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INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS

IMCI planning guide

Gaining experience with the IMCI strategy in a country

DEPARTMENT OF CHILD AND ADOLESCENT HEALTH AND DEVELOPMENT
WORLD HEALTH ORGANIZATION

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Contents

List of figures

List of abbreviations

ARI	Programme for Control of Acute Respiratory Infections
BFC	Breastfeeding Counselling
CAH	Department of Child and Adolescent Health and Development, World Health Organization
CDD	Programme for Control of Diarrhoeal Diseases
CHD	Division of Child Health and Development, World Health Organization[1]
EDC	Essential Drugs Concept
EDP	Essential Drugs Programme
FCP	Family and Community Practices
HIS	Health Information System
HSR	Health Sector Reform
IMCI	Integrated Management of Childhood Illness
MCH	Maternal and Child Health Programme
MOH	Ministry of Health
NGO	Non-Governmental Organization
UNICEF	United Nations Children's Fund
WHO	World Health Organization

[1] CHD has been combined with Adolescent Health and Development (ADH) to become the Department of Child and Adolescent Health and Development (CAH).

About planning for the IMCI strategy

A large proportion of childhood morbidity and mortality in the developing world is caused by five conditions: acute respiratory infections (mostly pneumonia), diarrhoea, measles, malaria, or malnutrition. The Integrated Management of Childhood Illness (IMCI) strategy encompasses a range of interventions to prevent and manage these major childhood illnesses, both in health facilities and in the home. The IMCI strategy incorporates many elements of diarrhoeal and ARI control programmes, as well as child-related aspects of malaria control, nutrition, immunization, and essential drugs programmes.

An integrated strategy is needed to address the overall health of children for the following reasons:

- Most sick children present with signs and symptoms of more than one condition. Thus, more than one diagnosis may be necessary. Health workers need to be prepared to assess the signs and symptoms of all of the most common conditions, not simply those of a single illness.
- When a child has several conditions, therapies for those conditions may need to be combined. Health workers need to be prepared to treat conditions when they occur in combination.
- Care needs to focus on the child as a whole and not just the diseases and conditions affecting the child.
- Other factors that affect the quality of care delivered to children such as drug availability, organization of the health system, referral pathways and services, and community behaviours are best addressed through an integrated strategy.

Implementation of the IMCI strategy in countries involves the following three components:

- Improvements in the case management skills of health staff through the provision of locally adapted guidelines on integrated management of childhood illness and activities to promote their use.
- Improvements in the health system required for effective management of childhood illness.
- Improvements in family and community practices.

Implementing the IMCI strategy requires and facilitates collaboration between health programmes in a country, at all levels of the health system. The IMCI strategy does not involve taking responsibility for existing programmes, but re-

quires ensuring that activities are well-coordinated and implemented to contribute to IMCI. By improving the coordination and quality of existing services, the IMCI strategy will increase the effectiveness of care and reduce costs as countries work to achieve the following objectives:

- To reduce morbidity and mortality associated with the major causes of disease in children.
- To promote healthy growth and development of children.

Phases of implementing the IMCI strategy

Because IMCI is an integrated strategy requiring the commitment and full cooperation of a variety of health programmes, it is important to take time to build consensus and create a broad base of support as the strategy is planned and implemented. Countries are encouraged to adopt a gradual, phased process for planning and implementation of IMCI activities. The recommended process involves thorough orientation to, adaptation of, and experience with the IMCI strategy before expanding IMCI coverage and activities. The process involves three phases: introduction, early implementation of selected activities in a limited area, and finally, expansion of activities and geographic coverage.

- **Introduction phase:** The purpose of this phase is to orient and train key MOH decision-makers and staff to enable them to make an informed choice whether to adopt the IMCI strategy and, if so, to create a management and coordination group.

  In this phase decision-makers in the Ministry of Health receive information so that they may decide whether to adopt the IMCI strategy. Orientation meetings are held for managers in the health sector, as well as representatives of other relevant sectors, academic and training facilities, professional associations, donor agencies, NGOs, etc. Selected key national staff attend *Integrated Management of Childhood Illness*, the case management training course for first-level health workers, in another country, in order to better understand what is involved in implementing the IMCI strategy.

  If the Ministry of Health chooses to implement the IMCI strategy, this commitment is formalized by an official written endorsement and the creation of an IMCI Working Group to plan, manage and coordinate IMCI early implementation activities. The working group should have a coordinator who is a high-level member of the Ministry of Health and can effectively foster coordination among programmes and institutions represented on the working group. There should also be a focal person for the IMCI strategy in the country who is available for the day-to-day coordination of IMCI activities. In addition to the working group, it is an option to have a high-level national steering committee to review and validate policy decisions as needed.

- **Early implementation phase:** The purpose of this phase is to gain experience with IMCI planning and implementation through a well-defined set of activities within a limited geographical area.

Once a commitment has been made to the IMCI strategy, a country should gain experience with the strategy in a limited geographical area, which will be used to guide future planning and implementation. In the early implementation phase, the IMCI Working Group develops a national plan for IMCI activities and selects the initial districts for early implementation. The working group coordinates the adaptation of the clinical guidelines and training materials for the country. The group plans for IMCI activities and helps prepare the districts to implement them. District health teams participate in planning and then conduct activities in the district, including several training courses, follow-up visits after training, and ensuring drug availability. Existing community-based programmes or interventions should be strengthened and utilized to promote family and community practices.

The experience explores how the IMCI strategy will fit into the overall planning system at both central and district levels, how to link with health sector reforms, how much it costs, and how district capacity to do IMCI activities can be built. It includes a careful documentation of activities to identify and solve problems. At the end of the early implementation phase, there is a review of the experiences.

- **Expansion phase:** The purpose of this phase is to expand IMCI geographical coverage and activities based on the experience and lessons learned in the previous phase.

Drawing on experience from the early implementation phase, the country plans how to expand IMCI activities in districts where IMCI activities were implemented on a limited scale and begins IMCI activities in other districts. A country may also broaden the range of IMCI activities within the three components of the IMCI strategy: improving case management skills, improving the health system, and improving family and community practices. IMCI evaluation activities begin in this phase.

The IMCI Planning Guide

What is the IMCI Planning Guide?

The *IMCI Planning Guide* was developed by WHO to assist countries who want to undertake the IMCI strategy. It describes a phased process for planning and implementing interventions of the IMCI strategy and recommends steps for each phase up to planning for the expansion phase. The recommendations are based on experience in a limited number of countries. The guide sometimes describes different options and recognizes that countries may find various ways of carrying out the steps depending on their circumstances and ways of operating.

Because the IMCI strategy is an integrated approach, staff and programmes will need to work together in new ways. Some important functions such as policy and guideline development, and setting minimal criteria for quality, will rest at the central level. However, most IMCI activities will be planned and implemented at district level. For these reasons, planning will require some innovative and co-operative approaches. Consensus-building, though it will take time, is essential.

The planning process will include some key events that bring together people from different programmes and institutions. The guide will describe these events in detail and will suggest additional ways to build consensus as plans and preparations are made.

Who should use the *IMCI Planning Guide*?

The *IMCI Planning Guide* is written for the persons responsible for planning for the IMCI strategy within the IMCI management structure, such as the IMCI focal person and the IMCI Working Group. It will also be helpful to other national and district-level planners, and external consultant advisors from WHO, UNICEF and other organizations who are assisting national planners.

How do you use the *IMCI Planning Guide*?

Suggested steps for planning and implementing the IMCI strategy are shown on the flowchart provided with this guide on page 7. The guide is organized according to this proposed sequence. A portion of the flowchart appears at the beginning of each chapter to show the context of the steps described in the chapter. However, there are other possible sequences; countries have proceeded in varied ways during the introduction and early implementation phases to accomplish the same steps.

Persons responsible at the national level, including the members of the IMCI Working Group, should read the entire guide to understand the steps of planning and implementing the IMCI strategy. National and district-level staff involved in certain steps should carefully read about those steps in the guide. To prepare for and conduct a certain step, study the guidelines carefully, adjust them as needed, ensure any preparations are complete, and then conduct the step, referring to the guidelines as needed.

Are there other tools that can help?

WHO has developed some additional IMCI documents to help planners, such as the *Adaptation Guide*,[1] *Guidelines for Follow-Up after Training*,[2] the *Course Director's Guide*,[3] and *Improving family and community practices: A component of the IMCI strategy*.[4] These documents are used to prepare for and conduct specific activities such as adaptation, follow-up after training, an IMCI course, and planning of activities to improve family and community practices.

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[1] *Integrated Management of Childhood Illness. Adaptation Guide, A guide to identifying necessary adaptations of clinical policies and guidelines, and to adapting the charts and modules for the WHO/UNICEF course*, Working draft November 1999, WHO/CAH

[2] *Guidelines for Follow-Up after Training in the WHO/UNICEF course on Integrated Management of Childhood Illness for first-level health workers*. WHO/FCH/CAH/99.1

[3] *The Course Director's Guide, Integrated Management of Childhood Illness*, WHO/CHD/97.3.K Rev.1

[4] *Improving family and community practices: A component of the IMCI strategy*, WHO/CAH/98.2

What is the role of external consultants in planning for the IMCI strategy?

National planners are encouraged to ask for help from WHO, UNICEF and other partners to carry out some of the key activities for planning and for adaptation. There are some events for which the help of an experienced person may be required. These events include:

- A preliminary visit to discuss the IMCI strategy with the MOH
- An orientation meeting at the national level
- The national planning workshop
- An adaptation workshop
- The consensus meeting about clinical guidelines
- Special studies
- The first central-level training course in IMCI case management
- The first follow-up after training workshop and field visits, and
- The review and replanning meeting

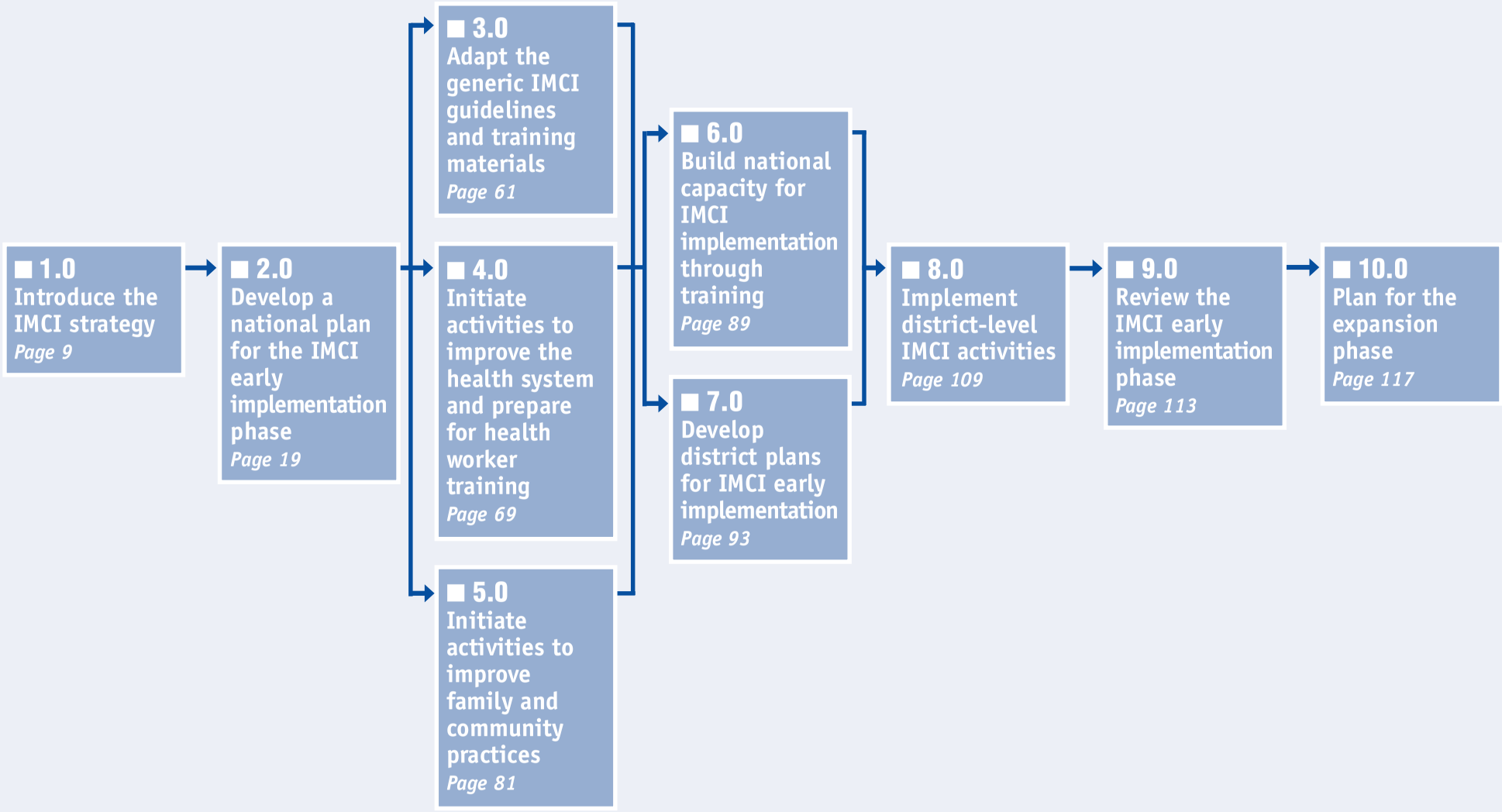
FIGURE 1

Component of the IMCI strategy	Possible activities in early implementation phase
Improving case management skills of health staff	● Adaptation of generic guidelines and training materials on integrated management of childhood illness at the first-level health facility ● IMCI training courses for first-level facility health workers ● Follow-up visits after training to reinforce skills of health workers ● Guidelines and training to improve skills at referral-level facilities
Improving the health system	● Ensuring availability of drugs needed for IMCI through improving supply and management ● Improving referral pathways and services ● Improving organization of work at health facilities ● Improving supervision of health services ● Linking IMCI classifications and the health information system
Improving family and community practices	● Providing health education and counselling to mothers about feeding children and care of a sick child, with improved counselling skills of health workers ● Ensuring that consistent messages about child health are given to families ● Implementing community-based interventions to promote child health and development

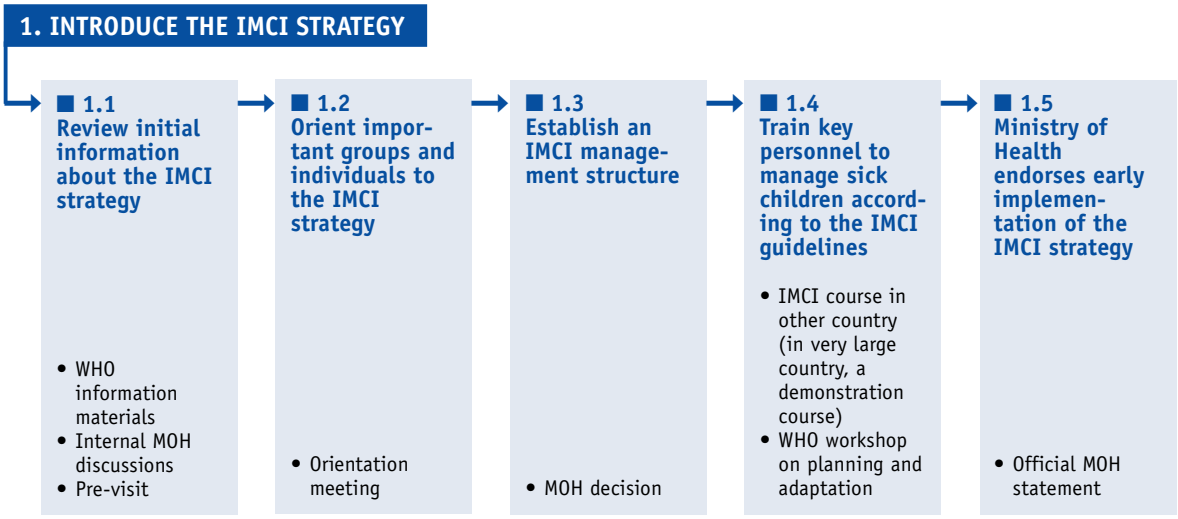
Components of the IMCI strategy

The IMCI strategy involves three components: improving case management skills, improving the health system, and improving family and community practices (Figure 1). References to these three components appear throughout the guide.

OVERVIEW OF THE PLANNING PROCESS FOR THE IMCI STRATEGY



1. Introduce the IMCI strategy



The overall goals of the introduction phase are:

- To create a good understanding about the IMCI strategy including all three components
- To enable decision-makers in the health sector to make an informed choice whether to adopt the strategy
- To encourage full participation of staff in the planning process
- To agree on a management structure for early implementation of the IMCI strategy
- To train a few key staff members in preparation for planning and early implementation of the IMCI strategy
- To encourage the Ministry of Health to demonstrate commitment to explore the potential of the IMCI strategy by means of the early implementation phase

Initial interest in the IMCI strategy usually arises from someone or a group charged with 'child health', such as the MCH programme or Child Health Division. They may require the assistance of an experienced consultant to guide the country through the introduction phase and to be present for orientation meetings.

The steps in this phase are described in this section.

1.1 Review initial information about the IMCI strategy

The description of this and the next step (1.1 and 1.2) is directed to the individual or the group who stimulates the interest in the IMCI strategy in the country. The rest of this guide is addressed to the persons responsible within the IMCI management structure, such as the focal person for IMCI.

To initiate the discussions about IMCI in the country, send official requests for information from the Ministry of Health to WHO, UNICEF or other organizations with suitable experience, so that the country will receive a well-informed response. It is important that the IMCI strategy is well understood from the beginning.

1.1.1 Review specially prepared generic materials on the IMCI strategy and its implementation, which can be obtained from WHO, UNICEF or other organizations

These materials include:

- The WHO IMCI Information Folder
- *Integrated Management of Childhood Illness (IMCI): a joint WHO/UNICEF initiative*
- *Improving child health, The role of Integrated Management of Childhood Illness (IMCI)*, Division of Child Health and Development, WHO

1.1.2 Hold initial discussions among senior decision makers, reviewing the specific information obtained and discussing:

- The nature and scope of the IMCI strategy
- How the IMCI strategy relates to the needs of the country
- The process of implementing the IMCI strategy gradually, in phases
- The implications for organization and resources (estimates of likely costs and effectiveness)
- Planning for a wider orientation, including a formal orientation meeting and technical meetings with groups and programmes

Involve the highest possible levels of the Ministry of Health in individual or small group meetings to discuss the IMCI strategy. They should learn enough about IMCI that they could chair subsequent meetings from a position of knowledge. Include in the discussions donors and other partners, including NGOs who are interested in improving child health in the country, if this is appropriate and useful.

It can be very helpful to request that a consultant trained in planning the IMCI strategy make a preliminary visit. During the preliminary visit the consultant can help hold these important discussions and discuss implications of introducing the IMCI strategy in a country.

Helpful materials for these discussions and the orientation meeting described in step 1.2 below include the items listed above (in 1.1.1) and:

- Available information about the country:
  - epidemiological data on childhood illness
  - service data on case management of childhood illness
  - household study data

The outcome of this step may be a decision to pursue further discussions and plans by means of a structured orientation to the IMCI strategy for the Ministry of Health and other groups. Some countries are then able to move quite quickly through initial steps of the introduction phase (steps 1.1–1.5), accomplishing them almost simultaneously; some countries require several months. Or, a country may decide not to pursue the IMCI strategy at this time, recognizing that some important preliminary activities are needed before engaging in the IMCI strategy.

1.2 Orient important groups and individuals to the IMCI strategy (orientation meeting)

If there is an interest in the IMCI strategy, plan a formal orientation meeting. The orientation meeting provides an opportunity for a large group of stakeholders to reach a common understanding of the concepts and practical principles of the IMCI strategy, and its advantages and implications for the health system.

The format and duration of the meeting may vary, depending on the depth of the discussions that have already taken place and the readiness of the country to move forward. If few discussions have taken place, and the Ministry of Health needs more elaborate information about the IMCI strategy, it will be useful to conduct a two-day meeting to provide information and reach a common understanding. If substantial discussions have already taken place with the help of an experienced person (as in a preliminary visit), the Ministry may be ready to commit to the IMCI strategy. In this case, it will be useful to extend the orientation to include steps to prepare for the national planning workshop.

Annex A describes different options for conducting the meeting. Use the annex to decide on the most appropriate option and prepare for the workshop accordingly. Figure 2 summarizes key aspects of an orientation meeting.

Look for a person with experience in planning IMCI to help plan and conduct the orientation meeting and advise on a management structure (perhaps a consultant from WHO, UNICEF or another organization). Informal meetings to generate and maintain interest may precede or follow the orientation meeting.

1.3 Establish an IMCI management structure

The Ministry of Health, in coordination with other key actors, should establish a management structure for coordination of the early implementation of IMCI activities. The structure should:

FIGURE 2

Orientation meeting

Objectives

- To provide information and reach a common understanding on the concepts and practical principles of the IMCI strategy, its advantages and implications for the health system
- To discuss the need and explore options for a management structure to coordinate the implementation of the IMCI strategy
- To obtain commitment to initiating the early implementation phase in order to gain experience with the practical application of the IMCI strategy

Participants

- Programme managers and technical staff of programmes involved with IMCI, such as MCH, CDD, ARI, EDP, malaria control, EPI, nutrition, HIS, training, etc.
- Other related ministries and bodies: Rural Development, Education, Social Welfare, Planning, etc.
- Actual or potential partners: bilateral and multilateral agencies, NGO's, health-related institutions
- Academic and training faculties
- Representative from medical association, nursing association

Duration

Two to four days, depending on the country's needs

Methods

Interactive mix of presentations and discussions

Topics

See agenda in Annex A

- Involve all major concerned parties, at least technically, in decision making, so that they may feel ownership of the IMCI strategy
- Have the authority to make decisions across programmes
- Have the authority and resources to make day-to-day decisions on the implementation process without delay

A structure that has been shown to work includes an IMCI Working Group, a coordinator for the working group, and a focal person for the IMCI activities. In addition, some countries may wish to have a higher-level steering committee.

IMCI Working Group: The working group will guide and support the ongoing planning and management during early implementation. This small group should include staff of relevant programmes (such as ARI, CDD, MCH, malaria control, nutrition); representatives from the national drug programme, national breastfeeding committee, and organizations involved in community-based interventions; representatives of university departments and important institutions; paediatricians and interested partners. Programmes should nominate a member for the working group who can make the time commitment to carry out IMCI activities.

The working group will have the shared responsibility to carry out the activities in the early implementation phase:

- Provide technical support and advice to the IMCI focal person
- Carry out the steps of adaptation of the IMCI guidelines and training materials
- Plan and implement activities at the central level, and assist districts in building capacity for planning, implementing and documenting IMCI activities at district-level
- Facilitate the coordination of concerned programmes and groups

It has proven advantageous to organize the working group in two or three subgroups:

- The Adaptation Subgroup focuses on adaptation. Its members are technical staff from concerned programmes, pediatric association, academic institutions.
- The Implementation Subgroup focuses on planning for implementation and data collection at the central and district levels. Its members are staff with substantial programme experience.

- The Family and Community Practices Subgroup (optional) focuses on planning for implementation of interventions for this component. Its members should include key persons who are working with communities and families.

It is important that appropriate staff from district level become involved in planning as soon as possible.

Each subgroup needs a coordinator to schedule meetings and organize the work. The IMCI focal person may serve as coordinator of one of the subgroups. Some members may serve on one or more subgroups, though this may be limited by the time they are able to devote to working on IMCI activities. As soon as the early implementation districts are selected, representatives from the districts should join each subgroup.

The full IMCI Working Group should meet regularly during early implementation so that the subgroups can update each other on their work and share information.

IMCI Working Group coordinator: The IMCI Working Group should have a leader or coordinator who is a senior member of the Ministry of Health and can effectively foster coordination among programmes and institutions represented on the working group. Designating someone for this role who is at a higher organizational level than the managers of the technical programmes will facilitate coordination. This individual should be a well-respected person to whom the paediatricians and others on the working group will respond. In addition he or she should have the authority required for making and implementing the decisions of the working group, including advocating for the IMCI strategy and allocating resources for its implementation.

IMCI focal person: The Ministry should be encouraged to assign at least one person to work full-time on IMCI activities. This focal person has the day-to-day responsibility for ensuring that planning and implementation moves ahead at a steady pace. The IMCI focal person is a member of the working group, but probably not the coordinator. The focal person will manage and facilitate the IMCI activities, such as by inviting members of the working group to meetings, circulating information, and participating in and supporting the work of the subgroups. The individual selected for this role should have a medical background, ideally in paediatrics, and programme experience. The focal person should have secretarial and administrative support.

Where possible the IMCI Working Group and the focal person should be supported by an IMCI secretariat, consisting of several staff who can dedicate a substantial amount of their time to IMCI-related activities on a regular basis. This becomes particularly important once the implementation of activities at district level has started, when there will be a demand for managerial support from the central level.

A high-level steering committee: (Optional) Some countries may consider having a small committee (4–5 people) that includes a few essential senior Ministry of Health officials, and advisers from senior faculty of universities and institutions. The IMCI Working Group coordinator would be on this committee. The committee would:

- Review and validate the work of the working group and
- Facilitate higher-level policy decisions as needed.

At the district level, a district focal person and the district health team: In districts, health activities are usually managed by the district medical officer and a district health team of 5–10 people which may include some nurses, public health inspectors, and doctors. In each early implementation district, the district medical officer or an appointed member of the team should be a **district focal person for IMCI**. This individual should coordinate with the central level, including the IMCI Working Group and its subgroups. The focal person represents the interests of the district, helps the central level plan for activities in the district and helps the district health team obtain advice and support needed from the central level.

Alternatively, the IMCI Working Group in consultation with the district health team may decide to establish a district IMCI Working Group. This will enable the district health team to co-opt representatives from other sectors and organizations to plan and implement IMCI activities. Some countries already have established district health management teams that are an extension of the district health team, to meet these objectives. Whatever the organizational arrangement chosen, it is important that the IMCI focal point has a close link with the district health team and therefore is a full member of it.

The long-term success of the IMCI strategy will depend in part on whether there is effective coordination of the concerned programmes. Countries will evolve a suitable structure for this coordination, drawing on the experience of the early implementation of IMCI.

1.4 Train key personnel to manage sick children according to the IMCI guidelines

Key personnel in the IMCI Working Group need to be trained to manage sick children according to the IMCI guidelines by participating in a standard 11-day course for first-level health workers. This is essential so that they can lead the IMCI Working Group to adapt the case management guidelines and plan for IMCI training courses and other activities.

As soon as the IMCI focal person and members of IMCI Working Group are designated, the Ministry should discuss with WHO, UNICEF or other child health organizations how to train key persons. Discuss arrangements for sending to an IMCI training course at least the IMCI Working Group coordinator, the IMCI focal person and the coordinators for the Adaptation and Implementation Subgroups. If there is to be a community subgroup, the coordinator should also be included. A donor may support participants going to a course in another country where fully adapted materials have been completed and courses are underway. There may also be an opportunity for someone to participate in a WHO workshop on planning and adaptation.

In some countries, where it is essential to have a larger group of people that are knowledgeable about IMCI in order to get commitment to proceed, an option is to conduct a demonstration IMCI case management course. A demonstration

course is conducted with only minimally adapted materials. Experienced facilitators are brought from outside the country. Though it is costly, it allows a large number of people to learn about the IMCI clinical guidelines, how a course is organized and how it works. However, there is very limited experience with demonstration courses and there is known difficulty preparing and using a course with minimal adaptations. It may be better for key staff to participate in a course in another country where adaptation has been completed and implementation of courses is underway. This knowledge will be especially important for the individuals who plan early implementation, such as the IMCI focal person and subgroup coordinators.

1.5 Ministry of Health endorses early implementation of the IMCI strategy

The long-term future of the IMCI strategy in a country depends on acceptance and commitment from the Ministry of Health and other groups. As each country has to find the best way to implement the IMCI strategy, it cannot be expected that the Ministry will express full commitment to long-term implementation before the health system has gained some experience.

However, even the introduction of the IMCI strategy involves existing programmes and staff working in new ways. Therefore, it is essential that the Ministry of Health officially endorse the steps of early implementation.

In order to facilitate coordination, enhance credibility with partners and increase visibility of the IMCI strategy, the Ministry should prepare and issue an official statement announcing:

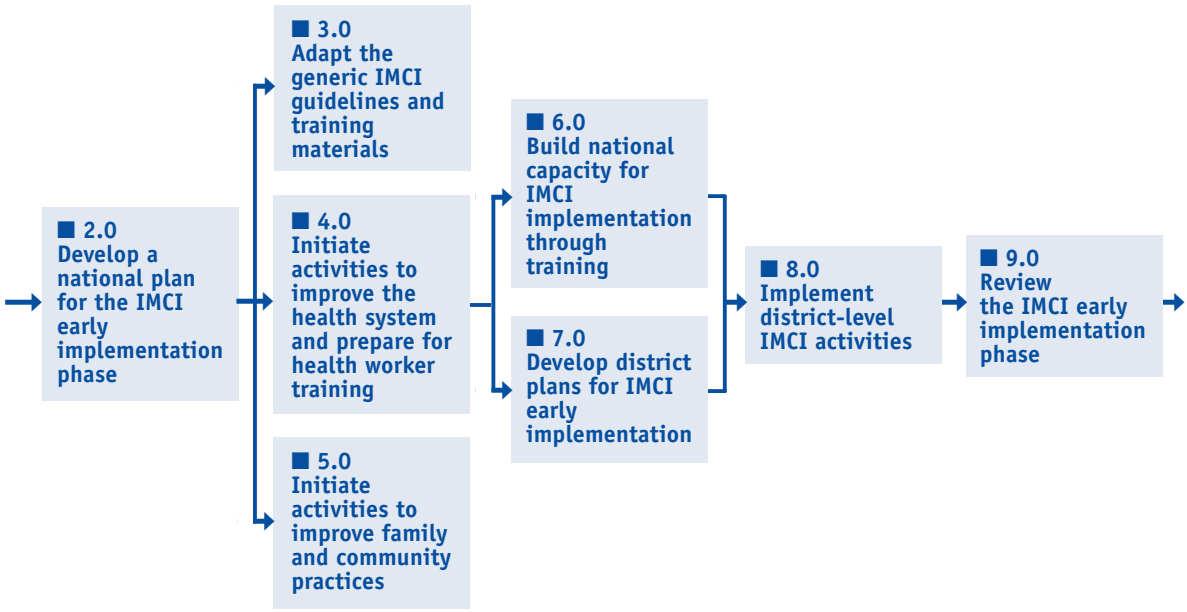
- The Ministry's decision to implement the IMCI strategy, beginning with carrying out an early implementation phase
- The management structure for IMCI, including the membership of the IMCI Working Group, the working group coordinator and the IMCI focal person
- The Ministry of Health authorizes appropriate staff time of all concerned programmes to collaborate with the early implementation of the IMCI strategy.

The Ministry of Health should send this statement to all concerned programmes within the Ministry, with a covering letter directing them to collaborate in the early implementation of the IMCI strategy. The official statement should be widely distributed, including being sent to universities, and partner organizations that attended the orientation meeting.

As soon as the Ministry of Health has made this endorsement of the IMCI strategy, the country should proceed quickly to prepare a national plan for the IMCI early implementation phase (step 2.0 below). This plan will help to ensure that activities proceed in a coordinated way. If development of a national plan is delayed, and adaptation or other activities begin anyway, inefficiencies and confusion are likely.

Overview of the IMCI early implementation phase

STEPS IN THE EARLY IMPLEMENTATION PHASE



During the early implementation phase, the country will gain experience with implementation of IMCI activities at the central level and in a small number of districts (2 or 3). Early implementation includes planning, adapting clinical guidelines and training materials, building training capacity at the central and district levels, and conducting training courses and follow-up visits. It includes activities to strengthen the health system, such as ensuring the availability of drugs needed for IMCI. It explores how the IMCI strategy fits into the overall planning system at both central and district levels, how it links with health sector reforms, how much it all costs, and how to build district capacity to do IMCI activities. This phase also includes carefully documenting activities to quickly solve problems. The information on activities is organized for a review after about one year of implementation in order to strengthen future plans.

Step 2.0 is done by the whole IMCI Working Group. Then three blocks of activities are done simultaneously by the subgroups:

- Step 3.0 is done by the Adaptation Subgroup and focuses on adaptation of IMCI clinical guidelines and training materials, and then the preparation and production of materials.

- Step 4.0 is done by the Implementation Subgroup, including staff from the selected districts. It includes orienting and beginning work with the districts.
- Step 5.0 is done by the Family and Community Subgroup, if the IMCI Working Group decides to form one to address the major issues regarding the promotion of key family and community practices. Otherwise this step is done by the Adaptation Subgroup.

Steps 6.0 and 7.0 are then done at approximately the same time. Step 6.2 is the first IMCI case management course at the central level. Some district staff should be trained in this course before doing planning and preparations in the district (step 7.0).

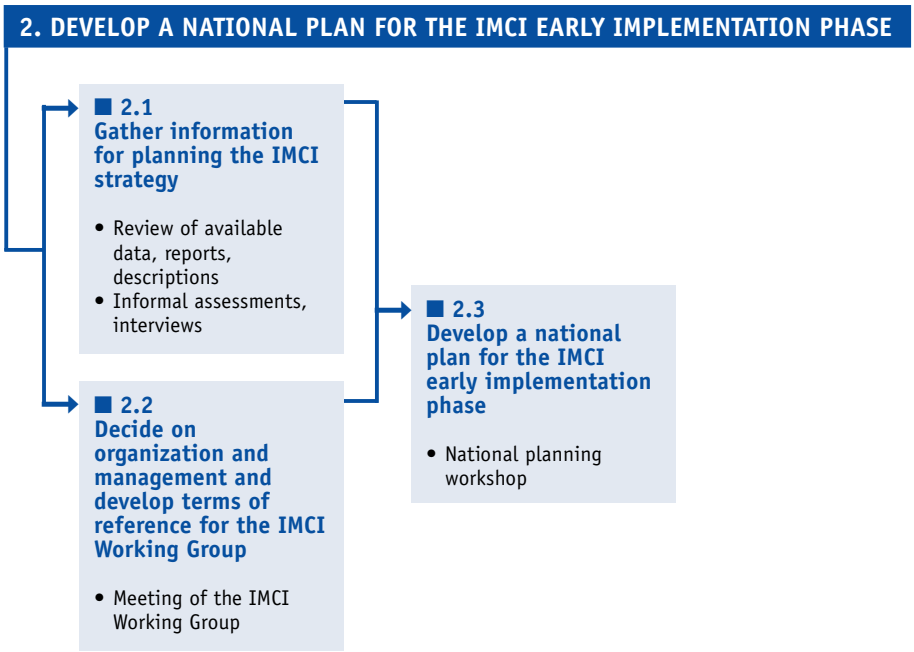
Step 8.0 is carried out at the district level, by district staff, with some involvement and support from the central level.

Step 9.0 is the responsibility of the central level, with participation of district staff.

A country may feel the need for some technical assistance from a person with experience implementing the IMCI strategy, such as a consultant or representative of WHO, UNICEF, or another organization. This assistance may be most helpful with several key steps in the early implementation phase, specifically:

- The national planning workshop (step 2.0)
- The first meeting of the Adaptation Subgroup (step 3.1, also called adaptation workshop) and the consensus meeting about clinical guidelines (step 3.3)
- First central-level IMCI training course (step 6.2)
- First follow-up after training (steps 8.2.2)
- Review of the early implementation phase (step 9.0)

2. Develop a national plan for the IMCI early implementation phase



The first step in the early implementation phase is the development of a national plan. A national planning workshop is a feasible way to achieve this. In preparation for this workshop, there is a need to gather information and formalize the IMCI management structure. The outcome of this step is a national plan for the early implementation phase that forms the basis of all steps and tasks that will follow.

2.1 Gather information for planning the IMCI strategy

The national planning workshop (step 2.3) and the initial meetings of the subgroups (steps 3.1, 4.1 and 5.1) will include discussions and decisions that should be based on accurate information about the current health situation and services. To prepare for these meetings, this information should be collected and then prepared for the members in a clear and organized format.

The recommended approach is to gather only information that is essential for planning of clinical guidelines, for setting priorities and for planning activities in the three components of the IMCI strategy. Figures 3 and 4 list information to gather prior to these meetings.

FIGURE 3

Preparing for the national planning workshop:

Checklist of useful information to gather if available

1. ☐ Major causes of morbidity and mortality in children in the country
2. ☐ Health facilities: structure of health system, approximate numbers, types of health facility, utilization of health services
3. ☐ Current case management practices (compliance with national policies)
4. ☐ Target group for training: categories of health workers managing sick children and approximate number of each
5. ☐ Information on how inservice training is currently organized (e.g., for CDD/ARI, MCH, nutrition): methods, availability of clinical trainers, etc.
6. ☐ Existing training sites and possible central-level sites for IMCI case management courses
7. ☐ Any ongoing health sector reform efforts
8. ☐ Major partners in child health
9. ☐ Availability of drugs and supplies: supply and distribution to health facilities in districts
10. ☐ List of generic drugs that are needed for IMCI case management
11. ☐ Usual referral practices at first-level facilities when severely ill child needs additional care
12. ☐ Description of current monitoring and supervisory systems at the district level: job descriptions, data on quality and frequency of supervisory visits, types of monitoring tools
13. ☐ Description of existing health information system (HIS): how it performs including frequency, type of information collected, methods, forms, and how information is used
14. ☐ Some information on a few likely districts for early implementation, if known: accessibility to central-level staff, availability of suitable training sites, accessibility of referral of severely ill children from first-level facilities, availability of drugs, committed staff, support by partner organization
15. ☐ Any available information on careseeking patterns, caretaker recognition of illness, and home care practices
16. ☐ A brief summary of who is doing what with regard to community-based child health and nutrition promotion
17. ☐ Information on existing interventions to improve family and community practices

FIGURE 4

Preparing for the initial meeting of the Adaptation Subgroup:

Checklist of useful information to gather if available

Epidemiological data

1. ☐ Distribution of high, low, no malaria risk areas in the country
2. ☐ Rate of malnutrition based on WFA and criteria by age or growth chart used in the country
3. ☐ Prevalence of vitamin A deficiency
4. ☐ Rate, intensity, geographic distribution of infection with hookworm and whipworm in children (for ages 2, 3, and 4 years of age)
5. ☐ Other important causes of fever in children less than 5 years of age, for example dengue haemorrhagic fever, typhoid, or borreliosis. If they are significant, during what seasons of the year or in what subpopulations.
6. ☐ Other common health problems (for example, wheezing)

Clinical guidelines and national policies

7. ☐ Policy statements on case management, including case management charts and other summaries of clinical guidelines for managing children:
   - ☐ ARI
   - ☐ Diarrhoeal disease
   - ☐ Malaria
8. ☐ Nutrition or MCH programme policies on:
   - ☐ Promotion of breastfeeding
   - ☐ Infant feeding and complementary feeding recommendations
   - ☐ Therapeutic feeding and supplementary feeding of malnourished children
9. ☐ Vitamin A policies on:
   - ☐ Use in measles cases
   - ☐ Supplementation policies (regular supplementation policy, if any, or linked with immunization after 6 months of age, or to children with specific diseases)
10. ☐ Immunization policies on:
    - ☐ Schedule
    - ☐ Availability of vaccines for administration in clinic on a daily basis

(continued page 22)

FIGURE 4 (*continued*)

Drugs

11. ☐ National drug policy (policy statements)
12. ☐ National Essential Drugs List
13. ☐ List of drugs recommended for treating conditions addressed in the IMCI guidelines and those supplied to first-level health facilities (including formulations supplied)
14 ☐ Guidelines for drug use issued from Essential Drugs Programme (or pharmaceutical division)
15. ☐ Information from country or adjoining countries on antimicrobial susceptibility of:
    - ☐ *Streptococcus pneumoniae*
    - ☐ *H. influenzae*
    - ☐ *Vibrio cholerae*
    - ☐ *Shigella* species
    - ☐ *P. falciparum* malaria

Programme activities

16. ☐ Breastfeeding counselling course (whether given; who has been trained; whether health workers can observe breastfeeding in clinics)
17. ☐ Mother's counselling cards and any other communication materials for the following programmes:
    - ☐ ARI
    - ☐ CDD
    - ☐ Malaria
    - ☐ Nutrition, including breastfeeding and complementary foods
    - ☐ Immunization
18. ☐ Training of workers in first-level facilities in cold chain and vaccine administration
19. ☐ Who is doing what in relation to community-based child health and nutrition promotion
20. ☐ Child deworming efforts
21. ☐ Results of studies, if any, identifying local terms for signs of illness (e.g., focused ethnographic studies)

Existing sources of information for planning include:

- Supervisory reports, training reports and records
- Surveys (CDD/ARI Health Facility and Household Surveys, Breastfeeding Surveys, Demographic Health Surveys, Multiple Indicator Cluster Surveys, Focused Ethnographic Studies)
- National morbidity/mortality studies
- Programme review reports, etc.

Information can also be gathered through interviews with knowledgeable sources and in informal but well-focused assessment visits to some districts.

In most cases, these sources provide sufficient and accurate information for planning. Extensive data-collection activities are seldom worth the investment of time and resources. Surveys, which can require intensive effort and expense, are not recommended. Large-scale surveys are particularly discouraged. Because the objective of early implementation is to identify the best operational solutions rather than to demonstrate or measure change, observational visits are adequate to determine current conditions and improvements needed. Some countries have developed detailed checklists for assessing district health services and management.

2.2 Decide on organization and management and develop terms of reference for the IMCI Working Group

Before the national planning workshop, the IMCI Working Group should meet to discuss and agree on:

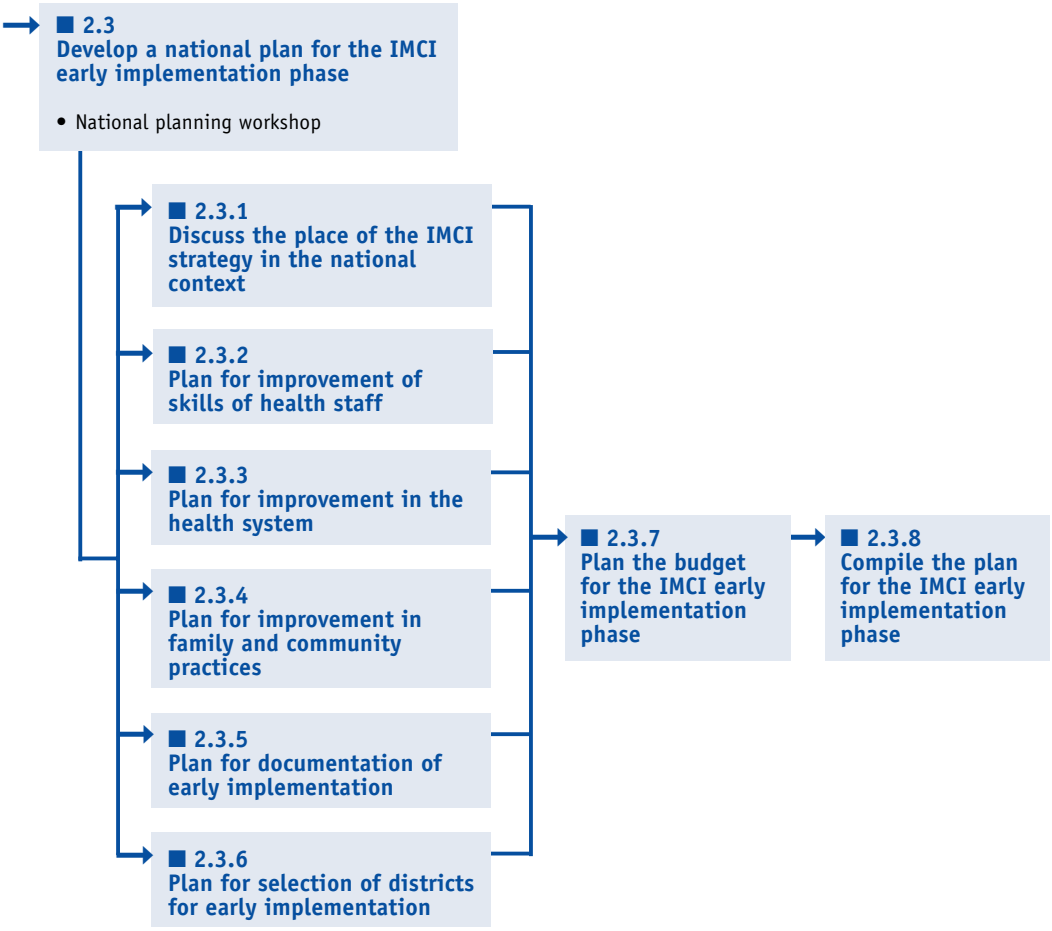
- The role of the IMCI Working Group (to plan IMCI activities and assist districts to plan and implement them) and which members will participate in the work of the subgroups
- How the districts selected for early implementation will be involved in planning (a focal person and possibly other planners from each district will be members of the subgroups, especially the Implementation Subgroup, as soon as possible)
- A format for the national planning workshop, appropriate participants to invite, and how to organize the information needed for the workshop

The IMCI focal person should:

- Organize the information that will be used during the workshop (and during the initial work of the subgroups), invite the appropriate participants, and make all arrangements for the workshop
- Schedule the initial meetings of the subgroups soon after the national planning workshop

2.3 Develop a national plan for the IMCI early implementation phase (conduct a national planning workshop)

The IMCI Working Group and partners need to agree on a strategy for the early implementation phase and major activities of the phase. This planning is done in a national planning workshop and documented in a written national plan for the IMCI early implementation phase.



