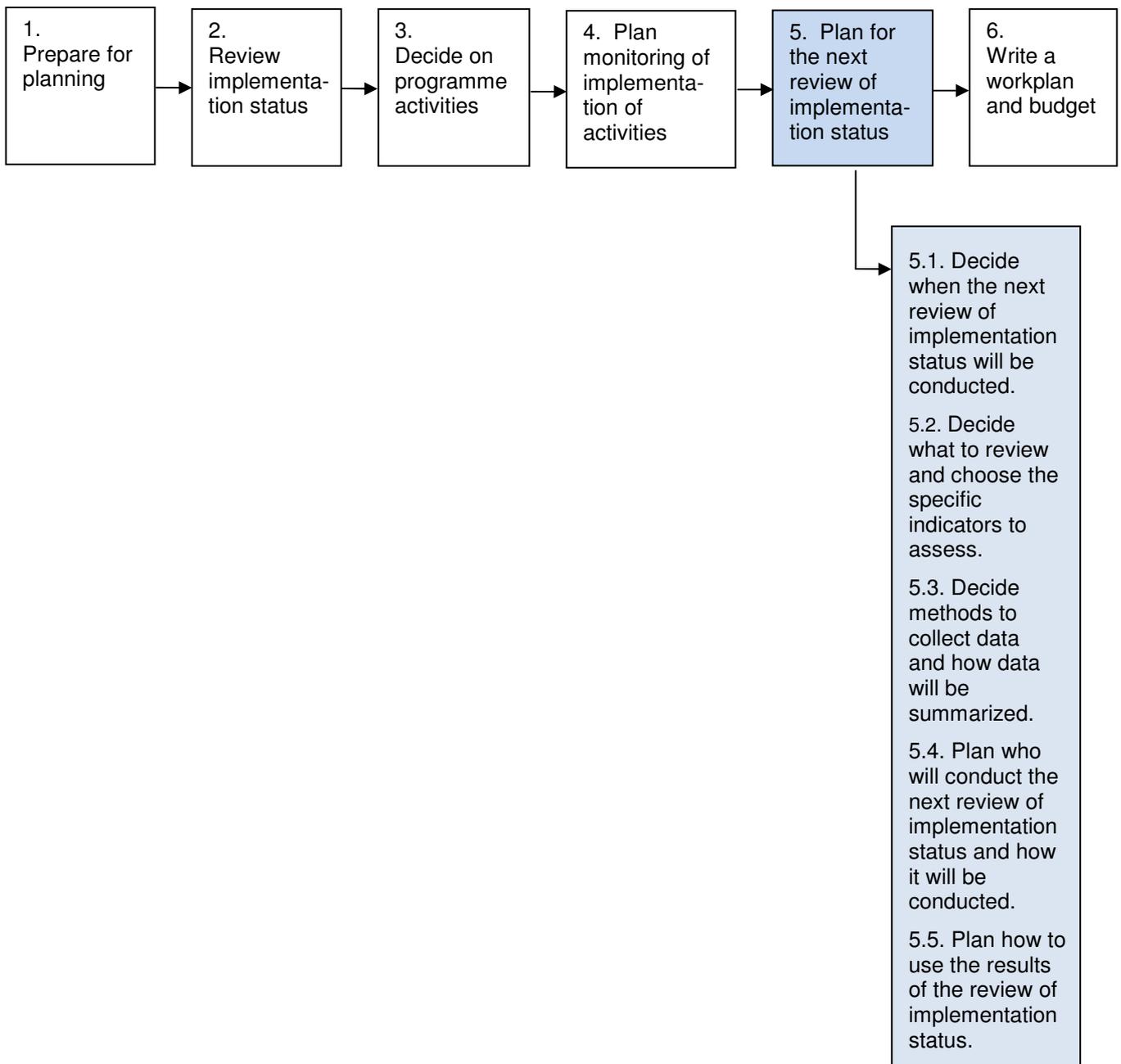
1. Follow the instructions in the **Workbook** (page 28) to complete the *WORKSHEET: Plan Monitoring of Implementation of Activities* (page 29).
2. Then write answers to the questions on the *WORKSHEET: Plan How to Summarise, Analyse, and Interpret Data and Use and Disseminate Results from Monitoring* (page 30).

When you have completed this exercise, discuss your work with a facilitator.

# **Step 5**

## **Plan for the Next Review of Implementation Status**

Figure 26

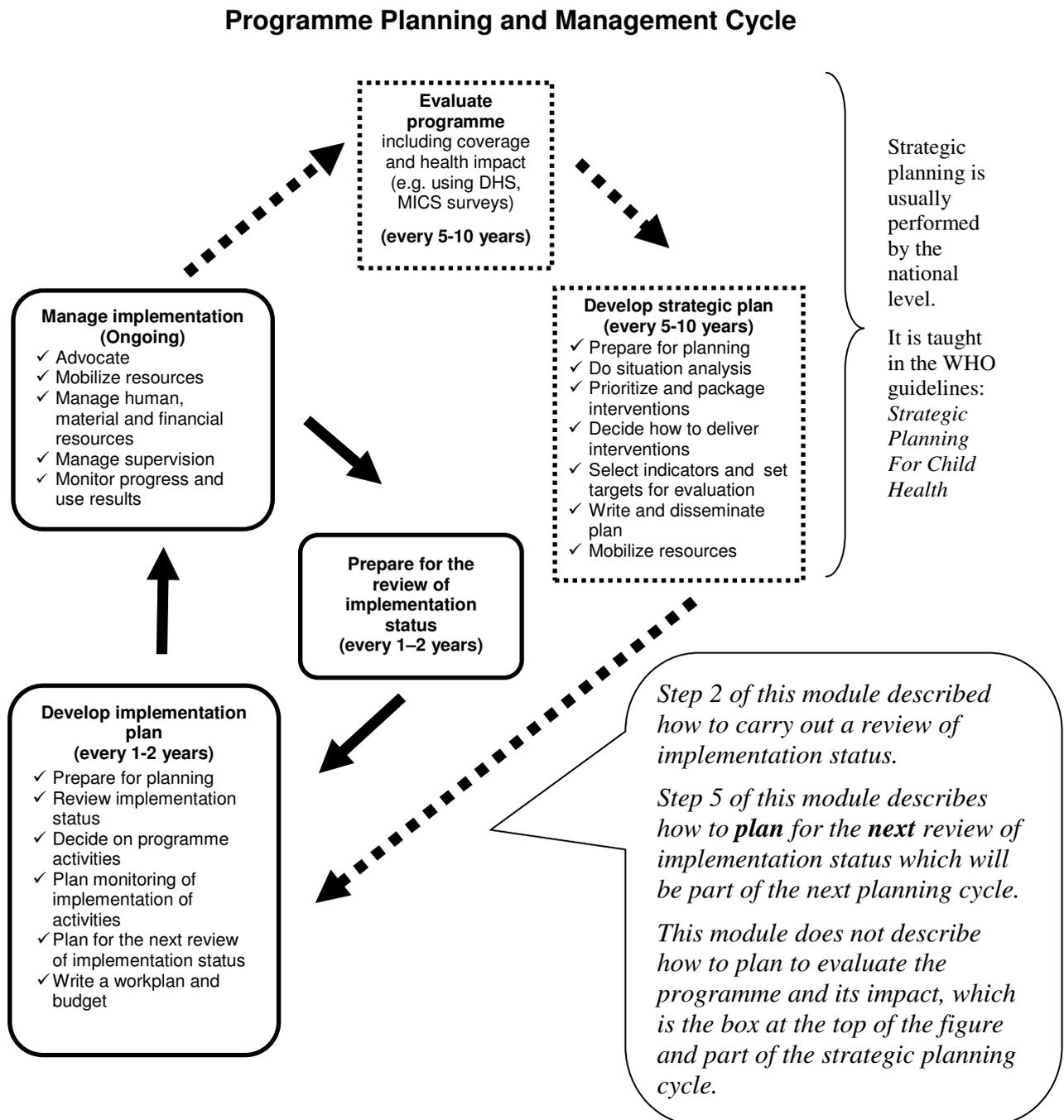




## Step 5. Plan for the next review of implementation status

This section describes how to plan for the review of implementation status that should occur at the end of each year as a part of planning. (If resources are limited, this review may take place only every two years.) Figure 30 below (which appeared as Figure 1 in *Module 1: Introduction*) shows that you should review implementation status as an early step in developing the next implementation plan. Thus, plans to collect and synthesize data for the next review must be included in **this** implementation plan, so that data will be available for the **next** planning cycle.

Figure 30



This review of implementation status is very much the same as the process described in this module in “2.0 Review implementation status” and practised in Exercises B and C. Some differences from year to year may include the amount of recent data available and the number of participants in the planning team.

So that your programme will be prepared to do a meaningful review a year from now, the implementation plan should include activities to collect and summarize the data needed to assess progress. How much and what sort of data collection can be done depend greatly on the resources available, including financial and human resources, and plans made for data collection by higher levels (e.g. a household survey organized by the region).

### **5.1 *Decide when the next review of implementation status will be conducted***

The review of implementation status (step 2.0) should be conducted in one or two years' time as a part of developing the implementation plan for the next period. Schedule the next review of implementation status keeping in mind that routinely collected data on implementation must be compiled and summarized before the planning group meets. Any special data collection activities such as surveys or special studies must be completed and summarized. When selecting dates for the review, also consider the opportunity provided by any review meetings in maternal and child health or other health sector review meetings to maximize the participation of key stakeholders and the use of resources.

### **5.2 *Decide what to review and choose the specific indicators to assess***

Decide which areas of programme activity will be reviewed, for example, progress in training health facility staff in IMCI, in increasing availability of community case management of pneumonia and ensuring its quality, in community activities related to improved infant feeding, in making improvements in EMOC at hospitals, and in making supplies of essential medicines consistently available at health facilities.

Choose indicators to assess achievement of targets that were set. For example, look at Figure 15 on page 39, which shows the targets for the child health programme in the Coastal Region. At higher administrative levels (national, regional), the programme may plan to assess population-based coverage indicators. It is less likely that other levels, such as the district, will be able to assess coverage indicators; however, the district will assess all the activity-related indicators.

The indicators to evaluate achievement of the coverage targets in the Coastal Region will be:

- 1. % of children with pneumonia in the previous 2 weeks who received an appropriate antibiotic*
- 2. % of children age 6–9 months who receive breast milk and appropriate complementary feeding*

The indicators to evaluate achievement of the activity-related targets will be:

- 3. % of health facilities that have at least 60% of health workers caring for sick children trained in IMCI*
- 4. % of health facilities that have received at least one supervisory visit that included observation of practices in the previous 6 months*
- 5. % of villages that have at least one CHW trained in community case management of pneumonia*

6. *% of trained CHWs that have antibiotics available for treatment of pneumonia*
7. *% of villages that have at least one CHW trained in infant feeding counselling*
8. *% of trained CHWs who have child health counselling materials available and in use*
9. *% of villages that have breastfeeding/nutrition support groups established*
10. *% of caregivers of infants who received at least one child nutrition counselling session at home or in a health facility in the previous month*

List any additional important activity-related indicators to assess. These should be indicators that measure the results of activities in terms of availability, access, demand, quality of services or knowledge of families and communities.

The Coastal District added the following activity-related indicators to the list of indicators:

11. *% of children prescribed ORS, and/or an oral antibiotic and/or an oral antimalarial whose caregivers can describe correctly how to give the treatment*
12. *Index of availability of four recommended vaccines available at each facility on the day of visit*
13. *% of health facilities that have the equipment and supplies to provide full immunization services on the day of the visit*
14. *% of hospitals that have the ability to perform a caesarean section at any time (24 hours per day 7 days per week)*

### **5.3 Decide on methods to collect data and how data will be summarized**

#### **5.3.1 Consider how the data needed can be collected**

To measure the status of implementation, plan to use:

- monitoring data collected during the year
- reports from supervisory visits, and
- activity reports such as on training, medicine supply and management, and community activities.

For example, data to measure indicators 11, 12, and 13 above can be collected during supervisory visits; specific questions would need to be added to the supervisory visit form. If survey data will be available from a health facility survey and/or household survey conducted by another organization, a national survey, or from other studies, plan to use that also.

It is helpful to specify exactly the data that will be needed (numerator and denominator) to calculate the indicators chosen (in step 5.2 above), so that appropriate methods will be planned to collect the data. Figure 28 demonstrates this.