The workshop addresses the strategic decisions for IMCI early implementation. Detailed plans for implementation at the district level are made later, with the participation of representatives from the selected districts.

The national plan should address all three IMCI components. It is important to keep in mind and plan for all three components from the beginning even though implementation of different interventions and activities in the three components will have to be phased-in in the selected districts. In the early implementation phase, there is substantial focus on implementing activities for *improving skills of health staff*.

During early implementation it is also important to focus on all aspects of *improving the health system* to facilitate case management at first-level facilities.

Ensuring that families receive consistent messages about *improving family and community practices* related to child health, and implementing specific community-based interventions to effect other behavioural changes in the community, may also be included in early implementation.

As the IMCI strategy is broadly defined and encompasses a range of activities, existing programme activities can contribute to the IMCI strategy and be a part of it. Coordinated planning should consider how different interventions can link with already available resources such as the Baby Friendly Hospital Initiative, breastfeeding counselling training, the promotion of insecticide-treated bednets, or community-based interventions to improve nutrition and careseeking.

Figure 5 summarizes important aspects of the national planning workshop.

Topics to address during the workshop are listed in Figure 6 below. Each is described in detail in the text which follows (the text section number is in parentheses).

Guidelines for conducting the workshop

The IMCI Working Group coordinator and the IMCI focal person may co-chair the workshop. A consultant with experience in planning IMCI may also help to facilitate the group discussion through the necessary topics.

Methods to complete the discussions on topics can vary. They may involve work in subgroups, provided an experienced facilitator is available to guide each subgroup. To decide how to conduct the workshop, use the following:

Work as one group if:

— there is only one facilitator,

— the orientation process was brief,

— there is a need for additional information on the rationale and content of the topics,

— the number of participants allows involvement of all individuals.

Work in subgroups, if:

— there are at least two facilitators,

— orientation was thorough,

— initial steps have been made to plan for implementation and adaptation.

FIGURE 5

National planning workshop

Objectives

- To develop a written national plan for the IMCI early implementation phase which addresses the 3 components of IMCI
- To develop a shared understanding of IMCI among the IMCI Working Group and partners and full commitment to follow the plan
- To agree on phasing out of CDD and ARI in districts where IMCI will be supported, and agree to work towards their integration and continued implementation in other districts

Participants

- The full IMCI Working Group
- Major partners in improving child health
- Staff involved in health sector reform efforts
- An expert in planning the IMCI strategy[1]

Duration

4–5 days

Methods

Presentations on the need for a national plan for the IMCI strategy and the activity areas to be planned. Discussions to plan each area, either in plenary or in groups. Plenary discussion to reach consensus upon final plan. A rapporteur should keep notes of the discussion and conclusions for the national plan.

Topics

See Figure 6

[1] If a consultant is to help with the adaptation process, this consultant should be invited to the national planning workshop and the first meeting of the Adaptation Subgroup.

FIGURE 6

Topics to cover in the national planning workshop

- Need for a national plan that describes the strategy and major activities for the early implementation phase
- Place of the IMCI strategy in the national context (2.3.1)
  - — Organization, management, policy (2.3.1.1)
  - — Ongoing health sector reforms (2.3.1.2)
- **Improvement of skills of health staff** (2.3.2)
  - — Adaptation (2.3.2.1)
  - — IMCI training courses for first-level health workers (2.3.2.2)
  - — Follow-up visits after training (2.3.2.3)
  - — Improving skills of referral-level health workers (2.3.2.4)
  - — Optional: Introducing IMCI in preservice training (2.3.2.5)
- **Improvement in the health system** (2.3.3)
  - — Availability of drugs and supplies needed for IMCI (2.3.3.1)
  - — Referral pathways and services (2.3.3.2)
  - — Organization of work in health facilities (2.3.3.3)
  - — Supervision (2.3.3.4)
  - — Linking IMCI classifications and the Health Information System (2.3.3.5)
- **Improvement in family and community practices** (2.3.4)
- Documentation of early implementation (2.3.5)
- Selection of districts for early implementation (2.3.6)
- Budget for the early implementation phase (2.3.7)
- Compile the national plan for IMCI early implementation (2.3.8)

In this instance, one subgroup could discuss issues on implementation, while the other group discusses adaptation and planning for family and community practices. (Note that at this stage of planning, it is useful to plan the tasks for adaptation and improving family and community practices together, as there is an overlap. After the planning workshop, tasks can be divided again and the Implementation Subgroup can be responsible to initiate the first steps to plan community-based activities).

Begin the workshop with

- Introductions of the participants
- Description of the workshop objectives
- Discussion of the need for a written national plan for the early implementation phase
- The topics that will be planned in the workshop.

Below are item-by-item guidelines for then discussing and planning the major areas of early implementation. Generally the discussion should begin with a description of the topic to be planned. The guidelines then list the items to be discussed, decided, or planned for the topic.

2.3.1 Discuss the place of the IMCI strategy in the national context

As a conclusion of the orientation process, the Ministry of Health made a formal commitment to engage in the IMCI early implementation phase, in order to gain experience with implementing the IMCI strategy. For future sustainability, it is necessary to have clarity at an early stage about where the IMCI strategy will fit into the national health policy, and how different programmes and partners will contribute to it. In countries where health sector reforms are underway, the linkage with the IMCI strategy should be examined carefully. Although it is beyond the scope of the early implementation phase to arrive at policy changes rapidly, it is important to keep this in mind as an eventual goal.

It is useful to start the planning workshop with the discussion on how the IMCI strategy fits in the national context of health sector development. To this effect, the meeting should discuss issues related to organization, management and policy, and where appropriate, how the IMCI strategy links with ongoing health sector reforms.

2.3.1.1 *Plan for sustainable organization and management, and adequate policy support for the IMCI strategy*

By the time the planning workshop is held, the IMCI Working Group is likely to have agreed upon a working mechanism which may involve subgroups, and specific responsibilities for each subgroup (described under point 2.2). This organizational arrangement aims to ensure the involvement and contributions of all relevant programmes and partners into the planning and implementation of the IMCI strategy.

While there is usually willingness of relevant programmes to participate in the IMCI Working Group, experience indicates that it is more difficult for all those involved to feel ownership for the IMCI strategy. Working Group members should continue to examine what the IMCI strategy can offer the different programmes, such as CDD, ARI, malaria control, nutrition and EPI. They should gain a clear understanding and agree upon the principle that the IMCI strategy covers almost all aspects of national CDD and ARI programmes, and the child-related elements of national malaria control and nutrition programmes. Collaboration during the early implementation phase should eventually lead to policy changes that acknowledge the place of the IMCI strategy in the national health policy, which will be necessary as a basis for expansion.

- Review the organizational arrangement that has been made for the IMCI early implementation phase. Agree upon specific terms of reference for the working group and subgroup(s).
- Review the available manpower to work on IMCI implementation. Ensure that at least one person with a coordinating function is available full-time, i.e. the IMCI focal point. Agree upon a minimum proportion of time that other working group members will contribute to IMCI planning and implementation. Discuss the importance of programme managers agreeing to this formally.
- Discuss which aspects of the different programmes are covered by the IMCI strategy. Start discussing how the IMCI strategy fits into specific programme policies, and in the national child health policy overall.
- Explore the implications for resource allocation. Specify how programmes will benefit from contributing human and financial resources to the IMCI strategy.

2.3.1.2 *Plan how to link the IMCI strategy with ongoing health sector reforms*

Reforms of the health sector are either discussed or already underway in most countries. Health sector reforms could be defined as the attempt to improve efficiency, equity, and effectiveness of the health sector. Health sector reform strategies include strengthening management of public health care, improving the function of ministries of health, decentralization, identifying an essential package of health care services, defining the role of private health care providers

in the health system, identifying alternative sources for financing, and improving finance management of the health sector.

There are obvious linkages between the IMCI strategy and health sector reforms. Health sector reform concepts encompass a new role of the Ministry of Health in policy making, formulating regulation, and monitoring. Decentralization of management and planning of health services to district levels, building capacity at first-level health facilities, and emphasis on "essential services" are other key components of health sector reforms that are relevant and in line with the IMCI strategy. Considering the interest and support that health sector reforms are receiving in developing countries, it is important to identify how and when the IMCI strategy could be part of and contribute to health sector reforms.

Below are points to address during the workshop to plan how IMCI activities can be a part of and contribute to health sector reforms:

- Review ongoing and planned health sector reforms in the country, such as:
  - World Bank-supported projects
  - Cost recovery initiatives (for example, the Bamako initiative on community financing and management of drugs)
  - 'Minimum package' of activities or 'essential services' (child health is usually included in this kind of prioritization of health care services)
  - Decentralization (delegating authority to districts to plan, implement and finance key interventions)
- Discuss and plan how IMCI activities can link up with reform efforts. As described, health sector reforms and the IMCI strategy can and should be complementary to one another. These links need to be identified and understood by all key partners within each specific country situation. This could be achieved through various mechanisms:
  - Information exchange
  - Mutual review of policies, strategies and guidelines to ensure compatibility and consistency
  - Mutual participation in planning
- When larger health projects are prepared in a country, such as World Bank-supported projects, the IMCI strategy needs to be considered both at the stage of identification and selection of key areas and possible interventions, and at the stage of pre-appraisal and preparation of an implementation plan. In this process, public health specialists, health planners and paediatricians addressing child health issues need to be aware of and understand the IMCI strategy. This could be done through:
  - Orientation meetings
  - Joint planning exercises
  - Participation in project identification, pre-appraisal

— Appraisal missions by individuals knowledgeable about the IMCI strategy

The outcome of this discussion should be a section for the national plan including:

— Description of planned and ongoing reform efforts

— Description of opportunities for including IMCI activities in the reforms and having the IMCI strategy benefit from their efforts

2.3.2 Plan for improvement of skills of health staff

The IMCI strategy can encompass a range of training activities including the IMCI case management course for first-level health workers, the drug management training course for first-level health facilities, and breastfeeding counselling training for breastfeeding counsellors at the referral level. In addition, guidelines for care at first-referral level are available.

During the early implementation phase, it is recommended that all countries use the course *Integrated Management of Childhood Illness* for first-level health workers. However, it is also important to consider at an early stage how and when to phase in other training activities, without overburdening the district health team and health workers involved. Additional training activities may be introduced later, after the first review and replanning.

The clinical guidelines and training materials must be adapted to be suitable for the country, so adaptation must be completed before the case management training activities can begin. Training of first-level health workers includes the case management training course for initial skill acquisition *and* follow-up visits to reinforce skills and help to solve problems. During this workshop plans should be made for adaptation, first IMCI training courses for first-level health workers and follow-up visits.

2.3.2.1 *Plan for adaptation*

Plan for adaptation of the clinical guidelines for case management and the training materials.

WHO has prepared the *IMCI Adaptation Guide* to help countries through the process of adaptation. It is a companion to the *IMCI Planning Guide* and is written specifically for the adaptation coordinator and subgroup.

To prepare to describe adaptation and the steps involved, study the *IMCI Adaptation Guide*, section A. Below are points to address to plan for adaptation. (Some countries progress rapidly during a preliminary visit of an IMCI consultant and the orientation meeting. They have then had substantive discussions about adaptation and the specific needs of the country before the national planning workshop. If this is the case in your country, you will need to adjust your statements and the agenda accordingly.)

- Explain the rationale and principles of adaptation. (Refer to the *IMCI Adaptation Guide*, 1.3 The need for adaptation, and 2.0 Principles of adaptation.)
- Agree on major steps in adaptation. (Refer to the flowchart of Adaptation tasks facing page 1; also see 1.4 Overview of the adaptation process.)
- Discuss the time requirements for the adaptation process. (It may easily take 6 months.)
- Review data on the five major conditions that contribute to childhood morbidity and mortality addressed in the IMCI guidelines. Discuss whether it is likely that any condition should be removed or added to the country's guidelines (e.g., dengue haemorrhagic fever).
- Confirm responsibility within the IMCI Working Group to carry out adaptation. (Name members and coordinator of the Adaptation Subgroup.)
- Confirm the date for the first meeting of the Adaptation Subgroup.
- Discuss the need and a process for building consensus on adaptations.
- Agree that the subgroup will keep the IMCI Working Group informed of the key issues and progress resolving them.
- Agree that the Adaptation Subgroup will prepare a written document to summarize the technical basis for the national adaptations.

At this workshop, the participants should understand and agree on the major steps of adaptation, which include review of generic guidelines, adaptation of clinical guidelines, feeding recommendations and local terms, activities to build consensus and production of the adapted materials. They will not be able to do a detailed plan for carrying out the steps of the adaptation process. The Adaptation Subgroup will make the detailed plans at their initial in-depth meeting.

Record the major discussion points and the decisions about adaptation for the national plan.

2.3.2.2 *Plan IMCI training courses for first-level health workers*

Training activities during early implementation will usually be limited to in-service training of first-level health workers using the course *Integrated Management of Childhood Illness*. The *IMCI Planning Guide* focuses on planning of in-service[1] training. In-service training courses will show quickly how the clinical guidelines perform and will provide the means to train teachers from pre-service institutions.

Below are points to address when planning national in-service training courses. More detailed plans for conducting the courses in the districts are made later. The group should address the following items:

[1] In-service training is training of health staff who are currently working in a health facility. Pre-service training is training of individuals in preparation for working, such as during medical or nursing school, or a preparatory programme for health assistants or paramedicals.

■ Agree on the format for the IMCI training course for first-level health workers, including the basic methods and duration.

■ Agree how to build training capacity at central and district level, including the role of the central level in initial district training. Figure 7 provides a possible sequence for conducting IMCI courses. National staff trained in IMCI in other countries and/or an external consultant can explain how other countries have developed staff for training courses. Then the group can agree to follow the same procedure or agree on modifications:

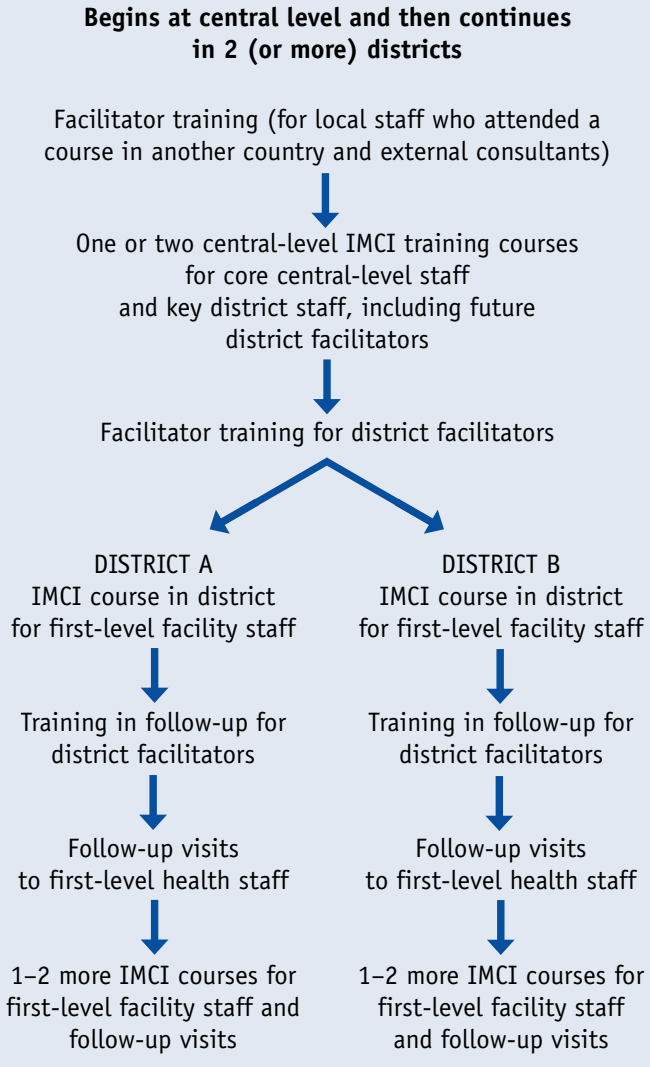
At central level: Often the first training will require external input (in the roles of course director, facilitator, inpatient instructor). If there is a team of nationals who have been trained in an IMCI training course, they may be trained as facilitators. In this case, only an external course director and a clinical instructor are required. If only a few individuals were trained, it will be necessary to involve external facilitators as well. All the facilitators should participate in training in facilitation skills (5 days) before the first central-level course.

The first training course is also an opportunity to try out the adapted materials before they are finalized and printed in quantity. Participants are usually a mix of influential paediatricians, managers from relevant programmes, future facilitators (from central level and districts) and possibly a representative of a major partner. The standard method is a course of 11 days duration. A second course at central level will train more central and district-level staff, so that there is a larger group of staff who can be considered when selecting facilitators for district-level courses.

Determine what support the central level is able to provide to districts. Members of the IMCI Working Group will help

FIGURE 7

Possible sequence of activities for conducting training in Integrated Management of Childhood Illness



conduct initial district-level courses. Discuss how to sustain a pool of available and motivated central-level course staff (such as by paying a small incentive, having a rotating schedule to avoid burn-out).

Assess the need for training teachers of paramedical and medical institutions, heads of paediatric departments and paediatric associations, relevant Ministry of Health staff and senior staff of partners. This may require additional courses at central level.

At district level: Involve future district facilitators in central-level training or train them at initial district IMCI case management courses with central-level facilitation. The method is an IMCI case management course (11 days) followed by facilitation skills training (5 days). To ensure quality, central-level facilitators should assist in initial district courses for first-level health workers.

- Agree on the format of facilitator training[1]
- Agree on quality standards for IMCI training courses for first-level health workers. Recommended standards include:

  One facilitator for four participants

  Course duration: 11 days (minimum 80 hours)

  Proportion of time in clinical sessions: 30%

  Average number of patients managed per participant: at least 20

  Number of course participants: no more than 24

  All training modules completed at the end of the course

  Each participant receives his/her own copy of the chart booklet

  For training of first-level health workers: one follow-up visit conducted within four to six weeks after training

- Specify criteria for:

  Target group for training: Agree on professional categories to be trained during early implementation (e.g., doctors, nurses, clinical officers, medical assistants) and to train a critical mass at each facility (ideally, all staff managing children, as soon as possible, rather than only one or two from each facility). Another criterion is good reading ability.

  Facilitators: Currently active in clinical care of children or breastfeeding counselling, previous training experience if possible, previously trained in the IMCI training course and in facilitation skills, speak the language of participants, available for future training courses.

  Training sites: Facilities must have sufficient case load, access to outpatient and inpatient departments, acceptable quality of care, director and staff interested and able to conduct a number of courses.

[1] Refer to the *The Course Director's Guide, Integrated Management of Childhood Illness*, WHO/CHD/97.3.K Rev.1

■ Plan for the first IMCI training courses which will be held at the central level. The first central-level course(s) fulfills several important objectives. Determine how many (one or two courses at central level) will be needed to meet the objectives:

- To test the adapted materials to identify any adjustments needed, before the materials are printed in quantity
- To train staff from the central level, such as MOH child health programme managers or representatives from partner organizations, so that they will be better informed about the IMCI strategy and better able to support and plan for IMCI activities
- To train staff from the IMCI Working Group and from each early implementation district who will be involved in planning IMCI activities and/or conducting the first district-level training courses as facilitators, course director or clinical instructor.

■ Discuss the requirements for the first central-level course(s). If information is available, the group may select the training site, agencies to contact for external help conducting the course, possible participants, etc.

- To identify an appropriate training site for the first central-level course(s), the group should refer to the text on selecting sites for clinical practice (the inpatient ward and outpatient clinics) in the *IMCI Course Director's Guide*.
- To plan a date for the course, the Adaptation Subgroup will have to estimate when the adaptation of the clinical guidelines and training materials will be complete and ready to try out. This should not be attempted until the Adaptation Subgroup is well into the process of adaptation.
- Assign responsibility to the Implementation Subgroup to complete plans and preparations for the first central-level course(s).

■ Determine the number of courses to conduct in each district, in light of needs and the capacity to implement activities. (Usually 2–3 courses are conducted in each of the selected districts during early implementation, which provides ample experience and information for future planning.) Consider the number of health workers in the district, the number of courses that would be needed to train them, and the number of courses that will be feasible to conduct during early implementation.

■ Assess the approximate number of central and district-level facilitators, clinical instructors and course directors required for central and district training activities.

■ Decide how to review and document the quality of training, using the agreed criteria. Annex B lists methods and procedures for collecting relevant information. Annex C contains a copy of the *Course Director's Summary* for collecting information on each course, and sample tables for summarizing information on quality of training and numbers of courses, participants, and facilitators.

- Agree that the Implementation Subgroup, together with district planners from the selected districts, will have the responsibility to continue planning for training, for example, to work with the early implementation districts to select district-level training sites, plan for facilitator training, etc.

Record the conclusions of this discussion of IMCI training courses for the national plan.

2.3.2.3 *Plan for follow-up after training*

The strategy for follow-up described in the national plan will provide a basis for later making detailed plans for follow-up. Follow-up after training is viewed as an extension of the IMCI training course for first-level health workers, and may or may not utilize the existing supervisory system.[1] Below are items to address in planning for follow-up:

- Discuss and agree on the rationale and recommended approach to follow-up after training

  In the IMCI training course, first-level health workers acquire new skills to manage sick children more effectively. They may find it difficult, however, to begin using these skills when they see children in their clinics. Therefore, a follow-up visit is made to reinforce the new skills and help solve problems that may occur in early attempts to apply them in the clinic. The follow-up visit should occur soon after training, if possible within 4 to 6 weeks, to help each health worker get started. Visits are usually conducted by an IMCI-trained supervisor, and/or a facilitator in an IMCI case management course, or if this is not possible, others may be designated, such as staff from the regional office of the Ministry of Health.

- Agree on the objectives of the follow-up visit:
  - To reinforce IMCI skills and help health workers transfer these skills to clinical work in facilities
  - To identify problems faced by health workers in managing cases and to help solve these problems
  - To gather information on the performance of health workers and the conditions that influence performance, in order to improve the implementation of IMCI guidelines

- Agree on the core activities to be done during a follow-up visit:
  - Introduce the follow-up activity
  - Observe case management and reinforce skills
  - Review facility supports

[1] A complete description of the follow-up activity including activities of a visit, generic job aids and forms for data collection and summary, guidelines for training supervisors, etc., can be found in *Guidelines for Follow-Up after Training* in the *WHO/UNICEF course on Integrated Management of Childhood Illness for first-level health workers*. WHO/FCH/CAH/99.1

- — Facilitate problem solving with the staff
- — Complete a summary report of the visit

■ Agree on any additional possible activities:

- — Caretaker Interview (to determine knowledge of how to continue care at home and satisfaction with care received at the facility)
- — Review of Patient Recording Forms (as a way to identify and discuss case management problems)
- — Practice Exercises (to review guidelines when children are not present during the visit)

■ Discuss what type of staff could conduct the follow-up visits. Some countries have, or are setting up, district health management teams that include clinical officers who work in hospitals and outpatient departments. They maintain their clinical skills and, on the team, are often responsible for the clinical supervision of other health workers in the district. Such supervisors at the district level can more easily visit first-level health workers, compared to persons from a central or regional supervisory team. (Feasibility of involving supervisors in doing follow-up could be another consideration in selecting districts for early implementation.) Consider whether these supervisors could conduct follow-up visits.

It is recommended to pair routine supervisors with trainers. Agree on criteria for staff who will do follow-up visits:

- — Should have completed an IMCI case management training course, and should be trained in IMCI facilitation skills and in conducting follow-up visits
- — Should be district-based and available to conduct visits to health facilities where health workers have been trained

If the district health management team has only a limited number of supervisors who have the clinical skills and status necessary to do follow-up visits, consider using clinicians from the district (or private) hospital to act as facilitators for the IMCI training course and for follow-up. Try to involve staff who are trained in breastfeeding counselling, so they can reinforce and possibly expand the very basic skills provided through the IMCI course.

■ Specify that the person who coordinates IMCI training courses at the district level should also coordinate the follow-up activity.

■ Discuss how information collected during the follow-up visits will be organized, who will receive the reports, and how the information will be shared.

■ Discuss what resources are needed to support the follow-up activity (per diem, transportation, and training of supervisors who will conduct visits) and what resources are available.

- Assign responsibility to the Implementation Subgroup to plan and prepare for follow-up in detail (such as adaptation of follow-up recording and reporting forms, how staff providing follow-up will be trained), in collaboration with the districts selected for early implementation.

Record the conclusions of the discussion of follow-up after training for the national plan.

2.3.2.4 *Consider possibilities for improving skills of referral-level health workers*

Though the emphasis of early implementation is on training first-level health workers, it is important to consider at an early stage how and when to address training needs at the referral level. Possible interventions include use of referral care guidelines[1] and conducting breastfeeding counselling (BFC) training[2] for selected referral-level staff who will become breastfeeding counsellors.

When they follow the IMCI guidelines, first-level health workers will refer severely ill children to hospital for necessary additional care. Referral-level facilities must be able to give appropriate care to these children. Toward this end, health staff in referral facilities may need to improve their skills and knowledge. WHO has developed the referral care guidelines to describe appropriate management of the most common serious problems that these facilities are likely to see. The guidelines are published as a manual that can be used for easy reference by staff in the referral site.

In every district where first-level health workers are to be trained in IMCI case management, selected health workers also need to be trained in BFC to provide breastfeeding referral care.

A specific plan for a national introductory breastfeeding counselling course should be made at the same time as the plan for the introductory IMCI first-level course. It may not be practical to hold two courses close together, (depending on how many people would be involved in both), but coordinate planning and discuss the question of whom it would be appropriate to involve in both courses.

In some situations, it will be preferable to hold BFC training first, in order to prepare a cadre of health workers with an understanding of breastfeeding counselling. Some could be further trained as facilitators in the IMCI course, to ensure that this aspect of IMCI case management is adequately taught. If IMCI first-level training courses are to be conducted during early implementation, but not BFC training, try to link IMCI activities with ongoing activities of the Baby Friendly Hospital Initiative, to ensure that there is at least a Baby Friendly Hospital in the districts implementing the IMCI strategy. For more information on how to link IMCI and breastfeeding activities, see Annex D *Breastfeeding aspects of the IMCI strategy*.

It is important to discuss the concepts of improving referral care while planning the training of first-level health workers in IMCI. However, implementation of

[1] *Management of the child with a serious infection or serious malnutrition: Guidelines for care at the first referral level in developing countries*. WHO/FCH/CAH/00.1.

[2] *Breastfeeding counselling: A training course*. WHO/CDR/93.3–6. UNICEF/NUT/93.1–4. World Health Organization. 1993.

activities to introduce new referral care guidelines and new training for breastfeeding counsellors may need to wait until the expansion phase.

2.3.2.5 *Optional: Discuss how to introduce IMCI in pre-service training*

In some countries, there will be questions about or a perceived need to discuss how to include IMCI in pre-service training at an early stage. Explain that it is useful to gain some experience implementing IMCI in-service training, in order to

- Build a pool of persons who know IMCI well
- Train facilitators and clinical instructors

This experience can then be used to see how best the teaching of the IMCI guidelines can be incorporated in the basic education of paramedical and medical workers.

At present there is no standard set of recommendations for including IMCI in pre-service training. WHO/CAH is working with countries to learn about the different options that can be used. Experience shows that it is useful to focus initial efforts on incorporating the IMCI in-service training course, *Integrated Management of Childhood Illness* for first-level health workers, into the existing teaching schedule. Efforts to change the curriculum can be initiated simultaneously but are usually more resource intensive and time consuming.

In most instances, it is useful to delay the introduction of IMCI into pre-service training until experience has been gained using the adapted guidelines both for training health workers and for managing sick children at first-level health facilities.

2.3.3 Plan for improvement of the health system

When planning activities to improve health worker skills, also plan activities to strengthen the health system, so that it can accommodate the needs of IMCI-trained health workers and allow for implementation of the IMCI guidelines. Consider, for various elements of the health system, the current situation and improvements needed. Decide on priorities to address during early implementation. (Detailed plans for activities will be made later by the Implementation Subgroup.) Below are points to address when planning health system improvements.

2.3.3.1 *Plan for availability of drugs and supplies needed for IMCI*

Implementation of integrated case management is possible only if health staff have a steady supply of the drugs that are needed to implement the IMCI case management guidelines.

The availability and rational use of drugs are related to four areas: availability of drugs; store and stock management; rational prescription and dispensing of drugs; compliance/adherence and correct use of drugs. None of these areas is unique to IMCI strategy.

A common problem is the lack of availability or irregular availability of appropriate drugs at health facilities. Improving drug availability often requires a coordinated approach, in order to avoid parallel systems or the duplication of efforts among different health care activities and programmes. Therefore, it is important to establish a close collaboration with national drug programmes. Interventions to improve availability of drugs for IMCI activities should not have a short-term perspective, such as physically providing drugs to health facilities for a limited period. The goal should instead be to improve the basic functions of drug management (selection, procurement, distribution, and use), leading to a sustainable system that makes essential drugs, including drugs needed for implementation of IMCI, available at all levels.

National drug programmes commonly are based on the Essential Drugs Concept (EDC). Like the IMCI strategy, the EDC is based on the fact that the majority of health needs of a population can be met with relatively few drugs. EDC has resulted in Essential Drug Lists of 30 to 40 drugs for first-level facilities delivering primary health care in developing countries. Since one of the main target groups for primary health care has always been mothers and children, there are many similarities between the EDC and the IMCI strategy.

Compared to the EDC, the IMCI strategy introduces a new concept by recommending the use of second-line treatments and pre-referral treatment for severely ill children at the first-level health facility. These treatments have been introduced based on the evidence that a proportion of deaths in severely ill children who present at first-level health facilities could be prevented if those children are given an immediate dose of an appropriate antibiotic, instead of delaying that treatment for several hours until the child reaches a referral facility. Within the context of the IMCI strategy, these second-line and pre-referral drugs become essential drugs to cope with the treatment needs of major childhood illnesses. Previously they have been available at the referral level for use under the supervision of those who are trained in their use. Using the IMCI strategy, workers at first-level health facilities will be trained in their use.

What are the implications? When second-line and pre-referral drugs are available, well-trained and supervised health workers will increase their impact on childhood mortality. However there are implications of costs, safety and potential abuse to discuss in the process of reaching consensus on their availability at first-level facilities. For example, caretakers may demand second-line antibiotics first if they are found to be effective. Or, caretakers may be reluctant to take a child to a referral facility if they know that pre-referral drugs are available in health facilities. Potential negative effects need to be weighed against the positive results in terms of lives saved, on the premise that IMCI training and close supervision will help to promote the rational prescription and dispensing of these drugs.

The early implementation phase provides an opportunity to gather information to indicate whether or not the second-line antibiotics and pre-referral drugs can be rationally and safely used at first-level health facilities. In addition it may provide data to quantify the supply-cost implications of their inclusion on the list of drugs needed at first-level facilities for implementation of IMCI. The IMCI

Working Group may want to gather data on the above issues through the design of data collection tools and documentation of the early implementation phase.

Below are steps to plan availability of drugs and supplies for IMCI activities:

- Review the list of drugs and supplies needed for IMCI (Annex E) based on the generic IMCI guidelines and state that some may change or be added, depending on the adaptation for the country.

- Review the national drug policy and identify the level of the health system and the types of health workers that are allowed to handle drugs for IMCI, particularly the second-line antibiotics and pre-referral treatments.

- Discuss that the Implementation Subgroup, in collaboration with planners from the districts selected for early implementation, is responsible for ensuring that drugs needed for IMCI are available in those districts. Make sure that representatives from the national drug programme and its partners are involved in the subgroup.

- Agree on activities for the subgroup, which include:

a) Reviewing the national drug policy and the national Essential Drugs List, for an update on legislative and regulation issues, and to identify mechanisms for improving availability of drugs and rational use of drugs.

b) Assessing:

  — drug procurement and distribution systems at central and district levels

  — current availability of drugs and supplies in the districts (and informing the Adaptation Subgroup as this could affect the choice of drugs to be recommended in the country's IMCI guidelines)

  — the role of the private sector in drug management (private practitioners and licensed drug sellers)

c) Initiating discussions with the staff of the national drug programme on modifying the Essential Drugs List to ensure that the drugs for IMCI are included. The discussion should be coordinated with the Adaptation Subgroup.

d) Determining the implications of making all drugs needed for IMCI available at first-level health facilities. Planning activities to estimate the drug needs and costs of drugs, and to document drug use through follow-up after training and supervision. Perhaps, document caretakers' attitudes to the availability of certain drugs at first-level health facilities.

e) Assessing whether the drug distribution system will be able to get the drugs needed for IMCI to the health facilities. Identify the needs for specific support, for example, strengthening the skills of the district pharmacist in estimating the required drugs and ordering them in time.

f) Determining whether drug management practices at the health-facility level should be further assessed during early implementation.

Findings would help with future decisions about the need to train first-level facility staff in drug supply management.[1]

The outcome of the above review and discussions should be a section for the national plan including:

— Assignment of responsibility for drug availability to the Implementation Subgroup

— Activities to be undertaken by the subgroup to plan for availability of drugs and supplies

2.3.3.2 *Plan for improving referral pathways and services*

During early implementation the emphasis is on improving case management at the first-level facilities. The case management guidelines for this level assume that referral services exist and are functioning sufficiently for severely ill children to receive care there. Therefore, early implementation should be undertaken in districts with good referral pathways and services.

■ Discuss current pathways and practices for referral of severely ill children from first-level facilities. Access to and quality of care in the referral site are two important determinants influencing whether children who need effective referral care will receive it.

■ To gain a good understanding of the local situation, it is necessary to make an assessment in each of the districts selected for early implementation. This should include observation of quality of care in the referral sites as well as mapping of distances between first-level facilities and the referral sites. The assessment should also document evidence of cultural practices and beliefs that could affect referral negatively.

■ If it can be anticipated that access to a referral site will be a problem for some first-level facilities, explore realistic options for improving the situation. This may include improving transport, improving infrastructure, or upgrading selected health facilities to act as referral sites.

■ Upgrading health facilities to act as referral sites may involve posting more qualified staff, such as a medical assistant or doctor, at this level. Or, if this is not feasible, training the local staff in simple referral care skills. It always requires supplying the facility with equipment and drugs necessary for providing referral care. In exploring options, examine the legal aspects. The national health policy will describe at what levels different kinds of care can be provided.

■ If the most feasible option is to train local staff in additional skills, discuss the use of Annex E. *Where referral is not possible*.[2] If the Annex is to be used, it should be adapted in light of the treatment procedures that

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[1] *Drug Supply Management Training*, WHO/CHD/98.4 is a course for health workers responsible for managing drug supplies in first-level health facilities.

[2] Annex E *Where referral is not possible* is part of the module 'Treat the Child', *Integrated Management of Childhood Illness*, WHO/CHD/97.3.D

are allowed in first-level health facilities, and be consistent with the guidelines for outpatient care. A decision should also be taken on how to introduce the Annex. As the 11-day IMCI course is already very full, additional time needs to be allocated or a separate training conducted. The referral care manual, discussed as part of point 2.3.2.4, will obviously be relevant for use in these settings as well.

■ When there are obvious cultural barriers towards referral, note this issue as an important practice that could be addressed as part of interventions to improve family and community practices, and through improved counselling skills of health workers.

The outcome of this discussion should be a section of the national plan including

— An agreement to assess the situation with regard to referral pathways and referral practices in each of the early implementation districts

— A description of recommended steps for improving the referral system where there is a problem

2.3.3.3 *Optional: Plan for organization of work in health facilities*

In planning for early implementation, participants often express concerns regarding organization of work in health facilities. Common concerns relate to the duration of consultation if the integrated case management process is fully applied, as well as to distribution of tasks.

■ Explain that WHO has not developed generic recommendations for organizing work in a health facility after staff has been trained in IMCI. Experience has shown that, in smaller facilities, it is often possible for a trained health worker to apply the integrated case management process fully as taught in the course. However, in facilities with a heavy caseload or with many staff, tasks may need to be distributed. For example, one health worker can be especially assigned to providing feeding counselling or giving the first dose of drugs and treatment advice. If tasks are distributed, it is essential that all staff involved have participated in an IMCI course, or have been prepared to do their task by an IMCI trained health worker.

■ Agree that it is most useful to design locally appropriate solutions when some experience in implementation has been gained. Follow-up visits provide a good opportunity to identify any problems and decide how best to overcome them. It is also useful to add a session at the end of the IMCI course for participants to discuss how they plan to organize work in their health facility in order to implement the acquired skills.

■ Discuss the need for staff stability in health facilities that have been selected for IMCI implementation. IMCI-trained health workers should be retained in their functions for a considerable period of time, in order to gain maximum benefit from their training.

■ Discuss current practices for follow-up of children. As the IMCI strategy recommends a follow-up visit for a selected group of sick children,

this should be facilitated by policies which exempt them from renewed fees for such a visit.

2.3.3.4 *Plan for supervision*

Health workers in first-level facilities require regular support to maintain a good standard of performance. Supervision that includes observation of case management is an important means of strengthening and sustaining health workers' skills. Tasks that are part of a follow-up visit are aimed specifically at improving health workers' skills and are relevant for routine supervision as well. When planning for follow-up after training (step 2.3.2.3), the IMCI Working Group recommends whether district supervisors should be involved in follow-up visits and thus be trained to perform these tasks.

Now the group considers whether follow-up visits could be linked with routine supervision, and whether they could be sustained over time. Discuss whether supervision of health workers implementing IMCI case management can be integrated in existing supervisory activities. If this is not likely at this time, the districts may just use the early implementation phase to gain experience with follow-up after training.

Of course, in facilities where there is a supervisor who has been trained in IMCI case management and facilitation skills, that supervisor should reinforce the health workers' skills as they implement IMCI activities.

Address the points below in discussion and state the conclusions in the national plan.

- Discuss and review the current supervisory system at the district level. Describe who is responsible, the types of supervisory visits (vertical, integrated), the tasks performed, and the quality. Use information on the existing supervisory system including job descriptions, checklists, sample supervisory reports, any data or reports on the quality or frequency of supervisory visits.

- Decide whether it is appropriate to plan how to include supervision of health workers doing IMCI case management in the supervisory system now, or whether, as a first step, districts will gain experience with follow-up after training. The introduction of follow-up after training will build district capacity to conduct supervision. If the supervisory system is not functioning well, it may be appropriate to focus on follow-up first and then use the expertise gained to strengthen the supervisory system at a later stage, during expansion.

- If it is appropriate to include supervision of IMCI case management in routine supervision, decide which aspects to include based on the procedures that have been agreed for visits for follow-up after training. Emphasize the importance of clinical supervision for problem solving, and gathering of information on the implementation of the IMCI strategy. Decide on the tasks to be completed by a supervisor, and the methods. Consider additional means of gathering information and problem solving as relevant for the district (for example, by telephone discussion).

- Decide how to prepare clinical supervisors to conduct routine supervision of IMCI case management. (They need the same training in IMCI case management, facilitation skills and follow-up visits as discussed under follow-up).

- Decide whether and how to collect information from supervisory visits. Assign to the Implementation Subgroup the responsibility of preparing data gathering tools. Using the forms and tables that are part of the tools for follow-up after training, they may revise existing forms or develop new forms, if necessary.

- If much of the above information is not available, and therefore a strategy decision is not possible, ask the Implementation Subgroup to investigate the capacity of the current supervisory system. Then the IMCI Working Group can discuss the decision at a later time.

The outcome of this discussion of supervision should be a section for the national plan including:

— A recommendation on the role of district clinical supervisors in supervision of first-level health workers implementing IMCI case management and the relationship of follow-up visits and routine supervision

— If feasible, assignment to the Implementation Subgroup of responsibility for planning how to integrate supervision of IMCI case management into existing supervision, and development of tools for collection of information by supervisors

2.3.3.5 *Plan for linking IMCI classifications and the health information system*

The IMCI strategy and the disease surveillance component of a health information system (HIS) have different purposes. Generally speaking, the IMCI guidelines are designed to improve the treatment of individual ill children, and an HIS is designed to detect the occurrence of specific diseases. As a result, some IMCI classifications may have no corresponding HIS classification (for example, mastoiditis); and some IMCI classifications may satisfy the case definitions for two or more HIS classifications (for example, 'very severe febrile illness' may satisfy the HIS case definition for both malaria and meningitis). In these instances, IMCI and HIS classifications are incompatible. Since health workers have the dual responsibility for treating children and disease surveillance, IMCI-HIS incompatibilities may lead to confusion among health workers.

Below are items to address in planning for linking IMCI classifications and the HIS:

- Review the issue of incompatibility of the IMCI and HIS classifications and the reason it is a problem

  For health workers, a problem exists because the health system expects them to treat childhood illnesses using IMCI classifications and report the illnesses using HIS classifications. IMCI-HIS incompatibility may cause confusion among health workers, and this confusion may adversely affect

health workers' performance. Health workers using IMCI classifications will not be able to provide information needed by the HIS, and may become frustrated with the IMCI guidelines. They may stop reporting to the HIS, or may stop using IMCI classifications, which would affect the quality of case management.

■ Agree on an approach to the problem

There should be an HIS which includes disease classifications that are realistic and accurate for first-level health facilities. As it is usually not possible to make accurate diagnoses at this level, changing HIS classifications to be compatible with IMCI classifications is the most appropriate solution to the problem. For example, it would be helpful if the names of some HIS classifications could be modified as follows:

HIS classification:	*Use instead IMCI classification:*
bacillary dysentery	dysentery
cholera or diarrhoea without blood	diarrhoea with severe dehydration diarrhoea with some dehydration diarrhoea with no dehydration

Unfortunately, changing any existing HIS classifications may be difficult to accomplish in the short-term.

If it is unlikely that the HIS is willing to modify some classifications soon, the IMCI Working Group may want to look at other approaches to the problem. Options include 1) using parallel reporting systems for IMCI and HIS classifications, 2) developing some interface of the two systems. These options are not perfect solutions, however, and they may create even larger problems, including a burdensome workload for health workers.

■ In some countries, some interface for converting IMCI classifications into HIS classifications will be the approach. Since the goal is to minimize the confusion caused by IMCI-HIS incompatibility, the country would develop a system whereby IMCI classifications are translated into HIS classifications after the health worker's consultation with the child.

With this approach, health workers would classify children using IMCI classifications at the time of the consultation and record the IMCI classification in the patient register. At a later time, the IMCI classification would be translated into HIS classifications using a standard translation table. The HIS classifications would be reported on an HIS routine surveillance form. Health workers or other support staff in the health facility may do the translation. Another approach would be to report IMCI classifications to the district or national level where staff or a computer perform the translation.

The design of the translation table is a key component of this system. See Annex F for considerations for designing the translation table and an example table.[1]

[1] Rowe AK, Hirnschall G, Lambrechts T, Bryce J. Issues and options for linking the classifications of the Integrated Management of Childhood Illness strategy to health information systems. *Bulletin of the World Health Organization*, issue 12 (in press).

- Assign responsibility for designing a solution to this problem to the Implementation Subgroup.

The outcome of this discussion should be a section for the national plan including:

— Description of the incompatibility of classifications for IMCI and HIS and problems anticipated as a result

— The recommended approach to improving the problem and assignment of responsibility for developing the solution to the Implementation Subgroup

2.3.4 Plan for improvement in family and community practices

The aim of this component of the IMCI strategy, improving family and community practices, is to initiate, reinforce and sustain the key family practices for child survival, growth and development. The other components of the IMCI strategy—for the improvement of health systems and health workers' skills—also have elements to support the efforts of families to care for their children.

The IMCI strategy promotes changes in the health system to make it easier for families to care for their children. An improved health system makes drugs available either free or at low cost, and in formulations that are easier for families to use. The health system provides access to health workers who can treat children and talk effectively with parents. It provides health workers with counselling aids that are adapted to local cultures, to help them communicate with families and understand the conditions that affect the ability of families to care for their children.

The IMCI strategy provides guidelines for managing the major health problems of children at first-level health facilities and trains health workers in the knowledge and skills to use the guidelines effectively. Health workers learn to better recognize illness and treat it correctly, to help the family understand and do what needs to be done, and to help solve specific problems particularly around feeding at home and referral of the severely ill child to hospital. Using health workers as the channel of delivery, the guidelines influence family and community practices through:

- Nutrition counselling including breastfeeding (*to improve feeding practices*)
- Immunization (*to improve immunization status*)
- Use of local terms (*to improve recognition of signs of illness*)
- Advice on when to return (*to improve timely careseeking*)
- Use of the mother's counselling card (*to improve feeding practices, careseeking, and home case management during illness*)
- Practice in giving treatment (*to improve compliance with recommended treatment*)

The IMCI strategy promotes actions within the community to support key family practices. This includes working with communities to improve nutrition and child

development, for example, through mothers' support groups on breastfeeding and child feeding centres. Opportunities may be created for educating families and reaching sick children through community events such as village health days. Communities may provide resources for families with children needing urgent care through loans, transport, or assistance with looking after the children who remain at home. Communities may support the prevention of illness, for example, by making insecticide-impregnated bednets accessible to families.

As part of the early implementation phase, the IMCI working group will plan and implement activities that will lead to improving family and community practices. There are certain essential activities that need to be accomplished in any country. These include the adaptation of local terms and feeding recommendations, development of a mother's card that can be easily understood by caretakers, and ensuring consistency of existing health education messages targeted at caretakers.

In addition, the IMCI Working Group may initiate work to strengthen and utilize existing community-based interventions or introduce new interventions to promote behavioural change in communities and families. These are possible additional activity areas. Figure 8 lists the essential activities and possible additional activity areas.

FIGURE 8

Essential activities for improving family and community practices

During the early implementation phase, ***essential activities*** for this component are:

A. Adaptation of the feeding recommendations, identification of local terms for signs of illness, and development of a mother's card that can be easily understood by caretakers

B. Case management training courses and follow-up of health workers to strengthen their communication and counselling skills

C. Ensuring that existing health education messages are compatible with IMCI guidelines

Implementation of the guidelines by health workers lays the foundation for further expansion of interventions to improve family and community practices through other channels, outside the health system. ***Possible additional activity areas*** include:

D. Strengthening and utilizing existing community-based programmes or interventions to promote family and community practices

E. Introducing additional community-based interventions to promote behavioural changes in the community

In planning for the community component, address the following points and state the conclusions in the national plan:

- Explain how activities in the other two components—improvement of health workers' skills and health systems—contribute to improving family and community practices.
- Introduce the essential activities for this component and the possible additional activity areas as listed in Figure 8.
- Discuss the essential activities to improve family and community practices.

The adaptation of feeding recommendations, the identification of local terms and the development of the mother's counselling card are *essential activities* to ensure that health workers, the health system and community resource persons can communicate with caretakers in an effective way. They have also been addressed in point 2.3.2.1, as part of planning for adaptation of the IMCI generic guidelines and training materials. Protocols for completing these activities are part of the *IMCI Adaptation Guide*. They should be implemented as a collaborative effort between the working group members involved

with adaptation and with planning of the community component.

Caretakers should also receive consistent messages about child health. Health education materials are often generated by a variety of partners in a country, and may not always convey the same messages. The IMCI Working Group will collect and review existing health education materials while adapting local terms and feeding recommendations, and developing the mother's card. Once the adaptation has been completed, the working group should ensure that those messages delivered to caretakers in the early implementation districts are fully consistent with the IMCI guidelines. This may require holding meetings and negotiating with those responsible for the formulation or dissemination of existing messages to achieve consensus and consistency.

■ Discuss the possible additional activities to improve family and community practices.

The IMCI strategy sets priorities to address the problems that have the greatest impact on child health. A substantial body of evidence identifies the benefits of specific practices in the child's survival. Figure 9 lists these key family practices. The IMCI Working Group will put into action a process to help identify a limited number of key family practices to be promoted, and to identify the best interventions to support them. Although communities face different challenges, problems related to child nutrition and family responses to illness are likely to be present in most communities. Interventions to improve these areas will be appropriate in many settings.

In most countries, there are ongoing community-based activities to improve family and community practices. They may be supported by the government, multi- and bilateral agencies or NGOs. Extension workers from other sectors including NGOs may

FIGURE 9

Key family practices for child survival, growth and development

- Breastfeed infants exclusively for at least 4 and if possible up to 6 months.
- Starting at about 6 months, feed children freshly prepared energy and nutrient rich complementary foods, while continuing to breastfeed up to 2 years or longer.
- Ensure that children receive adequate amounts of micronutrients (vitamin A and iron, in particular), either in their diet or through supplementation.
- Dispose of faeces, including children's, appropriately; and wash hands after defecation and before preparing meals and feeding children.
- Take children for a full course of immunizations (BCG, DPT, OPV, and measles) before their first birthday.
- In malaria-endemic areas, have children sleep under insecticide-treated bednets.
- Promote the child's mental and social development by being responsive to the child's needs for care, and by encouraging the child's development through talking, playing, and providing a stimulating environment.
- Continue to feed and offer more fluids, including breastmilk, to children when they are sick.
- Give sick children appropriate home treatment for infections.
- Recognize when sick children need treatment outside the home and take them for care to the appropriate providers.
- Follow the recommendations given by health workers in relation to treatment, follow-up and referral.
- Ensure that every pregnant woman has adequate antenatal care. This includes having at least four antenatal visits with an appropriate health care provider, and receiving the recommended doses of the tetanus toxoid vaccination. The mother also needs support from her family and community in seeking care at the time of delivery and during postpartum and lactation period.

disseminate information on nutrition, immunization and other child health matters in communities. The health sector can build on these activities and use available resources for developing a strategy for improving family and community practices in the context of the IMCI strategy.

■ Introduce the steps involved in planning possible additional activities.

To select the interventions that are most appropriate in the local context, the IMCI Working Group will conduct a planning process that involves all relevant stakeholders at national, district and community levels. The process includes the following tasks:

At national level:

— national assessment of key family practices

— national assessment of potential resources, including a review of existing community-based interventions, community resource persons, and partners

— selection of districts to initiate activities

At district level:

— district assessment of key family practices

— district assessment of available resources, including ongoing community-based interventions, community resource persons, and partners

— selection of communities to initiate activities

At community level:

— community assessment to identify perceptions of common problems related to child health and the key family practices associated with them

— selection of a limited number of family practices to address

— selection of interventions

The assessments will be initiated at national level, and repeated at district and community levels, using the information that has been generated at each previous level. In this way, there will be a gradual narrowing down of scope, and clarification of priorities. In moving from one level to the next, a focus will emerge of those key family practices that are in greatest need of intervention and of possible interventions to address them. Throughout the process, there will be consensus building. The final decisions on the selection of interventions will be taken with participation of the communities involved.

During the assessments, areas may be identified for which no information is available. The working group will plan for additional data collection, using simple and low-cost approaches, to obtain the required information.

In addition to the assessments, there may be a need in certain countries to quantify the progress of promoting behaviour change. The working group may decide to conduct a baseline survey to obtain objective measurements or indicators, prior to the implementation of interventions. To be able to evaluate the level of change over time, the survey needs to have an adequate sample size. The information generated in a baseline survey can also be used to guide the planning of priority interventions.

WHO and UNICEF, in collaboration with bilateral agencies and NGOs, participate in the Interagency Working Group on Household and Community IMCI. One of the tasks of the Interagency Working Group is to develop the tools for planning community-based interventions in the context of the IMCI strategy. They include guidelines for assessment and baseline survey, and will be available as complementary tools to the *IMCI Planning Guide*.

■ Discuss to what extent activities will be initiated as part of early implementation, and whether to form a third subgroup

Discuss whether it is appropriate or desirable to include any of the possible additional activities during the early implementation phase. If there is an interest in developing the third component beyond the essential activities, decide whether to form a separate Family and Community Practices Subgroup and discuss its terms of reference.

The establishment of a separate Family and Community Practices Subgroup will provide the opportunity to co-opt relevant staff from other programmes and institutions that are implementing community-based activities, who may not be represented in the other subgroups. They may include representatives of other sectors in the government (such as Ministries of Local Government, Rural Development, Education), NGOs and community-based organizations (for example women's groups). Plan to meet with representatives of those units or institutions who may not have been invited to the planning meeting but are relevant to participate in the planning of community-based interventions as part of an intersectoral working group.

The outcome of the discussion should be a section of the national plan that includes:

— A decision whether or not to develop the third component of improving family and community practices beyond the essential activities to include any of the possible activities during the early implementation phase.

— A decision whether or not to form a Family and Community Practices Subgroup to plan activities to improve family and community practices. If there is to be a third subgroup, proposed membership and terms of reference.

— Agreement on the activities which may include:

Essential activities

- Collaboration with the Adaptation Subgroup to adapt the feeding recommendations, identify local terms and develop the mother's counselling card.
- Collaboration with the Adaptation Subgroup to review and revise existing health education materials to ensure that families receive consistent messages on child health in the early implementation districts.

Possible additional activities

- Assessment of current key family practices and resources available at national level to improve them
- Selection of district(s) in which to initiate activities
- Participation in assessments of key family practices and resources available in the selected district(s) and communities to improve them
- Participation in the selection of appropriate intervention(s) to be supported in the selected districts and communities, in the context of the IMCI strategy
- Building of national, district and community capacity to plan and implement interventions, and monitor progress

2.3.5 Plan documentation of early implementation

An objective of the early implementation phase is to gain experience implementing the IMCI strategy as a basis for planning future expansion. As a consequence, it is important to carefully review and document experiences during this phase in order to identify and solve problems, to identify lessons learned and to utilize these to plan future activities. Address the points below in discussion and state the conclusions in the national plan:

- The documentation of the early implementation phase should cover all main aspects of IMCI implementation, listed in Figure 10. Each main aspect is described in more detail in Annex B.
- In previous steps the group made plans for how to collect information on quality and coverage of training activities, and for how to compile and use data gathered during follow-up after training. The information collected this way will be an important resource for documentation of the early implementation phase.
- There is also a need for information in other areas, such as organization and management and adaptation. Many of the issues that are useful to document in these areas do not require regular data collection. They are the result of experiences accumulated over time.
- The table titled *Issues relevant to the status and quality of IMCI implementation organized according to major areas* (Figure 26 in Annex G)

FIGURE 10

Documentation of the early implementation phase

Areas and tools for collecting information

1. Organization and management at central and district level

a. Organization and management at central level

- Capacity of the Ministry of Health to support the IMCI strategy (level of commitment to the IMCI strategy, available manpower to plan and implement activities, participation of relevant programmes).
- Policy support for the IMCI strategy (inclusion of IMCI in health sector reforms, inclusion of IMCI in national health policy, acceptance of the IMCI strategy as part of malaria, nutrition and EPI programmes).

b. Organization and management at district level

- Readiness of district health teams to implement the IMCI strategy (orientation and planning completed prior to initiation of training, inclusion of IMCI activities in district health plan, allocation of district funds to IMCI activities).
- District capacity to sustain activities (ability of district health team to plan and implement IMCI activities, district health team members trained in IMCI case management, number of district health staff qualified to conduct follow-up, inclusion of IMCI aspects in routine supervision, other activities initiated by district health management team to strengthen the health system).

c. Budget

- Central-level costs associated with IMCI implementation (for adaptation of clinical guidelines, studies for local terms and feeding recommendations, development of mother's card, development of training materials, planning at district level, central-level courses, follow-up visits).
- District-level costs associated with IMCI implementation (for training of trainers, courses for first-level health workers, follow-up visits, purchase of supplementary drugs, improving referral pathways and care, community-based interventions).

See Figure 11 for a sample list of budget items.

2. Quality of adaptation

- Consistency of IMCI guidelines with other national guidelines and policies (consistency with national policies or guidelines on ARI, CDD, malaria, nutrition, anaemia, immunization, feeding recommendations).
- Completeness of IMCI guidelines (local terms and feeding studies completed, appropriateness of guidelines for a specific area or population group, clarity and ease of application).

3. Quality of IMCI training

- IMCI courses meeting quality criteria (number of courses meeting agreed criteria, reasons for poor quality, performance of IMCI guidelines and training materials, clinical signs not commonly seen, number of participants trained and designation).
- Capacity to continue IMCI in-service training (number of qualified trainers, course directors and clinical instructors prepared and available at central level; number of qualified trainers, course directors and clinical instructors prepared and available at district level; availability of training materials, availability of training sites).

includes such issues. Review the table and discuss the importance of summarizing this information in a written report at the end of the early implementation phase. Discuss whether there is a need to further adapt available tools for data collection (that is, the training and follow-up summary forms in Annex C) to elicit more of the necessary information.

■ Discuss the mechanism for tracking costs of IMCI activities. Introduce the example budget (Figure 11) which will help to estimate costs for the early implementation phase. Discuss the need to record and summarize the actual costs of activities and their sources of funding.

FIGURE 10 (*continued*)

- Progress in introducing IMCI in pre-service training (number of schools involved, type of students, staff trained, materials used, training meeting quality criteria, evaluation conducted, collaborating partners)
- Alternative approaches to 11-day training course or courses for other categories of health workers (description of quality criteria, duration, methods and materials used, preparation of facilitators, quality of training, number of health workers trained and designated, results of follow-up)

See Annex C for generic data collection tools for documenting IMCI in-service training

4. Performance of health workers after training

- Follow-up visits (tasks completed during visit, preparation of supervisors, data collection tools used, timing of visit after training, number of visits per health worker).
- Health worker performance (number of health workers able to do correct assessment, classification, treatment, and counselling tasks, common difficulties observed during direct case observation, common difficulties observed during record review)

Generic data collection tools available in Annex A of Guidelines for Follow-up after Training.

5. Quality of health system support for IMCI implementation

- Availability of first-line drugs, second-line drugs and pre-referral drugs in health facilities with IMCI-trained staff
- Availability of equipment essential for IMCI implementation in health facilities with IMCI-trained staff
- Organization of work in health facilities to allow completion of all IMCI related tasks
- Accessibility of first-level health facilities to referral-care facilities
- Compatibility of IMCI classifications with the health information system classifications

Generic data collection tools available in Annex A of Guidelines for Follow-up after Training.

6. Caretaker satisfaction

- Caretaker satisfaction (expressed during follow-up after training, shown in increased patient attendance for follow-up or overall)

Generic data collection tools available in Annex A of Guidelines for Follow-up after Training.

- Introduce the core IMCI indicators for first-level facilities and household level (Annex H).
- Explain that it is not recommended to conduct a survey to measure the indicators during the early implementation phase, because coverage is still limited and it is a better use of resources to conduct multiple follow-up visits, or supervision that includes observation of case management and facility supports. Theses activities provide better opportunities for skills reinforcement and problem solving than a survey, and they generate data to monitor progress towards the indicators.
- Discuss that information must be organized as it is collected and then summarized, so that it will provide the basis to review the experience at the end of the early implementation phase. Discuss how to collect the information. (Specifically, each IMCI course director completes a Course Director Summary after each course. These are compiled and summarized at the district level, and then the central level summarizes the district data. Follow-up visit results are submitted by individuals conducting the visits and compiled at the district and then central level.)
- Introduce the concept of global monitoring of IMCI implementation by WHO. Review the milestones (Annex I) and discuss who will be responsible for reporting on these milestones to the national WHO office.

The outcome of the discussion of documentation of early implementation should be a section of the national plan that specifies:

- Assignment of responsibility to the Implementation Subgroup for planning documentation of the early implementation phase
- Definition of types of information that will be collected as part of documentation
- Definition of the key players at different levels who are responsible for data collection, summary, identifying problems, and taking action based on the findings
- Tasks to be undertaken by the subgroup to develop or adapt the tools for documentation, and to introduce the process to persons responsible for their use

2.3.6 Plan for selection of districts for early implementation

The group should decide on selection criteria for early implementation districts, suggest possible districts and, if possible, actually choose the districts. The districts selected should be those where the potential for successful IMCI activities is good.

- Agree on criteria for selecting early implementation districts. Possible criteria for selecting these districts might include:
  - Good physical access to central-level staff (for ease of travel for planning, assistance performing activities, and documentation)

- — Committed staff in the district to do planning and management illustrated by, for example, previous experience with management of drug availability and of training
- — Availability of, or access to, a suitable training site with access to inpatients and outpatient facilities for clinical practice
- — Availability of drugs needed for implementation of IMCI in health facilities
- — Ability to refer severely ill children from first-level facilities for acceptable care
- — Availability of other resources to support the IMCI strategy, such as a donor agency or training institution

- Discuss some additional factors that could be considered:
  - — It will be helpful if the districts are similar in child feeding practices and in language (because if they are different, multiple studies and different versions of the mother's counselling card will be needed)
  - — It may be important to select different types of districts (for example peri-urban and rural)
  - — If any of the candidate districts are target districts for particular donors (including the presence of specially-funded field staff), the donors may provide helpful support
- Discuss districts that might fulfill these criteria.
- Select districts for early implementation.

It is important to limit the number of districts for early implementation so that accomplishing the preparatory tasks will be manageable. The recommendation is to select 2 or 3 districts. Experience has shown that 2 or 3 districts are feasible for the central level to manage, helping with planning, initial implementation, and documentation. This number is also adequate to get sufficient information to assess the early implementation experience.

Making the selection now will enable the districts to become involved earlier in the planning process, participating in the work of adaptation and preparation for implementation. The involvement of district representatives will benefit both the districts and the sustainability of the IMCI strategy as a whole.

If this is not possible, identify candidate districts for further investigation by the Implementation Subgroup. They will investigate and then select 2–3 districts for early implementation.

The outcome of this discussion should be a section of the national plan which:

- — Lists the criteria for selecting districts for early implementation
- — Specifies the districts selected (or suggests some districts to

consider and assigns to the Implementation Subgroup the responsibility to investigate as necessary, and select the districts).

NOTE: If the districts cannot be selected now, assign some members of the Implementation Subgroup the responsibility of collecting available information on the selected or candidate districts and bringing it to the first subgroup meeting. Much information is probably readily available. It is not recommended to undertake a survey of districts.

2.3.7 Plan the budget for the IMCI early implementation phase

Figure 11 lists example budget items. Someone knowledgeable about all the items may have to explain some items that the Working Group members have not yet discussed (such as the nutrition study required to adapt the feeding recommendations and the early implementation review meeting). Estimate costs for each, especially those at the central level. Make rough estimates of costs of district training courses and follow-up visits. More accurate budget estimates for district-level activities will be possible when more detailed district planning is done (step 7.0).

The IMCI Working Group should use this budget to negotiate within the Ministry of Health, and with multi- and bilateral agencies and NGOs working in the districts to obtain funds for these early implementation activities. Ask relevant programmes within the Ministry of Health, such as CDD, ARI, malaria control and nutrition, to contribute to IMCI activities from their budgets. Ask the higher level of the Ministry to assign resources for IMCI implementation (for example, by creating an IMCI budget line, by allocating part of WHO regular country funds to IMCI activities).

2.3.8 Compile the national plan for the IMCI early implementation phase

By the end of the national planning workshop, the group has developed plans and recommendations on the following topics:

- Improvement of skills of health staff: adaptation of IMCI clinical guidelines and training materials, IMCI training courses for first-level health workers, follow-up after training, and linking the IMCI training for first-level health workers with other training, such as breastfeeding counselling, drug management, or referral care.
- Health system improvement: linking of IMCI activities with health sector reforms, availability of drugs and supplies needed for IMCI, referral pathways and services, supervision, linking IMCI classifications and the health information system
- Family and community practices: consistency of messages, selecting and supporting community-based intervention(s)
- Documentation of early implementation
- Selection of districts for early implementation
- Budget for the early implementation phase

FIGURE 11

IMCI early implementation budget

	Amount
Salary for IMCI focal person (100% for one year)	
Salary for secretarial support person	
National planning workshop	
4–5 days (rent of meeting room, travel, per diem)	
Other meetings of whole IMCI Working Group	
Adaptation	
Initial subgroup meeting	
Nutrition study (may include household trials)	
Local terms study (may include field trials)	
Consensus meeting	
Production of materials, including mother's card	
Computer and graphics services	
Translation, if needed	
Printing (modules, chart booklets, facilitator guides, answer sheets, etc.)	
Consultant time (outside advisors for clinical guidelines, nutrition study, materials production)	
Implementation planning	
Initial subgroup meeting	
Visits to districts:	
Initial visit including orientation meeting	
Other visits to assess conditions and work with district staff	
District planning workshop (3 days) (travel, per diem)	
Materials production	
Data collection forms	
Follow-up forms	
Training materials on how to do follow-up	
Planning for improvement of family and community practices	
Initial subgroup meeting	
Design and production of messages consistent with IMCI	
National assessment of key family practices and available resources	
Central-level training courses	
1–2 IMCI case management courses (11 days each)	
Local costs	
Consultants (course director, facilitators, clinical instructor)	
Facilitation Skills courses (5 days) (train 10 from central level, 10 from each district = 30 people, in 2 courses of 15 participants each)	
Local costs	
Consultants (if needed)	
Training of resource persons to implement selected interventions to improve family and community practices	
District activities	
4–6 IMCI case management courses (2–3 in each district):	
local costs (transportation, drugs)	
Training in follow-up (train 10 persons per district, in 2 courses)	
(per diem for central staff who conduct training, and an outside consultant if needed)	
Follow-up visits to 100 participants (travel and per diem)	
Assessments of key family practices and available resources at district and community levels	
Implementation of selected interventions to improve family and community practices	
Workshop to review early implementation and planning meeting for expansion phase (one longer meeting or two separate ones)	
Rent of conference room	
Printing of early implementation summary report	
Travel and per diem	
TOTAL	

Finish each subsection and organize the sections into a final plan. The IMCI Working Group will use this plan as they continue preparations for implementation in the districts. It should be distributed to all participants in this workshop and sent by the Ministry of Health to all programmes, to donors, and to the early implementation districts (when selected).

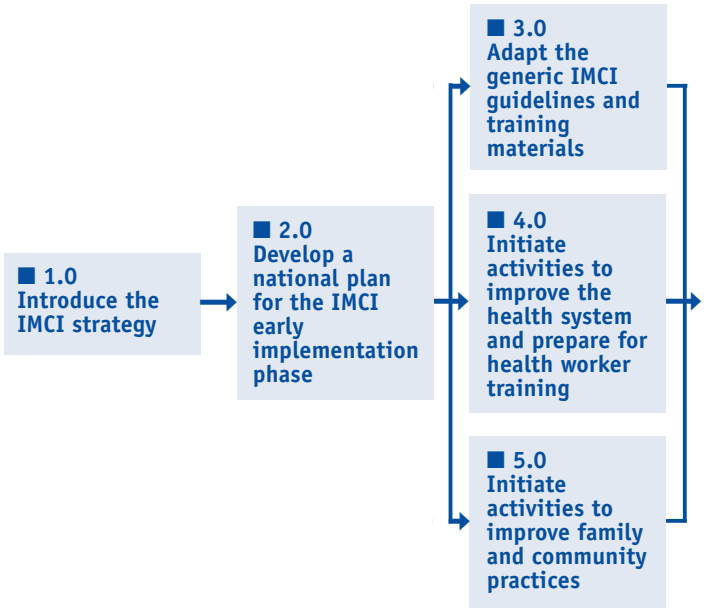
After the meeting, the IMCI coordinator may meet with the partners, such as donors, WHO, UNICEF, bilaterals and NGOs working in the districts, to discuss coordination among groups and agree on responsibilities for various tasks and activities.

After the national planning workshop, subgroup work should begin.

- Step 3.0 is done by the Adaptation Subgroup and focuses on adaptation of clinical guidelines and preparation and production of materials.
- Steps 4.0 is done by the Implementation Subgroup, in collaboration with representatives from the selected districts.
- Step 5.0 is done by the Family and Community Practices Subgroup, if one has been designated, or by the Adaptation Subgroup.

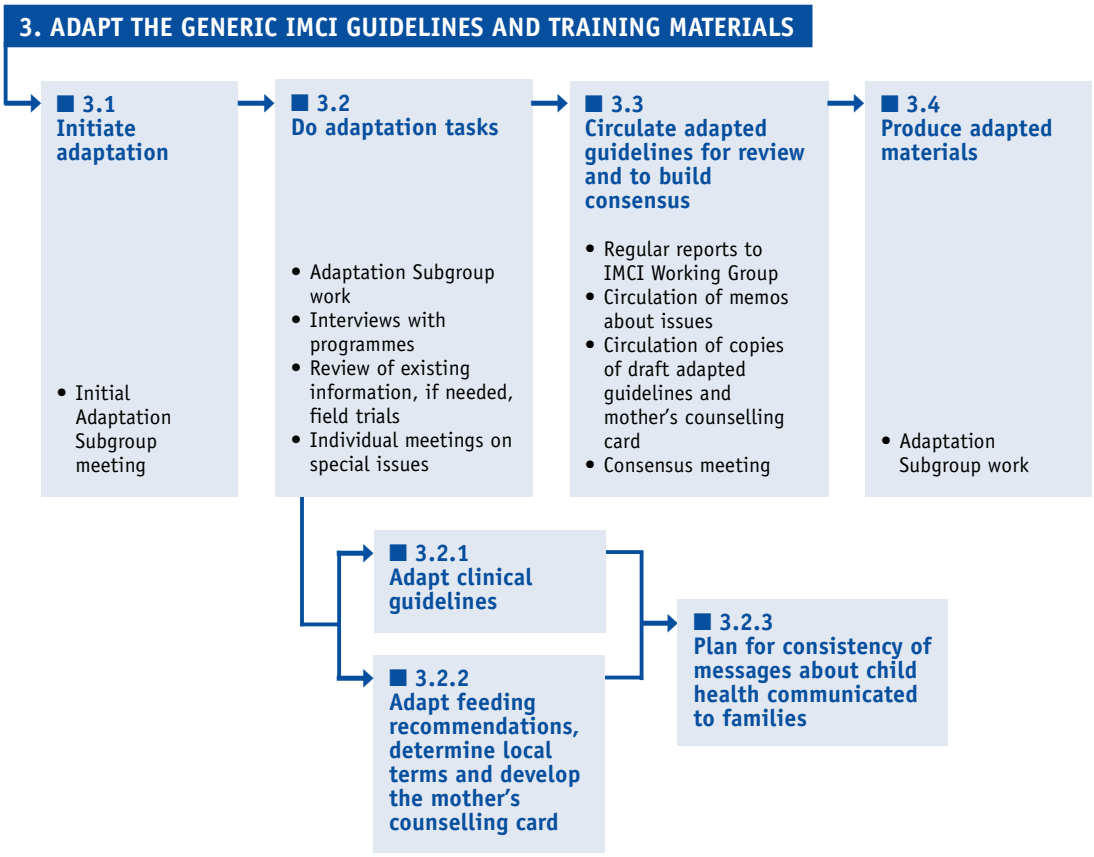
Overview of steps 1.0–5.0 of the IMCI planning process

OVERVIEW OF STEPS 1.0–5.0 OF THE IMCI PLANNING PROCESS



Note that the subgroups cannot work completely independently of each other. Subgroups can often benefit from knowing about the work and decisions of one another, and from sharing information about the districts. It can be helpful if some individuals are on two subgroups, to facilitate the coordination of the work. In any case, the IMCI focal person needs to ensure frequent exchange of information and feedback between the subgroups.

3. Adapt the generic IMCI guidelines and training materials



NOTE: The instructions in this guide for step 3.0 are addressed to the Adaptation Subgroup, and particularly its coordinator. The IMCI Working Group coordinator and the IMCI focal person should also study these steps and play an active role in them. The instructions are also informative for others who want to understand the steps being done by this subgroup. These steps are described in greater detail in the *IMCI Adaptation Guide*, which should be the primary guide for the Adaptation Subgroup and its coordinator.

3.1 Initiate adaptation

Immediately following the national planning workshop, the coordinator of the Adaptation Subgroup should conduct the initial Adaptation Subgroup meeting of 3–4 days. (This may be called the adaptation workshop.) If this is not possible,

the coordinator should set up and conduct the initial meeting soon after the national planning workshop. The IMCI Working Group coordinator and the IMCI focal person should also participate in or co-chair this meeting. If a trained adaptation consultant is to help with the adaptation process, this consultant should help conduct the meeting.

As soon as possible after the early implementation districts are selected, the Implementation Subgroup will visit each district. They will ask the district health team to identify a focal person and possible other planners to work on the Implementation Subgroup and also on the Adaptation Subgroup.

Purposes of the initial meeting of the Adaptation Subgroup

In the first two days of the meeting:

- Orienting members to the adaptation process

In the later days of the meeting:

- Preparing a preliminary list of adaptations
- Agreeing on assignments for the different adaptation tasks
- Specifying the information needed to resolve adaptation issues and how to get it
- Planning for adaptation of nutritional advice and use of local terms

(If a 4-day meeting is not possible, the work could be divided into several meetings.)

Ask the members to bring their copy of the information package given to them at the national planning workshop. In addition, give each member:

- A copy of the generic chart booklet
- A copy of *Introduction* and *Principles of adaptation* (from A. *The adaptation process*, *IMCI Adaptation Guide*)
- The draft national plan for IMCI early implementation phase (as soon as it is available)

Figure 12 lists topics to cover in the first meeting. Refer to the *IMCI Adaptation Guide* for guidance on conducting this meeting.

It is important that the members of the Adaptation Subgroup are very familiar with the generic IMCI guidelines, as a basis for discussing the needed adaptations. An in-depth briefing on the case management process may have taken place as part of the orientation meeting. If such a briefing was not held, conduct it now as a part of the orientation to the adaptation process. See Annex J for notes and exercises for this briefing.

3.2 Do adaptation tasks

3.2.1 Adapt clinical guidelines

The process of deciding on adaptations of clinical guidelines is described in the *IMCI Adaptation Guide*, in A. *The adaptation process*. **The *IMCI Adaptation Guide* will be the primary guide for the subgroup as they complete this work.**

The Adaptation Subgroup has a series of meetings to discuss the adaptations that are needed, comparing the generic guidelines on the chart with the existing national guidelines, policies and epidemiology of childhood illness and agreeing on specific changes to make.

There are three categories of adaptations:

Essential adaptations must be done in every country. There are blanks left in the generic charts where the essential clinical adaptations must be filled in. These include the recommended first- and second-line antibiotics and antimalarials, and other treatment recommendations. This also includes the locally-adapted feeding recommendations and locally-used terms for signs of illness.

Recommended adaptations are based on new information and additional expert reviews that have suggested the need for updates of some clinical guidelines. For example:

> *Give multivitamins and minerals for two weeks to all children with PERSISTENT DIARRHOEA.*

Possible adaptations are additional adaptations that may be considered if the country's guidelines, policies, or epidemiology of childhood illness differ substantially from those assumed in the generic materials. For example,

> *Add a condition, such as dengue haemorrhagic fever, if it is an important contributor to mortality (and morbidity) in children.*

FIGURE 12

Topics for the initial meeting of the Adaptation Subgroup

Orientation to the adaptation process

1. The **objectives** of the subgroup:
   a. To adapt clinical guidelines
      - assemble the relevant, existing national guidelines (this task was begun during the preparation),
      - determine whether adaptation is required beyond the essential (and recommended) adaptations, and
      - prepare a statement of the guidelines to use in the course and their brief technical justification.

   b. To establish feeding recommendations.
   c. To identify local terms for signs of illness relevant to the course.
   d. To approve a mother's counselling card.
2. A more in-depth **briefing on the case management** process. (See Annex J.)
3. The **need for adaptation**. (See 'Introduction' from the *IMCI Adaptation Guide*.)
4. The **adaptation process and major tasks**. (See 'Introduction' from the *IMCI Adaptation Guide*.)
5. The **principles of adaptation**. (See 'Principles of adaptation' from the *IMCI Adaptation Guide*.)

Adaptation work and plans

6. Prepare a list of **possible adaptations that need to be discussed** and **information needed** to resolve them. (Use the *IMCI Adaptation Guide* Annex A-2: *Questions to summarize required adaptations* and section C. *Technical Basis*.)
7. Plan for **adaptation of nutritional advice and use of local terms**.
8. Agree on **assignments for different adaptation tasks**, including collecting information on adaptations.
9. Agree on ways to build and maintain **consensus**.
10. Agree on a **plan for work** and **meetings** of the Adaptation Subgroup with **next steps**.
11. Discuss possible means of **production** of adapted materials (proofreading, local possibilities for printing, etc.)

A process for discussing adaptations is described in detail in the *IMCI Adaptation Guide*, section A.

Some adaptations will seem reasonable and little discussion is needed for the subgroup to make a decision. If the subgroup is not able to agree on an adaptation, the members state what information is needed to make a decision, and how to obtain it. This may require consultation or decisions by relevant programmes in order to decide whether an adaptation is required and, if so, exactly what the adapted guideline will be.

After the initial meeting, the subgroup members carry out their assignments for gathering information. The Adaptation Subgroup meets again whenever progress can be made in expanding the agreed-upon guidelines, and meets as many times as necessary to reach consensus.

When the subgroup reaches consensus on adaptations for a particular technical area (for example, malaria treatment), they write the specific changes in the appropriate places on a copy of the generic IMCI chart booklet. They also write a description of the guidelines for the technical area, including a statement of the accepted generic guidelines as well as the adaptations, and provide the technical basis for each decision. The adapted chart booklet and the explanation for the guidelines will be used in the consensus meeting (step 3.3) and will serve as reference material for further IMCI activities.

As the subgroup determines the clinical guidelines, they finalize a list of the drugs and supplies that will be needed at first-level health facilities in order to implement the guidelines. As soon as this list is available, the Adaptation Subgroup gives this information to the Implementation Subgroup. The Implementation Subgroup will plan for these drugs to be available in all health facilities where staff will be trained to manage sick children according to the IMCI guidelines.

The Implementation Subgroup needs to plan a date for the first central-level IMCI case management course. To do this the Adaptation Subgroup will have to estimate when the adaptation of the clinical guidelines and training materials will be complete and ready to try out. This

FIGURE 13

Ways to develop consensus and support for the adapted IMCI guidelines

- Report regularly to the larger IMCI Working Group.
- Meet individually with persons from other programmes or institutions or with other key individuals who are not included in the Adaptation Subgroup but are relevant to guideline decisions.
- Make sure key programmes or specialists are not excluded.
- Circulate memos with meeting results, list of information needed, and unresolved issues.
- Lobby for enough time for the iterative process of resolving issues.
- Circulate draft guidelines in a format that is easy to review.
- Circulate drafts of clinical guidelines, decisions on feeding recommendations and local terms, and invite comments.
- Hold a special meeting of all people relevant to a particular technical issue to endorse guidelines which have been agreed in that area, and/or to settle a final issue. For example, hold a meeting of local malaria experts in the Ministry of Health and university to change malaria treatment recommendations.
- Involve outside experts on specific issues, if necessary.
- Provide available technical background documents to relevant persons and groups.

should not be attempted until the Adaptation Subgroup is well into the process of adaptation so that they can make a realistic estimate.

3.2.2 Adapt feeding recommendations, determine local terms and develop the mother's counselling card.

While the Adaptation Subgroup is working on the clinical guidelines, they also ensure development of locally appropriate feeding recommendations for the *Counsel the Mother* chart and module, and identification of locally-used terms for signs of illness that health workers will discuss with mothers. After the feeding recommendations and local terms have been identified, a specialist designs and pretests an adapted mother's card that incorporates these results.

The Adaptation Subgroup will need to arrange for this work to be done, and orient specialists who can help with these tasks. If there is a subgroup with responsibility for planning for improvement of family and community practices, this subgroup is likely to include or be able to contact such specialists. It may be that the Family and Community Practices Subgroup will help to undertake these tasks, in collaboration with the Adaptation Subgroup. (See section 5.2.1.)

When the information has been gathered, the Adaptation Subgroup will need to review it to ensure that recommendations resulting from these efforts are technically sound and appropriate for use in the IMCI guidelines. The participation of a representative from each early implementation district is important for ensuring appropriateness of the recommendations. Since the Family and Community Practices Subgroup will be assessing key family practices, they may share helpful information and insights.

Three protocols for this work are in the *IMCI Adaptation Guide*:

D. *Protocol for adapting the feeding recommendations*
E. *Protocol for identifying and validating local terms*
F. *Protocol for designing and pretesting an adapted mother's card*

The first two protocols (D and E) describe a process of:

- Using available sources of information to determine the locally appropriate feeding recommendations and terms for signs of illness.
- If available sources are inadequate, using short field studies for gathering additional information from the homes and communities where IMCI activities will be implemented.
- Analysing the information from the review of available sources and/or field trials to develop locally appropriate recommendations and identify appropriate local terms.

Special staff or a local consultant with expertise in conducting this type of study should be identified to carry out each protocol. The results and suggested adaptations are reviewed by the Adaptation Subgroup and then incorporated into the list of adaptations.

After the feeding recommendations and local terms are identified, a designer of educational materials designs and pretests an adapted mother's card that incorporates the results. This procedure is described in the *IMCI Adaptation Guide*, F. *Protocol for designing and pretesting an adapted mother's card*. As part of designing the mother's card, the specialist should find out about messages on care of sick children and recommended feeding practices that are currently transmitted to mothers from other sources, such as other health programmes.

3.2.3 Plan for consistency of messages about child health communicated to families

It is important that mothers receive consistent messages about child health. Health education messages are often generated by a variety of partners in a country, including the MOH health education unit, programmes and projects under the MOH that develop their own materials, and non-governmental organizations that generate and distribute health education messages. Messages about child health that are currently communicated to families, whether through the use of printed materials, radio, or community groups, should be made consistent with the IMCI messages that will be delivered by health workers at the sick child visit. The Adaptation Subgroup is responsible for making messages consistent. They may collaborate with the Family and Community Practices Subgroup, who will be assessing ongoing interventions related to improving key family practices (see step 5.2.2), and may therefore have relevant information. Plan for consistency of messages, such as by the following steps:

- Make a list of IMCI messages intended for families
- Review communication/health education materials to determine messages currently being given to families from different sources in the early implementation districts
- Determine differences in message content and terminology, especially messages that contradict IMCI messages
- Consider what current designs have been tried and proven to be effective and use them in designing the IMCI mother's counselling card
- Examine and discuss each important difference in message content or terminology with the responsible programme, and find a solution for maintaining consistency.

3.3 Circulate adapted guidelines for review and to build consensus

This step should be done at important points during the development of the adapted guidelines, and again at the end. Anticipate which programmes should have representatives on the Adaptation Subgroup, such as the ARI/CDD programme, the nutrition programme, the malaria control programme, and the Essential Drug Programme, so that these programmes can participate in adaptation discussions and stay informed of the issues during the adaptation of the guidelines.

When a certain section of guidelines is drafted by the Adaptation Subgroup, send that section to the entire IMCI Working Group and the appropriate programmes. Get their input and comments (in writing or by meeting with them). If they do not agree with the adaptation, use their input to reconsider the issues. Revise the guidelines if appropriate, and discuss them with the programmes again. This process of sharing the guidelines with relevant people during development and considering their input will help to build consensus and support for the adapted guidelines. Some practical ways to develop consensus are listed in Figure 13 on page 64.

When the adapted guidelines are complete, including the adapted feeding recommendations and the local terms on the mother's counselling card, distribute a copy for review by all those who are involved in planning the IMCI strategy. Send the guidelines to the IMCI Working Group members, other relevant Ministry of Health staff, key paediatricians in university medical schools and in paediatric associations. With the guidelines, send a draft document describing the technical basis justifying adaptations made to the generic materials. Also send a letter briefly describing the work that has been done to develop them, and ask for review.

Final consensus meeting

A final consensus meeting to endorse the clinical guidelines, feeding recommendations, and mother's card is usually a useful way to receive widespread support. This meeting includes senior officials of the Ministry of Health, the IMCI Working Group (including both subgroups) and other key individuals or institutions relevant to disseminating the guidelines or setting policies. This meeting is described in the *IMCI Adaptation Guide*.

3.4 Produce adapted training materials

3.4.1 Adapt training materials to reflect the adapted guidelines and translate them

The adapted chart booklet and mother's card should be completed first (that is, before adapting other training materials) so that copies can be distributed in the final consensus meeting. Adapting the training materials (including the case recording forms, modules, facilitator guides and answer sheets) to reflect the adapted guidelines involves much careful staff work. Detailed guidance for adapting them is provided in the *IMCI Adaptation Guide*:

B. *Procedures for adapting the charts and modules*, and

G. *Changes in materials required for specific adaptations*

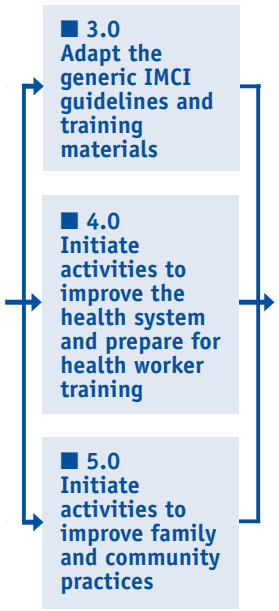
The materials may need to be translated. The Adaptation Subgroup has the responsibility of carefully checking all the adaptations and translations. They then produce the materials in a format for printing, and proofread them.

3.4.2 Produce copies of adapted materials to use in the first central-level IMCI case management course

The first central-level course (step 6.2) is important for training future facilitators and others in the IMCI guidelines, but it is also essential as a test of the adapted materials. It will show whether the adaptations are appropriate and whether they have been incorporated correctly throughout the materials. It is likely that at least minor problems or errors will be identified when the materials are used in the course, and some revisions and corrections will need to be made as a result. Therefore, produce only sufficient copies for the first central-level IMCI training course, such as by photocopying rather than printing. The Implementation Subgroup can estimate the number of copies that will be needed in the first course.

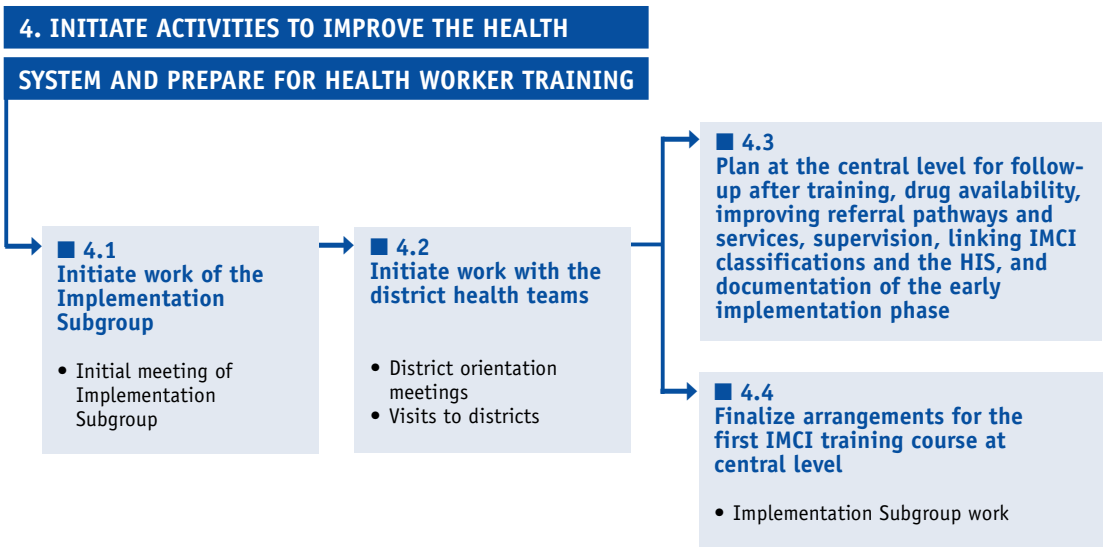
While the Adaptation Subgroup is accomplishing its task of adapting the IMCI clinical guidelines and training materials (step 3.0), the Implementation Subgroup initiates preparations for implementation in the districts (step 4.0). The Implementation Subgroup, or the Family and Community Practices Subgroup, initiates work to improve family and community practices (Step 5.0). Note that the work of each subgroup is not independent, because there are many times when one subgroup must inform the other of its work.

STEPS 3.0–5.0 OF THE IMCI PLANNING PROCESS



NOTE: The instructions in this guide for step 4.0 are addressed to the Implementation Subgroup, and particularly its coordinator.

4. Initiate activities to improve the health system and prepare for health worker training



The plans made in the national planning workshop were strategic decisions for IMCI early implementation (for example, selection criteria for training sites and facilitators for IMCI training courses). The Implementation Subgroup and each early implementation district will elaborate on and implement those plans, for example by applying criteria and executing decisions specified in the national plan.

Step 4.0 includes several important steps that initiate preparations for implementing IMCI activities in the districts. It begins with the first meeting of the Implementation Subgroup. The subgroup then initiates work with the selected districts by visiting them and conducting an orientation meeting. It also includes initiating activities that are within the responsibility of the central level, such as a review of the national drug policy and the health information system, with the aim of working towards consistency of IMCI. The subgroup finalizes the arrangements for the first IMCI case management course for first-level health workers, which will be conducted at the central level. Participating in this course will help to prepare staff for later courses and help district staff and others understand the IMCI strategy and clinical guidelines.

4.1 Initiate work of the Implementation Subgroup

Soon after the national planning workshop, the coordinator of the Implementation Subgroup should conduct the initial subgroup meeting. (If the meeting is

FIGURE 14

Initial meeting of the Implementation Subgroup

Objectives

- To brief the subgroup members on the objectives of the Implementation Subgroup and the tasks that need to be carried out.
- To select the early implementation districts (if not already selected)
- To agree on tasks and assign responsibilities within the subgroup

Participants

- Members of the Implementation Subgroup
- IMCI Working Group coordinator and the IMCI focal person
- If the early implementation districts were already selected, a representative from each district, if possible

Duration

One day

Preparations

- Ask members to bring their copy of the information package received at the national planning workshop.
- Prepare for each member a copy of the draft national plan for IMCI early implementation (the output of the national planning workshop), as soon as it is available.

Methods

The Implementation Subgroup coordinator and the IMCI Working Group coordinator or IMCI focal person give a presentation to the entire group about the objectives and tasks of the subgroup. The subgroup coordinator leads the discussion, and selection of early implementation districts if needed, and a discussion and agreement on responsibilities and a schedule.

conducted immediately after, it will probably not be possible to have representatives from the selected early implementation districts attend.) The objectives and organization of the meeting are summarized in Figure 14.

Guidelines for conducting the meeting

1. *Describe the responsibilities of the Implementation Subgroup during the early implementation phase*

   a. To orient the early implementation districts

   b. To plan with the districts how they will carry out early implementation activities (procedures and management)

   c. To work with relevant partners at the central level to resolve central-level issues related to, for example, drug availability, referral, supervision and HIS

   d. To assist and support the districts as they carry out activities, such as to help carry out the first facilitator training in the district, first IMCI training course in the district, first follow-up after training

   e. To organize data for review at the end of the early implementation phase

   These responsibilities will be accomplished over a period of one year (approximately).

2. *Describe the tasks of the Implementation Subgroup*

   Review the flowchart step 4.0 and its substeps, which the Implementation Subgroup and district staff will carry out. Also point out that the Implementation Subgroup will support the districts as they carry out Steps 7.0–8.0.

3. *Select 2 or 3 districts for early implementation (if not done previously)*

   If the early implementation districts were not already selected during the national planning workshop, review the previously-agreed criteria for early implementation districts (agreed in the national planning workshop, step 2.3.6). Then ask the members to discuss the characteristics of the candidate districts in relation to the criteria. Then apply the criteria to select 2 or 3 districts for early implementation.