- If the denominator is all members of the target population in the community (e.g. children under 5, infants, cases of diarrhoea in the previous 2 weeks, pregnant women, or caregivers), a household survey is required.
- If the denominator is all cases (e.g. of diarrhoea, pneumonia, or wasting) seen at a health facility, a facility survey is needed.
- If the denominator can be determined from records (e.g. number of health workers), a survey is not needed.

Figure 28

**EXAMPLE: Data needed and methods to collect data**

<b>1. What to assess (Indicator or question)</b>	<b>2. Data needed: Numerator/denominator</b>	<b>3. Method to collect data</b>
Proportion of infants under 6 months of age who are exclusively breastfed (coverage)	Infants under 6 months whose mothers report were exclusively breastfed in the last 24 hours/ Infants under 6 months in the geographic area	Household survey
Proportion of caregivers of children aged 0-59 months who know at least 2 signs for seeking care immediately when their child is sick (knowledge)	Caregivers of children aged 0–59 months who correctly describe 2 signs for seeking care immediately when their child is sick/ Caregivers of children aged 0–59 months in the geographic area	Household survey
Proportion of children seen at first-level health facilities who needed an antibiotic or antimalarial who were prescribed the medicine correctly (quality)	Children correctly prescribed an antibiotic or antimalarial/ Children seen at first-level health facilities who needed an antibiotic or antimalarial	Health facility survey
Proportion of villages in the district with at least one CHW trained in community case management of pneumonia (availability, access)	Villages in the district with at least one CHW trained in community case management of pneumonia/ Villages in the district	Review of administrative records (list of CHWs); training records Administrative records
Proportion of CHWs that received at least one supervisory visit with observation of practice in the previous 6 months (quality)	CHWs who received at least one supervisory visit that included observation of practice in the previous 6 months/ CHWs in the district	Review of records of supervisory visits to CHWs during the last 6 months Administrative records
Why do some women choose not to exclusively breastfeed their infants?	Community beliefs and traditions about breastfeeding and breast milk, supplementing breast milk, how long to breastfeed, when to start complementary foods, etc. Women's explanations of why they did or did not exclusively breastfeed for 6 months	Focus groups of women in the community (all ages) Interviews of mothers of children age 6 months to 3 years

If it has been 2–3 years since a survey has been conducted in the area and there is need for more current data, you may decide to undertake a health facility survey during the year to assess the quality of case management in facilities. If sufficient resources will be available, you may plan to do a household survey every few years to provide better information on the coverage of interventions and other results of activities (such as knowledge of caregivers, feeding practices of infants and children, attendance of deliveries by a skilled birth attendant). The programme may decide to organize a small study, such as by using exit interviews of caregivers, to answer specific questions.

If a household survey will **not** be feasible, some indicators may have to be dropped from the list of indicators to be assessed in the next review. If a health facility survey will not be possible, quality of care indicators cannot be quantitatively assessed. If small studies will not be feasible, some questions will not be answered. In this situation, **the review will be limited**

**to indicators that can be assessed using monitoring data, reports of supervision, and reports of activities conducted.**

### ***5.3.2 Decide whether to undertake special data collection activities next year***

Below are descriptions of three special methods that can provide data in addition to that provided by routine monitoring, supervision, and activity reports. However, when deciding how and when to collect additional data, the desire to conduct surveys to collect current data must be balanced against the human and financial resources that would be required. When deciding whether to undertake special data collection consider:

- What data will be already available, such as from a survey that was recently completed or is scheduled to be completed by the MOH, a partner, or another organization?
- Are surveys needed to measure certain indicators? What type of surveys? In what geographic area(s)?
- What data collection will be feasible with available time, personnel, and other resources?

#### **1) Health facility survey**

Health facility surveys measure the quality of care and quality of counselling received by sick children and their caregivers attending first-level health facilities. Management of sick children by health workers is observed and compared against clinical standards for quality. The survey can also measure the availability of supports that are required for quality practice, such as supervision, essential medicines, vaccines and supplies. These surveys use a standard protocol, including standard checklists.

The WHO Health Facility survey<sup>4</sup> uses IMCI clinical guidelines as standards of practice. In this survey, health workers are observed and their practice compared to the IMCI standard to determine whether sick children are managed correctly. Interviews with caregivers and health workers are often included also. Data are summarized and key facility-level indicators are calculated.

Other facility surveys are needed (or adaptations to the IMCI health facility survey tool may be needed) in order to assess quality of care for other technical areas such as antenatal care, HIV care, management of obstetric complications, or management of sick newborns.

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<sup>4</sup> *Health Facility Survey: Tool to evaluate the quality of care delivered to sick children attending outpatient facilities (using IMCI clinical guidelines as best practices)*. Geneva, WHO, 2003. ISBN: 92 4 154586 0.

## 2) Household survey

Household surveys provide the best quality field data on the population-based coverage of an intervention. Small-sample surveys such as 30-cluster household surveys or the Maternal, Newborn, Child and Adolescent Health (MNCAH) household survey<sup>5</sup> provide data on intervention coverage and other measures of caregiver knowledge and practices. The benefits of small-sample surveys are that they are cheaper and easier to conduct, and they provide data about districts or groups of districts that can be used for local planning.<sup>6</sup>

Small-sample household surveys can also measure activity-related indicators in the population, such as the availability of immunization and case management services, access to insecticide-treated bednets, or knowledge of families about infant and young child feeding practices.

## 3) Qualitative research studies

Qualitative methods include focus group discussions, key informant interviews, exit interviews, and participatory approaches. These methods can get information on local beliefs, caregivers' perceptions, reasons why people do or do not practise appropriate home care or care-seeking, and satisfaction with services for child health. They can provide information on why certain programme activities work and why others do not. They can allow local caregivers and community members to express their views on what is needed.

Special studies may be useful in some circumstances to answer particular questions, for example, to assess compliance with prescribed antibiotic treatment, practices of informal providers (medicine sellers, traditional healers), and barriers to referral. Verbal autopsies are sometimes useful for determining the cause of death of young children and the process that occurred from the onset of the illness until the child's death.

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<sup>5</sup>*Maternal, Newborn, and Child Health Household Survey, final draft 2009*. Geneva, World Health Organization, 2009.

<sup>6</sup> The sample sizes of small-sample surveys are not adequate to make mortality estimates. Large sample-size community-based surveys are required to calculate mortality rates for children under age 5, infants, and neonates, since most mortality in developing countries occurs away from facilities. Commonly conducted large-scale surveys include the DHS survey (<http://www.measuredhs.com>) and UNICEF MICS3 survey (<http://www.childinfo.org/mics/mics3>) which require extensive resources and are usually undertaken by the national level.