4. *Plan how the group will carry out the tasks of planning for implementation and agree on responsibilities*

   Refer to the flowchart and the tasks to be done by the Implementation Subgroup. Each is described in detail

in the *IMCI Planning Guide*. Explain that they include steps to plan in further detail than was possible at the national planning workshop, and to complete preparations for implementation in the district. They require working with a focal person from each district, and later, with more district staff in a district planning workshop, to make specific plans to develop district capacity and implement IMCI activities.

Discuss and agree on how the tasks can be approached and who will be responsible, with estimated dates for each. Schedule a series of meetings of the subgroup to review progress, discuss needs for additional information, share information, and complete tasks.

4.2 Initiate work with the district health teams

4.2.1 Conduct an orientation meeting in each selected district (half day)

The IMCI focal person and members of the Implementation Subgroup make a visit to each of the selected districts, usually for a full day. Items to accomplish during the visit include the following:

Meet with the district medical officer, members of the district health team and senior personnel in the district such as the medical superintendent of the hospital and the senior paediatrician, perhaps the head of large health centres nearby, and local representatives of other partners (donors, NGOs, training institutions) working in the district. The agenda should allow for:

1. *An orientation to the IMCI strategy*
   - — Presentation and discussion of the purpose and nature of IMCI
   - — Explanation of the national plan for IMCI early implementation
   - — A technical briefing on the underlying assumptions of the case management guidelines and training course, including an opportunity to go through the case management charts
2. *Discussion of achievements and problems in the district, how the IMCI strategy can contribute to improving health services, and what IMCI activities require from the district health system*
3. *Agreement that the district health team will implement the IMCI strategy in the district in the early implementation phase*
4. *Agreement on organization for management of IMCI activities at the district*

   The district should designate one member of the district health team as the ***district focal person*** for IMCI activities. This person should have good knowledge about health facilities and conditions in the district, so he or she can work as a member of the Implementation Subgroup and make appropriate plans for the district. The district should also designate someone who has good clinical knowledge (this could be the same person) to work on the Adaptation Subgroup. The district should also identify other district planners who can help plan for implementation in the district. It is best if the person who is already in charge of planning for the district is involved.
5. *Plenty of discussion time*

FIGURE 15

Assessment of the district health system: Checklist of useful information to gather

At district level

- Number of health facilities, number of staff per facility and their designation
- Previous staff training, per facility (in ARI, CDD, breastfeeding, nutrition, other relevant courses)
- Training sites, caseload per site
- Number and names of experienced facilitators who could be involved and are available for IMCI training
- Drug procurement and distribution to health facilities in the district
- Referral situation in the district (distance of first-level facilities to the referral site, factors influencing accessibility, quality of care in the referral site)
- District supervisory system (who is involved, frequency, types of visits, use of information and data collected)
- Management of HIS
- Ongoing community-based interventions to improve child health
- Description of district planning cycle
- Partners in child health
- Available financial resources

At health-facility level

- Staffing, designation, previous experience/ training in child health interventions
- Availability of drugs needed for implementation of IMCI (see list in Annex E)
- Availability of supplies needed (see list in Annex E)
- Organization of work in health facilities (who does what, that is, assessment, treatment, giving drugs, counselling)
- Patient recording/HIS
- Frequency of supervision, tasks completed including observation of case management
- Involvement of facility staff in health education and/or community-based interventions

4.2.2 Have individual meetings and discussions with key district persons

With the focal person for the district, some subgroup members may visit various persons such as the district medical officer, medical superintendent of the hospital, and other staff in the district team.

During the visit, be alert to observe the staff and hospital or other health facilities. The observations may be helpful later when planning activities, such as when considering possible training sites.

Discuss concerns as a follow-up to the orientation meeting. Address any questions about possible activities and make clear plans on how to proceed

Explain the role of the district focal person. He or she will act as a liaison between the district health team and the central IMCI Working Group and will be a member of the Implementation Subgroup. It is the district health team that is responsible for planning IMCI activities, as part of regular district health planning. Initially IMCI activities may not be fully integrated into the district health plan, but this should occur as soon as possible, during the next planning cycle.

The district health team and other staff from the district will plan the district activities, completing the plans in a district planning workshop

4.2.3 Obtain information about the district that will be useful for planning

Figure 15 lists information for an assessment of the district health system, to help the IMCI Working Group understand the current situation, resources, and constraints in the district and to enable planning of appropriate activities. During or after the orientation meeting, give the district focal person a list of useful information. If needed, help the district health team to develop a simple assessment tool.

Collection of the necessary information may occur at different times and in different ways, depending on the district. Sometimes, some of the information may be available to the IMCI Working Group prior to the district orientation meeting. Or the working group and district health staff may work together during and after the orientation meeting to gather the information. Methods for obtaining the information include review of district records, visits to health facilities or potential training sites, and interviews with health workers and trainers. Staff should use a checklist of items to be observed and questions to be answered, but not attempt a formal survey or study. They should also talk with district staff, including the district medical officer and the medical superintendent as needed.

As planning continues, the Implementation Subgroup may find that some information is still missing or they may identify new questions about particular conditions in the district. As these questions arise, subgroup members should compile a list of the additional information needed. They should also check with the Adaptation Subgroup, who may have new questions that should be included in the new round of data collection (such as whether an alternative drug that is being considered is actually available at health centres in the district). This should help to avoid multiple trips to the district observing first one item, and then returning to observe another.

4.3 Plan at the central level for follow-up after training, drug availability, improving referral pathways and services, supervision, linking IMCI classifications and the HIS, and documentation of the early implementation phase

The Implementation Subgroup makes specific plans for some issues at the central level, before district-level plans are made. These are issues that may require central-level support to solve problems and for which a consistent approach should be determined and then applied in the different districts. Members of the subgroup plan these items over a period of a few weeks.

4.3.1 Plan for follow-up after training

When planning for follow-up, use the *IMCI Guidelines for Follow-Up after Training*. This document describes the purposes and activities of follow-up and provides generic job aids for conducting follow-up visits and summarizing information. Begin the discussion by reviewing the objective and the core activities to be done during a follow-up visit as recommended in the national plan (as a context for the discussion and decisions to be made). This planning would include the steps listed below:

- Select the type of staff who should conduct follow-up visits after training in the early implementation districts. For example:
  - District supervisors, if the national plan recommends that supervisors do follow-up visits
  - Clinical staff at district hospital who are responsible for supervision or training

- — Regional or district coordinators responsible for vertical programmes (e.g., for CDD, ARI, or malaria control)
- — IMCI course facilitators who conduct a course in the district
- — Central Ministry staff or project staff

■ Decide what information should be collected during follow-up visits to document the implementation of IMCI activities. This must coordinate with the overall plans for data collection. Plan how the information will be organized and used at the district level and central level. The *IMCI Guidelines for Follow-up after Training* provide generic data collection and summary forms. If additional information is to be collected for purposes of documentation of early implementation, forms may need to be adapted or developed.

■ Develop the procedures and job aids to use during follow-up visits and plan to adapt the generic job aids, if needed.

- — Patient recording forms (same as used in the IMCI case management training course, adapted with course materials)
- — Checklist of facility supports (that is, conditions within the health facility that affect the implementation of integrated case management)
- — Summary report of visit
- — Forms for optional activities, such as interviews with caretakers after their children receive care at a health facility

■ Plan how, when, where and by whom staff will be trained in conducting follow-up visits. For suggested procedures, refer to the *IMCI Guidelines for Follow-Up after Training*.

■ Plan how to ensure budget for follow-up visits.

4.3.2 Plan for availability of drugs needed for implementation of IMCI

The Implementation Subgroup plans how to ensure that health workers will have a steady supply of the drugs and supplies needed to implement the IMCI guidelines (see Annex E) immediately after their training. This planning would include the following steps:

■ Review the national drug policy and the national Essential Drugs List for an update on legislative and regulation issues, and to identify mechanisms for improving availability of drugs and rational use of drugs.

■ Assess:

- — drug procurement and distribution systems at central and district levels
- — current availability in the districts of the drugs and supplies needed for implementation of IMCI
- — the role of private sector in drug management (private practitioners and licensed drug sellers)

This assessment aims to determine the degree to which drugs, vaccines and supplies are available for preventing and treating common childhood illnesses. It will also help to identify specific reasons for the lack of drugs and vaccines at certain levels, as well as opportunities for improving the supply of drugs needed for IMCI implementation. Data collection methods that could be used are document reviews, structured interviews, and physical inventory checks. Assessment visits to selected districts and health facilities (discussed in step 4.2) provide an excellent opportunity to gather accurate data on the availability and operational problems associated with drug procurement, distribution and management at district and health-facility levels. The results of the assessment of drug availability should be shared with the Adaptation Subgroup and the national drug programme, as it may affect the choice of drugs to be recommended in the country's IMCI guidelines.

■ Initiate discussions with the staff of the national drug programme on modifying the Essential Drug List to ensure that the drugs needed for implementation of IMCI are included. The discussion should be coordinated with the Adaptation Subgroup.

Do not attempt to change the national drug policy and regulations. This is a long and complex process that is not easily initiated and completed. However, if the policy is not fully compliant with the IMCI guidelines, discuss how the IMCI strategy provides a new perspective, by improving health workers' skills to use these drugs in a rational and safe way. Negotiate the use of these drugs at new levels based on the common objectives of the IMCI strategy and the Essential Drugs Concept (EDC).

■ Determine the implications of making all the drugs needed for implementation of IMCI available at first-level health facilities. Plan activities to estimate the drug needs and costs of drugs, and to document drug use through follow-up after training and supervision. Perhaps, document caretakers' attitudes to the availability of certain drugs at first-level health facilities.

■ Assess whether the drug distribution system will be able to get the essential drugs needed for IMCI to the health facilities. Identify the needs for specific support, for example, strengthening the skills of the district pharmacist in estimating the required drugs and ordering them in time. Only consider temporary distribution solutions when IMCI training courses are conducted and drugs must be available for the course activities, or if drug availability is identified as a major problem.

■ Determine whether drug management practices at the health-facility level should be further assessed during early implementation. The Implementation Subgroup may ask the staff to document whether drugs are well managed or poorly managed at health facilities by collecting information on a few key indicators during follow-up visits after training. Some indicators may be:

— Is there a stock card for each item in the store and is it current and correct?

— Are there any expired items in the store?

— Is the store kept locked at all times when not in use?

Findings would help with future decisions about the need to train first-level facility staff in drug supply management. *Drug Supply Management (DSM) Training*[1] is a WHO course for health workers responsible for managing drug supplies in first-level health facilities. Participants in the course learn the recommended standard procedures for improving the ordering, organizing, receiving, secure storage, record keeping, payment procedures and dispensing of drugs. They also learn how to instruct caretakers on giving drugs correctly to their children.

■ If the management of drug supplies is decentralized, discuss district activities in procuring, distributing, and reordering drugs. Identify necessary actions to improve them, to ensure availability in the health centres.

4.3.3 Plan for improving referral pathways and services

In the national planning workshop, it was decided to conduct an assessment of referral pathways and services in the districts selected for early implementation. Based on the findings, specific activities will be planned to address any problems. They may include activities to improve care in referral facilities, upgrade first-level facilities to provide referral care, and improve caretakers' compliance with referral advice.

■ Agree upon the procedures for conducting the assessment. This will include the development of a health facility map by the district health team, direct observation of clinical care in the referral sites, discussions with staff in first-level facilities on their experiences with referral, and a review of documentation on caretaker practices (if available). If necessary, plan to hold focused group discussions with caretakers as part of activities to plan for improving family and community practices.

■ If it is likely that Annex E. *Where referral is not possible* will be used, agree the necessary adaptations with the Adaptation Subgroup. Examine the possibility of making the necessary drugs and equipment available in first-level facilities. Adapt the guidelines in line with the procedures and treatments that can be provided at this level.

Also decide how the Annex will be used. Extend the duration of the 11-day IMCI course, or plan for follow-on training after the course.

■ Review the referral-care manual[2] and decide how to introduce it to physicians in referral-care facilities and, where appropriate, in first-level facilities providing referral care.

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[1] *Drug Supply Management Training*, WHO/CHD/98.4 is a course for health workers responsible for managing drug supplies in first-level health facilities.

[2] *Management of the Child with a Serious Infection or Severe Malnutrition: Guidelines for care at the first referral level in developing countries*, WHO/FCH/CAH/00.1.

4.3.4 Plan for supervision

If the national planning workshop has decided that it is useful to try to integrate supervision of health workers doing IMCI case management into routine supervision, the Implementation Subgroup will plan further. This planning would include the following steps:

- Review existing supervision activities in the districts, instruments used, who does it, and how health workers' skills are reinforced.
- Plan how supervision of IMCI case management will be integrated into existing supervision.
- Revise checklists that are currently used by supervisors to include aspects of IMCI case management.
- Plan how supervisors will be trained to use the modified checklists and reinforce IMCI skills.

Even if there is no current plan to integrate supervision of health workers doing IMCI case management into routine supervision, every supervisor who is trained in IMCI case management and facilitation skills should observe and guide the health workers in his or her own facility as they implement IMCI activities.

4.3.5 Plan for linking IMCI classifications and the HIS

The Implementation Subgroup should study the issue of IMCI and health information system (HIS) incompatibilities and develop a solution according to the approach recommended in the national plan. The Implementation Subgroup should carry out the steps below:

- Study the classifications used in the HIS in comparison to the IMCI classifications (including any adaptations). To help understand the problem, make a list of the major IMCI-HIS incompatibilities. A simple way to identify IMCI-HIS incompatibilities is to have two members of the Implementation Subgroup independently try to assign an HIS classification to each of the IMCI classifications, imagining they are health workers who must report to the HIS. Real HIS reporting forms should be used for this exercise. Specific difficulties encountered in the process of translating IMCI classifications into HIS classifications should be recorded.
- Meet with a representative from the HIS who can explain the HIS classifications. Understanding why the HIS has chosen certain classifications will be helpful in developing a solution to the problem of IMCI-HIS incompatibility which will be acceptable to the HIS, and have a minimal impact on disease surveillance.
- Determine which, if any, of the current HIS classifications could be renamed or revised to make them more compatible with the IMCI classifications. There should be an HIS that includes disease classifications that are realistic and accurate for first-level health facilities. If appropriate, approach HIS management to determine if they are willing to make some adjustments in the HIS classifications. If so, work with them to agree on modifications.

- If the national plan recommends use of a translation table for translating IMCI classifications to HIS classifications:
  - refer to Annex F for guidelines for developing a translation table.
  - develop recommended procedures for translating IMCI classifications to HIS classifications for reporting. Specify how and where the IMCI classifications are recorded by the health worker, and when, by whom and how these are translated and reported for HIS purposes.
- Consider the implications of the recommended solution for training health staff. It may be necessary to have a short session on the last day of the IMCI case management course to show and teach health workers how to fill in the HIS form using any modified HIS classifications, or how to use the translation table.

If staff other than health workers will be involved, for example to do translation of IMCI classifications to HIS classifications, plan for their training.

4.3.6 Plan for documentation of early implementation

The Implementation Subgroup should review the list of information that will be needed for the formal review of early implementation that occurs at the end of the phase. They should also describe the types of tables and summaries that would be helpful. (See Annexes B, C and G.) This will make preparation for the review meeting easier. This planning would include the following steps:

- Review the guidelines for documentation of early implementation in the national plan.
- Specify the exact information to be collected about each of the main aspects of implementation. This should be the information needed to support planning and implementation of IMCI activities at the district level and the central level.
- Discuss how to involve partners and NGOs in documentation of early implementation.
- Specify the methods and process to document each of the main aspects of implementation. Refer to Annex B. In the plans, include:
  - who will collect the information, and where
  - the forms to be used
  - to whom the information will be sent
  - how it will be used on a regular basis to identify problems and address them at the district level
  - what information will be forwarded to the central level.
- Develop the tools for collecting the information. See *IMCI Guidelines for Follow-Up after Training* and Annex C for some generic tools for data

collection and summary (about training courses and follow-up visits). Adapt these generic tools and develop others as needed. Figure 11 *IMCI early implementation budget* can be adapted to make a checklist for collecting and summarizing data on the actual cost of activities.

- Plan for organizing and summarizing the information, so that it will be ready for review, including:
  - who will summarize it at the central level
  - how the data will be organized in tables to inform the review meeting
  - other summaries, such as reports from NGOs, that will be requested.

4.4 Finalize arrangements for the first IMCI training course at central level

The first central-level course is an opportunity to:

- Train staff from each early implementation district or the central level who will be involved in planning IMCI activities and/or conducting the first district-level training courses as facilitators, the course director or clinical instructor.
- Train staff from the central level, such as staff from the relevant departments in the Ministry of Health, or representatives from partner organizations, so that they will be better informed about IMCI guidelines and better able to support and plan for IMCI implementation
- Test the adapted materials to identify any adjustments needed, before the materials are printed in quantity

4.4.1 Identify participants for the central-level IMCI case management course

Discuss with the district health team who should go to the first central-level IMCI training course. Suggest that this should include the district focal person, some individuals who will possibly be facilitators for the first IMCI training course held in the district, and district-level managers and planners, who may work with the Implementation Subgroup. Participating in this case management training course will allow them to understand the case management guidelines, the training methodology and staff required, drugs needed, and other issues. With this understanding, they will be better able to plan and manage training, drug supply and other activities to support IMCI implementation in their district.

Also choose individuals from the central level to attend so that they can be better informed about the IMCI guidelines and better able to support and plan for IMCI activities. This could include child health programme managers, senior paediatricians, and representatives from partner organizations.

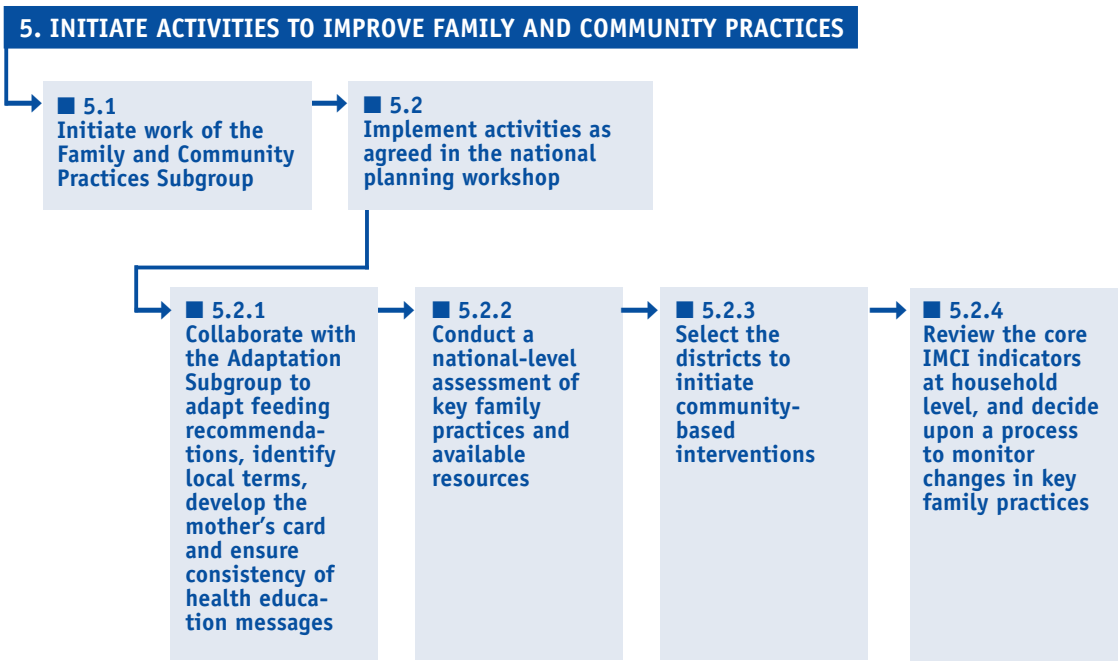
4.4.2 Prepare the central-level training site and obtain a course director, clinical instructor and facilitators

Since this will be the first time that the IMCI training course for first-level health workers is done in the country, there will be no staff with experience as course director, facilitator, or clinical instructor. Therefore, external assistance is usually needed to conduct the course. Negotiate with WHO, UNICEF, or other partners who could provide an experienced course director, a clinical instructor, and some facilitators. If there are staff who participated in an IMCI training course in another country, they can be involved as facilitators, provided they have an opportunity to participate in a five-day facilitator skills training preceding the course.

In most countries, the first central-level course will be conducted in a large hospital that has a large outpatient paediatric ward, in the capital city. Refer to the *IMCI Course Director's Guide* for guidance on preparing the site of the course (including classroom and clinical sessions) and making other preparations for the course.

Preparation of materials will include making sufficient copies of the adapted training materials and chart booklet for the course staff and all participants. The materials should be just photocopied, rather than printed, because this course is a test of the adaptation. It is important to be able to make improvements in the materials based on the test, before they are printed in large quantities.

5. Initiate activities to improve family and community practices



The national plan for the early implementation phase specifies the activities that will be initiated to improve family and community practices. The plan also specifies who will be responsible for supporting this component. This section describes the steps for conducting the essential activities, as well as possible additional activities. It assumes that a Family and Community Practices Subgroup has been established. If no separate subgroup has been formed, the Adaptation Subgroup should implement the essential activities described in point 5.2.1, and any other relevant activities discussed in the other points.

5.1 Initiate work of the Family and Community Practices Subgroup

After the National Planning Workshop, the coordinator of the Family and Community Practices Subgroup may have to conduct individual discussions with key partners who were not involved in the workshop, but who are relevant for planning activities to improve family and community practices. The aim of the discussions is to brief them on the IMCI strategy and their potential contribution to its implementation. The coordinator should then convene an initial meeting of the subgroup. Important aspects of the meeting are listed in Figure 16.

FIGURE 16

Initial meeting of the Family and Community Practices Subgroup

Objective

- To reach a common understanding of the third component of the IMCI strategy *Improving Family and Community Practices*: its objectives, and potential activity areas
- To agree on the main activities that need to be carried out for planning and implementing activities to improve family and community practices:
  - Collaborate with the Adaptation Subgroup to adapt the feeding recommendations, identify local terms, develop the mother's counselling card and ensure consistency of health education messages delivered to caretakers in the early implementation districts
  - Assess child care practices and available resources to improve them at national level
  - Select district(s) in which to initiate activities
  - Participate in assessments of key family practices and available resources to improve them in the selected district(s) and communities
  - Participate in the selection of appropriate interventions to be supported
  - Build national, district and community capacity to implement the interventions and monitor progress
- To agree on tasks and assign responsibilities within the subgroup

Participants

- Members of the Family and Community Practices Subgroup
- IMCI Working Group coordinator and the IMCI focal person
- If the early implementation districts have already been selected, representatives from each district, if possible

Duration

Two days

Preparations

- Ask members to bring their copy of the information package and the document *Improving Family and Community Practices: A component of the IMCI strategy*, provided during the national planning workshop. Provide spare copies if needed.
- Prepare for each member a copy of the draft national plan for the early implementation phase, as soon as it is available
- Provide additional materials on planning the community component as available from WHO and UNICEF

Methods

The Family and Community Practices Subgroup coordinator and the IMCI Working Group coordinator or IMCI focal person give a presentation to the entire group about the objectives and tasks of the subgroup. The subgroup coordinator leads the discussion of the objectives of the subgroup, the component of improving family and community practices and how it relates to the other components of the IMCI strategy, and a discussion and agreement on responsibilities and a schedule.

- Start the meeting with an overview of IMCI implementation in the country. Explain the rationale for initiating activities to improve family and community practices. Discuss how activities in the other two components—improving health workers skills and the health system—will contribute to improving family and community practices. Introduce the essential activities and possible additional activities for improving family and community practices as listed in Figure 8.

- Discuss basic principles for planning. Agree that the community component will be implemented in districts and communities where the IMCI strategy has already been initiated. Discuss the importance of considering the links between health facilities and communities when selecting and designing interventions. Agree that, where possible, interventions should build on existing resources, with the aim of supporting or strengthening them.

- Discuss the steps in the planning process. Develop a framework for planning which will facilitate selection of key family practices to be addressed, and the most effective interventions. Assign specific tasks and responsibilities to the subgroup members.

5.2 Implement activities as agreed in the national planning workshop

5.2.1 Collaborate with the Adaptation Subgroup to adapt feeding recommendations, identify local terms, develop the mother's card and ensure consistency of health education messages

The membership of the Family and Community Practices Subgroup may include persons who can manage protocols to determine feeding recommendations and local terms, and develop a mother's card. If so, it will be helpful to ask these persons to collaborate with the Adaptation Subgroup when they conduct local studies as described in step 3.2.2.

After the adaptation has been completed, the subgroup should also ensure that the health education materials that are used by various actors in the early implementation districts deliver messages that are consistent with the IMCI messages. In focusing on the early implementation districts, the subgroup may find that some of the issues that arise have national relevance as well. Messages that are used within a national communication strategy may be revised, provided they do not create a demand for health care services in areas where health workers have not yet been trained in IMCI. To complete this step, do the following tasks:

- Collect and review health education messages delivered in the early implementation districts. Include all delivery channels, including television, radio, printed materials, and training materials for health workers and community resource persons who delivery verbal messages.

- Determine which existing health education messages are consistent and recommend them for use.

- Determine which messages may contradict IMCI messages, and collaborate with responsible bodies to revise them.
- Ensure that any new health education messages will take into account the existing IMCI messages.

5.2.2 Conduct a national-level assessment of key family practices and available resources

The Interagency Working Group on Household and Community IMCI is developing tools to conduct the assessment of key family practices and available resources at different levels. In preparation of this step, contact the national WHO or UNICEF office to obtain the latest version of the assessment tools and use them as a complement to this *IMCI Planning Guide*.

5.2.2.1 *Collect and review existing information regarding key family and community practices*

In developing the community component, the Family and Community Subgroup will identify child care practices that are in greatest need of improvement and select some interventions to address them. The identification of practices and selection of interventions will be done in close collaboration with communities.

As a first step towards identifying which interventions to support, the subgroup will conduct an assessment of available information regarding key family practices at the national level.

- Review the information on conditions affecting childhood mortality and morbidity. Specify which are major child health problems and causes of deaths, and describe the size and distribution of the problems. Part or all of this information has already been gathered in preparation for the national planning workshop and discussed as part of planning for adaptation (see point 2.3.2.1).
- Review the key family practices and determine whether they are all relevant to the national situation. For example, if malaria is not a public health problem, the practice to protect children by ensuring that they sleep under an insecticide-treated bednet would not be relevant. This practice can therefore be eliminated from the list of key family practices.
- Collect and review existing information regarding key family practices. For each practice, gather and summarize the information available. Identify the most important practices that require strengthening.

  For this assessment, quantitative as well as qualitative data are useful. Sources of information include ethnographic studies, KAP studies, local studies completed for adaptation of the IMCI guidelines, Multiple Indicator Cluster Surveys (MICS), Household Surveys (HHS) and Health Facility Surveys (HFS).

  Although the assessment considers all available data at national level (not only from the IMCI early implementation districts), there may still

be gaps in information. Determine additional information needs and appropriate ways to get that information. This may involve the collection of new data in the districts selected for early implementation of the community component.

5.2.2.2 *Assess existing resources, opportunities and constraints to improve family and community practices*

This assessment includes the identification of resources that are currently in place to support families and communities in caring for their children, and a review of their strengths and weaknesses. The assessment should identify ongoing interventions and the partners who are working in communities to improve the key family practices. It should also identify potential delivery channels such as community health workers, other extension workers, and community mobilization events. The national assessment will make an inventory of the interventions, partners and delivery channels from the national perspective. This information will be verified and completed in a similar assessment in the districts selected for early implementation of the community component.

- Develop a list of past and ongoing interventions to improve key family practices. The assessment should include for example:
  - community-based interventions
  - activities undertaken as part of a national health education strategy
  - interventions undertaken by the health system to reach communities

  If the information generated in the previous step already provides clear information on child care practices that need support, the assessment should look out especially for resources that can be used to strengthen these. As the subgroup includes members from different sectors and organizations, their institutional experience can be utilized to make this list.

- For each intervention listed, specify the objectives and expected outcomes, the target group, and delivery channels. If possible, note how effective the intervention was by including monitoring or evaluation results or personal impressions of strengths and weaknesses.

- Complete the list of IMCI-relevant delivery channels. They may include community health workers, health educators, village health committees, mothers' support groups, extension workers for other sectors such as rural development, youth groups, women's groups, radio, television and many others. For each of the channels, consider strengths and weaknesses. Note available information on their potential to reach caretakers and their effectiveness in promoting behaviour change.

- Review current policies and identify how they support activities to improve key family practices. For example, the policy may endorse the role of community health workers as a linkage between first-level health

workers and communities, and specify the tasks that they are allowed to fulfill. Identify opportunities and constraints.

- Make a list of partners involved in supporting community-based interventions, specify their contributions to date and their potential for participating in IMCI implementation in future.
- Summarize the information gathered in points 5.2.2.1 and 5.2.2.2 in a concise report that will be used in the next steps of planning at district and community level. The example in Figure 17 shows possible community resources to improve nutrition. It also suggests ways they may be strengthened, and by whom.

5.2.3 Select the districts to initiate community-based interventions

As a general principle, activities to improve family and community practices should be linked to activities that aim to improve health workers skills and the health system. During the early implementation phase, the selection of districts should be limited to the early implementation districts. The subgroup should decide whether to initiate community-based activities in all early implementation districts or to select one (or two).

In addition to community-based activities, it is possible to initiate nation-wide activities as part of a health education strategy, provided the messages encourage caretakers to take actions that will be supported by the health system in general.

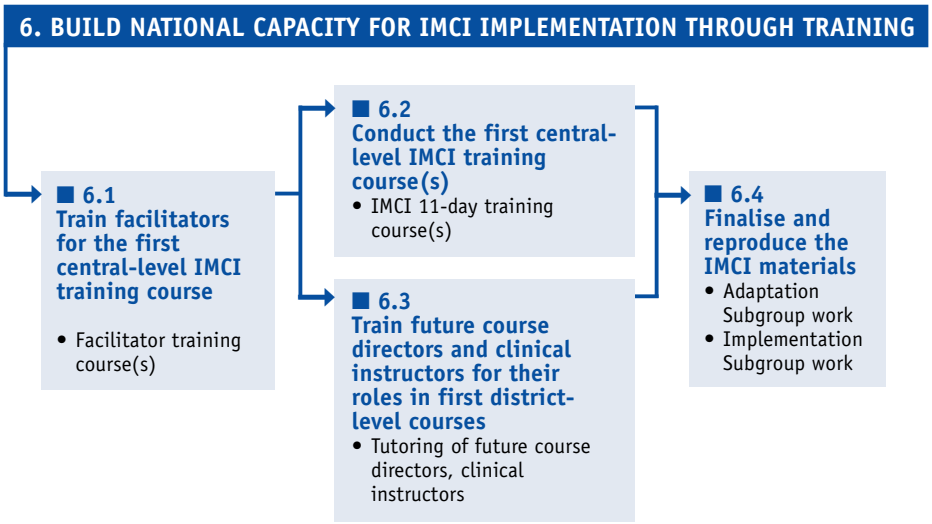
5.2.4 Review the core IMCI indicators at household level, and decide upon a process to monitor changes in key family practices

In Annex H, core indicators for measuring progress in relation to key family practices are listed. They are a minimum set of indicators, which need to be complemented and adapted in light of the activities that will be supported as part of the community component in a country, district or community. Review the indicators and agree that they will be supplemented with specific indicators that are able to measure progress in implementation and subsequent changes in behaviour.

FIGURE 17. HOW TO BUILD ON AND STRENGTHEN COMMUNITY RESOURCES TO PROMOTE IMPROVED NUTRITION

Family practice	Sample community resource	Where the resource exists and is effective	Where the resource exists but needs strengthening	Where no resource exists but a need has been identified
• Breastfeed infants exclusively for at least 4 and, if possible, up to 6 months • Starting at about six months of age, feed children freshly prepared energy and nutrient- rich complementary foods, while continuing to breastfeed up to 2 years or longer • Ensure that children eat adequate amounts of micronutrients (in particular, vitamin A and iron), either in their diet or through supplementation	Mothers' support group for breastfeeding	• Make contact with group to identify how mothers could be referred to support group (*health worker*) • Identify willingness of group to start a second group, and assist this effort (*health worker*) • Visit group periodically to assist with breastfeeding difficulties and identify needs for referral (*health worker, breastfeeding counsellor*) • Strengthen contact between health facility and programme, and identify capacity for participants to identify and refer children who are sick, families at risk, etc. (*health worker*)	• Make contact with group and offer periodic assistance with breastfeeding counselling (*health worker, breastfeeding counsellor*) • Identify what needs to be strengthened, e.g. frequency of gatherings, inclusion of young mothers with guidance of more experienced mothers, support for exclusive breastfeeding of young infants, information on when and how to introduce complementary feeding, availability of help with difficulties (*health worker, breastfeeding counsellor*) • As programme improves, continue tasks under **Where the resource exists and is effective**	• Identify NGOs, existing mothers' support groups, interested grandmother or others who could help gather a mothers' support group (*health worker, breastfeeding counsellor*) • Start a group with mothers of young infants who come to health facility (*health worker*) • Assist in planning, identifying appropriate site for group in community, and identify organizing mother, etc. (*health worker*) • As programme improves, continue the tasks under **Where the resource exists but needs strengthening**
	Community feeding programme	• Simplify mother's counselling card with focus on feeding recommendations and common problems (central) • Train village health worker or volunteers at feeding programme to use card (*health worker*) • Give the programme posters or other materials to reinforce messages (*health worker*) • Continue to monitor the quality and needs of the programme (*health worker*) • Link others to the activity who could help sustain it, and monitor the quality of activities (*e.g. health worker with agriculture extension worker, primary school teacher*) • Strengthen contact between health facility and programme, and identify capacity for participants to identify and refer children who are sick, families at risk, etc. (*health worker*)	• Simplify mother's counselling card with focus on feeding recommendations and common problems (*central*) • Identify person who could provide counselling, and identify opportunities during food distribution times when mothers could be counselled individually, reinforced by periodic small group sessions (*health worker*) • Promote the demonstration of the preparation of food using local food resources, and the participation of mothers • Continue to monitor the quality and needs of the programme (*health worker*) • Link others to the activity who could strengthen it, and monitor the quality of activities (*e.g. agriculture extension worker, primary school teacher, village health committee*) • As programme improves, continue tasks under **Where the resource exists and is effective**	• Identify NGOs and others who have feeding programmes and could set up programme (*central, health worker*) • Train the group leaders and provide them with adequate information (*central, health worker*) • Simplify mother's counselling card with focus on feeding recommendations and common problems (*central*) • Provide counselling cards for feeding and train village health worker or volunteers to use card (*health worker*) • Assist in planning, identifying village health worker or others to provide service until programme is running (*health worker*) • As programme improves, continue the tasks under **Where the resource exists but needs strengthening**

6. Build national capacity for IMCI implementation through training



6.1 Train facilitators for the first central-level IMCI training course

Three phases are required for preparation of a facilitator for the IMCI case management course. Facilitators should successfully complete:

- The IMCI case management course as a participant
- A 5-day training course in facilitation skills, and then
- An apprenticeship as a facilitator for the IMCI training course (paired with an experienced facilitator and working under close supervision of the course director)

Since this will be the first time that the IMCI training course for first-level health workers is done in the country, probably no local staff have experience as facilitators. Therefore WHO, UNICEF, or other partners have to help identify an experienced course director, a clinical instructor, and some facilitators (as planned in step 4.4.2).

If there is a team of staff who participated in an IMCI training course in another country and who have the right qualifications to act as facilitators in IMCI (e.g., currently active in clinical care of children, available for future courses), it may be possible to involve them as facilitators. This would require that a five-day facilitation skills training is conducted for them prior to the first course. An agenda and detailed guidelines for conducting the facilitator training are in the *IMCI Course Director's Guide*.

6.2 Conduct the first central-level IMCI training course(s)

Conduct the course as a standard 11-day course, as described in the *IMCI Course Director's Guide*. Because this course will be a model for future training courses, it is important that it meets all the criteria for quality. The course director must monitor the quality of the course and quickly correct any problems.

The course director must do a few special things to fulfill the above objectives for this first course. In particular, the course director should appoint someone to observe the course carefully, talk with the facilitators about any difficulties or errors they encounter with the adaptation, and take careful notes. These notes will be the basis for a review of possible improvements in the materials after the course. When difficulties or errors in the adaptation are identified, the course director should be informed in case they may be immediately corrected (if this is appropriate).

The course director should observe carefully the work of the facilitators, especially local staff who are facilitators, and give them feedback on their facilitation skills. This course may be their only 'apprenticeship' as a facilitator before they facilitate in a district-level course.

During the course, the course director and other teaching staff should observe the participants from the districts to identify individuals who will be suitable future facilitators. They should also look for an individual from each district who has the clinical and teaching skills to be a clinical instructor, and an individual who could be a district-level course director.

If there is a team of national staff trained in IMCI, it may also be possible to use the first course to train a national clinical instructor and course director. Suitable candidates should have been trained in IMCI and facilitation skills. They will work closely together with the experienced course director and clinical instructor to learn the relevant skills.

After the course, observations about the course and the adaptation are discussed in the IMCI Working Group. The Adaptation Subgroup then makes the necessary adjustments and corrections in the guidelines and materials. The Implementation Subgroup also reviews the experience of the course and discusses any lessons for district implementation.

After participating in this course, district staff are prepared to begin planning as described in step 7.0.

6.3 Train future course directors and clinical instructors for their roles in first district-level courses

Training a future course director and a clinical instructor for first district-level courses is best done by 'internships' during the central-level IMCI training course. They should work alongside the course director and the clinical instructor, who are experienced in these roles, during an entire course.

If this is not possible, an alternative is to choose suitable individuals to train to be the course director and clinical instructor for district courses during the first

few days of a central-level course. Ask them to observe how the jobs are done during the central-level course and tutor them after the course.

To prepare a future clinical instructor: Ask him or her to observe or assist the clinical instructor one morning as he selects appropriate patients for the day's inpatient sessions. Immediately after the course, follow the procedures for a tutorial session to prepare a clinical instructor, as described in the *IMCI Course Director's Guide*. It is most effective to tutor the clinical instructor at a hospital where there are many paediatric cases, and when the experienced clinical instructor (who may be external) is still there to help.

To prepare a future course director: Ask him or her to observe the course director during the day, to the extent possible while still participating fully in the training course. They may attend some facilitator meetings during the course to see how these meetings are conducted. After the course, review the *IMCI Course Director's Guide* with the future course director and discuss what a course director does.

6.4 Finalize and reproduce the IMCI materials

6.4.1 Revise materials as needed after the central-level IMCI training course

During the course, a special observer will be responsible for keeping notes on any problems or errors in the materials. After the course, the IMCI Working Group will discuss any observations about the course materials and the adaptation. They will decide whether any major adjustments are needed, and if so, how the guidelines or materials should be changed.

The Adaptation Subgroup will make the changes discussed, and in addition, any corrections and necessary minor revisions identified during the course (for example, where an exercise was adapted, but the answer sheet was not).

6.4.2 Produce materials in quantities needed for early implementation

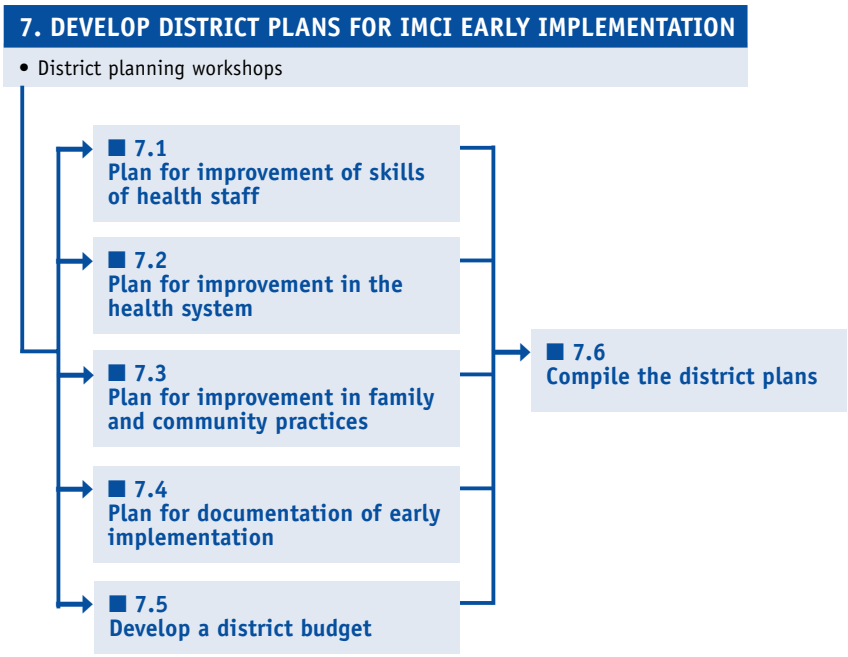
The Implementation Subgroup will determine the number of copies of the training materials to print for use in IMCI courses in the early implementation districts, and in any subsequent courses that will be held at the central level during early implementation.

They will also estimate quantities of the follow-up forms that will be needed for use during

- The training sessions for staff who will do follow-up after training
- Follow-up visits to all participants in IMCI training courses

Sufficient copies of forms for any additional documentation will be needed for all staff who collect data during early implementation activities.

7.
Develop district plans for IMCI early implementation
(Conduct district planning workshops)



The next steps shown in the flowchart are ones where the emphasis shifts to the districts, away from the central level and central training site. The responsibility for carrying out steps 7.0 and 8.0 is at the district level, to the extent possible, with support from the IMCI Working Group and central level. The activities are almost entirely carried out in the districts. District staff are better prepared to begin planning after they are familiar with the IMCI guidelines and training course, so it is recommended that step 7.0 begin after some district staff participate in the IMCI training course conducted at the central level (step 6.2).

Planning for early implementation in the district is a special planning activity and is not part of routine district planning. However, in the future, planning for IMCI activities should be integrated into the routine district planning cycle and procedures.

Careful planning is required so that implementation of IMCI activities in each district can occur in a timely and coordinated way. The Implementation Subgroup is responsible, along with the districts, for completing the planning and preparations. The Implementation Subgroup should encourage the district to take charge of making the plans to the extent possible, so that they will understand and later be able to sustain IMCI activities in the district.

Each district plan should address:

7.1 Improvement in skills of health staff

7.2 Improvement in the health system

7.3 Improvement in family and community practices

7.4 Documentation of early implementation

7.5 District budget

These are the same topic areas addressed, from a national perspective, in the national plan for the IMCI early implementation phase. The national plan specified the strategic decisions. In this step, the district describes how they will apply these decisions in the district context. The district plan specifies more detail and is district-specific.

Plans for activities in each district are made in several ways over a period of a few weeks to a few months, as described in the following steps:

- In meetings of the subgroups, including the district focal person and other district representatives, at national level
- When the district focal person returns to the district and formulates plans with district staff, and then brings them back to the subgroups, and
- During visits to the district when members of the national subgroups and district staff discuss and plan.

The partial plans are then compiled and completed in:

- A 1–2 day district planning workshop (step 7.0), which is described in Figure 18.

Keep in mind that the district planning workshop is just one of the ways to develop the district plans.

In the district planning workshop, the representatives of the national IMCI Working Group, including the focal person from each district, describe any plans made for each topic area so far. The district adds district-specific detail to each topic and plans additional areas as needed. Decisions that require extensive district input, such as selecting participants to be trained, are best completed in the workshop because more district staff are present.

The following sections (7.1–7.6) describe the areas of district activity for which plans will be completed during the workshop.

7.1 Plan for improvement of skills of health staff

Improvement of skills of health staff includes district activities for:

- IMCI training courses
- Follow-up visits after training
- How to build district training capacity
- Improvement of health workers' skills at referral level

FIGURE 18

District planning workshop

Objective

- To complete a written plan for the district's activities during the IMCI early implementation phase
- To develop a shared understanding among district staff about the IMCI strategy and the activities to be carried out in the district; to develop commitment to follow the plan
- To identify preparations that need to be made in the district

Participants

Representatives from the national-level subgroups

From each district: the district focal person for IMCI activities, district medical officer and the medical superintendent, staff responsible for major programme areas, representatives of important district partners, including NGOs, some health facility staff.

Location

Preferably in each selected district; otherwise, at the central level

Duration

1–2 days

Preparations

For each topic area, a presenter should prepare an explanation of the plans made so far and the issues that need to be decided in the workshop. For each participant, prepare copies of plans or partial plans completed so far.

Methods

A small group from each district completes their district plan, with facilitation and help from the national IMCI Working Group. They begin with a review of decisions already made and agree on or modify those plans. They then continue planning district activities in detail in all the topic areas.

Topic areas

7.1 Improvement in skills of health staff
- IMCI training courses
- Follow-up visits after training
- How to build district training capacity
- Improvement of health workers' skills at referral level

7.2 Improvement in the health system
- Availability of the drugs needed for IMCI at facilities
- Organization of work at health facilities
- Improving referral pathways and services
- Supervision
- Linking IMCI classifications and the HIS

7.3 Improvement in family and community practices

7.4 Documentation of early implementation

7.5 District budget

7.1.1 Plan IMCI training courses

During the early implementation phase, each district will conduct some IMCI training courses for staff in health facilities in the district. The number of courses was specified in the national plan. The Implementation Subgroup will help each district make the decisions listed below:

- Select training sites

  Review the criteria for training sites specified in the national plan. As one of those criteria is access to sites for clinical practice, also review the text in the *IMCI Course Director's Guide* about selecting sites for clinical practice (the inpatient ward and outpatient clinics). List some training sites in each district that are likely to meet the criteria. If a site was not already visited during the orientation visits to the district, include it in the list for an assessment visit.