Figure 29

**Key principles when planning additional data collection by survey**

1. Plan to use **EXISTING** data first. Research and survey data are often available; check with other programme departments, universities, and non-governmental organizations who may be planning surveys or studies.
2. Consider **LINKING** with other organizations or groups that collect child health data, in order to reduce costs and save time. For example: If DHS or UNICEF MICS3 surveys are planned, it is usually possible to incorporate specific questions into these surveys during development of questionnaires and other tools.
3. Balance the cost and feasibility of conducting a survey with the **NEED** for the data and the **QUALITY** of data collected. Conduct a survey that will provide data on indicators that are likely to have changed as a result of programme activities. When annual surveys are not feasible, plan smaller-scale surveys or conduct them less frequently, such as every three years.

### **5.3.3 Plan to summarize data for the next review**

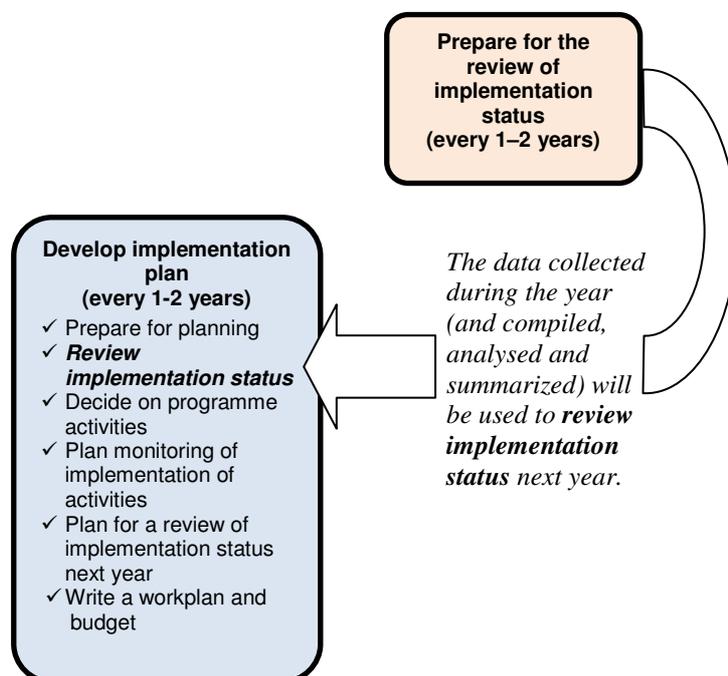
All the data that will be collected during the year **must** be compiled, summarized and analysed prior to the review. Reports from supervisory visits throughout the year must be summarized and the key findings stated so that reviewers can understand and use the findings within a reasonable period of time. The end-of-year status of each of the monitoring indicators should be calculated and listed to aid review. Other monitoring data and activity reports should be summarized, such as the numbers of health staff trained and still needing to be trained. If a survey was conducted, the survey report may provide the results or the relevant results may need to be summarized. The team should **not** have to shuffle through pages and pages of data to find the information they need. This is inefficient and frustrating, and will cause the planning process to take longer than it should.

Plan and schedule the work of compiling, summarizing and analysing the data prior to the review. Designate who will prepare the summaries, provide prototype tables for their use, and list the specific indicators that should be calculated for the end of the year. Specify when the data summaries will be finalized (set a deadline near the end of the following year) so that they will be available for the review.

Plan also to gather together other documents that will be needed for the review such as the strategic plan, most recent implementation plan, and any proposals and schedules that will show planned activities. Talking with staff at different levels of the programme and reviewing activity reports can provide information on activities that were or were not implemented and why.

Figure 30

### Monitoring and other data are collected, summarized and then used in a review of implementation status



#### 5.4 Plan who will conduct the next review of implementation status (step 2.0) and how it will be conducted

Possible ways to conduct the review of implementation status range from a review by a team (which may be formal or less formal) to a desk audit by an individual. In any review of implementation status, the reviewer(s)

- examine data from a number of sources
- assess whether targets were achieved
- assess the extent to which activities were implemented and their results
- identify programme strengths and weaknesses, and
- make recommendations for the future.

At the national level, the review may follow a rigorous protocol for a short programme review<sup>7</sup> or a situation analysis. At sub-national levels, the review should follow the same principles but could be less extensive and involve fewer reviewers, depending on resources available, the extent of programme implementation and the amount and types of data available to be reviewed. At the district level, the review will be limited by the data available (usually no data on coverage is available). It may be conducted by the child health manager, or some member(s) of the planning team.

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<sup>7</sup> Using Data for Reviewing Child Health Programme (Guidelines for conducting short programme reviews.) Geneva, World Health Organization, 2009.. See Annex G for a description of a short programme review.



Plan:

- **How** the review will be carried out (e.g. a meeting of a few specific people from the planning team or from different child health-related programmes coordinated by the IMCI focal person or MCH director; or alternatively some members of the district health management team carry out the review to present to the planning team).
- If a group will do the review, plan **who** will participate in the group, where the group will meet, and for how many days.
- **Who** will write the report of the review's findings and recommendations.

### **5.5 Plan how to use the results of the review of implementation status**

The results of the review of implementation status will inform the development of the implementation plan. For example, the recommendations of the review will guide the planning team when they do step 3.0 Decide on programme activities. The plan will include activities to address problems identified by the review.

Plan also to share the results of the review with higher levels, to inform them of the status of the programme's implementation in your area. The results can also provide the rationale when you request support and other resources needed to solve problems or expand activities.

Plan to give feedback to managers, facility staff, CHWs, and communities. Plan to discuss with them the status of implementation, achievements, problems, and plans for using results of the review.

Also plan to disseminate results through annual health sector review meetings, annual programme management meetings, and re-planning meetings. Plan to share any results on quality of care at meetings of nursing, medical, or other professional associations, and to publish results in newsletters or journals.



## ***EXERCISE I – Plan for the next review of implementation status***

In Parts 1 and 2 of this exercise you will practise specifying data needed to assess several indicators in Yama District and selecting methods to collect the data needed. In Part 3 you will plan for the next review of implementation status in your programme.

**Part 1:** The child health manager in the Yama District is planning to assess four indicators at the end of the year. Specify the numerator and denominator data that must be collected to assess each indicator, and then specify the method to collect that data. The first row is completed for you.

<b>What to assess (Indicator or question)</b>	<b>Data needed: Numerator/denominator</b>	<b>Method to collect data</b>
1. Proportion of children under age 5 years with diarrhoea who received ORT and zinc (coverage)	Number of children under age 5 years in the geographic area with diarrhoea in the previous 2 weeks who received ORT and zinc  Number of children under age 5 years in the geographic area with diarrhoea in the previous 2 weeks	Household survey
2. Proportion of children under age 5 years with diarrhoea seen at a health facility who were correctly treated (quality)		
3. Proportion of villages that have at least one CHW trained in community case management of diarrhoea (availability)		
4. Proportion of caregivers who can state 2 danger signs to bring a sick child for care (knowledge)		

**Part 2:** The child health manager now realizes, however, that it will not be feasible to do a household or a health facility survey next year in this district. But he still wants to assess at the end of the year whether the programme has made any progress in improving the treatment of children with diarrhoea.

The Yama District's plans include activities to recruit and train CHWs to treat diarrhoea and pneumonia, and to supply them with the necessary medicines. Activities are also planned to teach community members about these childhood illnesses, the signs that indicate the child should be taken for care, and what treatments are appropriate. Group health education sessions at health facilities should include instructions about how to feed a child during illness and how to use ORT. Another IMCI training course for health staff at facilities is planned. (IMCI training has been conducted during each of the past two years, but not all health staff are trained yet.)

The manager has planned a special training for supervisors to improve their supervisory skills and to introduce the new supervisory visit form to complete at each visit to a health facility. His plan is that each health facility will be visited every two months, and that visits will include observation of case management and a check of supplies of medicines.

What indicators can you suggest to the manager that will be feasible to measure and will show whether the programme is making progress in improving treatment of diarrhoea? List four indicators in the table below and specify the method to collect data to assess them.

What to assess (Indicator or question)	Data needed: Numerator/denominator	Method to collect data
1.		
2.		
3.		
4.		

When you have completed this part of the exercise, tell your facilitator that you are ready for the group discussion.

**Part 3:** Plan for the next review of implementation status in your programme. Work on this part of the exercise by yourself or with a colleague from your programme.

Locate the *WORKSHEET: Plan for the Next Review of Implementation Status* (Exercise I) in your **Workbook** (pages 32–33). Follow the instructions below to complete the worksheet.

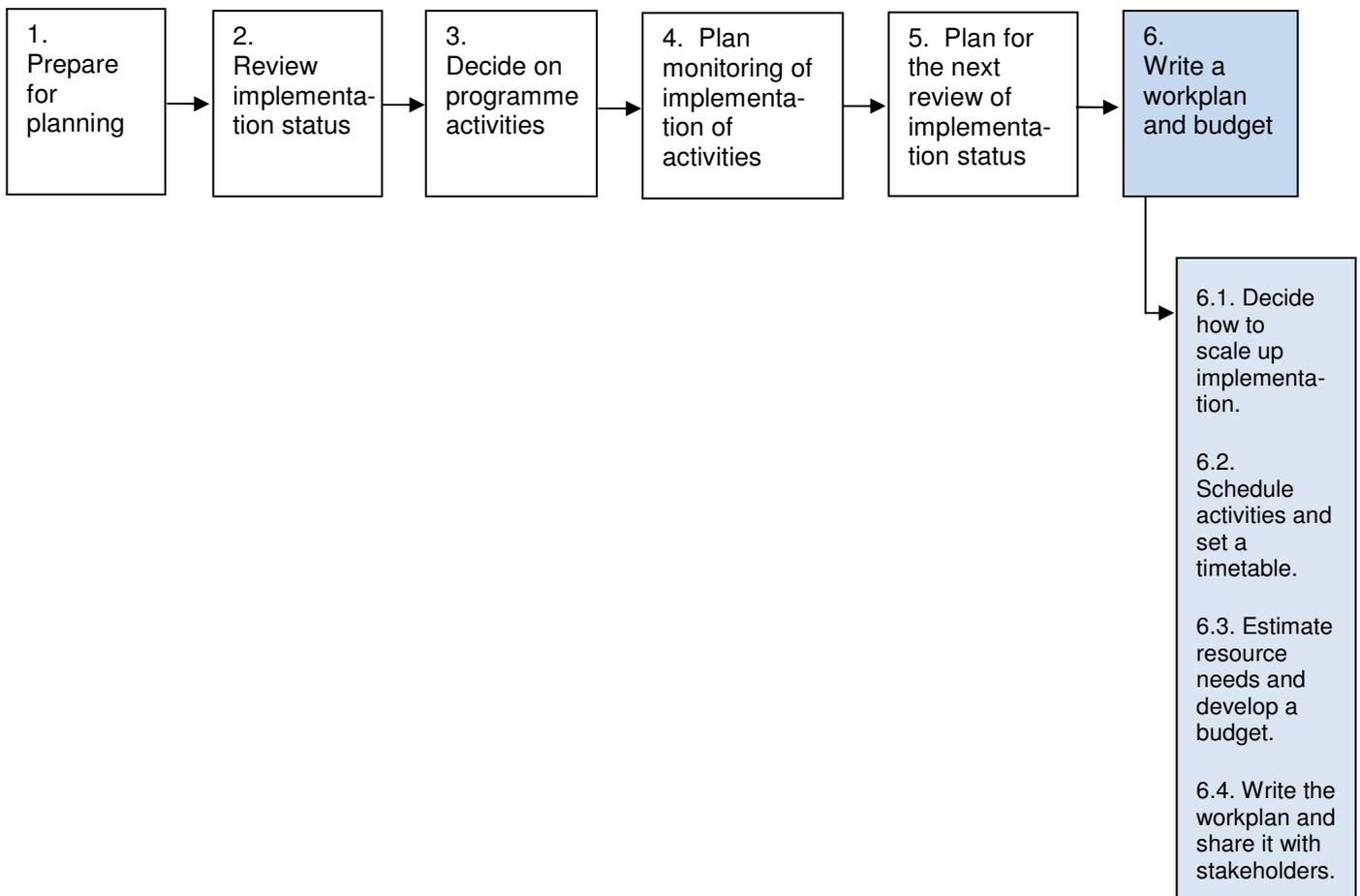
1. In the left column, list a few indicators (related to one intervention package) to assess the:
  - coverage of interventions (if feasible)
  - achievement of the activity-related targets that were set
  - extent of implementation of important activities
  - the results of the implementation of activities (availability, access, demand, quality, or knowledge of families related to child health)
  - additional questions that might be answered through research (if feasible)
2. In the centre column, for each of the indicators, specify the numerator and denominator.
3. Then specify the method of data collection.
- 4–8. Answer the questions on the second page of the worksheet (page 33).