  Select sites that are sure to meet all the criteria. Specify preparations that will be needed at each site before the training courses begin, such as obtaining a scale, clearing out a classroom, or setting up a diarrhoea treatment corner.

  Agree on how and when the necessary preparations will be made at the training sites. Describe support that the Implementation Subgroup can provide, such as providing a scale. The district health team should take responsibility for the other preparations, such as organizing a classroom or diarrhoea treatment corner.

- Select the facilities whose staff will be trained in IMCI case management

  Discuss an approach for selecting health centres or other facilities that will send staff for training. Keep in mind that it is more effective to train all health workers who manage children in one facility (in 1 or 2 courses) than to train one health worker from several facilities. Selections should be made initially from health facilities where conditions are good, to enable the district training team to develop its skills. The selection should take account of:

  — workload of individual health facilities

  — feasibility of follow-up

  — availability of drugs needed for implementation of IMCI

  — the support of the newly-trained in their health facilities (such as by clustering of facilities to be trained)

  — access to referral care

- Nominate course participants from the selected facilities

  Nominate participants who meet the criteria for course participants specified in the national plan. From each of the selected facilities, nominate several participants, including the officer in-charge, so that most of the health workers in the facility who treat sick children will be trained. It is essential for all staff in a facility to understand the reasons for changing

procedures for managing sick children, so that they manage sick children in a consistent way, and can help and support each other in their work.

- Identify any additional persons who should be included in training. Examples:
  - — individuals who are thought to be possible future facilitators, future course directors and future clinical instructors, and therefore need to participate in the course
  - — health workers employed by district partners or NGOs working in the district
  - — district authorities such as local paediatricians, district medical officers, coordinators of district programmes, or other key district staff who need to understand IMCI case management in order to better support IMCI activities and do their job, such as supervision of health facilities, or drug supply management
  - — supervisors of health workers who will be implementing the IMCI guidelines
- Plan the training courses

Plan for the number of training courses in the district that is specified in the national plan (usually 2 or 3). The *IMCI Course Director's Guide* has a detailed 'Checklist for Planning and Administrative Arrangements'. Review this checklist and agree on any items that can be planned now. Also assign responsibilities for taking care of the remaining items.

- Consider whether a session should be added at the end of the 11-day course to show participants how to fill in HIS forms, and to discuss the organization of work in their health facilities to allow for integrated case management. (This will depend on the solution planned by the central level and whether health workers will have to fill in HIS forms at their health facility.) If so, schedule it and assign responsibility for preparing instructions and sample forms and exercises to use in the session.

7.1.2 Plan for follow-up after training

When planning for follow-up, use the *IMCI Guidelines for Follow-Up after Training* which describe the purposes and activities of follow-up and provides generic job aids for conducting follow-up visits. Each district should discuss the items listed below and make the necessary decisions:

- To provide a context for the planning, describe the objectives of follow-up after training and activities to be done during a follow-up visit.
- Review the information to collect during follow-up after training. This was specified by the Implementation Subgroup (in step 4.3.1). Plan how the information will be organized and used at the district level.
- Review the procedures and job aids to use during and after follow-up visits.

— Record of Follow-Up of Trained Health Workers

— Patient Recording Forms (same as in IMCI training course for first-level health workers, adapted with course materials)

— Caretaker Interview (optional)

— Checklist of facility supports (that is, conditions within the health facility that affect the implementation of case management)

— Summary report of visit

— District Results Tables (Table 1: Quality of Case Management, and Table 2: Problems with Facility Reports)

■ Review the criteria for persons who will do follow-up after training and the type of individuals specified by the Implementation Subgroup (such as supervisors with appropriate clinical skills who regularly visit facilities, clinical officers at hospitals, district IMCI course facilitators). Apply these criteria to select individuals who will do follow-up visits. (Coordinate this decision with the selection of facilitators for IMCI training courses, discussed below in step 7.1.3.)

■ Discuss how follow-up activities will be organized and budgeted, including transportation and scheduling for a visit to each trained health worker within 4–6 weeks after attending the IMCI training course.

7.1.3 Plan how to build district training capacity

The national plan recommends a procedure for building district capacity to do training courses and follow-up after training. Some staff were trained in IMCI case management in the central-level course with external trainers. From among those trained, a course director, clinical instructor and some facilitators will be selected and then prepared to teach in district-level IMCI training courses. Additional district-level facilitators will be trained in IMCI either in a central-level training or at the first district IMCI courses, and then given a 5-day facilitator training. Selected staff are then also trained to do follow-up visits. Each district should discuss the items and make the decisions listed below:

■ Specify who will coordinate training courses and follow-up in the district.

This person will ensure that all arrangements are made for training courses and follow-up visits, including training in facilitation skills and follow-up. He or she will schedule visits, organize transportation, supervise follow-up visits and ensure that information is collected during visits and then organized. Discuss how the coordinator can be prepared to do these tasks.

■ Select facilitators for the first district courses. Refer to the criteria for facilitators specified in the national plan for the early implementation phase. Continuing availability over several rounds of training is important. They must participate in an IMCI case management course at the central or district level and facilitator training.

- Facilitators for the additional district courses can be identified during the first district course. Plan for their training in facilitation skills at district level. Review the format for training facilitators described in the national plan (and refer to the WHO guidelines on facilitator training[1]) and schedule a facilitator training prior to the second district-level IMCI course.

- Plan how to ensure the quality of training courses in the district.

Refer to the criteria for quality training courses in the national plan and agree on ways to ensure quality, such as:

  — IMCI Working Group supports the district team by sending a member to help with the first training course in each district.

  — IMCI Working Group ensures careful training of the course directors, clinical instructors and facilitators.

  — IMCI Working Group helps the district team as necessary to collect all information needed to document the training courses.

- Agree how staff will be trained to conduct follow-up visits.

  — Prerequisites are training in both IMCI case management and facilitation skills

  — Training includes classroom review of follow-up activities, a half-day field practice, and supervision on the first visits to health workers

- If possible, plan dates and place for training in how to conduct follow-up; dates and place for field practice (half-day); and dates and methods for supervising initial visits to health workers. (This will require knowledge of the schedule for IMCI first-level courses and facilitator training.)

7.1.4 Plan for improvement of health workers' skills at referral level

During the national planning workshop, the IMCI Working Group considered opportunities for improving skills of health workers at the referral level. In particular, attention was given to the link between IMCI training and breastfeeding counselling training, and the introduction of the IMCI referral care manual in referral-care facilities. The Implementation Subgroup has further investigated the access and quality of referral care in the districts selected for early implementation. The district health team should now plan how to coordinate training of first-level health workers with training of staff at the referral level. This aspect of planning is described in more detail in section 7.2.2.

[1] *Course Director's Guide, Integrated Management of Childhood Illness*, WHO/CHD/97.3.K Rev.1. This version includes an updated section on 5-day facilitator training.

7.2 Plan for improvement in the health system

Like the plans for skills improvement, the plans for improvement in the health system are developed over a period of time by the Implementation Subgroup and district staff. The decisions that require extensive district input will be completed in the district planning workshop.

Improvement in the health system includes district activities for improving:

- Availability of the drugs needed for implementation of IMCI at facilities
- Referral pathways and services
- Organization of work at health facilities
- Inclusion of IMCI into routine supervision
- Linking IMCI classifications and the HIS

7.2.1 Plan for availability of the drugs needed for implementation of IMCI at facilities with trained staff

The Implementation Subgroup has assessed the current availability of drugs and supplies for IMCI in the districts. They have planned ways to solve problems concerning the availability of drugs and supplies needed for IMCI, especially if the solution involves action at the central level.

Each district should discuss the items and make the decisions listed below:

- Review the list of drugs needed for implementation of IMCI. Review any plans and solutions made at the central level to address problems in drug supply.
- Plan district-level activities to solve drug-supply problems. For example:
  - Identify problems and implement improvements in distribution at the district level to ensure that the drugs in the system reach the health facilities.
  - During early implementation, give priority to distribution of drugs to facilities where staff have been trained in IMCI.
  - Where applicable, utilize funds from cost-recovery to purchase supplementary drugs.
- If the management of supplies is decentralized, plan district activities in procuring, distributing, and reordering drugs to ensure availability in the health facilities.

7.2.2 Plan for improving referral pathways and services

In the national planning meeting, the IMCI Working Group discussed needs and possible plans for improving referral pathways and services (section 2.3.3.2). Each district should discuss the topics and make the decisions listed below:

- Discuss the referral situation in the district (distance of first-level facilities to the referral site and factors influencing accessibility).
- Discuss the quality of care at the referral sites. If sufficient information is not available on accessibility and quality of referral sites, plan an assessment.
- Plan solutions to improve the referral situation. Examples to consider include:
  - introduction of the referral care manual[1] to staff caring for in-patients in referral sites
  - training of first-level staff in Annex E. *Where referral is not possible*,[2] and equipping their facilities to carry out those additional case management guidelines
  - mobilizing community resources to improve access
  - communication messages to modify beliefs that negatively affect referral and increase willingness of mothers to go for referral care when it is recommended
  - operational research to find out factors influencing referral, if not enough is known

In addition, assess the quality of breastfeeding support that is provided to mothers within health facilities and in the community. They should have access to a health worker with basic breastfeeding support skills, who can refer to a skilled breastfeeding counsellor if needed. To achieve this, activities should be planned to ensure that maternity facilities in the district are baby-friendly, and that all first-level facilities with IMCI trained staff are within a reasonable distance of a breastfeeding counsellor who can provide referral care.

- Assess maternity facilities in the district for their baby-friendliness. If needed, develop a plan for making them baby-friendly in collaboration with the national breastfeeding committee.
- Assess access to breastfeeding referral care. Develop a training schedule for the 40-hour *Breastfeeding counselling: A training course*, to establish a selected group of breastfeeding counsellors who can provide referral care, and who can also act as trainers and supervisors for IMCI in the district. Work in close collaboration with the national breastfeeding committee. Refer to Annex D for more guidance on the linkages.

7.2.3 Plan organization of work at health facilities

Plan changes or support that will enable trained staff to implement the IMCI case management guidelines. A few examples to consider are:

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[1] *Management of the child with a serious infection or serious malnutrition: Guidelines for care at the first referral level in developing countries*. WHO/FCH/CAH/00.1.

[2] Annex E. *Where referral is not possible* is part of the module *Treat the Child, Integrated Management of Childhood Illness*, WHO/CHD/97.3.D

- Clarify roles of different types of staff in health facilities in relation to major tasks involved in managing sick children according to the IMCI guidelines (for example, who will assess, classify and treat sick children, who will teach mothers how to administer medications, who will counsel mothers on feeding).
- In places where there is a fee for service, ensure that mothers will not be charged when they bring their children back to the health worker for follow-up.
- If needed, add one session at the end of the IMCI first-level course to help health workers plan how to implement the IMCI guidelines at their facility.
- Identify steps to improve patient flow. For example, staff should identify severely ill children quickly, even in the queue, so they may receive care promptly.
- Discuss how to ensure that staff who are trained in an IMCI training course will remain in their posts for at least 1 year.

7.2.4 Plan for supervision

Plans for supervision at the district level will depend on whether or not the IMCI Working Group has recommended that district clinical supervisors should carry out follow-up visits, and/or that supervision of health workers doing IMCI case management be integrated into routine supervision.

- Review the plans made by the Implementation Subgroup regarding how supervision of IMCI case management will be integrated into existing supervision. Review any modified supervision checklists.
- Consider the existing supervision activities in the district, instruments used, who does it, and how health workers' skills are reinforced. Identify how these existing activities will need to change to carry out the plans for IMCI implementation.
- Decide how supervisors will be prepared for IMCI-related tasks (for example, training of existing supervisors in IMCI case management, IMCI facilitation skills and follow-up skills, use of same job aids).

7.2.5 Linking IMCI classifications and the HIS

The IMCI Working Group, in cooperation with HIS management, made decisions on how to solve the problem of inconsistencies between IMCI classifications and the HIS. The district health team may need to take action to implement those decisions, such as to review the patient registers used in the district and adapt them if needed.

If action is needed, the IMCI Working Group should describe to the district staff the problem and the solution planned. Then the district plans how to implement the specific changes needed.

7.3 Plan for improvement in family and community practices

The Family and Community Practices Subgroup at national level has initiated a process to assess the situation with regard to key family practices, and available resources to support them. Based on this information, the subgroup may have already identified some key family practices that are priorities to address. They may also have made an inventory of related interventions, potential delivery channels, their strengths and weaknesses.

The next step now is to continue the assessment process at district level. The aim will be to confirm the work completed at national level, to gather more district-specific information, to arrive at conclusions about key family practices that need improvement, and to identify possible interventions that respond to the district's needs and resources. The conclusions of the district assessment will be verified in subsequent community assessments. The process will follow similar steps as those used at the national level, using district-specific information.

To initiate the district-level planning for this component:

- Introduce the objectives of the third component. Explain the key family practices and the rationale for selecting them. Obtain agreement that the district is interested in implementing interventions to improve family and community practices.
- Discuss the establishment of an intersectoral working group at the district level. The district Family and Community Practices Subgroup will involve the IMCI focal point in the district, members of the district health team, community leaders, representatives from local government, representatives of NGOs, and other institutions or organizations involved in community-based work.
- Discuss the terms of reference of the subgroup. They will include assessment of key family practices and available resources at the district-level, selection of communities in which to initiate interventions, community assessment visits, selection of the interventions to be supported, training of district resource persons, and monitoring of progress.
- Discuss each of the tasks in more detail and reach a common understanding on what needs to be done:
  - Review health, nutrition and hygiene messages and other messages delivered in the community, and facilitate making them consistent with the key family practices promoted in IMCI messages.
  - Gather community-specific information on key family practices affecting child health by identifying current practices, the influences on them, and groups at risk of ill health. Use existing information as much as possible. Sources of information that may be available include the district health information system, data from surveys conducted in the district such as Demographic Health Survey (DHS), Multiple Indicator Cluster Survey (MICS) and Household Surveys, as well as Knowledge Attitude and Practice (KAP) studies and Focused Ethnographic Studies.

— Identify resources in the community to support or strengthen key family practices. Identify ongoing interventions, potential delivery channels, and partners involved in community-based work. Assess their strengths and weaknesses.

— Select communities in which to initiate support for community-based activities. Consider criteria such as the health situation, local commitment, ongoing interventions, the presence of a local partner to support the interventions, and the usefulness of the early experience for expanding into other communities.

— Conduct participatory assessments in the selected communities to determine what should be done (ie. priority areas for action), how the community can be involved in promoting change, who are appropriate resource persons to implement interventions, and how to link with established health services. UNICEF has developed the *Community Dialogue* as a tool to guide the assessments.

— Select the interventions to be strengthened or initiated and plan for activities based on the specific needs of the community and resources available.

— Facilitate training of community-based resource persons to implement the interventions.

— Agree on a process for monitoring progress, and assign responsibility for gathering and using the information.

7.4 Plan for documentation of early implementation

The national plan makes recommendations about documentation of early implementation. The Implementation Subgroup, which has developed these plans further, should present these plans to the districts. Then each district should discuss the items and make the decisions listed below:

■ Explain the objectives of documenting the early implementation phase. Emphasize that an important objective is to identify and solve problems. Documentation also provides information on achievements and problems. This information is used later to review experiences, to identify lessons learned, and thus to plan future activities.

■ Review the list of information to be collected in order to document the main aspects of the early implementation phase. The district may decide to include additional information to meet district-specific needs. Confirm and finalize the list of information to be collected.

■ Identify a person who will be responsible for documentation of early implementation in the district. This may be the district focal person or another district staff.

■ Assess who currently makes visits to facilities, other possible contacts for information, alternative ways to collect information (for example, through telephone and other contacts), and available resources for

FIGURE 19

District early implementation budget

	Amount
Preparing for IMCI implementation	
Participation of district focal person in meetings of the national IMCI Working Group (travel, per diem)	
District orientation meeting (in collaboration with IMCI Working Group, half-day): local costs	
Health facility assessment visits	
District planning workshop (1–2 days): meeting room, travel, per diem, local costs	
Adaptation of local terms and feeding recommendations	
Assessment of key family practices and available resources to support them at district and community levels	
Consultants, travel	
Implementation of activities	
Training of facilitators (IMCI course plus facilitation skills training: 11+ 5 days)	
Consultant	
Local costs	
Courses for first-level health workers (2–3 courses, 11 days each)	
Trainers	
Local costs	
Training in follow-up skills for supervisors	
Consultant	
Local costs	
Conducting follow-up visits (at least one, if possible more, to all IMCI participants)	
Travel and per diem	
Provision of IMCI essential drugs to health facilities	
Conducting regular supervisory visits that include IMCI	
Travel and per diem	
Training of community resource persons	
Consultant	
Local costs	
Conducting selected activities to improve family and community practices	
Participation in the meeting to review the IMCI early implementation phase	
Travel and per diem	
Possible other activities	
Producing materials (assessment forms, mother's cards, health education materials)	

collecting information and supervision. Discuss what current activities and resources can be built on for IMCI documentation. Review decisions and plans already made for collecting some of the information in follow-up after training and training courses. Review any plans for collecting IMCI-relevant information as part of routine supervision.

■ Discuss and agree on the procedures to be used for collecting the information at district level. The plans will depend in large part on the decisions made as to who will conduct follow-up visits, and whether

FIGURE 20

District plan for early implementation

Activity	Who	Schedule	Completion	Budget	Source of funds	How documented

supervisors will include observation and data collection on IMCI case management in routine supervision. Specify:

- who will collect the data and what data they will collect
- the forms to be used
- to whom the information will be sent in the district
- how it will be used on a regular basis to identify problems which will be addressed at the district level
- what information to forward to the central level

7.5 Develop a district budget

The budget can best be developed by district staff, who have good knowledge of district costs, once they know the final plans for activities in the district. The Implementation Subgroup may help the district to estimate costs for new items such as IMCI training courses or follow-up visits.

The district and the IMCI Working Group should consult closely to determine the relative contribution of the district health budget and the national IMCI budget for all items in the district budget for IMCI activities. As a general principle, IMCI should become part of the regular district planning and budgeting as soon as possible. However, during the early implementation phase, a portion of the needed resources may come from nationally allocated funds.

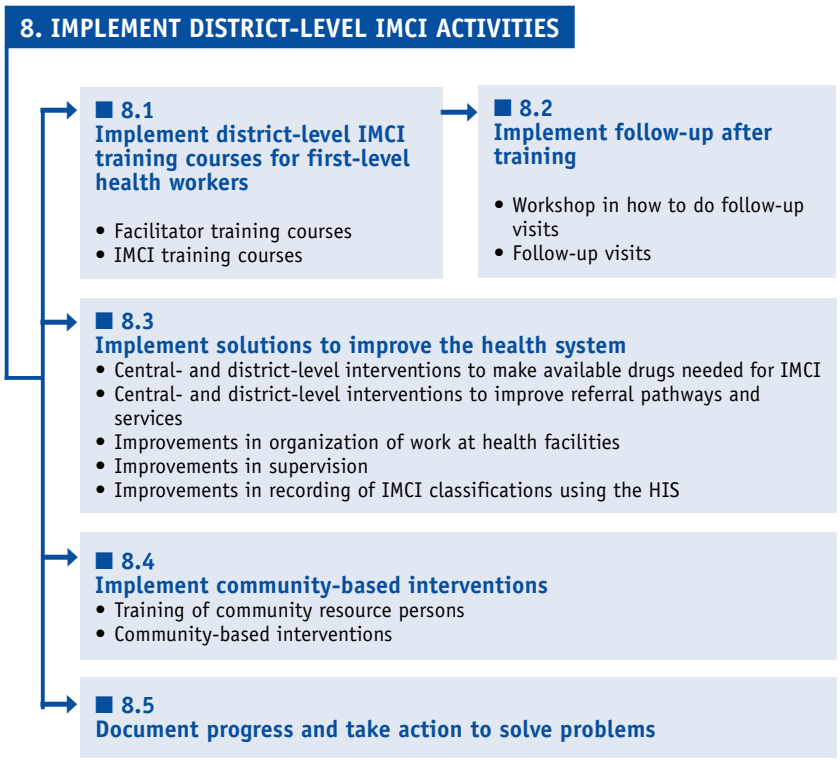
See the list of budget items in Figure 19.

7.6 Compile the district plans

In order to compile a plan for district activities, each district should document and organize all the plans and decisions that have been made by the subgroups in meetings with district staff, in addition to those made in the district planning workshop. Specify the schedule for each activity and assignments of responsibility. Be sure to identify preparations that still need to be done.

It is helpful to make a very clear summary of the plans for the central level and the district health team to keep and follow. A format such as in Figure 20 may help.

8. Implement district-level IMCI activities



District staff will complete planning and preparations for district-level IMCI training courses, follow-up after training and other activities. Members of the Implementation and the Family and Community Practices Subgroups may make visits to the districts to ensure that all preparations are taking place and to help if needed.

District staff will implement the planned activities, including conducting IMCI case management courses to train health workers, ensuring that drugs needed for IMCI are available at their health facilities, conducting visits to these workers for follow-up after training, and documenting IMCI activities. They will have support from central-level staff, especially for the first IMCI case management course in the district, the first follow-up visits, and the first data collection efforts. Implementation of activities will occur over a period of a few months to one year, depending on the capabilities and plans of the central level and the specific districts.

8.1 Implement district-level IMCI training courses for first-level health workers

Preparations for the IMCI training courses

The *IMCI Course Director's Guide* provides a detailed checklist of preparations for the IMCI training course. The checklist includes items such as invitations, accommodations and meals, training materials, clinical supplies and equipment. A critical step is to identify training sites that can offer suitable classroom space and settings for clinical practice including several outpatient clinics and an in-patient ward. Requirements for the training sites are specified in the *IMCI Course Director's Guide*.

Shortly before the courses, conduct training in facilitation skills for the facilitators for the first IMCI training course for first-level health workers in each district. Three phases are required for preparation of a facilitator. Facilitators should successfully complete:

- The IMCI case management course as a participant
- A 5-day training course in facilitation skills, and then
- An apprenticeship as a facilitator for the IMCI training course (paired with an experienced facilitator and working under close supervision of the course director)

Facilitators for the first district-level course would have completed the IMCI training course for first-level health workers given at the central level. Just prior to the first district-level IMCI training course, the central level should conduct a five-day training to teach facilitation skills and how to conduct the IMCI course. An agenda and detailed guidelines for conducting the facilitator training are in the *IMCI Course Director's Guide*. The new facilitators will be paired with an experienced facilitator from the central level, if possible, and will be closely supervised by the Course Director during the first district-level course. (Some participants in the first district-level course may become facilitators for later courses.)

Conducting the first district-level IMCI course for first-level health workers

The course director must make sure that the course is carried out as designed, for example, that facilitators give all participants individual feedback on their work during classroom sessions. The course director also makes sure that participants get sufficient practice during clinical sessions assessing, classifying, treating children and counselling their mothers. This requires that the course director visit and observe the different outpatient clinics during the sessions and be prepared to make changes if needed. For example, if there are not enough children attending a particular clinic, the course director may need to arrange for that small group to visit another clinic the next day.

During the courses, the course director and other teaching staff will look to identify individuals who have the clinical and teaching skills to be good facilitators, clinical instructors, or course directors for subsequent district-level courses.

Facilitators and the course director will collect information about the participants and the course, as described in the *IMCI Course Director's Guide*. The course

director will summarize the information and complete a report on the course (see Annex C for the Course Director Summary form).

8.2 Implement follow-up after training

8.2.1 Train staff to conduct follow-up after training

The national plan and the district plan specify who will conduct follow-up after training. The coordinator of follow-up from central level (together with an external consultant) will train the first group of these district staff in conducting follow-up. Guidelines for conducting training in how to conduct follow-up are in the WHO document *IMCI Guidelines for Follow-Up after Training*.

The training should take place after the district staff have participated in an IMCI training course and a 5-day facilitator training, and after the first district-level IMCI training course. It is best if the training occurs shortly before the follow-up visits so that the procedures are remembered well. After the district coordinator has watched and participated in the first training session on how to do follow-up, he or she will conduct subsequent training sessions for additional district staff.

8.2.2 Conduct follow-up after training and use findings to improve services

District staff should conduct follow-up visits to all participants in an IMCI first-level training course within 4–6 weeks after the course. They reinforce the new skills and help solve problems that may occur in early attempts to apply the skills in clinic. They record information on their observations and submit it according to agreed procedures. Complete instructions and forms for conducting the visits are in the WHO document *IMCI Guidelines for Follow-Up after Training*. After the visits, the individual who is coordinating the follow-up visits should meet with the staff to discuss their observations and solve problems. Summary forms for recording district results are in Annex C.

8.2.3 Conduct district-level IMCI training courses for first-level health workers, and conduct follow-up visits to all health workers trained in the IMCI course

The district will conduct the remaining courses planned, conduct follow-up visits to the participants, and continue activities to ensure availability of drugs for trained health workers, document activities, etc. As district staff gain experience with implementation, they are building their capacity to carry out the IMCI strategy with decreasing reliance on the central level for staff or other support.

8.3 Implement solutions to improve the health system

As with the training courses and follow-up activities, the district staff will carry out other activities that were planned in the district, with help from the central level as needed. It is important for the effectiveness of IMCI that all components of the IMCI strategy are addressed. Staff who are trained must have the drugs specified in the IMCI guidelines, support, and an appropriate organization of

work so that they can manage sick children as they have been trained. They should be able to refer severely ill children or provide them with adequate care in their facility.

8.4 Implement community-based activities

If a community-based intervention was planned for the district, the Family and Community Subgroup will continue to complete the activities as agreed during the district planning workshop. The subgroup will review available information to assess key family practices and available resources at the district level. They will select communities for implementation and work together with community members to conduct community assessments. Based on this process, the communities will select one or several interventions to implement. The subgroup will build district and local capacity to implement these interventions, and monitor progress in achieving the desired changes.

8.5 Document progress and take action to solve problems

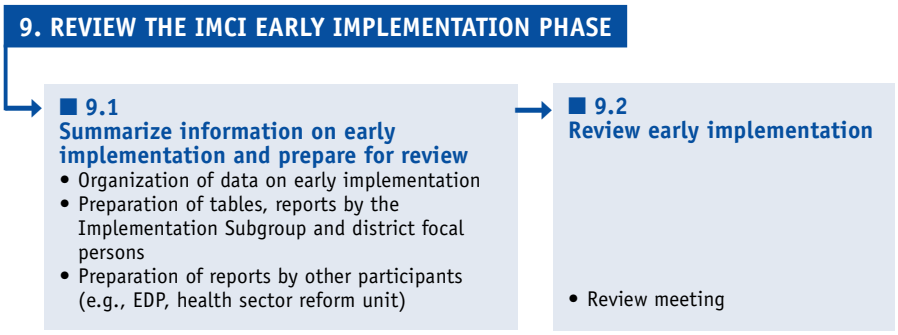
Document activities as planned. Organize the data as it is collected. Use it to identify and solve problems at facility and district level. Also submit it to the central level as planned.

District staff and central-level staff will need to make special efforts to ensure that problems do not stop or delay the implementation of activities. During the early implementation phase, the district is learning how to implement the IMCI activities. Misunderstandings, logistical and budgeting difficulties, and lack of available personnel are common reasons for activities being delayed or compromised. Often these can be overcome if someone notices and takes prompt action, including asking for help from the district or central level. Later implementation will be less difficult because the activities and procedures will be better understood and organized. With experience, fewer problems will occur.

District teams must check and take special action as needed to ensure that, for example:

- All facilitators and clinical instructors are trained in IMCI case management and facilitation skills prior to teaching an IMCI course for first-level health workers
- Persons who do follow-up after training are trained how to conduct a follow-up visit before they visit any course participants
- Drugs that are needed for implementation of IMCI are supplied to health facilities that have trained staff, so that health workers can implement the IMCI guidelines upon return from training
- Visits for follow-up after training are carried out, as scheduled, to every course participant within 4–6 weeks after attending the training course
- Data is collected by correctly completing forms during training courses and during follow-up after training
- District staff assess data to identify and solve any problems in a timely way.
- Data are summarized at the district level (Annex C).

9. Review the IMCI early implementation phase



To complete the early implementation phase, there will be a review of the initial experience gained with the IMCI strategy, based on data collected during the months of implementation. This will be done in a meeting. Annex G. *Review of the IMCI early implementation phase* provides detailed guidance and tools (tables, handouts) to prepare for and conduct the review meeting.

9.1 Summarize information on early implementation and prepare for review

Data that were collected as part of documentation of the early implementation phase are a main source of information for the review. The Implementation Subgroup and the district focal persons should write a report summarizing the plans and activities, and the findings collected as part of documentation of early implementation. This report will be a key reference during the review meeting. A report outline (Figure 24), and the steps to prepare it, are described in Annex G, section 2.1. Figure 26 *Issues relevant to the status and quality of IMCI implementation organized according to major areas*, lists issues that will be addressed during the review and the types and sources of information on each issue.

In addition to preparing the report, ensure that other necessary preparations are made (see Annex G, section 2.0):

- Invite participants
- Prepare a timetable
- Make logistic arrangements

- Finalize the organizational arrangements (e.g., composition of the subgroups, copies of relevant documents)
- Schedule daily facilitators' meetings

9.2 Review early implementation

The review is accomplished in a week-long (5-day) meeting of the IMCI Working Group, representatives of the early implementation districts, officials in the Ministry of Health and representatives from IMCI-related institutions and partners.

To assess the early implementation experience and plan for expansion, the participants will go through a structured process, including the following steps:

Step 1: Assess what has been achieved in each of the major activity areas, identify constraints and specify the resources required

Step 2: Identify feasible solutions for the constraints

Step 3: Assess how the IMCI strategy should be expanded and develop recommendations for what should be done

Participants work systematically through these steps considering all three components of the IMCI strategy, namely

— Organization and management of IMCI activities

— Improving the skills of health workers

— Improving the health system

— Improving family and community practices

Detailed guidelines for conducting the meeting are in Annex G. *Review of the IMCI early implementation phase*. It includes facilitator's notes for the introductory plenary, the group work and the consensus meeting, and participants' handouts for the group work.

Figure 21 summarizes key aspects of the review meeting.

FIGURE 21

Review meeting

Objectives

To identify ways to strengthen and sustain IMCI implementation as a main strategy to improving quality of care for children in health facilities and in the home, by:

- Assessing how well the country was able to implement its plans and intentions
- Identifying the main problems and identifying feasible solutions
- Summarizing lessons learned in the early implementation
- Developing a detailed set of recommendations describing the scope, pace and emphasis of expansion, and a draft report summarizing the findings on which the recommendations are based

In the consensus meeting, to reach consensus on the recommendations of the review and obtain commitment for their future implementation.

Participants

- Senior staff in the Ministry of Health who are in a position to endorse and promote the recommendations from the review
- The full IMCI Working Group
- Representatives from the early implementation districts (the focal person from each district and other key district staff). (If districts to be included in the expansion phase have already been selected, invite representatives from these districts.)
- Representatives of all programmes and institutions **who were involved** in the implementation
- Representatives from programmes and institutions **who may become involved** in the implementation of IMCI strategy during the expansion
- Representatives from partners and organizations that provide resources for IMCI implementation
- An external facilitator who is experienced in conducting IMCI reviews

For a final consensus meeting, a broader group including senior decision-makers in the Ministry of Health, and representatives from related institutions, other ministries and partner organizations.

Duration

5 days: One day plenary, three-and-a-half days for desk review in groups, last half-day for consensus meeting

Preparations

See step 9.1, Annexes C and G

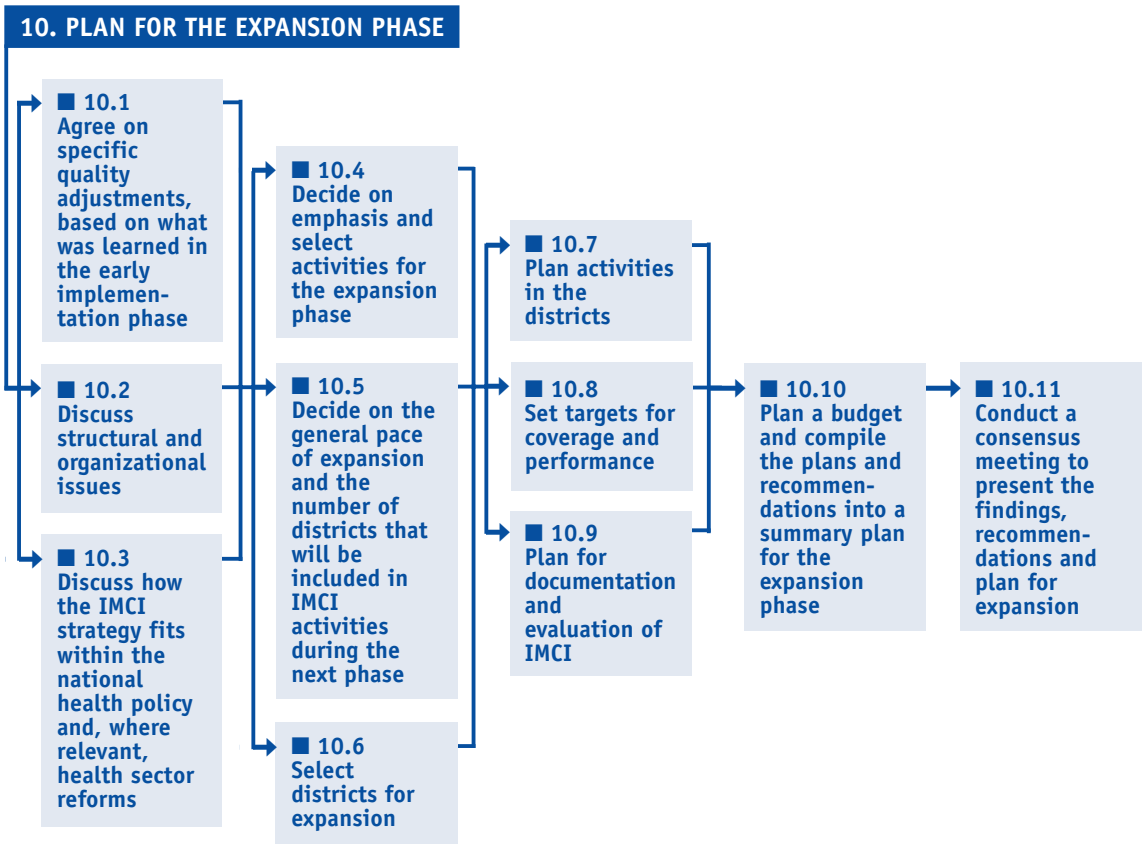
Methods

Desk review to assess what has been achieved in each of the major activity areas, to identify major barriers to successful implementation of the IMCI strategy and feasible solutions, and to assess how the IMCI strategy should be expanded and develop recommendations for what should be done. Methods include presentations, review of documents, subgroup and plenary discussions.

Consensus meeting to present the findings of the review and recommendations to the broader group.

See Annex G. *Review of the IMCI early implementation phase* for detailed guidelines

10.
Plan for the expansion phase



Drawing on the experience of the early implementation phase, the country is ready to plan how to expand IMCI activities in districts already covered and begin IMCI activities in additional districts. In the early implementation districts, the goal should be to continue activities in all three components and strengthen or maintain their quality. A country may also add new types of activities to broaden the range of activities within the three components of IMCI: improvements in case management skills, improvements in the health system and improvements in family and community practices.

This planning may be done as a second part of the review meeting or a separate meeting.

Plans for the expansion phase should aim towards the medium and longer term. The flowchart above provides the topics to address in the planning meeting for the expansion phase.

FIGURE 22

Planning meeting for the expansion phase

Objectives

To plan how to expand IMCI activities into more districts, expand the range of IMCI activities, and maintain and improve quality

Participants

- Same as attended the review meeting, plus
- Representatives of any additional programmes, partners or institutions that may become involved with IMCI in the expansion phase. (If districts to be included in the expansion phase have already been selected, invite representatives from these districts.)
- For the last day, representatives of all programmes, partners and institutions who are participants or potential participants in the implementation of the IMCI strategy, such as representatives of other departments in the Ministry of Health and other ministries, and representatives from technical assistance and donor organizations that provide resources for IMCI.

Duration

4 days. The final day is for presentation of the plans to a broader group.

Preparations

Prepare copies of the summaries from the review of early implementation for all participants.

Prepare a briefing on the results of the review for the individuals who did not attend the review meeting.

Prepare information on the status of specific projects, such as health sector reforms, or community health projects, with which IMCI plans will need to coordinate.

Methods

In plenary, the participants discuss each of the topics relevant for expansion (see flowchart) and plan future activities.

On the final day, the results of the meeting are presented to a broader group of senior officials from the Ministry of Health, other ministries, partner organizations and others:

- findings and recommendations from the review of early implementation
- plans and recommendations for the expansion phase

Guidelines for conducting the meeting

Begin by describing the objectives of the planning meeting for the expansion phase. Then briefly review the conclusions of the review of early implementation. (This briefing may be more detailed if there are several participants who did not attend the review. Otherwise, the summary may just review the major conclusions.) Then, as a group, discuss and plan each topic area as described below.

10.1 Agree on specific quality adjustments, based on what was learned in the early implementation phase

In the review of the early implementation phase, the group identified problems that had occurred during early implementation and recommended solutions to address or prevent these problems in the future. To identify activities for expansion:

- List the major lessons learned in each of the main areas under the three components.
- Agree on specific changes required to strengthen each area or maintain its quality. For example:
  - Agree on changes in the adaptation of the IMCI clinical guidelines and training materials, or mother's counselling card
  - Agree on any needed improvements in the process of introducing the IMCI strategy in a new district
  - Agree on any needed improvements in facility supports and how they can be accomplished, such as improvements in drug supply and distribution, availability of chart booklets and patient recording forms, organization of work and patient flow
  - Agree on any needed improvements in the procedures to document progress at district-level and nationally

Making adjustments in materials will be one of the first activities to be done in the expansion phase by the central level. These may include revising the adaptation and reprinting the training materials, finalizing the procedures and forms for follow-up and documentation, and reprinting the forms in quantities sufficient for the planned expansion activities.

During the early implementation phase, the central level usually has taken a leading role in implementing activities, even at district-level. A common challenge for the expansion phase is to increase district capacity and ownership. This requires a process of introducing IMCI at the district-level, which has similar aspects as the process described for the early implementation phase in this *IMCI Planning Guide*.

- Take some time to agree upon the essential steps for introducing IMCI into new districts. Specify the tasks and who should be responsible. Clearly define the responsibilities of the central level in introducing and sustaining activities at district-level. Use this analysis and framework as a basis for the discussions on the pace and scope of expansion later on.

10.2 Discuss structural and organizational issues

The review of the early implementation phase may have found that modifications are needed in management and organization of IMCI activities at central level or in districts. If the IMCI Working Group, with its subgroups, is no longer a helpful and sustainable arrangement for managing activities in the expansion phase, discuss modifications or alternative structures. Also agree on the role of the

IMCI focal person and the coordinators of the subgroups. It may be that as the IMCI strategy expands, full-time staff dedicated to IMCI activities are needed.

10.3 Discuss how the IMCI strategy fits within the national health policy and, where relevant, health sector reforms

When the IMCI strategy is expanded, it is crucial that this be done with adequate policy support. During introduction and planning for early implementation, the importance of incorporating the IMCI strategy into the national health policy and, where appropriate, health sector reform efforts has been discussed. This may have resulted in the required policy development by the Ministry of Health. Or senior decision-makers may have expressed an intention to incorporate the IMCI strategy into relevant policies pending the experiences of the early implementation phase. In planning for expansion, carefully examine what additional actions are needed to ensure that IMCI be endorsed as a main strategy for improving child health in the country. To enable full enactment, this not only requires an official policy statement, but also a dissemination strategy so that all implementers are aware of the policy, and plan and implement activities accordingly.

10.4 Decide on emphasis and select activities for the expansion phase

Activities will certainly include expanding IMCI training for first-level facility staff and expanding follow-up after training to additional health facilities in the early implementation districts. Those districts have developed the necessary capacity to continue conducting training courses and follow-up visits to health staff. In addition, there is likely to be a desire to expand IMCI activities to new districts.

A main challenge in planning the expansion is to plan activities that address all three components in a balanced way. While activities to strengthen health worker skills may have proven effectiveness, the main challenge will be to continue strengthening the health system to sustain IMCI implementation, and to initiate community-based interventions that support the interventions in health facilities. It is important at this stage to clearly articulate the needs and to plan activities in such a way that there is sufficient opportunity for the central and district working group to:

- Prepare for the introduction of IMCI activities, and
- Build the capacity to sustain them.

New activities could include:

- central level assistance in district planning, to guide the integration of IMCI activities in annual district health plans
- strengthening activities that will guide the organization of work in health facilities
- enhanced efforts to make drugs needed for implementation of IMCI available in first-level facilities

— training of staff in other skills which are important for IMCI implementation, such as management of drug supply at the first-level facility[1]

— upgrading skills of staff at referral-level facilities in care of severely ill children[2] and in breastfeeding counselling[3]

— preservice education of health staff in integrated management of childhood illness

— strengthening the supervisory system if it is poor; if the supervisory system is good, extending follow-up beyond one visit

— designing and implementing interventions to improve family practices related to child health

Select new activities that are feasible and will address important needs in the districts.

10.5 Decide on the general pace of expansion and the number of districts that will be included in IMCI activities during the next phase

Refer to the essential steps for introducing the IMCI strategy in a district, identified as part of step 10.1. Consider how many districts the central level can support with sufficient guidance and input to build the district capacity needed. Central-level support is usually required for district-level orientation, planning of activities in all three components, initiation of new activities, review and replanning. The national IMCI coordinator and working group will also have a responsibility to participate in monitoring of quality and outcome of activities. Some important factors that determine the pace of expansion include:

- Available manpower capacity for IMCI management and implementation at central and district levels, and time required to enlarge this capacity
- Central and district-level input required to address health system issues (such as improving the referral system and drug availability)
- Central and district-level input required to plan and implement community-based interventions
- Mobilization of resources at central, district and community levels
- Strategies of partners involved in IMCI implementation and the strengths of the IMCI Working Group to coordinate all inputs

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[1] *Drug Supply Management Training*, WHO/CHD/98.4.

[2] *Management of the Child with a Serious Infection or Severe Malnutrition: Guidelines for care at the first-referral level in developing countries,* WHO/FCH/CAH/00.1.

[3] WHO Division of Diarrhoeal and Respiratory Disease Control. *Breastfeeding counselling: A training course*. Geneva, WHO. Document WHO/CDR/93.4.

10.6 Select districts for expansion

Agree on factors to use in selecting districts for expansion, and select districts that will be included in activities in the expansion phase. In decentralized countries, districts may request involvement and be willing to mobilize their own resources.

Factors to consider in assessing district capacity or readiness to support the IMCI strategy are:

- a well-functioning district health management team
- inclusion of IMCI activities in the district health plan
- availability of local training faculty (for example in a training institution)
- the presence of an NGO or other donor that is ready to technically and financially support IMCI implementation in the district

Also consider if additional adaptation of clinical guidelines or training materials will be needed to expand to districts in other regions of the country (such as adaptations in feeding recommendations or local terms), and if so, schedule time for the adaptation to be done, including any studies required.

NOTE: It may take five years or more for transition to national IMCI coverage. During this time, districts not yet covered should continue disease-specific control activities, but should combine activities across relevant programmes as much as possible in preparation for integration.

10.7 Plan activities in the districts

In order to make a realistic plan of activities, develop a detailed schedule that specifies when, where and by whom each activity should take place. This exercise will demonstrate what is feasible in light of available manpower, logistics and funds. The plan should take account of the needs of districts in which the IMCI strategy is to be introduced, as well as the needs of the early implementation districts in which IMCI activities need to be sustained. If possible, coordinate planning in new districts with their annual planning cycle.

To develop the schedule, look at the framework of essential activities that should take place in each district that is going to initiate the IMCI strategy (developed as part of task 10.1). Expand the list of activities for the districts that have already initiated IMCI during the early implementation phase.

Write the activities in a table and specify essential information such as when, where, and by whom each activity will take place. For activities requiring central-level support, write the names of the central staff (or consultants from outside the district) who will participate.

Figure 23 is a generic example of a table for planning activities for training first-level health workers. When completing this table, keep in mind the criteria for quality. For example, for each training course, *Integrated Management of Childhood Illness*, there should be a course director, a clinical instructor and at least one facilitator for every 4 participants. All facilitators will need to participate in

facilitation skills training prior to conducting a course. In completing the table, you will find out how many courses can be planned realistically, and thus set the pace of expansion.

Prepare a similar table for other groups of activities, such as orientation and planning meetings at district level. This will help ensure that the plans are realistic.

10.8 Set targets for coverage and performance

In the early implementation phase, targets were set for activities, such as the number of training courses. In the expansion phase, targets may go beyond activities and specify desired levels of coverage, for example,

> By _____, ____% of first-level health facilities will have at least 60% of the staff who manage sick children trained to manage sick children according to the IMCI guidelines.
>
> By _____, ____% of sick children seen at first-level health facilities will be assessed for the presence of the three main symptoms (cough, diarrhoea, fever).

10.9 Plan for documentation and evaluation of IMCI

In the expansion phase data collection continues to be important. IMCI activities are documented so that results can be used to identify and solve problems, and to plan how to expand and improve activities in the three components of IMCI.

The first evaluation may address the process of IMCI implementation and outcomes in terms of health worker performance and facility supports. It will not be appropriate to evaluate the impact of the IMCI strategy on child mortality and morbidity until significant numbers of health workers have been trained and have had the opportunity to apply their new skills in the community for some time, and other activities intended to improve the health system and family and community practices have been implemented.