When you have completed Part 3,  
discuss your work with a facilitator.

# Step 6

## Write a Workplan and Budget

Figure 34



## **Step 6. Write a workplan and budget**

The written workplan specifies how the selected interventions and packages will be implemented on the ground, including activities and tasks to be done, and plans for monitoring and the next review of implementation. A workplan is usually written for a period of 1 to 2 years. It is used by staff to track whether activities and tasks are implemented in timely fashion. The budget is needed to forecast resources needed, to advocate for funds, and to track spending over time through financial monitoring.

### **6.1 Decide how to scale up implementation**

“Scaling-up” describes the process of implementing programme activities progressively throughout an administrative unit, such as a region, province, district or sub-district. New activities can begin simultaneously throughout the area, or can be implemented progressively, or “scaled up,” by beginning in one part of the area and expanding later to other parts. Careful phasing of implementation in this way can often enable implementation to be done more effectively because lessons learned and solutions developed in early implementation areas can be applied in subsequent areas.

Whether to scale up implementation progressively, and if so, how, will depend on:

- *Public health needs:* Areas with low intervention coverage should be given priority, since in these areas children are most at risk. These areas are often areas with the highest burden of disease, or with the most significant inequities in access, demand or quality of care.
- *Current programme status.* In an area where the proposed intervention will be added to existing programme activities, implementation can usually begin more quickly.
- *Readiness.* Some areas (regions, districts, sub-districts) may have a greater capacity for training, better system supports such as medicine supply or supervision, or greater support from local partners such as NGOs. Implementation can begin in these areas earlier than in areas with less capacity.
- *Demand.* Managers in some areas may be more interested and motivated than in other areas. Having the support of local staff is essential to effective implementation.
- *Resources available.* Programmes with limited resources may not be able to implement in all districts or areas at the same time. Alternatively, programmes with resources from donors or NGOs or the national treasury may be able to implement more widely using these resources.
- *Politics.* Political interests can sometimes determine the districts or areas where programmes are implemented first, or whether they will be implemented in all areas at the same time.



## ***EXERCISE J – Decide how to scale up implementation***

In this exercise you will plan how to scale up implementation in your area (the geographic area that is your responsibility). Work with a colleague from your area.

### **Part 1: Planning how to scale up implementation**

Consider the intervention package that you have been planning in the previous exercises. Answer the questions below about the current situation in your own programme.

#### **The intervention/package/activities to scale up:**

---

1. Areas with greater public health needs: Do these exist? Where are they?
  
2. Current programme status: Is the intervention package being implemented now? Are there areas where it is working better than others?
  
3. Readiness: Do certain areas have more capacity for training, system supports (medicines, supervision), or support from partners than others?
  
4. Demand: Is there greater interest and motivation from some areas than others?
  
5. Resources available: Are enough resources available to allow implementation throughout in all areas? Do some areas have extra resources available from NGOs or other sources?

6. Politics: Are there political interests that will determine priority areas for scaling-up implementation?

### **Part 2: Presentation of your plan**

Decide whether you can implement or add to the intervention package throughout your area all at one time, or whether you will need to scale up. Then prepare to give a brief presentation to the group on how you will scale up your intervention package in your programme area and why you have chosen this approach. (If you have worked with a colleague on this exercise, choose which of you will give the presentation.)

When it is your turn, **make your presentation of 2–4 minutes to the group**. Begin by telling what intervention or activities you want to scale up. Then tell how you will scale up your intervention package in the geographic area and why you have chosen this approach.

When you have prepared your presentation, tell your facilitator that you are ready for the group session.



## **6.2 Schedule activities and set a timetable**

Timetables are usually set for periods of one year. Activities are usually listed by month. There should be enough detail to remind managers of all major activities.

Schedule implementation according to the resources and other elements required. Some strategies are easier to implement than others in the short term; others require time before implementation can occur. Factors to consider when planning how to schedule activities include:

- 1) Whether training materials or guidelines are needed. If guidelines or materials need to be developed, then implementation cannot begin until development is completed. If they are already available, training can begin sooner.
- 2) Whether health education messages and materials are needed. Development of new messages and materials requires qualitative research, material development and field testing. Activities that use materials cannot begin until this process has been completed.
- 3) Whether elements of the health system need to be strengthened. Some gaps in the health system will require time to solve, such as improving the logistics of medicine and vaccine supply; or improving the availability of vehicles for supervision.
- 4) Whether health policies need to be changed to support certain interventions or activities. Key policies include: the roles and responsibilities of different health staff—such as community health workers and skilled birth attendants; vaccines and medicines recommended for routine use; and technical guidelines that have been adapted for local use.
- 5) Whether mechanisms for working in communities need to be established. These might include working with local committees, community health workers, or other partners. If these mechanisms do not exist, then time will be needed to establish them. When it is possible to use existing community mechanisms, there is less delay in implementation.
- 6) Whether there are barriers to supervision. Routine supervision will not take place until barriers, such as limited availability of staff, vehicles and fuel, have been addressed.

Figure 32 shows a timetable for some activities related to IMCI.