10.10 Plan a budget and compile the plans and recommendations into a summary plan for the expansion phase

This plan should be distributed to all concerned programmes, partners and institutions. Also send it to any groups that were not included in IMCI activities before, but who may be affected by new expanded activities, such as pre-service education, or training of drug supply staff.

10.11 Conduct a consensus meeting to present the findings, recommendations and plan for expansion

Conclude the planning for expansion with a meeting involving all relevant programmes, institutions and partners. The aim is to obtain consensus on the way forward, and commitments of support for the different activity areas. Some-

FIGURE 23

Example table for planning activities for the period _____

Section on training of first-level health workers

Course	Dates	Site (in and out patient)	Number of participants	Course Director (by name)	Clinical Instructor (by name)	Central facilitators (by name)	District facilitators (by name if possible)	Funding

times it may be possible for partners to express their support for specific activities during such a meeting. However this often requires individual meetings later on.

To conduct the meeting, follow the steps below:

- Provide for each participant a copy of the summary of the conclusions and recommendations of the review of early implementation, and the recommendations and plan for expansion
- Present the major findings and recommendations from the review of early implementation. The presentation can be short if the majority of participants already attended the consensus meeting after the review
- Present the recommendations and plans for the expansion phase
- Provide ample time for discussion
- Agree upon the necessary adjustments in the plan in light of the feedback received

After the meeting, finalize the plan for the expansion phase. The national IMCI Working Group and district health teams will work together to implement the plan, mobilizing human and financial resources.

Annexes

Annex A
IMCI National orientation meeting

Objectives

- To provide information and reach a common understanding of the concepts and practical principles of the IMCI strategy, its advantages and implications for the health system
- To discuss the need and explore options for a management structure to co-ordinate the implementation of the IMCI strategy
- To obtain commitment to initiating the early implementation phase in order to gain experience with the practical application of the IMCI strategy.

Participants

- Programme managers and technical staff of programmes involved with IMCI, such as MCH, CDD, ARI, EDP, malaria control, EPI, nutrition, HIS, training, etc.
- Other related ministries and bodies: Rural Development, Education, Social Welfare, Planning, etc.
- Actual or potential partners: bilateral and multilateral agencies, NGOs, health-related institutions
- Academic and training faculties
- Representatives from the medical association, nursing association

Format

The duration of the orientation meeting is variable, depending on the preparations that took place before the meeting and the readiness of the country to move forward.

- If few discussions have taken place and there is a need for more elaborate information about the IMCI strategy, it may be appropriate to conduct a two-day meeting, with the aim of meeting the first two objectives.
- If preliminary discussions took place with the help of an experienced person (preliminary visit), a country may be ready to commit to the IMCI strategy. In such cases, the orientation meeting would aim to meet all three objectives. After a one-day formal orientation, there could be a 3-day workshop to explore the practical implications of initiating the early implementation phase, i.e., an extended orientation.

If it is appropriate to conduct an extended orientation, the workshop following the formal meeting will focus on exploring steps for initiating planning for implementation and adaptation of the IMCI guidelines. It will include an interactive demonstration of the IMCI guidelines, followed by a review of information needed in order to guide the national planning workshop, and a discussion on steps that need to be taken to prepare for the workshop. The outcome is a concrete workplan covering the period between the orientation workshop and the national planning workshop. The workplan should cover tasks to develop (or adapt) data collection tools and process, to initiate planning in all three components of the IMCI strategy, and to establish a management structure that will provide a sound basis for planning and coordination among all relevant partners.

Two outlines for developing an agenda are provided to guide the planning of the orientation meeting.

Methods

For the formal orientation meeting, plan a balance between presentations (to introduce the different aspects of the IMCI strategy), descriptions of the national situation, and discussions. In an extended orientation, the workshop will include group work.

Preparations and materials needed

Gather data related to the epidemiology of major childhood illnesses in the country and current interventions to address them. Prepare a presentation describing the national situation.

For the formal orientation

Provide each participant with a copy of the IMCI information folder, the joint WHO/UNICEF statement on IMCI, and the brochure: *Improving Child Health—IMCI: the integrated approac*h (WHO/CHD/97.12 Rev.2) (optional, if available).

Display the following materials:

- IMCI wall charts
- some chart booklets
- the course *Integrated Management of Childhood Illness* for first-level health workers
- the *IMCI Adaptation Guide*
- the *IMCI Guidelines for follow-up after training*
- *Breastfeeding counselling: A training cours*e (as a tool to improve referral care)
- the document: *Improving family and community practices* (WHO/CAH/98.2)
- other reference materials as they become available (consult WHO for an updated list)

For the extended orientation, also provide to each participant:

— the chart booklet

— the exercise book for the demonstration of the guidelines (found in Annex J)

— the module titled *Photographs*[1]

— checklists of information needed to guide the planning workshop (Figures 3 and 4 in this *IMCI Planning Guide*)

If you plan to introduce the initial steps of adaptation, also provide to the adaptation subgroup the flowchart of the adaptation process and Annex A-2 of the *IMCI Adaptation Guide* Part 1.

For the demonstration of the IMCI guidelines

For the demonstration of the guidelines, provide facilitator's notes to each facilitator in this exercise (found in Annex J). Prepare copies of the video to show in each group. Prepare a flipchart, overhead and video equipment for each group.

Notes to guide the meeting

Describe the IMCI strategy and rationale. Focus on the three components and their interventions. Throughout the orientation, emphasize the need to plan activities in all three components in a balanced way.

Describe the principles of early implementation and the steps. Discuss the rationale for a staggered implementation in selected districts. While the early implementation phase is focused on all three components, the working group will select a limited number of essential interventions first, with a view on how they will add other interventions as time goes on. Limiting the number of districts is necessary because there is a need to build capacities to implement the activities at national and district levels.

When discussing implementation, stress the importance of developing clear plans for improving drug supplies, establishing mechanisms for supervision, improving referral pathways, improving family and community practices, linking related programme activities such as breastfeeding counselling training with IMCI training, documenting the activities of early implementation, etc, in addition to planning for training of first-level health workers. When discussing adaptation, stress the importance of the development of locally appropriate feeding recommendations and the identification of appropriate local terms as a parallel activity to adapting the clinical guidelines.

Throughout the meeting, explore mechanisms for making the IMCI strategy sustainable, and actively explore how current health policy and health sector reforms (where applicable) relate to the IMCI strategy. Encourage active partnerships with all health-related partners from the onset of early implementation.

[1] *Photographs, Integrated Management of Childhood Illness*, WHO/CHD/97.3.L

Address the importance of active collaboration and involvement of all relevant programmes, not only for adapting the IMCI guidelines, but also in implementation of training and finding feasible solutions to improve the health system and developing the family and community component. Ongoing activities and existing resources should be used in a coherent way in order to maximize the effect of IMCI beyond training of first-level health workers. As an example, specify how breastfeeding activities complement the IMCI course for first-level health workers and how they relate to all three components of IMCI. (See Annex D. *Breastfeeding aspects of the IMCI strategy*).

In an extended orientation, the schedule includes an extensive demonstration of the IMCI guidelines in groups (5 hours) which includes practical exercises and discussion. Facilitator notes and exercises are provided in Annex J.

In an extended orientation, introduce the relevant checklists for gathering information to the subgroups. Guide participants through the lists and discuss the relevance of this information. Also discuss how to collect the information. Participants may wish to engage in preliminary technical discussions. This is appropriate as a preparation for the national planning workshop.

It may not be possible to keep key officials for the entire period of the meeting. Organize the agenda in such a way that some key messages about the IMCI strategy are delivered in their presence.

Provide ample opportunity for discussion and examine how the IMCI strategy relates to the national situation.

Agenda

Below are outlines for a two-day orientation meeting and for a four-day extended orientation meeting. They list the topics that are useful to address and approximate time requirements. They can be used to develop detailed agendas, which match the specific requirements in a country.

AGENDA FOR A TWO-DAY ORIENTATION MEETING

DAY 1

Opening ceremony (one hour)

Speakers include officials from the Ministry of Health, representatives from partners (UNICEF, WHO, others).

The IMCI strategy : overview and rationale
Discussion (45 minutes)

IMCI guidelines for first-level health workers and training course
Discussion (45 minutes)

Child survival activities in the country: overview of achievements and ongoing activities
Discussion (one hour)

IMCI planning and implementation issues: overview
Discussion (one hour)

Global or regional status of IMCI implementation
Discussion (30 minutes)

Establishing an IMCI management structure
Discussion (30 minutes)

Linking IMCI to health sector reforms or health sector development
Discussion (30 min)

Open discussion at the end of the meeting

DAY 2

Planning for IMCI implementation according to the three components

Improving skills of health workers (two hours)

Adaptation of the IMCI guidelines and training materials
Discussion (one hour)

Training and Follow-up after training
Discussion (one hour)

Improving the health system (90 minutes)

Availability of drugs
Improving referral pathways
Organization of work in health facilities
Supervision
IMCI and the health information system
Discussion

Improving family and community practices (one hour)

What do the IMCI guidelines already offer
Conducting a situation analysis
Ensuring consistent health education and promotion messages
Strengthening and supporting ongoing community-based interventions
Designing new interventions
Discussion

Documentation of the early implementation phase
Discussion (30 minutes)

IMCI in the national context (one hour)

Appropriateness and feasibility
Coordination and collaboration of programmes and partners
Suggestions for establishing an IMCI management structure

Meeting recommendations

AGENDA FOR A FOUR-DAY EXTENDED ORIENTATION MEETING

(One day formal orientation for key officials, followed by 3-day workshop involving technical experts)

DAY 1

Opening ceremony (one hour)

Speakers include officials from the Ministry of Health, representatives from partners (UNICEF, WHO, others).

The IMCI strategy: overview and rationale
Discussion (45 minutes)

IMCI guidelines for first-level health workers and training course
Discussion (45 minutes)

Child survival activities in the country: overview of achievements and ongoing activities
Discussion (one hour)

IMCI planning and implementation issues: overview
Discussion (one hour)

Global or regional status of IMCI implementation
Discussion (30 minutes)

Establishing an IMCI management structure
Discussion (30 minutes)

Linking IMCI to health sector reforms or health sector development
Discussion (30 minutes)

Open discussion at the end of the meeting

DAY 2

Introduction of the workshop (objectives, process, expected outcomes) (30 minutes)

Demonstration of the IMCI guidelines in groups (5 hours)
(includes practical exercises and discussion; see Annex J for materials)

Adaptation of the IMCI guidelines and training materials
Discussion (one hour)

DAY 3

Planning for training and follow-up after training
Discussion (one hour)

Planning activities to improve the health system
Discussion (one hour)

Planning activities to improve family and community practices
Discussion (one hour)

Group work to discuss planning in more detail (4 hours)

group work on adaptation—using section A (with checklists) of the *IMCI Adaptation Guide*

group work on other implementation issues—using section 2 of the *IMCI Planning Guide*

(optional as a separate topic) group work on family and community practices—using section 2 of the *IMCI Planning Guide* and the document *Improving family and community practices*

DAY 4

Presentation of group findings, recommendations and a plan of action for tasks to be done before the planning workshop
Discussion (two hours)

Meeting of a small core team of national staff and partners to finalize the plan of action and agree upon responsibilities and resource allocation (two hours)

Annex B

Methods and process for documenting IMCI early implementation

The documentation of the early implementation phase should cover all main aspects of IMCI implementation. The main aspects are listed below, with suggestions for information to collect, sources of the information, and the process for collecting it.

The documentation of the early implementation phase will be a continuous process in which data will be collected, used and summarized. The primary aim is to identify and solve problems momentarily. A secondary aim is to summarize information to guide the review and replanning process.

Organization and management of the IMCI strategy at central and district level

In the early implementation phase countries gain experience in creating a sustainable management system for the implementation of the IMCI strategy. It is therefore important to document the capacity within the MOH to coordinate inputs and support for the IMCI strategy, how the strategy fits within the overall health policy and management, the capacity of district health teams to implement the strategy, the support provided by partners and the budget needed.

Sources of this information include copies of relevant policy documents and guidelines, minutes of meetings conducted by the IMCI Working Group and IMCI coordinators at central and district levels, description of budget and accurate records of expenditure of all activities.

The IMCI Working Group and district health teams should keep account of who is involved in IMCI implementation, discrepancies between IMCI guidelines and national policies, and the budget available and required. Based on the findings, they can take immediate action to improve the situation, or where not possible, keep a record of those issues that need improvement.

Quality of adaptation on the IMCI guidelines

The IMCI guidelines aim at covering the most common childhood illnesses leading to mortality. It is relevant to gather information on the completeness of the adaptation including feeding recommendations and local terms, whether the guidelines are consistent with national policies, whether they are acceptable to all partners including first-level health workers, whether they cover most com-

mon childhood complaints. The need for further adaptation and the national capacity to do so are also important issues for guiding expansion.

Sources of this information include:

- the background report of the adaptation group
- minutes of the adaptation group's meetings
- reports of training and follow-up after training
- reports of special studies on feeding practices and local terms
- the country profile with regard to disease epidemiology/feeding practices/local terms
- listing of national experts involved in specific adaptation areas.

The IMCI Working Group, in collaboration with trainers, supervisors and district health staff, will closely follow how the IMCI guidelines perform in relation to national guidelines and in the field. There is no systematic way through which to collect the information, but a record should be kept of all observations and comments in this area, including during training and follow-up after training. It may not be possible to translate the lessons learned into immediate action. However, they will guide a decision on future needs for further adaptation.

Quality of IMCI training

Quality of training is a key factor to determine health worker performance after training. Documenting the quality of training courses is therefore crucial in order to analyse progress, identify problems and implement solutions immediately. In addition, it is important to measure training coverage and training capacity, as this information is needed to realistically plan for expansion.

Sources of this information include training reports from central and district levels (including criteria for quality of training) and direct observation of courses.

To document quality of training, the IMCI Working Group should develop a standardized format for training reports, based on the criteria for quality of training. They should also prepare summary tables that will enable a review of information across courses (sample generic forms are in Annex C). Course directors at central and district levels should be prepared to complete the training reports and send a copy to the IMCI Working Group. A group member will analyse the reports, provide feedback to the course director, make arrangements to improve on future courses if needed, and tabulate data in summary tables on training.

Performance of health workers after training

Changing the performance of health workers is a main objective of the IMCI strategy. A continuous review and documentation of progress are important not only to solve problems, but also to have data that can be used to create political commitment to the IMCI strategy. Direct observation of health worker performance, through follow-up after training visits and routine supervision, is an

important way to review and document progress in this area, which will be key to facilitating decisions on whether and how to expand the IMCI strategy.

Sources of information on performance are reports of follow-up after training visits and reports of routine supervision, including direct observation of case management.

Quality of health system support for IMCI implementation (drugs, equipment, referral pathways, organization of work, supervision, linkage of IMCI classification and the HIS)

The health system should ensure availability of drugs needed for implementation of IMCI in health facilities, access and quality of referral care, organization of tasks enabling IMCI implementation, a functioning health information system and effective supervision of quality of care over time. Documenting these provisions in the health system aims to identify and solve problems immediately, and to flag important issues that need further strengthening.

Sources of this information include reports of follow-up after training, reports of routine supervision, and reports from alternative ways to provide support, for example through telephone and other contacts.

Caretakers' satisfaction and improvements in family and community practices

One of the effects of the IMCI strategy may be improved caretaker satisfaction with the quality of care provided in health facilities, which in turn may influence careseeking behaviour. The IMCI strategy also aims to influence key practices with regard to home case management of childhood illnesses and healthy growth and development. The IMCI Working Group may choose to document activities related to these areas, but realize that it may be premature to document key practices at the community level during the early implementation phase.

Sources of this information include reports of follow-up after training and routine supervision involving caretaker exit interviews and household surveys (unlikely to show an impact during the early implementation phase).

Note about the process of data collection through follow-up visits

Performance of health workers, health facility supports, caretaker satisfaction and knowledge of key practices will be documented through follow-up after training visits. In preparing for implementation, the IMCI Working Group will decide on the objectives of the follow-up visit, the tasks to be completed and the reporting of findings. The supervisor who does the follow-up will use the findings for immediate feedback and skills reinforcement. He or she will send the reports to the district and central levels for action to solve problems that can not be immediately solved. In addition, the IMCI Working Group will summarize the findings of all visits in summary tables that follow the format promoted for recording the findings of each visit.

Where routine supervision including observation of direct case management takes place, the tasks can be modified to include a review of a health worker's performance and the facility supports for IMCI. The tasks agreed upon for follow-up can be used to guide this modification. Training of designated supervisors in IMCI clinical and follow-up skills will build capacity in this respect.

Annex C
Tools for data collection and summary

IMCI training courses

Course Director Summary form (provides information to assess whether the course met the criteria for quality of training)

Summary of District IMCI Courses (summarizes information on several courses for comparison and calculation of quality indicators)

Follow-up after training

Instructions for compiling District Results

District Results Table 1: Quality of case management

District Results Table 2: Problems with facility supports

COURSE DIRECTOR SUMMARY

Integrated Management of Childhood Illness

Location of course: _____

Facilitator training:

Dates of facilitator training: ___/___/___—___/___/___

Number of full days: _____

Number of facilitators trained: _____*

Course:

Dates of course: ___/___/___—___/___/___

Number of full days: _____

Total number of hours worked in course: _____

Number of participants: _____

Outpatient clinical sessions:

Number of outpatient clinical sessions conducted: _____

Number of hours devoted to outpatient clinical sessions: _____

Proportion of total course hours devoted to outpatient clinical sessions: _____%

Average number of patients managed by a participant: _____

To obtain this average, add the number of cases managed by each participant (as recorded on the Checklist for Monitoring Outpatient Sessions); then divide the total by the number of participants.

Inpatient clinical sessions:

Number of inpatient clinical sessions conducted: _____

Number of hours devoted to inpatient clinical sessions: _____

Modules completed: *(Tick if all completed, or indicate number of participants who completed.)*

Introduction:	☐ All completed	_____ completed
Assess/Classify:	☐ All completed	_____ completed
Identify Treatment:	☐ All completed	_____ completed
Treat the Child:	☐ All completed	_____ completed
Counsel the Mother:	☐ All completed	_____ completed
Young Infant:	☐ All completed	_____ completed
Follow-Up:	☐ All completed	_____ completed

Chart booklets: Did each participant receive a copy of the chart booklet to take home?

☐ Yes ☐ No. If no, why not?

* **Number of facilitators serving at course:** _____ *If different from the number trained above, please explain:*

_____

_____

Ratio of facilitators to participants: 1 to _____

Course Director comments and observations *(On the reverse side, please comment on administrative issues, staff attitude and drug supply at clinical training sites, problems and how you solved them, constructive suggestions for future courses, etc.)*

SUMMARY OF DISTRICT IMCI COURSES

Integrated Management of Childhood Illness

Course location						District TOTALS
Course dates						
a. Number of days of facilitator training						a.
b. Number facilitators trained and (number serving in course)	( )	( )	( )	( )	( )	b.
c. Number of days in course						c.
d. Total number of hours worked in course						d.
e. Number of participants in course						e.
f. Number of outpatient clinical sessions conducted						f.
g. Number of hours devoted to outpatient clinical sessions						g.
h. Proportion of total course hours devoted to outpatient clinical sessions (%)						h. $\frac{\text{Total g}}{\text{total d}}$ = ____ %
i. Average number of patients managed by a participant						i. $\frac{\text{Total i}}{\text{number of courses}}$ = ____ %
j. Number of inpatient clinical sessions conducted						j.
k. Number of hours devoted to inpatient sessions						k.
l. Number of participants who completed all modules						l.
m. Number of participants who received chart booklet (Equals "e" above if all received)						m.
n. Ratio of facilitators to participants	1 to _____	1 to _____	1 to _____	1 to _____	1 to _____	$\frac{\text{Total n}}{\text{number of courses}}$ 1 to _____ average

Instructions: Follow-Up after Training, District Results, Tables 1 and 2

The forms listed below are completed by the supervisor who conducts and documents visits to individual facilities to follow-up after training. These may be found in the *IMCI Guidelines for Follow-Up after Training* with detailed instructions for their use.

- Follow-up of Trained Health Workers in each facility
- Patient Recording Forms used as job aids for observing case management during follow-up visits after IMCI training
  - — Management of the sick child age 2 months up to 5 years, and
  - — Management of the sick young infant age 1 week up to 2 months
- Caretaker Interview (optional)
- Summary Form: Child (age 2 months up to 5 years)
- Checklist of Facility Supports
- Summary Form: Facility Supports
- Summary Report of the Visit

The *District Results Tables* are used to compile information from all the health facilities visited in the district. These tables may be used at the district and national debriefing meetings. The results will be useful in planning further IMCI activities.

Table 1 illustrates how information can be summarized on the quality of case management by trained health workers in the district. Table 2 can be used to report on numbers of specific problems found in facility supports throughout the district. The quantified information on the tables can be used to supplement the qualitative findings of supervisors who report on their follow-up visits. If facilities in more than one district have been visited, the same tables can be used to summarize information across districts.

The items listed on the tables should be adapted to correspond with those on the *Summary Forms*. (The information on the TIME for managing cases should be reported separately.)

To complete *District Results Table 1: Quality of Case Management*:

1. Refer to each *Summary Form: Child (age 2 months up to 5 years)* completed in the District. One column on the *District Results Table* will be filled for each *Summary Form* that has been completed. At the top of the column, write the name of the supervisor who completed the *Summary Form*.
2. Transfer the information from the Totals columns of the *Summary Form* using the following format:

   ____ of ____

   In the first blank, write the number of 'health worker agreed' ticks from the relevant row of the *Summary Form*. In the second blank, write the number of 'supervisor' ticks.

The blanks could be read aloud, for example, as '5 of 5 cases were correctly assessed for all danger signs'; '1 of 2 severe cases were referred'; etc.

3. In the last column, total the first and second blanks of each entry in the row. This will give you the district total.

To complete *District Results Table 2: Problems with Facility Supports:*

1. Refer to each *Summary Form*: Facility Reports completed in the district. One column on the *District Results Table* will be filled for each *Summary Form* that has been completed. At the top of the column, write the name of the supervisor who completed the *Summary Form*.
2. Transfer the information from the last column of the *Summary Form*: Facility Supports to the matching row on the *District Results Table*.
3. Add the results on each row for the district totals.

DISTRICT RESULTS TABLE 1: QUALITY OF CASE MANAGEMENT (IN CASES OBSERVED DURING FIRST FOLLOW-UP VISIT AFTER TRAINING)

	District:						Total
Visiting Supervisor or Team:							
1. Cases correctly assessed for all danger signs	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __
2. Severe cases referred	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __
3. Severe cases who received first dose of antibiotic before referral	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __
4. Severe cases of malaria who received IM quinine before referral	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __
5. Cases needing an oral drug, or ORS solution in the facility	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __
6. Cases of pneumonia who received a full course of antibiotics at the health facility	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __
7. Cases of dysentery who received a full course of antibiotics at the health facility	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __
8. Cases of malaria who received a full course of antimalarials at the health facility	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __
9. Cases of diarrhoea with some dehydration who received ORS solution in facility	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __
10. Caretakers of children, not referred, who received instruction on giving home treatment, or home care	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __
11. Cases who should have received an immunization, according to the schedule, and received it the day of the visit	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __
12. Cases who needed to be assessed on feeding who were assessed and whose caretakers were counselled on feeding problems	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __	__ of __

DISTRICT RESULTS TABLE 2: PROBLEMS WITH FACILITY SUPPORTS (FOUND DURING FIRST FOLLOW-UP VISIT AFTER TRAINING)

	District:							Total
Visiting Supervisor or Team:								
Problems with facility supports **Space and equipment:** No functioning scale								
No timing device								
No IMCI chart booklet								
No IMCI recording forms								
No mother's card								
No patient record cards								
Diarrhoea treatment corner (DTC): No functioning DTC								
No source of drinking water								
Not enough supplies (cups, ORS)								
No DTC register available								
Immunization: No functioning refrigerator								
No functioning sterilizer								
No MCH-1 cards								
Poor vaccine conditions								
Not all vaccines available								

DISTRICT RESULTS TABLE 2: PROBLEMS WITH FACILITY SUPPORTS (FOUND DURING FIRST FOLLOW-UP VISIT AFTER TRAINING) *(continued)*

	District:							Total
Visiting Supervisor or Team:								
Clinic and referral services: Clinic not opened as scheduled								
Immunization sessions not offered daily No referral facility within reasonable reach								
Quality of records: No individual patient records or registers kept								
Records not complete								
Management of drugs for IMCI: Any one of drugs not in stock (cotrimoxazole *or* procaine penicillin, chloroquine, IM Benzylpenicillin, vitamin A, ORS, *and* IM chloramphenicol)								
All available except IM chloramphenicol								

Annex D

Breastfeeding aspects of the IMCI strategy

1. Rationale

CAH estimates that at least 1.2 million infants die every year due to sub-optimal breastfeeding practices,[1] and the promotion of breastfeeding is one of the most cost-effective interventions for the reduction of childhood mortality and morbidity (1,3). The role of breastfeeding in the management of the ill child, and its benefits for healthy growth and development have been well documented (2).

The *Integrated Management of Childhood Illness* strategy aims to reduce global childhood mortality from five major conditions affecting child health,[2] and to promote the healthy growth and development of children. Sub-optimal breastfeeding practices rank high among the causes of childhood morbidity and mortality, and optimal breastfeeding practices are an important means for attaining optimal growth and development with long-lasting effects that reach even beyond childhood. Therefore, activities to improve and restore breastfeeding practices are an essential part of the IMCI strategy.

2. Objectives of breastfeeding promotion activities

WHO and UNICEF recommend that infants should be exclusively breastfed for at least the first four, and if possible the first six months of life, and that they should continue to breastfeed with adequate complementary foods up to two years of age or more. Most infants do not need complementary foods before six months of age. However, worldwide, few infants are optimally breastfed, even in settings where breastfeeding is still the norm. Few infants are exclusively breastfed after the first few weeks of life.

The objectives of activities to improve breastfeeding practices therefore are to:

- Increase the proportion of infants who are exclusively breastfed for at least the first four and if possible six months of life
- Increase the proportion of infants for whom breastfeeding with adequate complementary food is sustained up to two years or beyond

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[1] Based on available data, the department estimates that a moderate increase in the rates of exclusive breastfeeding in the first six months of life from 30% to 60%, and an increase of continued breastfeeding in the second six months of life from 50% to 75%, could result in a reduction of the total number of deaths in infancy by 1.2 million a year.

[2] The target group for the interventions are children 1 week up to 5 years of age, acknowledging that different interventions are needed to reduce neonatal mortality, which are promoted as part of the safe motherhood strategy.

- Reduce the proportion of infants who are unnecessarily or inappropriately fed on breastmilk substitutes or with feeding bottles
- Increase the proportion of infants who receive timely, nutritionally adequate and safe complementary foods, from about 6 months of age

3. Interventions to improve breastfeeding practices

There are interventions in each of the three components of the IMCI strategy which have been shown to contribute to improving breastfeeding practices.

Improvements in case management skills of health workers

Health workers need skills to assess the adequacy of breastfeeding, to recognize and manage problems, and to counsel and support mothers. Training in relevant skills at both basic and referral levels are key components of the IMCI strategy. The intervention, which includes both clinical and communication skills, is known by the term 'breastfeeding counselling'.

Improvements in the health system required for effective case management of childhood illness

To promote optimal breastfeeding practices from the time of birth, and to prevent difficulties, it is necessary to ensure that policies and routines in maternity services are supportive of breastfeeding. This is achieved through the Baby-Friendly Hospital Initiative (BFHI), in which the Ten Steps to Successful Breastfeeding are implemented (including antenatal education, initiation of breastfeeding within one hour of delivery, rooming-in, demand feeding, avoidance of artificial feeds unless medically indicated, avoidance of the use of feeding bottles and teats). Some simple but appropriate equipment may be needed, such as cups for feeding of infants who need special care, and bedding which makes rooming-in or bedding-in practicable. The need for breastmilk substitutes can be reduced to a very low level, and expenditure on feeding bottles is eliminated. This has been shown to be an extremely cost-effective health intervention.

Other health system improvements include:

— Extending the BFHI by training all first-level workers in outpatient services to provide continuing support to sustain breastfeeding, and to identify and refer mothers with difficulties.

— Appropriate deployment of staff trained in breastfeeding counselling, with breastfeeding counselling included in their job descriptions, so that they have time and are supported to do the work. They would provide the first referral level of care, even though they may be in the same facility as the BFHI or IMCI-trained first-level workers who refer mothers and infants to them.

— Implementation of the *International Code of Marketing of Breast-milk Substitutes*, relevant provisions in health-care facilities, including the

cessation of free or low-cost supplies of breastmilk substitutes, feeding bottles, teats and pacifiers, and banning of promotional materials

— Provision for mothers of all children less than 2 years of age to remain with them throughout hospitalization

● Improvements in family and community practices

These include:

— Training and supporting community health workers and peer counsellors to provide breastfeeding counselling

— The establishment of accessible and appropriate breastfeeding support groups for example by NGOs

— Raising public awareness of the benefits of breastfeeding and the risks associated with artificial feeding

— The adoption of legislation to protect breastfeeding rights of working women

— Implementation and monitoring of the Code, regulation of the promotion of breastmilk substitutes in accordance with the Code.

In many countries activities are ongoing, often involving national or international NGOs. If appropriate, NGOs may be involved in IMCI and breastfeeding counselling activities from an early stage in planning, training, and implementation. They are particularly likely to be able to play a useful role in breastfeeding counselling.

4. Levels of training in breastfeeding

Training in countries is conducted at three main levels for which tools have been developed. These are:

a) Training in basic breastfeeding support for health workers dealing with mothers and children in outpatient facilities. Relevant basic skills are provided through the course *Integrated Management of Childhood Illness* for first-level health workers. This is the minimum level of skill, and all health workers should receive at least this much training.

The IMCI course is for many health workers their first opportunity to learn about practical breastfeeding management. This is usually well received, but it is a very small part of the course. Experience to date indicates that newly-trained health workers quickly realize that the skills they acquire are limited and do not enable them to address adequately many of the breastfeeding difficulties that mothers present with in health facilities.

To make the breastfeeding support offered at the first level of care effective, there is a need to ensure that more skilled care is available within the same health facility or nearby. This is referral-level care, but it does not necessarily need to take place in a hospital. It may in fact be provided by well-trained community workers where resources permit.

b) Training to change the policies and routines in maternity facilities, to enable the facility to become Baby Friendly. Short courses, typically the 18-hour course for maternity staff, *Breastfeeding Management and Promotion in a Baby-Friendly Hospital*, are used for this purpose, and enable large numbers of staff to be given focused information in a short time using few trainers. However, the course does not usually develop skills for counselling, and health workers trained on 18-hour *Baby-Friendly Hospital* courses are not normally able to provide referral care in relation to breastfeeding.

This training is mainly the responsibility of the national Baby-Friendly Hospital committee, often supported by collaborating partners such as UNICEF.

c) Training in breastfeeding counselling for health workers in both outpatient facilities and maternities is provided by the 40-hour *Breastfeeding counselling: A training course* (BFC). This training strengthens the BFHI, by increasing staff skills for helping mothers in their care, and giving them a clearer understanding of mother's needs. These skills enable staff to help mothers who experience difficulties in establishing breastfeeding in maternities, more effectively than can workers trained only on 18-hour BFHI courses.

BFC training is also complementary to IMCI first-level health worker training, and provides the level of skill for referral, training and supervision of breastfeeding activities in outpatient services. BFC-trained health workers can help mothers to overcome a number of problems that are not covered in IMCI training, including re-establishing exclusive breastfeeding when infants develop illness related to artificial feeding. Thus BFC reinforces breastfeeding promotion in IMCI and makes it more effective. Without this level of care, what basic support can achieve may be very limited.

d) Specialized level training. More specialized training on 2–4 week courses is given at national or international training centres for senior professionals who will be responsible for organization and management. It is necessary to involve professionals with this level of expertise in the planning and introduction of the IMCI strategy and training course and BFC. If such professionals are not available in a country, then training needs to be arranged for them.

5. Planning breastfeeding aspects of the IMCI strategy

The specific objectives are:

- to give all health workers basic breastfeeding support and problem recognition skills
- to give selected health workers more specialized breastfeeding clinical and counselling skills, to provide referral care for problems identified by health workers with basic skills
- to prepare staff to facilitate breastfeeding sections of the IMCI course, and to provide adequate support to first-level healthworkers during follow-up and supervisory visits

Breastfeeding aspects during the IMCI introduction phase

Breastfeeding promotion activities are already ongoing in many countries, ranging from dynamic programmes to tentative initiatives, sometimes spearheaded by NGOs who are outside the health system. Activities may include a range of activities such as the Baby-Friendly Hospital Initiative (BFHI), implementation of the Code, breastfeeding clinics, community support groups, and public education. There usually remains an urgent need to improve health care practices from within the health system, and IMCI can play an important role in achieving this.

During the introduction of the IMCI strategy, the national coordinator of breastfeeding activities, or the responsible person at the Ministry of Health, should be invited as a full member of the IMCI Working Group, to participate both in the planning of IMCI activities, and the adaptation of materials. This is important to ensure complementarity and compatibility of breastfeeding aspects of IMCI with existing activities, even though these may continue independently.

Breastfeeding aspects during the IMCI early implementation phase

Adaptation

There may be a need to adapt the IMCI guidelines and course materials to address specific problems related to breastfeeding. For example, local managers may want to include specific reference and corrective measures for a common problem such as perceived milk insufficiency, which is not explicitly described in the generic guidelines. Such adaptation can draw upon the BFC course and other existing WHO/UNICEF materials.

Training

The national breastfeeding coordinator should be encouraged to review ongoing breastfeeding activities and IMCI activities together, and to consider options for coordination. As soon as planners are considering interventions to be included during the early implementation phase, they should include BFC training in the discussions.

If neither course has yet taken place:

A specific plan for a national introductory BFC course should be made at the same time as the plan for the introductory IMCI first-level course. It may not be practicable to hold two courses close together, (depending on how many of the same people are involved in both), but planning should be coordinated. Planners should discuss the question of whom it would be appropriate to involve in both courses.

In many situations, it will be preferable to hold BFC training first, in order to prepare a cadre of health workers with an understanding of breastfeeding counselling, to ensure that this aspect of IMCI is adequately taught in IMCI training.

If BFC training was introduced first:

One or more trainers from the BFC can be included in the introductory IMCI course, and additional BFC courses can be planned for early implementation districts.

If IMCI first-level courses have been conducted, but not BFC training:

BFC introductory training can be planned to include staff from areas where IMCI first-level training has taken place, and courses planned for IMCI districts.

As BFC training is introduced, a new cadre of trainers needs to be established. They should be people who are regularly involved in breastfeeding activities, in order that they have adequate experience for this specialized activity. Some of the BFC trainers should also be trainers for the IMCI course for first-level health workers. However, it is unlikely to be appropriate for all trainers to be regularly involved in both activities.

In deciding who should participate in IMCI first-level and BFC courses, the following principles apply:

- In every district where first-level health workers are trained in IMCI, selected health workers need to be trained in BFC to provide breastfeeding referral care. To cover one or two districts, it will probably be necessary to conduct one full BFC course during the early implementation phase. However, this may require that a national level introductory BFC be conducted first, to develop a team of national trainers. This requirement should be considered in planning.
- Each team of facilitators for the IMCI course for first-level health workers should include at least one person trained on the BFC course, to answer participants' questions and provide them with a model of effective breastfeeding counselling. If possible, this person should be a BFC trainer, and not just a participant.
- In follow-up after training, health workers trained in the IMCI course should receive a visit by a supervisor trained in BFC. This supervisor may be part of the general IMCI follow-up team, or a BFC trainer from the breastfeeding team.
- Breastfeeding counsellors should be identified and supported to do their referral level work. They should be deployed in a situation where they can see mothers who are referred to them. It may also be appropriate for them to supervise and reinforce the skills of health workers trained in the first-level IMCI course.

The introduction of IMCI and BFC in outpatient facilities need not wait for the Baby-Friendly Hospital Initiative (BFHI) to be in place, as mothers need help whether or not they were delivered in hospital, and whether or not the hospital is Baby Friendly. However, hospitals in IMCI districts should be encouraged to become Baby Friendly, as a preventive measure, so that more mothers who attend outpatient facilities are already breastfeeding optimally.

Breastfeeding aspects during the IMCI expansion phase

During this phase, the geographical coverage of IMCI activities will increase, and new interventions may be introduced. If BFC training was not part of the early implementation phase, it should certainly be included in the expansion phase. Depending on health service structure, and the extent to which health workers perform specialized functions, BFC training may include both health workers providing outpatient care for children and those providing maternity services.

The team of BFC trainers will need to expand as the demand for training increases, and district training teams may need to be developed. Some participants from previous courses who are providing breastfeeding referral care may be suitable as trainers. Some BFC trainers may also be trainers for IMCI first-level workers, and others may be involved mainly in maternity care.

6. Organization of work in health facilities

As tasks, jobs and patient flow are reviewed and revised, consideration should be given to where breastfeeding counselling should be conducted. In health facilities with more than two staff, it will probably be appropriate for one person to take responsibility for counselling mothers on infant feeding. Where possible, this person should be trained in BFC either during the early implementation phase, or during the expansion phase.

When IMCI activities extend to inpatient care, breastfeeding counselling will need to be included in training of inpatient staff. They should learn skills such as management of relactation, expression of breastmilk, and cup feeding of infants—important practices especially for infants who are ill because of poor feeding practices.

7. Improving the health information system

Indicators:

Breastfeeding-related indicators as specified in the document *Indicators for assessing breastfeeding practices* (WHO/CDD/SER/91.14) should be included in the health information system (HIS). The most important indicator is likely to be:

— the rate of exclusive breastfeeding among infants 0–4 months of age

Additional indicators to consider are:

— rate of breastfeeding with complementary feeding 6–9 months

— continued breastfeeding 12–15 months

— continued breastfeeding 20–23 months

In addition, the existence of Baby-Friendly hospitals, and availability of breastfeeding counselling expertise at community level, should be included in information on the health system, in the same way as availability of immunization.

8. Improving family and community practices

Community-based work conducted by national breastfeeding groups, NGOs and local mother-support groups should be recognized, and its continuation supported. Efforts should be made to ensure compatibility of this ongoing work and what is promoted with the IMCI strategy. IMCI-trained health workers should know the local breastfeeding support groups and collaborate with them, including referring to them mothers and infants who need help with breastfeeding.

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Annex E

Drugs and supplies needed for implementation of IMCI

Below are the drugs and supplies needed to provide care as taught in the course *Integrated Management of Childhood Illness*. This list would be modified to reflect adaptations made for the country.

Antibiotics:

* Cotrimoxazole
  - — Adult tablet (80 mg trimethoprim + 400 mg sulphamethoxazole)
  - — Paediatric tablet (20 mg trimethoprim + 100 mg sulphamethoxazole)
  - — Syrup (40 mg trimethoprim + 200 mg sulphamethoxazole)
* Amoxicillin
  - — Tablet (250 mg)
  - — Syrup (125 mg per 5 ml)
* Chloramphenicol Intramuscular (1000 mg vial)
* Gentamicin Intramuscular
  - — (2 ml vial containing 20 mg) OR
  - — (2 ml vial containing 80 mg)
* Benzylpenicillin (600 mg vial [1 000 000 units])
* Nalidixic Acid Tablets (250 mg)
* Tetracycline Tablets (250 mg)
* Erythromycin Tablets (250 mg)

Antimalarials:

* Chloroquine Tablets
  - — 150 mg base
  - — 100 mg base
  - — Syrup (50 mg base per 5 ml)
* Sulfadoxine and Pyrimethamine Tablets (500 mg sulfadoxine + 25 mg pyrimethamine)
* Quinine Intramuscular
  - — 300 mg/ml (in 2 ml ampoules using quinine salt) OR
  - — 150 mg/ml (in 2 ml ampoules using quinine salt)

Antipyretic:

* Paracetamol
  - — Tablet (500 mg) OR
  - — Tablet (100 mg)

Other drugs
* Small bottles of safe, soothing cough remedy (optional)

Vaccines:
* Adequate supplies of BCG, OPV, DPT and measles vaccines

Other supplies:
* Sugar
* Cloth for wicking draining ears
* Large drum (5, 10, or 15 litre size) with cover and side tap for holding large quantities of ORS in ORT corner
* Food to give patients on Plan B
* Nasogastric tube
* Sterile syringes and sterile needles:
  — 5 cc sterile syringes and sterile needles
  — 10 cc sterile syringes and sterile needles
* Sterile water for diluting IM antibiotics and IM antimalarials
* Cotton swabs and alcohol or spirits
* All appropriate cold chain supplies such as a reliable refrigerator or cold box, sterilizers, sterile syringes and sterile needles, immunization cards.

Annex F

Use and design of a translation table for IMCI and health information system classifications

Part 1. Translating IMCI classifications into health information systems (HIS) classifications using a translation table

A. Introduction

This annex includes a description and justification of an approach for translating IMCI classifications into HIS classifications using a translation table specific to the HIS of the country.

B. Description of the translation process

At the time of the consultation, the health worker should record the following in a patient register:

1) the child's age according to IMCI guidelines;[1]
2) all applicable IMCI classifications;
3) all illnesses not addressed by IMCI guidelines (such as trauma or paralysis); and
4) whether the consultation is an initial or follow-up visit.

At the end of each day, IMCI classifications should be translated into HIS classifications using a translation table (see Part 2 of this annex) and reported on an HIS routine surveillance reporting form. When the routine surveillance reporting form is being filled out, the ages of the children can be translated into the format recommended by the HIS. Similarly, illnesses of referred children and of children who came for a follow-up visit could be reported (or not), depending on the HIS policy. Suspected cases of diseases requiring immediate notification, such as poliomyelitis, should be reported immediately, in accordance with the country's HIS policy.

C. Design and use of the translation table

A central component of this approach is the design and use of the translation table. Part 2 of this annex shows a sample table for converting IMCI classifications into generic HIS classifications.[2]

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[1] The age should be recorded in months, except for infants younger than 2 months.

[2] The generic HIS classifications used in this annex are based upon WHO recommendations. (*WHO recommended surveillance standards*. World Health Organization, Division of Emerging and Other Communicable Diseases, Surveillance and Control, Geneva, 1997 WHO/EMC/DIS/97.1)

1. Respiratory diseases

Both IMCI pneumonia classifications ('severe pneumonia' and 'pneumonia') are translated into the HIS classification 'pneumonia' because both IMCI classifications satisfy the HIS case definition. If a country's HIS had a separate classification for 'severe pneumonia', then the two IMCI pneumonia classifications would not need to be combined. The IMCI classification 'No pneumonia: cough or cold' is translated into the HIS 'other diseases' classification. As above, if a country had an HIS classification for a similar illness, such as 'upper respiratory tract infection', then the 'no pneumonia: cough or cold' classification could be translated into that HIS respiratory classification and not 'other diseases'.

Three respiratory diseases which might be reportable, diphtheria, pertussis and tuberculosis, are not included on the translation table, and therefore would not be reported for children under 5 years of age. Tuberculosis has not been included on the translation table because the case definition recommended by WHO requires laboratory or radiographic results, or a physician's diagnosis, none of which would be available in a outpatient facility. Therefore, the 'tuberculosis' classification would not be reported from outpatient facilities even in the absence of IMCI.

Diphtheria and pertussis have not been included on the translation table because the IMCI assessment and classification process does not provide enough information to distinguish these two classifications from other respiratory IMCI classifications. A key design feature of the translation table is simplicity, and in most cases, HIS classifications are excluded from the table if their translation requires additional clinical data. Furthermore, if a key reason for conducting surveillance for these two diseases is to detect epidemics, the loss of routine HIS reporting of these two classifications for children under five years of age from first-level health facilities can be justified because:

1) some severely ill children will be taken to a hospital where the disease will be diagnosed;
2) except neonatal tetanus, epidemics almost always affect older children and adults, on whom disease surveillance would continue; and
3) health workers can always use a formal or informal immediate disease reporting system (such as sending a messenger, or making a radio or telephone call) for reporting suspected cases.

2. Diarrhoeal diseases

With the exception of dysentery, any diarrhoea IMCI classification is translated into the 'diarrhoea without blood' HIS classification. The IMCI classification 'dysentery' is translated into the similar 'bacillary dysentery' HIS classification. Under this system, 'cholera' would not be reported. However, the cholera case definition recommended by WHO excludes children under 5 years of age, so children being classified with IMCI would not be given the cholera HIS classification in most countries anyway. If a country had a cholera classification which included children under 5 years of age, not reporting cholera could still be justi-

fied by the reasons listed above in section C.1. If the HIS in a country with endemic cholera insisted on reporting cholera among children under 5 years of age, then the IMCI classification 'diarrhoea with severe dehydration' could be translated into the HIS classification 'cholera'.

3. Diseases with fever

Because the IMCI classification 'very severe febrile disease' overlaps with meningitis, malaria, yellow fever and plague, there are two options a country could take when designing the translation table. A simple approach is to translate all 'very severe febrile disease' classifications to the 'malaria' HIS classification. Loss of surveillance for meningitis, malaria, yellow fever and plague can be justified for the reasons listed in section C.1.

A more complicated approach is to instruct health workers to add a column to the patient register to indicate whether the child with fever also had neck stiffness. With this added piece of information, the translation process could work in the following way: if a child had 'very severe febrile disease' with neck stiffness, then report the child as having 'meningitis'; if a child had 'very severe febrile disease' without neck stiffness, then report the child as having 'malaria'. With this approach, plague and yellow fever would still not be reported. The justification is described above. Individual countries should decide which of the two fever translation approaches to use.