Figure 32

**EXAMPLE: Year 1 Timetable for implementing activities**

Type of Activity	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
IMCI Training	Plan and prepare IMCI training for nurses	→	Conduct training for nurses	→	→ Begin IMCI post-training follow-up	→	→	→	→ IMCI post-training follow-up visits	→	→	→ IMCI post-training follow-up visits
Communication	Review key messages in existing family package	→	Produce and test counselling materials	→	→	→	→	→	Update of HWs on new messages and materials	HWs train community groups and CHWs in revised health education/counselling materials	→	→
Medicines/supplies	Review vaccine supply system Identify source of timers	→	Establish mechanism for improving vaccine supply Deliver timers	Monitor: Vaccine supply at facilities; availability of timers	→	→	→	→	Monitor availability; address problems	→	→	→

Figure 32 (continued)

**EXAMPLE: Year 1 Timetable for implementing activities (continued)**

Type of Activity	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Develop Community Support	Form working group with NGOs and others to coordinate activities	Establish mechanism for HWs to routinely visit community workers during outreach	Work with community groups to develop methods to support CHWs	→	→	→	Monitor coverage with community groups/ workers Address problems areas	→	→	→	→	Monitor coverage with community groups/ workers Address problems areas
Supervision	Develop plan to improve quality and frequency of supervisory visits	Develop and test integrated checklist which includes IMCI	Plan supervisory training	Conduct training of supervisors	→	→	Supervision continues monthly	→ Conduct training for new supervisors	→	Monitor supervision	→	→
Advocate for Policy Support	Liaise with central managers to advocate for national guidelines on essential newborn care	Liaise with central managers on adding IMCI to pre-service training	→	→	→	→	→	→	→	→	→	→



## ***EXERCISE K – Review a timetable for activities***

In this exercise you will practise reading a timetable for activities. The group will discuss questions about timing of activities in your programme area.

Study the timetable on pages 88–89 and answer the questions below.

1. When does training of nurses in IMCI begin?

When does training of community workers using new messages and counselling materials begin?

Do you think the timing is reasonable? Explain your answer.

2. In your programme area, who usually works with communities to build local capacity? Do you think the timing of community activities in your programme is reasonable?

3. Which of these activity areas (advocacy, training, medicines/supplies, communication, developing community supports, supervision) has been most difficult to implement in your own programme? Why? Would you change the timing of activities?

When you have completed this exercise, tell your facilitator that you are ready for the discussion.

### **6.3 Estimate resource needs and develop a budget**

Scaling-up delivery of child health interventions will require additional investments in medicines, supplies, equipment, and human resources, as well as strengthening of the health system. A budget is needed to forecast the resources required and to advocate for funds.<sup>8</sup>

#### **6.3.1 Estimate human resource needs**

It is essential to estimate the number and type of personnel needed and how those needs can be met most efficiently with available human resources. Figure 33 on page 93 is a worksheet for estimating the number of health workers required. (It does not include administrative and managerial personnel). Four key steps are summarized below:

##### **Step 1: Determine how many health workers are required to meet health needs in the geographic area (the “baseline number”) (Column A)**

Determine the total number of staff and also the numbers of different types of workers needed to provide essential services. For example, in child health, health workers are needed to provide well and sick child care, immunizations, and postnatal care, and a supervisor is needed for these health workers. In many districts, each staff member is expected to perform multiple functions including adult health care. Ideally there should be enough health workers to allow division of labour. Division of labour will be more likely to lead to better quality of services (because more time is available), more satisfied clients, and more satisfied health workers.

An approach to estimating the baseline number of health workers required to see patients includes the steps below:

- Count the number of health facilities at each level.
- Review average daily/weekly case-loads of women and children
  - for each category of health facility (first-level, district, referral)
  - for the type of visit (immunization, sick child, well-child, postnatal etc.).
- Estimate the number of cases that can reasonably be seen each day by one health worker and the different types of health workers involved. These estimates can be made by:
  - 1) talking with and observing health workers in the clinic setting
  - 2) talking with experienced health facility managers
  - 3) conducting studies to investigate patterns of time usage.

Different types of services will require different amounts of health worker time. For example, the IMCI approach requires more time with mothers and children than giving immunizations.

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<sup>8</sup> For additional information on general costing and budgeting, see Creese A and Parker D. *Cost analysis in primary health care - a training manual for programme managers*. Geneva, WHO, 1994.

- Estimate total number of facility-based health workers needed at each level to see patients using:
  - 1) the total number of facilities at that level
  - 2) the average numbers of children and women attending daily/weekly and the reason for the visit
  - 3) the estimated average number of cases of each type that can be seen by one health worker each day. Allow for possible increases in attendance over time.
- Estimate the number of facility-based health workers needed for functions other than seeing patients (e.g. supervision, supply, laboratory, health promotion).
- Add together the number of facility-based health workers needed to see patients and the number needed for other related functions. Record this “baseline number” in column A of the worksheet.

**Step 2: Determine how many health workers are already available. (Column B)**

Up-to-date records of existing staff may or may not be routinely available. When staff turnover is high it is difficult to know exactly how many staff are working. It is important to get data from as many facilities as possible by means of:

- reports of supervision—where staff numbers are recorded
- visits to facilities to directly observe and record staff numbers
- contact via telephone, radio or mail to ask for staff numbers
- mailing or e-mailing questionnaires.

**Step 3: Estimate the expected inflow and outflow of health workers (per year) (Columns C and D)**

*Inflow* refers to the number of new health workers who are entering the workforce. They can come from the following sources:

- graduated health workers from training schools
- domestic migration or immigration
- resigned or retired health workers re-entering the workforce

*Outflow* refers to the number of health workers who are leaving the workforce. They can leave in the following ways:

- retirement/death (This is often 10–20% per year.)
- illness/disability
- absence due to long-term training
- emigration
- movement to the private sector (not-for-profit or for-profit)

**Step 4: Estimate the total number of additional health workers (if any) required for the programme (Column E)**

This calculation is summarized in the worksheet below. In order to estimate the additional number of health workers required:

- Start with the baseline number of health workers needed (column A)
- Subtract the number of health workers already available (column B) and the inflow of staff (column C) (A – B – C)
- Add the outflow of health workers (column D).
- The total is the additional number of health workers required (column E).

Figure 33

**WORKSHEET: Estimating the Number of Health Workers Required**

Type of health worker	Baseline required (A)	Available workers (B)	Inflow (C)	Outflow (D)	Additional workers required E=(A-B-C+D)
<b>Community level</b>					
Community health nurse					
Community health workers					
Skilled birth attendants					
Other:					
<b>First-level health facilities</b>					
Doctors					
Nurses					
Nursing assistants					
Health promotion personnel					
Other health workers					
Pharmacist					
Laboratory personnel					
Other medical personnel					
Other:					
<b>Referral facilities</b>					
Doctors					
Nurses					
Nursing assistants					
Pharmacist					
Nutrition personnel					
Health promotion personnel					
Laboratory personnel					
Other technicians					
Other health workers					
Storage personnel					
Guards					
Janitors/Cleaners					
Other:					
<b>TOTAL</b>					

### 6.3.2 Estimating costs of human resources

When the required number of health workers has been determined, estimate the cost of employing these health workers for a given time period. Salaries are often determined by the central level, for example by the Ministry of Health or the Ministry of Manpower. Additional costs, often called fringe benefits, are added to the salaries of health workers. The additional costs can be substantial (see Figure 34).

The total costs for personnel will appear in the overall budget.

### 6.3.3 Estimating material resource needs

Material resources include

- infrastructure
- capital equipment (including vehicles)
- medicines, vaccines
- medical equipment and supplies
- communication materials
- training materials
- administrative supplies

#### Infrastructure

Infrastructure includes buildings for both operational activities (e.g. clinics, consultation rooms, pharmacy, wards, storage facilities, training rooms) and administrative purposes (e.g. director's office, accounting, warehouse). The costs of infrastructure can sometimes be offset by the provision of local resources. For example, communities may contribute some labour and materials for constructing buildings.

#### Capital Equipment

Capital equipment (also called non-recurrent) lasts for several years and requires care and maintenance. Capital equipment includes vehicles (e.g. trucks, cars, motorbikes, bicycles), medical equipment (e.g. X-ray machines), refrigerators, sterilizers, weighing scales, height/length boards, video players, projectors, loudspeaker systems, computers, printers, copiers, maintenance equipment, etc. It is important to take into account the expected lifetime of each item when estimating requirements, and to include maintenance needs.

Figure 34

<b>Fringe Benefits</b>	
Staff costs in addition to salary are called fringe benefits. They may be required by law or may be part of the health programme's policies and practices. Fringe benefits include, but are not limited to:	
✓	Social security
✓	Medical insurance
✓	Severance pay
✓	Annual vacation
✓	Housing allowance
✓	Transportation allowance
✓	Subsidized meals
✓	Subsidized education and training
✓	Loans at favourable interest rates



## Medicines

The availability of effective medicines is critical for delivering child health interventions. Medicines used should be based on essential medicines lists. Essential medicines are the minimum required for the epidemiological profile of the region or district, i.e. they should treat the most common causes of morbidity and mortality. Essential medicine lists will often differ according to the skill level of health staff. For example, highly trained workers at referral facilities are able to use a wide range of medicines, while workers at first-level health facilities and community health workers should only use

medicines that are appropriate to their diagnostic skills, knowledge, and experience. A shorter, adapted list of essential medicines is appropriate for first-level health facilities, and a more limited list is appropriate for community health services.

For more on essential medicines and IMCI, see the WHO publication, “Drug supply management in the context of IMCI: report of an inter-country training workshop in Bali, Indonesia, 18-24 March 2000”, Drug Supply Management Training, CAH/WHO, and other training materials and guidelines. For more on estimated medicine needs see: “On being in charge: a guide to management in primary health care.”<sup>9</sup>

Figure 35

***Collaborating with the essential medicines programme***

Programme managers can collaborate with the essential medicines programme by:

- ✓ Advising on medicine recommendations for the treatment of key childhood illnesses—based on standard treatment guidelines. Antibiotic recommendations should be based on antibiotic sensitivity testing data.
- ✓ Advising when medicines currently being recommended are inappropriate—because they have proven to be ineffective.
- ✓ Providing accurate and timely estimates of total medicine needs based on local epidemiological data.
- ✓ Monitoring whether medicines are getting to health facilities. If not, work with the essential medicines programme and local staff to find out why not and to solve problems.
- ✓ Monitoring appropriate use of antibiotics. Inappropriate use of antibiotics for watery diarrhoea or simple upper respiratory tract infections is common. Use of standard case management guidelines and regular supervision with observation of practice will help to improve practices.

### Estimating and ordering medicines

It is very important to estimate needs carefully and order appropriate amounts of medicines. Ordering too much wastes resources, since some medicines may still be unused after the expiry date. Not ordering enough means that some patients will not receive treatment.

The amount needed of a particular medicine is calculated using the formula below:

**Total dose of average course of treatment x Number of patients treated within the purchasing interval**

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<sup>9</sup> McMahon, R., Barton, E., Piot, M. *On Being in Charge. A Guide to Management in Primary Health Care*, Second edition. Geneva, World Health Organization, 1992.  
<http://whqlibdoc.who.int/publications/9241544260.pdf>

The purchasing interval is the time between deliveries of medicines at a facility or district, e.g. three or six months.

Medicine needs for each childhood illness can be calculated using estimates of the incidence rate of the disease, the number of cases expected and the number of these cases who receive a full course of treatment. Determine the number of patients treated in a period of time from clinic records or estimates from health facility surveys. A process for estimating medicine needs (co-trimoxazole for standard case management of pneumonia at first-level health facilities) is demonstrated in Exercise L on page 98. Annex E shows a different tool for estimating medicine needs and costs to treat different classifications of ARI in the community, at first-level health facilities, and at referral facilities. Annex F contains a worksheet for calculating needs for ORS and zinc to treat children with diarrhoea.

*Using non-brand name and generic medicines can lower costs of implementation. They should only be used when they have been demonstrated to be safe and effective.*

### **Communication materials**

Communication materials include videos, audiocassettes, DVDs, public address systems, flipcharts, discussion posters, wall charts for clinics and other locations, banners and posters with child health messages, leaflets, calendars, and growth charts. Estimate needs for communication materials based on the health education activities that are planned for a given period.

### **Training materials**

Training materials include materials for use by trainers (e.g. videos, slide shows, trainer's guides), take-home materials to be used by participants during courses (e.g. handouts, modules, chart booklets), and distance-learning materials (e.g. manuals and newsletters). To estimate the needs for training materials, consider the planned number of training courses/sessions and the number of participants expected.

### **Other supplies**

Other supplies, also called consumables, are supplies that are used up and must be replaced. For example, the following consumables are essential to IMCI:

- child health cards
- source of clean water
- spoons, cups and jugs to mix and administer ORS
- syringes and needles
- health cards for mothers
- referral forms
- gloves, tissues, alcohol, dressings

Each technical area will have slightly different supply needs, although many of the same supplies are used by several areas of primary health care. Estimates of supply needs can usually be based on experience

*Medicines and supplies must be stored properly to achieve optimum shelf-life (see the section on storage below). If suitable storage facilities do not exist, you may need to include storage facilities as an infrastructure need.*