The rest of the translation process for diseases with fever is straightforward. 'Malaria' is reported as 'malaria'; 'fever—malaria unlikely' is reported as 'other diseases'; and all IMCI measles classifications are translated into the single HIS 'measles' classification.

4. Ear problems

All three IMCI classifications related to ear problems are translated into a single HIS classification "ear infections".

5. Nutritional disorders

According to IMCI guidelines for the classification 'anaemia or very low weight', a health worker may report only the component of the classification applicable to the child being assessed. For example, a child with only anaemia would receive the IMCI classification 'anaemia'. If this principle is applied to all IMCI nutrition classifications, then translating IMCI classifications into HIS classifications becomes straightforward.

D. Reporting multiple classifications

Many children will receive multiple IMCI classifications. If the HIS is designed to accept only one classification per patient, then a system should be developed for choosing which classification to report. One strategy is to prioritize IMCI

classifications and instruct health workers to report the classification with the highest priority. Part 3 of this annex shows a sample priority table. The prioritization algorithm used to develop this table was that severe classifications have a higher priority than non-severe classifications, and within the same level of severity, symptoms have the following priority (listed highest to lowest priority): fever, cough or difficulty breathing, diarrhoea, malnutrition, measles, and ear problem. This priority list roughly corresponds to the proportion of mortality that each symptom directly contributes.

Other priority lists may be more appropriate for specific countries. For example, certain classifications, such as poliomyelitis, which would not receive an IMCI classification, may be included in the priority list. The important concept is to develop a standard that is easy to use and which satisfies the needs of the HIS.

E. Justification for the approach

The primary justification for this approach is that the confusion caused by IMCI-HIS incompatibility will not affect health workers during consultations with children, and therefore should not affect the quality of case management. A second reason that makes this approach attractive is that the HIS does not need to change its classification system. Third, other incompatibilities between IMCI and HIS can be resolved when the routine surveillance reporting form is completed (i.e., at the time of translation). These other incompatibilities include differences in the format for reporting a child's age, and whether the illnesses of referred children and children coming for a follow-up visit should be reported.

There are some disadvantages to this approach. A key drawback is that certain HIS classifications may not be reported at all (diphtheria, pertussis, tuberculosis, cholera and plague). However, as mentioned above, ceasing surveillance of these diseases for children under five years of age would not seriously affect the ability of the HIS to detect an epidemic. Other drawbacks include the requirement for additional training of health workers in using the translation table, and the actual work of translating IMCI classifications to HIS classifications.

F. Computer-assisted translation

In some countries, it might be possible to have a computer translate the IMCI classifications into HIS classifications. The benefits of computer-assisted translations are that (once the IMCI classifications are keypunched) a computer can perform the translations more accurately and efficiently than a person, and that it saves health workers the work of translating. For this approach to work, however, a computer program needs to be developed to perform the translation, IMCI classifications need to be reported to the site where the computer is located, and someone will need to enter the IMCI classifications into a database. These requirements may result in a considerable amount of additional work and must be balanced against the benefits of using a computer.

G. Implementation of the translation approach by IMCI planners

IMCI planners should focus on four tasks. First, the Implementation Subgroup should meet with representatives of the HIS management to learn both the HIS classification system and the reasons why the HIS collects disease surveillance data in the way that it does. In particular, it will be important to identify HIS classifications that can be applied at outpatient health facilities. Detailed knowledge of the HIS will help the Implementation Subgroup design an effective translation table.

Second, a translation table, and if necessary a classification priority table, should be developed and field tested.

Third, patient registers should be modified to include the following:

1) one or more columns for the IMCI classifications;
2) a column for the child's age;
3) a column to indicate if the consultation is for an initial or follow-up visit;
4) a column to indicate whether the child was referred; and
5) if the country wants to report meningitis, then a column to indicate whether the child had neck stiffness.

Modified registers should be field tested.

Fourth, the Implementation Subgroup should provide clear, detailed instructions to the working group on how health workers should translate IMCI classifications to HIS classifications. These instructions should be part of IMCI training.

Part 2. Sample table for translating IMCI classifications into HIS classifications

IMCI classification	HIS classification
Severe pneumonia or very severe disease	Pneumonia
Pneumonia	Pneumonia
No pneumonia: cough or cold	Other diseases
Diarrhoea with severe dehydration	Diarrhoea without blood
Diarrhoea with some dehydration	Diarrhoea without blood
Diarrhoea with no dehydration	Diarrhoea without blood
Severe persistent diarrhoea	Diarrhoea without blood
Persistent diarrhoea	Diarrhoea without blood
Dysentery	Bacillary dysentery
Very severe febrile disease	*
Malaria	Malaria
Fever—malaria unlikely	Other diseases
Severe complicated measles	Measles
Measles with eye or mouth complications	Measles
Measles	Measles
Mastoiditis	Ear infection
Acute ear infection	Ear infection
Chronic ear infection	Ear infection
No ear infection	Not reported
Severe malnutrition or severe anaemia	*
Anaemia or very low weight	*
No anaemia and not very low weight	Not reported

* See Part 1 text for explanation, section C.

Part 3. Sample table to prioritize IMCI classifications when only one classification may be reported to a surveillance system

Priority*	IMCI classification
	Severe classifications
1	Very severe febrile disease
2	Severe pneumonia or very severe disease
3	Severe persistent diarrhoea
4	Diarrhoea with severe dehydration
5	Severe malnutrition or severe anaemia
6	Severe complicated measles
7	Mastoiditis
	Classifications which are non-severe, but potentially life threatening
8	Malaria
9	Pneumonia
10	Dysentery
11	Persistent diarrhoea
12	Diarrhoea with some dehydration
13	Anaemia or very low weight
14	Measles with eye or mouth complications
	Other non-severe classifications
15	Fever—malaria unlikely
16	No pneumonia: cough or cold
17	Diarrhoea with no dehydration
18	Measles
19	Acute ear infection
20	Chronic ear infection
	Classifications which should not be reported
	No ear infection
	No anaemia and not very low weight

* One is the highest priority, 20 is the lowest priority.

Annex G
Review of the IMCI early implementation phase

1.0 Overview

To complete the early implementation phase, the working group will organize a review of the experiences. The aim of the review is to analyse the experiences, to summarize the lessons learned and to decide whether and how IMCI implementation will be continued in the future. The review is an essential bridging step between the early implementation and expansion phases. The guidelines and materials needed to prepare for and conduct the review are in this annex and Annex C. *Tools for data collection and summary*.

The review may be followed immediately by planning for expansion or this may be scheduled after an interval. In many instances, it may be appropriate to conduct the activities back-to-back. Section 10.0 of the *IMCI Planning Guide* describes the planning for expansion.

1.1 Objective of the review of IMCI early implementation phase

The objective of the IMCI review is to identify ways to strengthen and sustain IMCI implementation as a main strategy to improve the quality of care for children in health facilities and in the home, based on a review of previous experiences.

1.2 Expected outcomes

The expected outcomes of the review are (i) a detailed set of recommendations describing the scope, pace and emphasis of expansion and (ii) a draft report summarizing the findings on which the recommendations are based.

1.3 Participants

The review meeting should bring together

- the IMCI Working Group
- representatives from districts where early implementation took place
- representatives from all programmes and institutions **who were involved** in the implementation of the IMCI strategy in the early implementation phase
- representatives from programmes and institutions **who may become involved** in the implementation of the IMCI strategy during the expansion phase
- representatives from partners and organizations that provide resources for IMCI implementation.

It is important that all relevant staff participate for the entire period of the review. Participants should include high-level officials from the Ministry of Health who are in a position to endorse and promote the outcomes of the review.

The consensus meeting on the last day provides the opportunity to bring together all those who were not able to participate in the review, but whose support and endorsement of the recommendations is crucial for future success of implementation.

For this first review, it is usually helpful to obtain the assistance of an external facilitator(s), who is experienced in conducting the exercise. The WHO office will be able to help identify a suitable person.

1.4 Process

The review will be organized as a meeting or desk review, covering four major areas:

- Organization and management of IMCI
- Improving the skills of health workers
- Improving the health system
- Improving family and community practices

The duration is about five days or one working week. The first four days are dedicated to the actual review process and the last day to a consensus meeting. Preceding the review, preparations need to be made in order to provide all participants with necessary information on the basis of which they will conduct the review. The steps of the process are summarized below.

1.4.1 *Preparations*

Data that were collected as part of documentation of the early implementation phase are a main source of information on which the review is based (see the sections on planning for documentation, 2.3.5, 4.3.6, 7.4 and Annex C). The data should be compiled and summarized in a written report, which will be a key reference document during the review.

Field visits to obtain additional qualitative information at district level should not be needed if the early implementation phase was documented as planned. However, if there are no reliable or recent data available about, for example, the performance of trained health workers or facility supports, it may be necessary to conduct field visits prior to the review in order to gather such data.

1.4.2 *Desk review*

During the desk review, participants will complete the following steps:

— Step 1: Assess what has been achieved in each of the major activity areas, identify constraints, and specify the resources required

— Step 2: Identify feasible solutions for the constraints

— Step 3: Assess how the IMCI strategy should be expanded and develop recommendations for what should be done.

Methods to complete the steps include presentations, review of documents, plenary discussions and group discussions. A table, *Issues relevant to the status and quality of IMCI implementation organized according to major areas*, is provided to help participants identify important issues to consider in the review (Figure 26).

1.4.3 *Consensus meeting*

To conclude the desk review, the findings and the recommendations are presented to a broader group of stakeholders, who should include senior decision-makers in the Ministry of Health and representatives from related institutions, other ministries and partner organizations. The aim of the meeting is to reach consensus on the recommendations of the review and obtain commitment for their future implementation.

1.5 Time table

Preparations should be started about 6–8 weeks before the review in order to ensure their timely completion. If there is any indication that data collection was not carried out as planned, it will be necessary to start the preparations earlier. In this instance, there may be a need to conduct field visits prior to the review meeting.

The review meeting itself can usually be completed in five days (or forty working hours). This assumes that the IMCI strategy was implemented in more than one district and that a number of IMCI-related district-level activities took place. When it is appropriate to plan for expansion immediately after the review, a second week should be scheduled for the planning meeting for the expansion phase.

2.0 Preparations

2.1 Write a report summarizing the early implementation phase

As stated in step 9.1 of this guide, in preparation for the review, the IMCI Working Group should write a report summarizing the plans and activities, as well as the findings collected to document the early implementation phase. The report should cover the four major areas around which the review will be organized. It should describe the objectives of what the IMCI working group intended to achieve in each of the three components, and what has been done. It should also describe the organization and management of the IMCI strategy at national and district levels. Figure 24 is a proposed outline for the report.

To prepare the report, the IMCI working group should review and complete the information that they agreed to collect for documentation of the early implementation phase. The issues that will be addressed during the review, the types of information needed and the possible sources of information are provided in Figure 26, later in this annex.

2.1.1 *Compile and summarize information collected during follow-up visits after training.*

Annex C. *Tools for data collection and summary* provides forms for summarizing the information collected during follow-up. The forms are derived from the generic procedures and methods that are recommended in the document *IMCI Guidelines for Follow-up after Training*. They need to be adapted according to the follow-up procedures applied in the country.

FIGURE 24

Outline of topics to address in the report summarizing the early implementation phase

Introduction

— Rationale for implementing the IMCI strategy in the country
— Rationale for conducting the review
— Objectives of the review

Organization and management

— IMCI management structure
— Policies in support of IMCI
— Relation of IMCI to health sector reforms (if applicable)
— Orientation and planning at national level
— Orientation and planning at district level

Improving skills of health workers

— Adaptation process
— Training plan and status of implementation
— Follow-up plan and status of implementation

Improving the health system

— Activities to improve drug availability
— Activities to improve referral pathways and services
— Activities to review and organize work in health facilities
— Supervision
— IMCI and HIS
— Documentation of the early implementation phase

Improving family and community practices

— Activities to ensure consistency of health education and promotion messages
— Activities to strengthen and support community-based interventions to improve child care

Budget required to complete the activities and sources of funding

Issues of concern to the IMCI Working Group which should be addressed in the review

Annexes: Summary tables as discussed under points 2.1.1, 2.1.2 and 2.1.3.

There are two forms. *District Results Table 1: Quality of case management (in cases observed during first follow-up visit after training)* provides a format for summarizing the information on how well health workers performed in applying IMCI skills during follow-up visits. *District Results Table 2: Problems with facility supports (found during first follow-up visit after training)* provides a format for summarizing conditions in health facilities that hamper IMCI implementation.

Each form is designed to accommodate information from the first follow-up visit in a number of districts. However, the forms can be used to report on a second, or even multiple visits to the same facilities. If the IMCI working group was able to conduct **more than one follow-up visit** to facilities with trained health workers, **it is important not to aggregate the findings of subsequent visits** with those of the first visit. Reporting on each visit separately will enable the review team to assess progress. In such instance, mark the columns with 'first visit,' 'second visit' and so on.

2.1.2 *Compile and summarize information collected during routine supervision*

In some countries, it might have been possible to incorporate IMCI activities in the system of routine supervision at district level. In that case additional data, similar to those collected during follow-up, may be available. Compile them in summary forms similar to those for follow-up.

2.1.3 *Compile and summarize information on training*

Annex C also provides a form to summarize the information collected by course directors during IMCI training courses on the Course Director's Summary Form. *Summary of District IMCI Courses* organizes the data for comparison of courses

conducted in the district and analysis of important indicators of quality for the training courses.

2.1.4 *Make available other types of information*

In addition to the report, the following documents are relevant for the review. If they can be obtained, make copies for the review.

- Organigram of the Ministry of Health depicting the relation between the different divisions, programmes and units involved in IMCI activities
- Statement prepared by the Ministry of Health to endorse the early implementation of the IMCI strategy
- Background documents on health sector reforms (where applicable)
- Policy documents of programmes involved in IMCI implementation (including the national Essential Drug List and policy)
- Copy of the adapted IMCI guidelines and training materials
- Sample of completed follow-up forms and any supervision forms
- Sample of health education and promotion materials relevant for the IMCI strategy
- Summary reports of training and other activities conducted by the ARI, CDD, malaria control, EPI and nutrition programmes during the early implementation period

2.1.5 *Prepare the report of the early implementation phase*

Use Figure 26, *Issues relevant to the status and quality of IMCI implementation organized according to major areas* as a guide to prepare the report. For each issue that will be addressed during the review, review the types of information needed and then see what information is available in the summaries mentioned above. Decide what additional information should be compiled to facilitate the review, such as reports on particular aspects prepared by members of the Implementation Subgroup, district focal persons, or other participants such as essential drugs programme or the health sector reform project. (Note: Use the table in Figure 26 as a guide for organizing the information. It is not intended that the IMCI Working Group has the answers to all questions prior to the review. Some questions can only be addressed in discussions during the review.)

2.2 Invite participants

Participants in the review should include representatives of all parties that were involved in the early implementation phase. The review also provides an opportunity to involve programmes, institutions and partners that may not have been involved yet, but whose involvement is important for future sustainability of the IMCI strategy. See section 1.3 for a list of whom to invite.

Because the IMCI strategy requires new ways of organizing available resources and building partnerships among existing programmes, institutions and organi-

zations, it is necessary to involve senior officials of the Ministry of Health as full participants during the review as much as possible.

For the consensus meeting on the last day, invite senior officials from the Ministry of Health and representatives from related ministries and partner organizations (such as multi- and bilateral agencies, NGOs) who have an interest in or may contribute to the implementation of the IMCI strategy, but who were not able to attend the review full-time.

To obtain an experienced facilitator(s) to help conduct the review, contact the national WHO office with a request for technical assistance.

2.3 Prepare a timetable

Schedule five days for the review. Plan the first day to be spent on plenary presentations (described in points 3.1 and 3.2) before the actual review process starts. This will enable the review team to develop a common understanding about what the IMCI working group set out to achieve in the early implementation phase, and hear highlights of the accomplishments. It also provides an opportunity for different stakeholders to present their experiences or views about the IMCI strategy.

The time required to complete the three steps of the review process depends on the number of activities that were conducted. Assuming that early implementation took place in 2–3 districts and that a number of district-level activities took place, three-and-a-half days should be sufficient. Schedule sufficient time to complete step 1, as this step requires most time. It is also helpful to plan the plenary presentations of group work early in the morning so that the group starts out together and rapporteurs have an opportunity to prepare their presentations the preceding evening. Schedule the consensus meeting for the last half-day of the review.

2.4 Make logistic arrangements

It is appropriate to organize the review as a residential workshop in a location away from the normal working environment. This will help to keep participants fully involved, away from routine activities. Arrange for:

- a meeting room large enough to seat all participants; a larger room on the last day if needed to seat all participants in the consensus meeting
- adequate space for four subgroups to work undisturbed
- paper and pencils for all participants
- flipcharts and markers for each subgroup
- secretarial support during the entire period of the review
- photocopying facilities
- computer and printer

2.5 Finalize the organizational arrangements

In the week preceding the review, when participants have confirmed their attendance, finalize the organization of the review.

- Decide on the composition of the subgroups for group work
- Assign chairpersons and rapporteurs for the plenary sessions
- Assign chairpersons and rapporteurs for the group work
- Prepare a copy of the review report for each participant and make sure that copies of other relevant documents are available for the subgroups

2.5.1 *Decide on the composition of subgroups for group work*

Participants will complete the steps of the review process in subgroups. The major areas that need to be covered in the subgroups are:

Organization and management

— organization and management at central level

— policies in support of the IMCI strategy

— central level support to districts

— organization and management at district level

— relation of the IMCI strategy to health sector reforms

— involvement of partners

— budget requirements

Improving skills of health workers

— adaptation process

— training plan and status of implementation

— follow-up plan and status of implementation

Improving the health system

— activities to improve drug availability

— activities to improve referral pathways

— activities to review and organize work in health facilities

— supervision

— IMCI and HIS

— documentation of the early implementation phase

Improving family and community practices

— activities to define the area and select interventions

— activities to ensure consistency of health education and promotion messages

— activities to strengthen and support community-based interventions to improve child care

It may thus be appropriate to divide participants in four groups, each covering one major area. If there were few activities planned and implemented to improve family and community practices during the early implementation phase, it may be justified to divide into three groups.

Depending on the scope of activities in each area, you may rearrange the topics for each group. For example, if many training and follow-up activities took place, it may be appropriate to include the review of adaptation under 'organization and management.' Or, if few activities took place under 'improving family and community practices,' this area could be covered as part of 'organization and management.'

Assign participants to a subgroup that matches their main areas of responsibility or interest. Make sure that each group has one staff member from the Ministry of Health who has accurate knowledge about the area under review. Ensure that each group has a balance of staff representing the Ministry of Health, related institutions and partners.

2.5.2 *Assign chairpersons and rapporteurs*

For all sessions, including those in plenary and in subgroups, there should be a chairperson and a rapporteur. The chairperson is responsible for introducing the session and guiding the discussion, emphasizing key points and relevant issues. The rapporteur is responsible for developing a report of the findings and conclusions of each session or step. By the end of the review, a draft report should be available. It is useful to plan who could best fulfill these responsibilities prior to the start of the review.

2.5.3 *Prepare copies of relevant documents*

For each participant, prepare a file which includes (in addition to the agenda and list of participants):

— the report of the early implementation phase

— handouts for completing the steps in group work (found at the end of this annex)

— Figure 26: *Issues relevant to the status and quality of IMCI implementation organized according to major areas*

For each subgroup, prepare a file that includes:

— a copy of the national plan for the IMCI early implementation phase

— specific documents related to the area under review (like the national Essential Drug List, the national drug policy, supervisory checklists and data collection forms)

2.6 Schedule daily facilitators' meetings

When the organizational arrangements are clear, schedule daily facilitators' meetings starting on the evening preceding the review. Involve the chairpersons, rapporteurs, and external facilitator(s). During the meetings:

— review progress made during each day,

— identify problems and find solutions,

— reach a common understanding on the tasks that need to be completed during the following day, and adjust the timetable as necessary.

3.0 The review

Introductory notes for the national organizers and external facilitator:

The review is completed through plenary sessions and group work. After a one-day introduction, participants divide into subgroups to complete three steps. After completing each step, the subgroups report back their findings in a plenary session.

Below is a description of how to conduct the review. It includes a list of tasks to complete during each step, the methods to use, and guidance on how to complete the tasks. The notes can be used by the facilitator(s) to introduce each step. **They are also given as handouts to guide participants in the group work**.

3.1 Introduce the review (plenary—4 to 6 hours)

Although there will be variation in the topics that need to be addressed in each country, it is useful to cover at least the following:

— opening speech highlighting the rationale for implementing the IMCI strategy, the rationale for the early implementation phase, and the purpose of the review meeting

— introduction of participants

— administrative arrangements during the review

— overview of the early implementation phase, summarizing plans and activities according to the major areas, as discussed in the background report

— presentations on other topics of interest, such as the relation of the IMCI strategy to health sector reforms, national drug policies and management, findings of operational research relevant to the IMCI strategy

3.2 Introduce the group work (plenary—1 hour)

Introduce participants to the steps and tasks that need to be completed in groups during the next 3 or 3-and-a-half days:

3.2.1 *Introduce the review process describing the purpose, steps and methods*

- Explain the points below:

  The purpose of the early implementation phase was to gain experience with the IMCI strategy by implementing selected activities in a limited geographical area. The phase aimed to build national and district capacity to implement IMCI activities and to find practical ways of organizing the participation of relevant programmes, institutions and partners in the implementation of the IMCI strategy.

  The purpose of the review is to assess what has been achieved in order to identify strengths and weaknesses, achievements and constraints. Based on the findings, the review team should be able, at the end of the review, to provide answers to the following basic questions:

  — Does the IMCI strategy, as it has been implemented, meet the needs for child health in this country?

  — Were there any gaps in the selection of the activities during the early implementation phase that need to be filled in order to receive the full benefits of the strategy? Was there an appropriate balance of activities in the three components?

  — How much capacity has been built to sustain what has been achieved and possibly expand activities (e.g., qualified trainers, supervisors, national adaptation consultants, commitment of district health staff, national and district expertise to develop and sustain community-based interventions)?

  — What were the constraints that have to be overcome in order to arrive at satisfactory implementation, and what are feasible solutions to these constraints?

  — What resources were required in terms of organization, manpower and funds, and what resources are likely to be needed if the strategy is expanded? What resources can be made available at all relevant levels to implement the IMCI strategy?

  To answer these questions, participants in small groups will go through a structured process, in which they complete the following steps:

  — Step 1: Assess what has been achieved in each of the major activity areas, identify constraints, and specify the resources required

  — Step 2: Identify feasible solutions for the constraints

  — Step 3: Assess how the IMCI strategy should be expanded and develop recommendations for what should be done.

- Announce the subgroups and reach agreement on the proposed composition
- Propose chairpersons and rapporteurs for each group and clarify their respective roles

3.3 Complete Step 1: Assess what has been achieved in each of the major activity areas, identify constraints, and specify the resources required

3.3.1 *(Plenary) Introduce the step:*

Give each participant the handout describing the step (located at the end of this annex) and a copy of Figure 26 *Issues relevant to the status and quality of IMCI implementation organized according to major areas*. Clarify that each group will complete the step for the assigned areas and topics. The handout describes:

Tasks for the step
Methods to complete the tasks
Guidance for completing the tasks

The checklist lists important issues to address in the review of each main area. It is a guide to help analyse what was achieved and what are constraints. Explain the tasks and how to complete them.

Tell the participants how long they will have for subgroup work and when they will reconvene in a plenary session to present their findings. Answer any questions participants may have.

3.3.2 *(Group work) Each group completes the step*

To complete the step, participants will review documents and discuss the issues in the group. The chairperson manages the group discussion and the rapporteur takes notes.

3.3.3 *(Plenary) Each group presents their findings*

This is an opportunity to discuss, refine and complete the findings, and to ensure coherence among the conclusions and recommendations of the review.

3.4 Repeat the process described above in step 3.3 to complete Step 2: Identify feasible solutions for the constraints

FIGURE 25

Facilitator's notes for making a presentation on expansion

To provide participants with a common understanding of what they are supposed to achieve in Step 3, it may be useful for the national IMCI coordinator or the external facilitator to make a presentation on the objectives and implications of the expansion phase. Below are some points to address in the presentation.

- The key activity areas under each component of the IMCI strategy.
- Expansion aims at increasing the coverage and the range of activities implemented as part of the IMCI strategy, in line with national and district capacity.
- The emphasis should be on achieving an appropriate balance of high quality activities in each of the three components in districts where IMCI is implemented.
- This requires careful planning, which takes account of
  - steps that are needed to build national ownership and coordination
  - steps that are needed to build district ownership and management capacity
  - central level input that is needed to build district capacity.
- Sustainability needs to be considered in planning of all activities.
- Taking account of the findings of the review, the review team should determine how and at what pace to expand. This means that the group will make clear recommendations on what needs to be done, with what priority, in order to make IMCI implementation successful and sustainable.

3.5 Repeat the process for Step 3: Assess how the IMCI strategy should be expanded and develop recommendations for what should be done

As a part of the introduction of Step 3, the facilitator could make a presentation on the objectives and implications of the expansion phase. Figure 25 lists points to address in this presentation.

4.0 Consensus meeting

At the end of the review, participants will present their conclusions and recommendations in a consensus meeting with high-level officials in the Ministry of Health and representatives from IMCI-related institutions and partners. The outcome of the meeting will be used as a basis for planning the expansion of the IMCI strategy.

4.1 Make preparations for the consensus meeting

Some preparations were made before the review meeting, that is, inviting participants and arranging for a large meeting room. Before the consensus meeting (such as the day before, or the morning before):

- Prepare the meeting room (seating, projector and screen, if needed)
- Decide how to present the findings, conclusions and recommendations of the review. Assign responsibility to individuals and prepare visual aids to guide the presentations.
- Prepare copies for every participant of the background documents and the draft report of the conclusions and recommendations.

4.2 Conduct the consensus meeting

- Introduce the review to the participants. State the objectives, explain who the participants were who worked on the review for the past several days, and describe the steps that were accomplished.
- Explain how the conclusions and recommendations of the review will be used to guide the planning for expansion. State when and how the planning meeting for the expansion phase will take place. Discuss how the current meeting aims to achieve consensus on the outcomes of the review, as a basis for developing a feasible plan.
- Give a brief overview of the early implementation phase, summarizing main activities and achievements. Use the data collected for documentation to demonstrate progress.
- Summarize major findings of the review, including achievements and constraints.
- Present the conclusions and recommendations.
- Provide ample time for discussions. Acknowledge valuable suggestions for revisions or additions to the recommendations, and take notes of them.
- Try to obtain commitment to the recommendations from all partners as a basis for support of the future plan of action.

FIGURE 26. ISSUES RELEVANT TO THE STATUS AND QUALITY OF IMCI IMPLEMENTATION ORGANIZED ACCORDING TO MAJOR AREAS

The following information about early implementation is needed for the meeting to review the IMCI early implementation phase. The participants at the meeting will discuss these questions.

1. IMCI Organization and management

Area	Issues	Information needed	Source of information
Organization and management at central level	Capacity of MOH to coordinate and support the IMCI strategy	What kind of structure has been established at central level to coordinate and implement IMCI activities? Are the relevant programmes and institutions all represented and participating collaboratively on the IMCI Working Group? Is manpower sufficient to complete tasks required at national level? How many full and part-time staff are assigned to IMCI? Does the IMCI Working Group have necessary authority to enact decisions?	IMCI Working Group membership list Minutes of meetings Description of organization of MOH Interviews with IMCI Working Group members (including co-ordinator or focal person)
Policy support	Formal support of MOH for IMCI as a key strategy	How has the Ministry of Health expressed its commitment for the IMCI strategy? How does the IMCI strategy fit within the national health policy framework? Have health authorities at all levels, and partners been informed about the place of IMCI within the national health policy? Have existing programmes such as malaria control and nutrition included IMCI into their programme policies?	Written statement of commitment to IMCI by MOH, budget line for IMCI MOH policy statements
Health sector reform	Relationship of IMCI to health sector reform (HSR) efforts	What is the status of health sector reforms in the country? Is the IMCI strategy included in the HSR policy? Is it in the package of activities promoted under HSR? What are implications of the HSR for implementing the IMCI strategy? (manpower, decentralization of resources, cost-sharing systems, community health boards, health information systems)	Presentation by HSR group MOH reports of implementation of health sector reforms HSR policy documents
Central-level support for districts	Readiness of district health teams to implement the IMCI strategy	Did districts selected for early implementation meet essential characteristics? (availability of training site, referral facilities, drugs, committed staff, good physical access by central-level staff) Were district orientation and planning meetings held? Were some district health managers trained in IMCI as part of the orientation and planning process? What else was done to prepare district health teams for IMCI planning and implementation?	Interviews with district health team, and with IMCI Working Group

Area	Issues	Information needed	Source of information
Organization and management at district level	Commitment of district health authorities Budget commitment Capacity of district health team to plan, implement and monitor the IMCI strategy	Is IMCI part of the district health plan? Is the district health team fully involved in creating conditions in health facilities and in the district which help IMCI implementation? What actions did the district health team take in response to the results of follow-up visits? Did district authorities allocate resources to IMCI activities? Is there a pool of district-level staff who are trained in IMCI facilitation and follow-up skills? Are they able to implement training and follow-up without central-level support?	Interview with district focal person District health plan District health budget Training reports
Partners	Involvement of and coordination with partners	What is the interest of partners in the IMCI strategy? Are there any potential partners who have not yet been involved? Is support for IMCI from WHO and other partners sufficient? Are results of follow-up and supervision used to generate support for the IMCI strategy?	Interviews with representatives of partner organizations Financial records of support from partners Interview with IMCI Working Group coordinator or focal point
Budget	Costs of IMCI	What were the central-level costs associated with implementation? (costs for adaptation of clinical guidelines, feeding and local terms studies, development of mother's card; planning at district level; central-level training course; reproduction of materials) What were the district-level costs associated with implementation? (costs for IMCI training courses, training in follow-up, conducting follow-up visits, supplementary costs to make all drugs and equipment needed for IMCI available) What resources were available for IMCI implementation? What resources did the MOH and individual programmes allocate to IMCI?	Central-level financial records District-level financial records MOH budget, budget allocated by partners

2. Improving skills of health workers

Area	Issues	Information needed	Source of information
Adaptation of IMCI materials	Appropriateness of adapted IMCI guidelines	Was adaptation of clinical guidelines completed before the first course?	Report of Adaptation Subgroup Minutes of IMCI Working Group meetings, consensus meeting
	Appropriateness of local terms, feeding recommendations and mother's card	Were local terms and feeding studies completed? Were adaptations national or district-specific?	
		Was a mother's card developed? Is it appropriate nationally, or district-specific?	
		Were all relevant programmes involved in the adaptation? Are the current IMCI guidelines widely accepted?	
		Did the adapted materials work well during training (the guidelines, modules, local terms, feeding recommendations, and mother's card)?	Training reports of MOH and districts
		Could health workers apply them on return in the health facility?	Interviews with trained health workers
		Did the adapted guidelines cover a reasonable proportion of the complaints of children seen?	Reports of visits for follow-up after training
	Need for second round of adaptation	Is there a need to revise the adapted guidelines or to revise the training materials?	Reports on epidemiological, geographical and cultural characteristics of potential areas for further expansion.
		Is adaptation needed for other regions or districts? What adaptations are required?	
	Capacity for carrying out further adaptation	Is national expertise and capacity available for further adaptation?	List of nationals trained in conducting local terms and feeding studies
IMCI case management training	Quality of IMCI in-service training	Were courses conducted as planned? How many courses?	Training reports of MOH and districts
		Did they meet the criteria of quality? (facilitator: trainee ratio, duration of course, proportion of time spent in clinical sessions, number of cases managed per participant, completion of course modules, follow-up visit planned, chart booklet given to each participant)	Table summarizing IMCI indicators of quality of training
		Were participants selected appropriately? (managing children in first-level facilities, having good reading skills)	Table summarizing characteristics of courses including characteristics and performance of participants
		How did participants perform during training? Was the methodology appropriate? Did the course meet their needs?	Reports of trainees' evaluations Observations of Implementation Subgroup members, district focal person
		Were training sites appropriately selected? (sufficient case load, access to inpatient and outpatient facilities, acceptable quality of care, director and staff interested in IMCI)	
		Were training materials available in sufficient quantities?	
		Were there any specific problems with training courses?	

Area	Issues	Information needed	Source of information
IMCI case management training (continued)	Capacity and feasibility for continuing in-service training	How many suitable training sites are available in each district?	Discussions with IMCI Working Group members, and representatives of district health team
		Have provisions for procurement or reproduction of training materials been made?	
		Has a core team of trainers been established at national level (to help districts get started)? How many are there and who are they? Are they appropriately skilled? (currently active in clinical care, have previous training experience, previously trained in IMCI and in facilitation skills, speak language of participants, include qualified course directors, clinical instructors and facilitators). Were there any specific problems?	Table summarizing national-level staff trained and performing as course directors, clinical instructors, facilitators
		Has a core team of trainers been established at district level? Are they appropriately skilled? (currently active in clinical care, have previous training experience, previously trained in IMCI and in facilitation skills, speak language of participants, include qualified course directors, clinical instructors and facilitators). How many trained course directors, clinical instructors, and facilitators are available in each district?	Table summarizing district-level staff trained and performing as course director, clinical instructors, facilitators in each district
		Were there any specific problems with training at district-level?	
		Did IMCI Working Group receive complete reports after each course? Was feedback provided to the district?	Reports from IMCI focal point
	Coordination of IMCI and other training and implementation	Are staff from different programmes involved as trainers?	Training records of other programmes
		Has IMCI training been coordinated with other types of training, for example breastfeeding counselling training?	Discussions with IMCI Working Group members, district focal person
	Pre-service training	Were any plans made or activities undertaken to train future health staff in pre-service settings about IMCI? If so, what was the experience and the results?	

Area	Issues	Information needed	Source of information
Follow-up visits after training	Quality of follow-up after training	What number and proportion of participants were visited for follow-up?	Reports of follow-up after training, training of staff to do follow-up
		What proportion of participants were visited within 4–6 weeks after IMCI course?	
		Were any additional visits conducted?	
		Did follow-up visits meet quality criteria? (Observation of case management tasks with feedback, review of facility conditions, exercise to practice identifying signs of severe illness, caretaker interview, gathering information for monitoring, summary report developed)	
		Were staff conducting follow-up visits trained? How? (trained in IMCI plus facilitation skills, plus follow-up procedures?)	
		Were data collected during follow-up used for feedback and action at all levels (health facility, district and national level?)	
	Capacity and feasibility to sustain follow-up after training	How many staff in each district are trained and available to do follow-up?	District training records
		Was there any relationship between the follow-up visit and regular supervision? (e.g., Were multiple visits conducted? Were the same people doing them? Were district supervisors involved in the visits?)	
	IMCI case management practices in facilities (effectiveness of training)	How did health workers perform during the visit? (appropriate assessment, classification and treatment, use of chart booklet)	Reports from follow-up visits
		Did cases who needed it receive a full course of an appropriate antibiotic or antimalarial in the health facility?	
		Were cases immunized on the day of the visit, when they needed it?	Report of caretaker interviews in a sample of facilities during follow-up visit
		What proportion of cases needing referral were referred and received appropriate pre-referral treatment?	
		Were there other signs in the health facility that indicated that IMCI was implemented? (triage to identify children with danger signs, recording of multiple classifications, follow-up indicated in records)	
		What were caretakers' views/knowledge? (on IMCI home case management, feeding and when to return)	
	Coordination with other programmes in conducting follow-up after training	Were central staff from different programmes involved in follow-up? Were district-level staff responsible for different programmes involved in follow-up?	

3. Improving the health system

Area	Issues	Information needed	Source of information
Drug supplies and equipment	Potential of system to support IMCI implementation and its sustainability	Are all drugs needed for IMCI implementation included in the Essential Drugs List? Does the national drug policy allow the use of all drugs needed for IMCI (eg., pre-referral and second-line antibiotics) in first-level facilities? How does the distribution of drugs needed for IMCI operate at different levels? (from central to district level; from district level to the health facilities) What is the capacity of health facility staff to manage drug supplies? Is basic equipment needed to manage drugs and vaccines available at the health facility? (cold chain, recording system?) Were the drugs needed for IMCI available in health facilities where staff had been trained in IMCI? Were functioning scales, thermometers, and timing devices available? Was ORT equipment available? What actions were taken at national and district-level to improve drug availability or strengthen the distribution system?	Copy of the national Essential Drugs List and national drug policy Interviews with staff of the Essential Drugs Programme Interviews with the IMCI Working Group Interviews with district health managers Observation of and interviews with first-level facility staff Reports from follow-up visits and from supervision
Referral pathways and services	Capacity of system to support timely referral	What was the average distance from a first-level health facility to a referral facility and what was the average time required to travel to the referral facility? Are there any other factors that prevent caretakers from going to a referral care facility? For children in need of referral who could not be referred, how were they managed? Was the Annex *Where there is no referral* used? If the Annex was used, was it adapted? How was it used, as part of the 11-day course? Was it helpful?	Interview with district health team or focal person Reports of follow-up visits Interviews with IMCI Working Group and IMCI facilitators
Organization of work at health facilities	Constraints and supports for implementation of IMCI in facilities	Do job descriptions allow first-level health workers to perform all IMCI tasks? Did the current organization of work in health facilities allow every trained health worker to perform all IMCI tasks? If not, which tasks were completed by other health workers? How were they prepared to complete these tasks? Was there any spill-over of knowledge and skills of trained health workers to non-trained colleagues? Were there any other signs in the health facility that indicated that IMCI was implemented? (triage to identify children with danger signs, using chart booklet, recording of multiple classifications, follow-up indicated in records)	Administration unit in MOH, district Reports from follow-up visits, routine supervisory system Observations during up follow-up visits

Area	Issues	Information needed	Source of information
Supervision	Relationship of IMCI and the existing supervisory system	Were existing supervisors trained in IMCI and follow-up skills? Were existing supervisory visits used to follow-up on aspects of IMCI? Which aspects were included? Were existing supervisory checklists adapted to include IMCI related tasks?	Training records Interviews with district health management team or focal person Reports of supervisory visits
Linkage of IMCI and the HIS	Compatibility of IMCI classifications and HIS categories	What were the discrepancies between IMCI classifications and HIS categories? What has been done to overcome these discrepancies?	Reports of supervisory visits or follow-up visits Interviews with IMCI Working Group and district health teams
Documentation of the early implementation phase	Capacity to monitor quality of activities and overall progress	Was a plan developed specifying the areas and activities to document and who should be responsible for collecting the information? Was adequate follow-up given to the plan? If not, what were problems? Were tools developed to facilitate the documentation? Can they be used in future or do they need further adaptation?	Summary report of the early implementation phase Summary tables on quality of training and results of follow-up District-level reports on IMCI implementation

4. Improving family and community practices

Area	Issues	Information needed	Source of information
Defining the content and the scope	Selection of key practices and effective interventions to address them	Was an assessment of key family practices in relation to the main health problems conducted ? Which practices were selected for intervention? Was an assessment of ongoing interventions and available community resources conducted? At what levels (national, district, community)? Which interventions or resources were selected for strengthening or support?	Summary report of the assessment Existing programme information (surveys, KAP studies, Focused Ethnographic Studies etc.) Interviews with IMCI Working Group Interviews with district health team
Health education and counselling by health workers	Consistency of messages targeted at caretakers and the community Effectiveness of health workers in teaching caretakers about IMCI home care and timely care-seeking	Were existing health education and promotion messages reviewed and revised to be compatible with IMCI guidelines (to include local terms, feeding recommendations, signs of when to bring a child to the health facility)? Were IMCI-specific health education messages developed? If so, were messages from different programmes reviewed and utilized to guide the development? Was the mother's card field-tested? Was this done with the assistance of an expert? Did health workers use the mother's card when counselling mothers? Was caretaker's knowledge assessed and what was knowledge about home care and when to return?	IMCI Working Group Reports of follow-up visits Exit interviews conducted during follow-up visits (at a sample of facilities)
Increasing the linkage between health facilities and the community	Participation of community health workers in the IMCI strategy	Were community-based health workers used to provide a link between IMCI-trained health workers in health facilities and the community? What is their profile? How were they trained? What tasks did they perform? What were the experiences?	Interviews with IMCI Working Group Interviews with IMCI-trained health workers and community-based health workers? Community health worker training materials
Community-based interventions	Quality of community-based interventions	Was any new community-based intervention implemented or an existing intervention strengthened in the context of IMCI? Who participated in the planning and implementation? How were the persons working with the community prepared (or trained)? What was done to monitor progress? Were activities implemented as planned? How many people or families were reached? What problems occurred?	Interviews with IMCI Working Group and district health teams Interviews with representatives of NGOs involved with community-based health care in the selected districts

Handouts for participants in the review of the IMCI early implementation phase

Handout step 1

Assess what has been achieved in each of the major activity areas, identify constraints, and specify the resources required

TASKS FOR STEP 1

- List the specific objectives, if any, for the component or area under review
- List the activities that were planned
- Assess the status of implementation of the planned activities and their quality
- Examine the resources that were required to implement the activities and specify the capacity that has been built for implementing various activities
- Identify achievements (specific objectives that were met, planned activities that were completed with good quality)
- Identify constraints
- Present the findings in plenary, and revise as necessary

METHODS TO COMPLETE THE TASKS

- Review documents, such as the report of the early implementation phase and specific documents related to the area under review
- Use the questions listed in the checklist *Issues relevant to the status and quality IMCI implementation according to major areas* to assess the quality of activities and capacity that was built
- Discuss within the group and draw upon individual experiences to complement the available information.

Guidance for completing the tasks of Step 1

- Take some time for every group member to **read the report of the early implementation phase**. Distribute other available documents among the group and ask one person to read each document and take note of the content so that this can be referred to in the discussions.
- For the area or component under review, **decide what were the specific objectives**. They may be stated in the report, or you may have to define them based on your knowledge of what the IMCI Working Group intended to achieve.

Example:

Specific objectives for the area 'organization and management' might be:

— to create a management structure which enables all relevant programmes, institutions and partners to contribute to the implementation of the IMCI strategy

— to ensure consistency in policies relevant to the IMCI strategy

— to build capacity at national and district level for planning, coordination, and supervision of IMCI activities

- **Review the questions** relevant to the area under review on the checklist *Issues relevant to the status and quality IMCI implementation according to major areas*. **Use the questions** as a guide to help you complete the subsequent tasks.
- **Identify the activities** that were planned in the area under review.
  — For some areas, such as 'Training of first-level health workers', there may be a clear plan, which lays out specific activities.
  — For other areas, there may be no specific plan. The questions in the checklist will help you define the activities that are relevant.
- For all activities, **assess their implementation status** (whether they were implemented fully, partially or not at all) **and their quality**. The checklist provides you with criteria of good practice.
- **Identify the resources that were needed** to implement the planned activities, both financial and human. **Identify the capacity that was built** to implement future activities.
- **Identify achievements** in terms of (i) completed activities of good quality, (ii) progress towards the specific objectives, (iii) capacity built. To identify progress towards specific objectives, **use the data that were collected as part of documentation of the early implementation phase** provided in the report. Data from follow-up after training (and if available, from routine supervision) are particularly relevant to assess improvements in health care delivery.

  Example 1:

  The specific objective of training health workers was 'to improve the skills of first-level health workers to manage common childhood diseases and to provide appropriate counselling to caretakers about home care and when to return'. Considerable progress has been made towards this objective as follow-up after training has demonstrated that:

  — 90% of children who needed referral were referred

  — 85% of children needing an antibiotic or an antimalarial were given the drug

  — 70% of caretakers knew how to give the drug

  — 60% of caretakers knew when to return

  etc.

Example 2:

A specific objective under 'organization and management' was to create district ownership for IMCI. At the end of the early implementation phase, district health authorities had allocated a budget for IMCI and included IMCI activities into the district health plan for the next year. There is a clear commitment on their part to 'own' the IMCI strategy.

- **Identify constraints** that impeded implementation of planned activities or progress towards the objectives.

  Example:

  First-line drugs for IMCI were only available in about 80% of health centres and dispensaries in which there were staff trained in IMCI. Second-line drugs and some pre-referral drugs were only available in 20% of these health facilities. These drugs are not included in the national Essential Drug List and are therefore not provided in the drug kits.

- **Present the findings in the plenary meeting**. Discuss them with other groups and be prepared to receive feedback and comments.

- **Complete or revise the findings** before moving to the next step.

Handout step 2

Identify feasible solutions for the constraints

TASKS FOR STEP 2

- Review the list of constraints and summarize them in main problem statements
- For each main problem, discuss the causes
- Brainstorm on possible solutions to overcome the problems
- Select realistic solutions based on relevance, efficiency and feasibility
- Present the findings in a plenary session.

METHODS TO COMPLETE THE TASKS

- Group discussion
- Application of criteria to select realistic solutions

Guidance for completing the tasks of Step 2

- Look at the list of constraints identified in Step 1. You may find that some constraints are similar in nature or related. **Try to define a limited number of problem statements** which capture the most important constraints. This will help to find the most relevant, efficient and feasible solutions.

  Example:

  In the area of 'organization and management', the list of constraints include:

  — no formal IMCI Working Group established

  — limited interest among programmes to contribute to IMCI

  — no adequate manpower to plan, coordinate and monitor activities

  — no budget line for IMCI

  — limited support from key decision-makers

  — limited involvement of district health team in implementation of activities

  — no district budget for IMCI

  — IMCI not included in district plans

The constraints can be captured in the following problem statements:

— decision-makers are not well committed to the IMCI strategy

— the IMCI strategy has not yet been institutionalized in the MOH

— district health authorities have not yet taken ownership of the IMCI strategy

- For each problem statement, **discuss the causes**.

  Example:

  Decision-makers are not well committed to the IMCI strategy. It is noted that few of them have participated in an orientation meeting. They were not kept informed as activities were planned. Results from follow-up have not been presented to them to illustrate the progress that has been made.

- **Brainstorm freely on possible solutions** to overcome the problems.

  Example:

  Conduct an orientation and coordination meeting involving key officials in the Ministry of Health, and representatives from partner organizations, with the aim to reach a common understanding about the IMCI strategy and to reach consensus about the place of the IMCI strategy in the national health development plan.

  Organize periodic meetings involving senior staff in the Ministry of Health and partner organizations, to brief them about the findings of follow-up after training and routine supervision, and to discuss mechanisms for concerted action to solve problems.

- Review the list of possible solutions and **select those solutions that are most relevant, efficient and feasible**.

  — To assess relevance, examine whether the solution is directly related to the cause of a problem and intended to remove that cause.

  — To assess efficiency, examine whether the solution is likely to be successful in removing or decreasing the cause of a problem.

  — To assess feasibility, decide whether the solution can be implemented with available personnel, funds and other resources. If not, can additional resources be obtained?

  Discuss whether these solutions alone have a significant impact on the problem, or whether certain other solutions must be linked to them.

  Example:

  Referral presents a problem for health workers in many health centres. Limited data indicate that a minimum delay of two hours can be expected. The referral hospital is badly equipped and the quality of care is low. Mothers have little confidence in taking their children there.

  As part of the solutions, it is not enough to train health workers at referral care level. The management of referral centres should be strengthened through

management support training that is part of health sector reforms. Also, community-based activities should aim to involve communities in facilitating transport of people requiring it. All these solutions are feasible, but require a long-term effort.

- **Present the main problems** (or problem statements) **and the solutions** that are relevant, efficient and feasible in the plenary meeting.
- **Discuss the solutions in light of the findings of other groups**. Complement and revise the list of solutions according to the feedback and comments provided by other participants.

Handout step 3

Assess how the IMCI strategy should be expanded and develop recommendations for what should be done

THE TASKS OF STEP 3

- Decide on activities that are critical as a prerequisite for expansion
- Decide on the relative emphasis of activities in each of the three components
- Decide on the pace of expansion
- Develop recommendations for what should be done.

METHODS TO COMPLETE THE TASKS

Optional:

- Presentation in plenary session to introduce the objectives and implications of expansion (by IMCI coordinator or external facilitator, see Figure 25)
- Group discussion
- Plenary discussion to reach common conclusions and coherent recommendations

Preamble to the tasks

The aim of the final step is to decide **how and at what pace** the IMCI strategy will be expanded. This is a critical step, which forms the basis for developing an implementation strategy and a plan of action during the planning meeting for the expansion phase. Participants will work in their original groups to answer these questions. Each group should not only focus on their area but also take into consideration other findings of the review. The plenary session at the end of the step will help to arrive at coherent conclusions.

Generally speaking, the approach for expansion (how and at what pace it should take place) can be captured in one of the following scenarios:

i. The findings of the previous steps have indicated that the IMCI strategy meets the needs of the country. However, basic conditions to make its implementation successful are lacking. They need to be put in place before implementing a broader range of activities.

Examples:

There is no clear management structure for IMCI, and responsibilities for future implementation have not been allocated. This problem needs to be solved as a matter of priority. Only a functioning working group and a designated IMCI coordinator will make it possible and feasible to implement the IMCI strategy.

There are hardly any drugs at health facilities due to an acute breakdown in the central procurement and delivery system. This problem needs to be addressed, prior to implementing training of health workers.

ii. The early implementation phase has shown that the IMCI strategy is suitable for the country. However, resources are limited, and technical capacity at central and district levels to implement the various aspects of the strategy is still weak. It is therefore important to focus on consolidating achievements in the early implementation districts, and to allow sufficient resources for a thorough preparation in any new district that will be involved. In this scenario, the recommendations of the review should clearly indicate the need for a gradual expansion of activities in a focused manner, with due emphasis on all three components.

Example:

There was very little experience at district level to plan and implement IMCI activities. Therefore districts required a lot of central support. In the early implementation phase activities focused on training, but there was a need to strengthen activities in the other two components as well. The focus of expansion should be on consolidating achievements in these early implementation districts. The IMCI Working Group needs to assist the districts in planning a better balance of activities in all three components, and be available to participate in district-level activities in order to strengthen the district capacity. In planning the pace of expansion, the working group should take account of the fact that each new district will require considerable central-level input in order to achieve an acceptable standard of implementation.

iii. The early implementation phase has been successful. It has been shown that the IMCI strategy is suitable for the country. There is a strong central-level working group and districts are able to plan, implement and monitor activities. The recommendations can focus on expansion of the IMCI strategy to other districts and on increasing the range of interventions, in line with national and district capacity and available financial resources.

Example:

During the early implementation phase, considerable capacity was built to implement IMCI activities, particularly training and follow-up after training. There is a strong commitment to IMCI at all levels. District authorities have initiated activities to improve drug availability and supervision. As careseeking is low, there is a need to focus more clearly on improving family and community practices in future. In this scenario, there is scope to expand the IMCI strategy in line with existing capacity to other districts and to expand the scope of activities to include more interventions in all three components.

When the group works on Step 3, the conclusions are likely to meet one of the above scenarios.

Guidance for completing the tasks of Step 3

- Look at the list of problems and realistic solutions developed in your group and consider the findings of the review overall. **Decide how each problem will affect expansion**. Specify whether there are any critical problems that should be solved prior to expanding other activities. Specify whether there are realistic solutions to solve these problems.

  Example 1:

  The IMCI strategy has not yet been institutionalized in the Ministry of Health. Feasible solutions include the appointment of a full-time IMCI focal point in the maternal and child health unit of the Ministry of Health and the establishment of an IMCI Working Group. The implementation of these solutions is critical for expansion. They should be implemented as a priority, before proceeding to other activities. Without this, the IMCI strategy can not be expanded successfully.

  Example 2:

  There are major differences in recording and reporting requirements for HIS and IMCI. The IMCI Working Group will discuss possible solutions and the current differences need not hinder expansion.

  Example 3:

  Referral care of children has proved to be inadequate in most places implementing IMCI. The problems include reduced confidence in quality of care at referral centres, difficulties in transport, and financial and social constraints of caretakers. The overall solutions to the problems will require inputs from various sectors and are unlikely to be achieved in a short time. The referral possibilities and potential for improving them need to be considered as criteria for expansion into new areas.

- **Decide on the relative balance of activities in the three components**. Indicate how activities in the area under discussion should relate to activities in other components.

  Example 1:

  Training of health workers has been successfully implemented, but care-seeking behaviour is low. Only 20% of children needing assessment are brought to health facilities. The group dealing with improving family and community practices recommends that in districts with IMCI-trained health workers, community-based efforts should be undertaken to improve care-seeking behaviour. The planning of intervention in this area should be balanced with planning the expansion of training.

  Example 2:

  The commitment and capacity of district health teams to the IMCI strategy is low. It is important to allocate sufficient time and resources to conduct

district orientation and planning workshops. National staff should also be available to help district authorities initiate key IMCI activities and also sustain their quality.

- **Decide on the pace of expansion**. Considering what would be needed at district and national level to make future implementation a success, assess what a feasible rate of expansion would be. **Take into account existing capacity** at all levels, including human, financial and other resources.

  Example:

  Considering that central-level input is required in at least the first two courses in each district and there is limited availability of central-level trainers, expansion of training should not exceed five districts per year during the next two years.

- **Develop recommendations** for what should be done in your area under review, based on the solutions to problems and your assessment of how and at what pace expansion should take place. State clearly:

  — the activities that are critical for any future success of IMCI implementation and should have priority

  — activities that were implemented well and should be sustained

  — what else should be done to overcome current constraints or expand into new areas of activity

  — the emphasis on interventions in one area relative to other areas

  — the recommended pace of expansion into new districts.

- Present the findings in a plenary session. Make revisions in light of other groups' findings. **Work towards achieving a coherent set of recommendations that describe what should be done in future, balancing activities in all three components and setting clear priorities for immediate action**.

Annex H

Priority IMCI indicators at health-facility level and at household level

List of priority IMCI indicators at health-facility level

Health worker skills

Assessment

1. Child checked for three general danger signs
2. Child checked for the presence of cough, diarrhoea, and fever
3. Child's weight checked against a growth chart
4. Child's vaccination status checked
5. Index of integrated management
6. Child under two years of age assessed for feeding

Correct treatment and counselling

7. Child needing oral antibiotic and/or antimalarial is prescribed drug(s) correctly
8. Child not needing antibiotic leaves the facility without antibiotic
9. Caretaker of sick child is advised to give extra fluids and continue feeding
10. Child needing vaccinations leaves facility with all needed vaccinations
11. Caretaker of child who is prescribed ORS and/or oral antibiotic and/or an antimalarial can describe how to give the treatment

Correct management of severely ill children

12. Child needing referral is referred

Health system supports for IMCI

Supervision

13. Health facility received at least one supervisory visit that included observation of case management during the previous six months

Drugs, equipment and supplies

14. Index of availability of essential oral treatments
15. Index of availability of injectable drugs for pre-referral treatment
16. Health facility has the equipment and supplies to provide full vaccination services
17. Index of availability of four vaccines

IMCI training coverage

18. Health facilities with at least 60% of health workers who manage children trained in IMCI

Caretaker satisfaction

19. To be determined at country level

Priority IMCI indicators at health-facility level

(*A validated classification is a classification made by an IMCI-trained expert clinician after re-examining the child. The indicators listed below refer to children two months up to five years of age, unless otherwise stated*)

1. *Child checked for three general danger signs*. The proportion of children checked for the three general danger signs.

   Numerator: Number of sick children aged 2 months up to five years seen who are checked for three danger signs (is the child able to drink or breastfeed, does the child vomit everything, has the child had convulsions)

   Denominator: Number of sick children aged 2 months up to five years seen

2. *Child checked for the presence of cough, diarrhoea and fever*. The proportion of children checked for the presence of cough, diarrhoea, and fever.

   Numerator: Number of sick children seen whose caretakers were asked about the presence of cough, diarrhoea, and fever

   Denominator: Number of sick children seen

3. *Child weight checked against a growth chart*. The proportion of children who have been weighed the same day and have their weight checked against a recommended growth chart.

   Numerator: Number of sick children seen who have been weighed the same day and have their weight checked against a recommended growth chart

   Denominator: Number of sick children seen

4. *Child vaccination status checked*. The proportion of children who have their vaccination status checked.

   Numerator: Number of sick children seen who have their vaccination card or vaccination history checked.

   Denominator: Number of sick children seen

5. *Index of integrated assessment*. Mean of assessment tasks performed per sick child assessed (need further fieldtest)

   Definition: Arithmetic mean of 10 assessment tasks performed for each child (checked for three danger signs, checked for the three main symptoms, child weighed and weight checked against a growth chart, checked for palmar pallor, and checked for vaccination status divided by ten).

Calculation:
- — checked for 'ability to drink or breastfeed', 'vomits everything', and 'convulsions', 1 point each
- — checked for presence of 'cough & fast/difficult breathing', 'diarrhoea', and 'fever', 1 point each
- — child weighed the same day and child's weight used against a recommended growth chart, 1 point each
- — child checked for palmar pallor, 1 point
- — child vaccination status checked (card or history), 1 point

6 *Child under two years of age assessed for feeding practices*. The proportion of children under two years of age whose caretakers are asked about breastfeeding, complementary foods, and feeding practices during this episode of illness.

Numerator: Number of sick children under two years of age whose caretakers are asked if they breastfeed this child, whether the child takes any other food or fluids other than breastmilk, and if during this illness the child's feeding has changed.

Denominator: Number of sick children under two years of age seen

7. *Child needing an oral antibiotic and/or an antimalarial is prescribed the drug correctly*. The proportion of children who do not need urgent referral, who need an oral antibiotic and/or an antimalarial who are prescribed the drug(s) correctly.

Numerator: Number of sick children with validated classifications, who do not need urgent referral, who need an oral antibiotic and/or an antimalarial (pneumonia, and/or dysentery, and/or malaria, and/or acute ear infection, and/or anaemia in high malaria risk areas) who are correctly prescribed them, including dose, number of times per day, and number of days

Denominator: Number of sick children with validated classifications who do not need urgent referral, who need an oral antibiotic and/or an antimalarial.

8 *Child not needing antibiotic leaves the facility without antibiotic*. The proportion of children who do not need urgent referral and who do not need an antibiotic for one or more IMCI classifications who leave the facility without having received or having been prescribed antibiotics.

Numerator: Number of children with validated classification who do not need urgent referral and do not need an antibiotic for one or more IMCI classifications (no pneumonia: cough or cold, diarrhoea with or without dehydration, persistent diarrhoea, malaria, fever—malaria unlikely, measles, chronic ear infection, no ear infection, anaemia or very low weight, and/or no anaemia and not very low weight) who leave the facility without receiving antibiotics or a prescription for antibiotics for those validated classifications.

Denominator: Number of children seen who do not need urgent referral and who do not need an antibiotic for one or more IMCI classifications

9. *Caretaker of sick child is advised to give extra fluids and continue feeding*. The proportion of sick children whose caretakers are advised to give extra fluid and continue feeding.

   Numerator: Number of sick children with validated classifications, who do not need urgent referral, whose caretakers are advised to give extra fluid **and** continue feeding

   Denominator: Number of sick children with validated classifications, who do not need urgent referral

10. *Child needing vaccinations leaves facility with all needed vaccinations*. The proportion of children needing vaccinations (based on vaccination card or history) who leave the health facility with all needed vaccinations (according to national immunization schedule).

    Numerator: Number of children who need vaccinations (based on vaccination card or history) who leave the health facility with all needed vaccinations

    Denominator: Number of children seen who need vaccinations (based on vaccination card or history)

11. *Caretaker of child who is prescribed ORS, and/or an oral antibiotic and/or an oral antimalarial knows how to give the treatment*. The proportion of children prescribed ORS, and/or an oral antibiotic and/or an oral antimalarial whose caretakers can describe correctly how to give the treatment.

    Numerator: Number of sick children prescribed ORS, and/or an oral antibiotic and/or an oral antimalarial whose caretakers can describe how to give the correct treatment including the amount, number of times per day, and number of days

    Denominator: Number of sick children prescribed ORS and/or an antibiotic and/or an antimalarial

12. *Child needing referral is referred*. The proportion of children needing referral who are referred by the health workers.

    Numerator: Number of sick children with a validated classification of severe disease needing referral (one or more danger signs, severe pneumonia or very severe disease, and/or severe dehydration with any other severe classification, and/or severe persistent diarrhoea, and/or very severe febrile disease, and/or severe complicated measles, and/or mastoiditis, and/or severe malnutrition or severe anaemia) who were referred by the health workers

    Denominator: Number of sick children with a validated classification of severe disease needing referral

13. *Health facility received at least one supervisory visit that included observation of case management during the previous six months*. The proportion of health facilities that received at least one visit of routine supervision that included the observation of case management during the previous six months.

Numerator: Number of health facilities that received at least one visit of routine supervision (excluding the follow-up visits to health workers shortly after their training that are part of IMCI training) that included the observation of case management during the previous six months

Denominator: Number of health facilities surveyed

14. *Index of availability of essential oral treatments*. Essential oral drugs for home treatment of sick children present the day of visit

Definition: Arithmetic mean of essential oral drugs recommended for home treatment of diarrhoea, dysentery, pneumonia, fever, malaria, and anaemia available at each facility the day of visit, divided by eight.

Calculation:
— ORS, 1 point
— recommended antibiotic for pneumonia, 1 point
— recommended antibiotic for dysentery, 1 point
— recommended antimalarial, 1 point
— vitamin A, 1 point
— iron, 1 point
— mebendazole, 1 point
— paracetamol/aspirin, 1 point

15. *Index of availability of injectable drugs for pre-referral treatment*. Injectable antibiotics and antimalarials for pre-referral treatment of sick children and young infants that are available in each facility the day of visit.

Definition: Arithmetic mean of recommended injectable pre-referral treatment for children and young infant with severe classification needing immediate referral, divided by four.

Calculation:
— recommended intramuscular antibiotic for children, 1 point
— quinine, 1 point
— gentamicine, 1 point
— benzylpenicillin, 1 point

16. *Health facility has the equipment and supplies to support full vaccination services*. The proportion of health facilities that have the equipment and supplies to provide full vaccination services on the day of survey.

Numerator: Number of health facilities that have the equipment and supplies to support full vaccination services (functioning refrigerator or cold chain, and functioning sterilizer and needles/syringes or disposable needles/syringes available on the day of survey

Denominator: Number of health facilities surveyed

17. *Index of availability of four vaccines*. Mean of four recommended antigens available at each facility the day of visit.

Definition: Arithmetic mean of recommended vaccines available at each facility the days of visits, divided by four.

Calculation:
— BCG, 1 point
— Polio, 1 point
— DPT, 1 point
— Measles, 1 point

18. *Health facilities with at least 60% of workers managing children trained in IMCI*. The proportion of first-level health facilities with at least 60% of health workers managing children trained in IMCI.

Numerator: Number of health facilities with at least 60% of health workers managing children who are trained in IMCI

Denominator: Number of health facilities surveyed

19. *Caretaker satisfaction*. To be determined at country level

List of priority indicators for IMCI at household level

Nutrition

20. Child under 4 months of age is exclusively breastfed
21. Child aged 6–9 months receives breastmilk and complementary feeding
22. Child under 2 years of age is low weight for age

Prevention

23. Child 12–23 months of age is vaccinated against measles before 12 months of age
24. Child sleeps under an insecticide-treated net (in malaria-risk areas)

Home case management

25. Sick child is offered increased fluids and continued feeding
26. Child with fever receives appropriate antimalarial treatment (in malaria-risk areas).

Careseeking

27. Caretaker knows at least two signs for seeking care immediately

Priority indicators for IMCI at household level

(*When specified, age groups include children aged exactly the lower number of months up to the end of the upper number of months. As an example, 12–15 months means children aged exactly 12 months up to one day less than 16 months. When age group are not specified, indicators refer to children up to five years of age*)

20. *Child under 4 months of age is exclusively breastfed*. Proportion of infants aged less than 4 months who were exclusively breastfed in the last 24 hours

Numerator: Number of infants aged less than 4 months (less than 120 days) who were exclusively breastfed in the last 24 hours.

Denominator: Number of infants aged less than 4 months (less than 120 days) surveyed.

21. *Child aged 6–9 months receives breastmilk and complementary feeding*. Proportion of infants aged 6–9 months receiving breastmilk and complementary foods

    Numerator: Number of infants aged 6–9 months who received breastmilk and complementary foods* in the last 24 hours.

    Denominator: Number of infants aged 6–9 months surveyed.

22. *Child under 2 years of age who is low weight for age (underweight prevalence)*. Proportion of children who are below –2SD from the median weight for age according to the WHO/NCHS reference population.

    Numerator: Number of children under 2 years of age whose weight is below –2SD from the median weight of the WHO/NCHS reference population for their age.

    Denominator: Number of children under 2 years of age surveyed.

23. *Child 12–23 months of age is vaccinated against measles before 12 months of age*. Proportion of children aged 12–23 months vaccinated against measles before 12 months of age.

    Numerator: Number of children aged 12–23 months vaccinated against measles before 12 months of age

    Denominator: Number of children aged 12–23 months surveyed.

24. *Child sleeps under an insecticide-treated net (in malaria risk areas)*. Proportion of children who sleep under insecticide-treated** nets in malaria-risk areas

    Numerator: Number of children who slept under an insecticide treated net the previous night

    Denominator: Number of children surveyed.

25. *Sick child is offered increased fluids and continued feeding*. Proportion of sick children for whom the caretaker offered increased fluids and continued feeding.

    Numerator: Number of children who were reportedly sick in the previous two weeks and for whom the caretaker offered increased fluids and the same amount or more food.

    Denominator: Number of children surveyed who were reportedly sick in the previous two weeks.

26. *Child with fever receives appropriate treatment*. Proportion of children with fever who received an appropriate antimalarial treatment (in malaria-risk areas).

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* Solid and/or semi-solid food

** Insecticide-treated net include immersion in an insecticide solution and/or regular direct spraying

Numerator: Number of children who were reported to have had fever in the previous two weeks and were treated with a locally recommended antimalarial.

Denominator: Number of children surveyed who were reported to have had fever in the previous two weeks.

27. *Caretaker knows at least two signs for seeking care immediately*. Proportion of caretakers who know at least 2 signs for seeking care immediately.

Numerator: Number of caretakers of children who know at least 2 of the following signs for seeking care immediately*: child not able to drink or breastfeed, child becomes sicker despite home care, child develops a fever (in malaria-risk areas or if child aged less than 2 months), child has fast breathing, child has difficult breathing, child has blood in the stools, child is drinking poorly.

Denominator: Number of caretakers of children surveyed.

* Local terms to be identified

Annex I
Milestones for IMCI implementation

Overview

Regional and global monitoring of IMCI implementation is be based on the monitoring of progress in the implementation of key IMCI activities, supplemented by a limited number of indicators. The purpose of this document is to present those activities and milestones. IMCI indicators are described elsewhere.

Milestones are country achievements related to stages of IMCI implementation. The milestones have been developed to reflect the three components of the IMCI strategy: improving health worker skills, improving the health system to support IMCI, and improving child care at family and community levels. WHO Regional Offices and Headquarters, in collaboration with interested partners, will document the number of countries passing each milestone on an annual basis.

Indicators are quantitative measures that can be repeated over time to track progress toward programme objectives. A limited number of indicators will be needed for the quality, coverage and outcomes of IMCI activities conducted by countries. Trained individuals will measure these indicators during visits to facilities and observations of IMCI-trained health workers, as part of district- or national-level monitoring and evaluation activities. They will report indicator levels on an annual basis and will specify that the denominators are children managed by IMCI-trained health workers in first-level facilities, or facilities with at least one IMCI-trained health worker.

Additional key IMCI activities and indicators for global monitoring will be identified as new IMCI interventions become available.

Description of IMCI milestones for global monitoring

1. Improving health workers' skills

The number of countries with:

1.1 Adapted IMCI guidelines. This milestone indicates that the adaptation of the IMCI guidelines has been completed, and that guidelines and training materials are ready to be reproduced for implementation.

1.2 At least three IMCI in-service training courses for health workers managing children in first-level facilities conducted. This milestone indicates that capacity for facilitation has been created, that training has gone beyond what may be an initial model course, that the in-service IMCI training course has been

used with its intended target audience and that some families in the country have access to IMCI-trained health workers.

1.3 First pre-service training conducted. This milestone indicates that countries have introduced and completed the first round of pre-service training for medical or paramedical health workers, using available IMCI training materials.

1.4 Breastfeeding counselling training conducted. Countries will reach this milestone when at least one breastfeeding counselling course (40 hours) has been conducted for selected health workers to whom mothers can be referred by an IMCI trained health worker working in first-level facilities.

1.5 First interventions to improve health workers' skills at referral level conducted. This milestone will capture any interventions to improve the skills of health workers managing children at referral centres (e.g., training in management of severely malnourished children, introduction of guidelines for referral care). This milestone does not include training in first-level IMCI care nor training in breastfeeding counselling of health workers working in these referral centres.

2. Improving the health system to support IMCI

The number of countries in which:

2.1 National policies support the appropriate use of drugs needed for IMCI. Countries will reach this milestone when all the drugs recommended in the national adaptation of the IMCI guidelines (for first-level facilities and referral facilities when appropriate) are included in the national Essential Drug List and approved for use at the appropriate level of the health system by IMCI trained staff.

2.2 IMCI strategy is part of the national health policy. This milestone reflects a country's commitment to IMCI implementation. To achieve this milestone, a written national health policy document should state clearly that IMCI is a strategy to achieve national objectives for health.

2.3 IMCI is included in at least three district development plans. Annual district plans are key tools for district management in countries with decentralised systems. This milestone reflects district ownership and captures part of the efforts made by districts to integrate IMCI in their overall planning and management cycle.

2.4 First district supervisors have been trained in IMCI. This milestone indicates efforts made by countries to strengthen existing supervision activities at district level. The combination of improved case management skills of health workers and improved support supervision are likely to help maintain health worker performance after training.

2.5 Review/replanning based on information collected through IMCI monitoring has been conducted in at least three districts. This milestone reflects the capacity of districts to implement IMCI routine monitoring and to conduct periodic review and evaluation to plan for further IMCI activities.

2.6 Assessment of factors other than health workers' case management skills that affect referral care conducted in three districts. This milestone tracks any assessment and planning for improvement of factors (other than training of health workers in case management) that affect the delivery or use of referral services in a district (e.g., better organization of work at the referral centre, improved drug supply, improved access).

3. Improving child care at family and community levels

Number of countries with:

3.1 Existence of adequate minimum counselling aids. The milestone indicates that countries have developed counselling aids, including at least age-specific guidance for feeding children and advice on when to return to the facility immediately, that are consistent with IMCI guidelines.

3.2 All widely-used health education messages compatible with IMCI. This milestone is achieved when effective actions have been taken to ensure that none of the health education messages used widely in districts implementing IMCI are incompatible with IMCI.

3.3 National IMCI strategy includes identified priorities to improve family and community practices. This milestone indicates that steps have been taken in the context of IMCI implementation to identify and prioritize family and community practices that need improvement.

Annex J

Selected exercises from the IMCI training course for first-level health workers

Participant's notes

A. Assess and classify

Exercise 1. Case study: Wambui

Wambui is 8 months old. She weighs 6 kg. Her temperature is 39 °C.

Her father told the health worker, "Wambui has had cough for 3 days. She is having trouble breathing. She is very weak." The health worker said, "You have done the right thing to bring your child today. I will examine her now."

The health worker checked for general danger signs. The mother said, "Wambui will not breastfeed. She will not take any other drinks I offer her." Wambui does not vomit everything and has not had convulsions. Wambui is lethargic. She did not look at the health worker or her parents when they talked.

The health worker counted 55 breaths per minute. He saw chest indrawing. He decided Wambui had stridor because he heard a harsh noise when she breathed in.

Record Wambui's signs on the Recording Form below.

Now look at the classification table for cough or difficult breathing on the chart. Classify this child's illness and write your answer in the Classify column. Be prepared to explain to your facilitator how you selected the child's classification.

Pic 1. (p3 in booklet 1)

Exercise 2. Photo booklet

In this exercise you will look at photographs of children with diarrhoea and identify signs of dehydration.

Part 1: Look at photographs 1 and 2 in the photograph booklet. Read the explanation for each photograph:

Photograph 1: This child's eyes are sunken.

Photograph 2: The skin pinch for this child goes back very slowly.

Part 2: Study photographs 3 through 8. Then write your answers to these questions:

Photograph 3: Look at the child's eyes. Are they sunken?

Photograph 4: Look at the child's eyes. Are they sunken?

Photograph 5: Look at the child's eyes. Are they sunken?

Photograph 6: Look at the child's eyes. Are they sunken?

Photograph 7: Look at this photo of a skin pinch. Does the skin go back slowly or very slowly?

Exercise 3. Case study: Adeola

Adeola is 7 months old. She weighs 5.6 kg. Her temperature is 37 °C. Her mother brought her to the clinic because Adeola has diarrhoea.

Adeola does not have any general danger signs. She does not have cough or difficult breathing.

The health worker assessed Adeola for signs of diarrhoea. The mother said the diarrhoea began 2 days ago. There is no blood in the stool. Adeola is not lethargic or unconscious, and she is not restless or irritable. Her eyes are sunken. When offered fluids, Adeola drinks eagerly as if she is thirsty. The skin pinch goes back immediately.

Pic 2. (p5 in booklet 1)

Record Adeola's signs and classify them on the Recording Form.

Pic 3. (p5 in booklet 1)

Exercise 4. Photo booklet

Part 1: Study the photographs numbered 8 through 11. They show examples of common childhood rashes. Read the explanation for each of these photographs.

Photograph 8: This child has the generalized rash of measles and red eyes.

Photograph 9: This example shows a child with heat rash. It is not the generalized rash of measles.

Photograph 10: This is an example of scabies. It is not the generalized rash of measles.

Photograph 11: This is an example of a rash due to chicken pox. It is not a measles rash.

Part 2: Study photographs 12 through 21 showing children with rashes. For each photograph, tick whether the child has the generalized rash of measles.

	Is the generalized rash of measles present?	
	YES	**NO**
Photograph 12		
Photograph 13		
Photograph 14		
Photograph 15		
Photograph 16		
Photograph 17		
Photograph 18		
Photograph 19		
Photograph 20		
Photograph 21		

Exercise 5. Case study: Surita

Surita is 3 years old. She lives in low malaria-risk area. She weighs 10 kg. Her axillary temperature is 38 °C. Her mother brought her to the health centre because she has a cough. She also has a rash.

The health worker checked Surita for danger signs. She was able to drink, she had not been vomiting everything, and she did not have convulsions. She was not lethargic or unconscious.

The health worker assessed Surita's cough. The mother told the health worker Surita had been coughing for 2 days. The health worker counted 42 breaths per minute. The health worker did not see chest indrawing. He did not hear stridor when Surita was calm.

When the health worker asked if Surita had diarrhoea, the mother said, "No."

Next the health worker assessed Surita's fever. It is the dry season and the risk of malaria is low. She has felt hot for 3 days, the mother said. She does not have stiff neck. She does not have a runny nose.

Surita has a generalized rash. Her eyes are red. She does not have mouth ulcers. Pus is not draining from the eye. There is no clouding of the cornea.

Record the child's signs and classify them on the Recording Form.

Pic 4. (p7 in booklet 1)

Exercise 6. Photo booklet

In this exercise, you will look at photographs in the photograph booklet and practice identifying children with palmar pallor.

Part 1: Study the photographs numbered 38 through 40b. Read the explanation below for each photograph.

Photograph 38: This child's skin is normal. There is no palmar pallor.

Photograph 39a: The hands in this photograph are from two different children. The child on the left has some palmar pallor.

Photograph 39b: The child on the right has no palmar pallor.

Photograph 40a: The hands in this photograph are from two different children. The child on the left has no palmar pallor.

Photograph 40b: The child on the right has severe palmar pallor.

Part 2: Now look at photographs numbered 41 through 46. For each photograph, tick (✔) whether the child has severe, some or no palmar pallor.

	Does the child have:		
	Severe pallor	**Some pallor**	**No pallor**
Photograph 41			
Photograph 42			
Photograph 43a			
Photograph 43b			
Photograph 44			
Photograph 45			
Photograph 46			

Exercise 7. Photo booklet

In this exercise, you will look at photographs in the booklet of still photographs and practice identifying signs of severe wasting and oedema in children with malnutrition.

Part 1: Now study photographs 47 through 50.

Photograph 47: This is an example of visible severe wasting. The child has small hips and thin legs relative to the abdomen. Notice that there is still cheek fat on the child's face.

Photograph 48: This is the same child as in photograph 47 showing loss of buttock fat.

Photograph 49: This is the same child as in photograph 47 showing folds of skin ('baggy pants') due to loss of buttock fat. Not all children with visible severe wasting have this sign. It is an extreme sign.

Photograph 50: This child has oedema of both feet.

Part 2: Now look at photographs numbered 51 through 58. For each photograph, tick (✔) whether the child has visible severe wasting. Also look at photograph 59 and tick whether the child has oedema of both feet.

	Does the child have visible severe wasting?	
	YES	**NO**
Photograph 51		
Photograph 52		
Photograph 53		
Photograph 54		
Photograph 55		
Photograph 56		
Photograph 57		
Photograph 58		
	Does the child have oedema of both feet?	
	YES	**NO**
Photograph 59		

Exercise 8. Case study: Kalisa

Kalisa is 11 months old. He weighs 8 kg. His temperature is 37 °C. His mother says he has had a dry cough for the last 3 weeks.

Kalisa does not have any general danger signs. The health worker assessed his cough. It has been present for 21 days. He counted 41 breaths per minute. The health worker does not see chest indrawing. There is no stridor when the child is calm.

Kalisa does not have diarrhoea. He has not had a fever during this illness. He does not have an ear problem.

The health worker checked Kalisa for malnutrition and anaemia. Kalisa does not have visible severe wasting. His palms are very pale and appear almost white. There is no oedema of both feet. The health worker determined Kalisa's weight for age. (Look at the weight-for-age chart in your chart booklet and determine Kalisa's weight for age.)

Record Kalisa's signs and their classifications on the Recording Form.

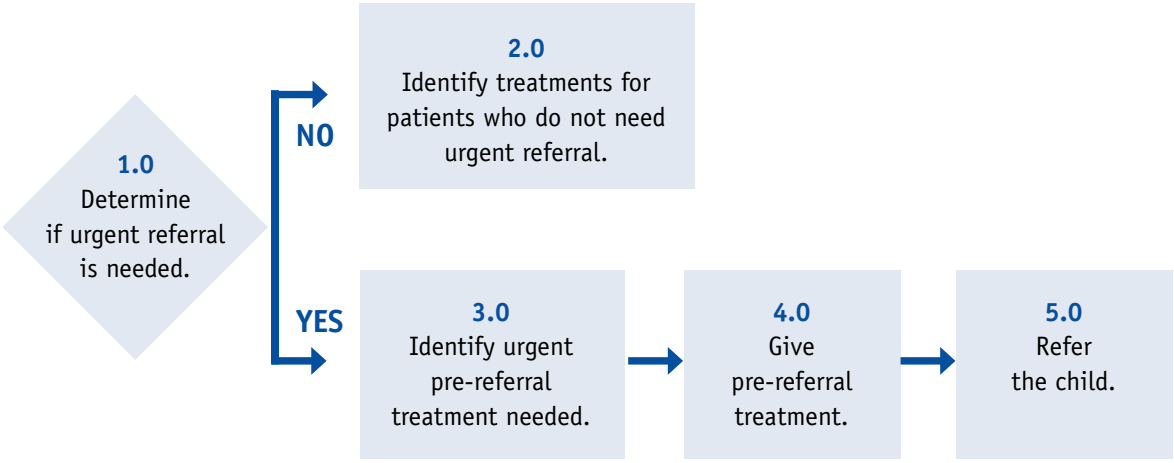
Pic 5. (p10 in booklet 1)

Exercise 9. Video Case study: Faduma

Pic 6. (p11 in booklet 1)

B. Identify treatment

This flowchart shows the steps involved in identifying treatment. Each step corresponds to a section in the module. Most patients will not need urgent referral and will be covered in step 2.0. However, for those patients who do need urgent referral, you will go straight to step 3.0.



In the following exercises you will use the Identify Treatment column of the *ASSESS & CLASSIFY* chart. If a child has only one classification, it is easy to see what to do for the child. However, many sick children have more than one classification. For example, a child may have both PNEUMONIA and an ACUTE EAR INFECTION.

When a child has more than one classification, you must look in more than one place on the *ASSESS & CLASSIFY* chart to see the treatments listed. Some of the treatments may be the same. For example, both pneumonia and ear infection require an antibiotic. You must notice which treatments are the same and can be used for both problems, and which treatments are different.

For some children, the *ASSESS & CLASSIFY* chart says to Refer URGENTLY to hospital. By hospital, we mean a health facility with inpatient beds, supplies and expertise to treat a very sick child. If a health facility has inpatient beds, referral may mean admission to the inpatient department of the same facility.

If the child must be referred urgently, you must decide which treatments to do before referral. Some treatments (such as wicking an ear) are not necessary before referral.

Exercise 10. Case studies

In this exercise you will decide whether or not urgent referral is needed. Tick the appropriate answer.

1. Sara is an 11-month-old girl. She has no general danger signs. She has:
   PNEUMONIA
   ACUTE EAR INFECTION
   NO ANAEMIA AND NOT VERY LOW WEIGHT
   no other classifications

   Does Sara need urgent referral? ☐ YES ☐ NO

2. Neema is a 6-month-old girl. She has no general danger signs. She has:
   NO PNEUMONIA: COUGH OR COLD
   Diarrhoea with NO DEHYDRATION
   PERSISTENT DIARRHOEA
   NO ANAEMIA AND NOT VERY LOW WEIGHT
   no other classifications

   Does Neema need urgent referral? ☐ YES ☐ NO

3. David is a 7-month-old boy. He has no general danger signs. He has:
   MASTOIDITIS
   MALARIA
   NO ANAEMIA AND NOT VERY LOW WEIGHT
   no other classifications

   Does David need urgent referral? ☐ YES ☐ NO

4. Marcel is a 2-year-old boy. He had a convulsion this morning and is not eating well. He has:
   NO ANAEMIA AND NOT VERY LOW WEIGHT, and
   no other classifications.

   Does Marcel need urgent referral? ☐ YES ☐ NO

5. Habib is a 9-month-old boy. He is lethargic. He has:
   Diarrhoea with SEVERE DEHYDRATION
   NO ANAEMIA AND NOT VERY LOW WEIGHT
   no other classifications
   The clinic can provide IV therapy.

   Does Habib need urgent referral? ☐ YES ☐ NO

How to use the back of the Sick Child Recording Form:

Fold the Classify column of the Sick Child Recording Form so that you can see it while looking at the back of the form.

Look at the *ASSESS & CLASSIFY* chart to find the treatments needed for each of the child's classifications.

List each treatment needed on the back of the Sick Child Recording Form.

Example. *Case study: Veda*

Study the opposite Sick Child Recording Form for Veda. The health worker referred to the Identify Treatment column of the *ASSESS & CLASSIFY* chart and listed the treatments needed on back of the form.

Veda does not need referral as she has no general danger signs and no severe classifications. She will be treated at the clinic.

Notice that the health worker chose cotrimoxazole as treatment for both pneumonia and malaria. Also notice that the earliest definite follow-up visit was entered in the appropriate space on the form.

Pic 7. (p15 in booklet 1)

Pic 8. (p16 in booklet 1)

C. Treat the child

Exercise 11. Case studies

In this exercise you will practice using the *TREAT THE CHILD* chart to determine the appropriate oral drug, and the correct dose and schedule. Refer to your *TREAT THE CHILD* chart. Select the concentration of each drug that is available at your clinic.

Assume that this is the first time each child is being treated for the illness, unless otherwise indicated. Record your answer in the space provided.

1. A 6-kg child needs an oral antimalarial for MALARIA.

2. A 4-month-old needs an antibiotic for an ACUTE EAR INFECTION and an oral antimalarial for MALARIA.

3. A 12-kg child needs an oral antimalarial for MALARIA and paracetamol for high fever.

4. A 9-month-old needs vitamin A for MEASLES.

5. A 4-year-old needs vitamin A for MEASLES.

6. A 2-year-old child (11 kg) has ANAEMIA with some palmar pallor and needs iron and mebendazole. The child's card shows he was given mebendazole 3 months ago.

7. A 3-year-old child (14 kg) has ANAEMIA with some palmar pallor and needs iron and mebendazole. The child's card shows he was not given mebendazole previously.

8. A 6-month-old child (7 kg) has ANAEMIA with some palmar pallor and needs iron.

9. A 16-kg child needs an oral antimalarial for MALARIA and iron for ANAEMIA with some palmar pallor. There is no hookworm or whipworm in the area.

Determine priority of advice

When a child has only one problem to be treated, give all of the relevant treatment instructions and advice listed on the charts. When a child has several problems, the instructions to mothers can be quite complex. In this case, you will have to limit the instructions to what is most important. You will have to determine:

— How much can **this** mother understand and remember?

— Is she likely to come back for follow-up treatment? If so, some advice can wait until then.

— What advice is most important to get the child well?

If a mother seems confused or you think that she will not be able to learn or remember all the treatment instructions, select only those instructions that are most essential for the child's survival. Essential treatments include giving antibiotic or antimalarial drugs ***and*** giving fluids to a child with diarrhoea. Teach the few treatments well and check that the mother remembers them.

If necessary, omit or delay the following:

— Feeding assessment and feeding counselling

— Soothing remedy for cough or cold

— Paracetamol*

— Second dose of vitamin A*

— Iron treatment

— Wicking an ear

You can give the other treatment instructions when the mother returns for the follow-up visit.

* Give the first dose of paracetamol or vitamin A. Do ***not*** dispense the other doses. Do ***not*** overwhelm the mother with instructions for later doses.

Exercise 12. Case study: Mela—Practice determining priority of advice

1. Read the case description of Mela. Look at the findings of Mela's assessment and classification on the recording form on the next page.

   A grandmother brought her 3-year-old granddaughter, Mela, to the clinic because she had been coughing with a runny nose for a week, and today she felt hot. The grandmother told the health worker that Mela's ear had been 'wet' for 2 days and her throat was sore. The risk of malaria is high.

   Mela weighs 14 kg and has a temperature of 39 °C. The health worker finds no general danger signs. He counts her breathing at 50 breaths per minute, but notes that she has no chest indrawing and no stridor. Mela also does not have diarrhoea. She does not have a stiff neck and has no signs of measles. The grandmother tells the health worker that Mela never had measles.

   The health worker sees pus draining from one of the ears and notices that Mela has ear pain. There is no tender swelling behind Mela's ears. The health worker finds Mela has no visible severe wasting, no palmar pallor and no oedema. Her weight for age is not very low. The health worker noted that Mela has had all the necessary immunizations.

   The health worker classifies Mela as having PNEUMONIA, MALARIA, ACUTE EAR INFECTION, and NO ANAEMIA AND NOT VERY LOW WEIGHT.

2. Read all of Mela's treatments and the list the treatments on the recording form.

3. Case description (cont.):

   *The health worker shows the grandmother the drugs (cotrimoxazole and paracetamol) she will take home. He tells the grandmother that to treat Mela's PNEUMONIA, MALARIA and ACUTE EAR INFECTION, he is giving her **cotrimoxazole**. He tells the grandmother to give Mela 3 cotrimoxazole paediatric tablets 2 times daily for 5 days. He explains how the tablets should be given and tells them to return in 2 days for follow-up care. He also advises the grandmother to return immediately if Mela is not able to drink or becomes sicker.*

   *Then the health worker tells the grandmother to give Mela **paracetamol** tablets for the ear pain. The paracetamol also lowers a fever. He tells her to give the child 1½ tablets until the ear pain is gone. He explains that the first dose will be given in the clinic, and that the grandmother should give Mela a dose every 6 hours, as needed for pain.*

   *The health worker then shows the grandmother how to make a wick and **dry Mela's ear by wicking**. He lets her practice wicking Mela's ear. He explains that Mela's ear should be wicked 3 times per day until it stays dry. The health worker began to tell the grandmother about how she could **relieve Mela's cough with a home remedy**. The grandmother interrupts the health worker. She tells him that she is very worried. She will try to remember all the instructions, but she does not remember things well. She tells him that she cannot read. The health worker realizes that he will not be able to teach this grandmother all the treatments, instructions and advice properly.*

4. Review your list of treatments, instructions and advice that Mela needs. Which ones are the most important for the health worker to teach the grandmother?

5. Which treatments, instructions or advice could be omitted or delayed if the grandmother is clearly overwhelmed?

You will learn to complete this section in Counsel the mother

Pic 9. (p21 in booklet 1)

You will learn to complete this section in Counsel the mother

Pic 10. (p22 in booklet 1)

D. Counsel the mother

Exercise 13. Case studies

In this exercise you will answer questions about the feeding recommendations.

1. Kiera is 9 months old. She is classified as NO ANAEMIA AND NOT VERY LOW WEIGHT. She is still breastfed. Her diet also includes fruit juice, water, and a thick cereal gruel mixed with oil or mashed banana. How many times per day should Kiera be given these foods?

2. Samuel is 15 months old. He is classified as NO ANAEMIA AND NOT VERY LOW WEIGHT. He still breastfeeds, but he also takes a variety of foods, including rice and bits of meat, vegetables, fruits, and yoghurt. How can the mother judge whether she is giving an adequate serving to Samuel?

3. Ramon is 15 months old. He has PERSISTENT DIARRHOEA and NO DEHYDRATION. He is classified as NO ANAEMIA AND NOT VERY LOW WEIGHT. He stopped breastfeeding 3 months ago and has been taking cow's milk since then. He also eats a variety of family foods about 5 times a day. What recommendations should the health worker make for feeding Ramon during persistent diarrhoea?

   When should Ramon return for a follow-up visit?

Exercise 14. Case study: Marwan

An 11-month-old is classified as NO ANAEMIA AND NOT VERY LOW WEIGHT. He is primarily breastfed but normally also takes other fluids and a thin cereal gruel twice a day. He does not use a feeding bottle. During the illness, his mother has stopped giving cereal gruel and given more breastmilk. His mother believes that, before 1 year of age, children do not really need foods in addition to breastmilk. Foods available to the family are cow's milk, flat bread, rice, cooking oil, vegetables, fruits, and occasionally fish and eggs.

The Sick Child Recording Form for this child is on the next page. Briefly describe his feeding problem(s) in the appropriate box on the front of the form.

Then fold the edge of the form back and write the relevant advice on the reverse side.

Pic 11. (p25 in booklet 1)

Pic 12. (p22 in booklet 1)

E. Young infant

Exercise 15. Case study: Ebai

Ebai is a tiny baby who was born exactly 2 weeks ago. His weight is 2.5 kg. His axillary temperature is 36.5 °C. His mother says that he was born early, at home, and was born much smaller than her other babies. She is worried because his umbilicus is infected. She says he has had no convulsions. The health worker counts his breathing and finds he is breathing 55 breaths per minute. He has no chest indrawing, no nasal flaring and no grunting. His fontanelle is not bulging. There is no pus draining from his ears. His umbilicus has some pus on the tip and a little redness at the tip only. The health worker looks over his entire body and finds no skin pustules. He is awake and content. He is moving a normal amount. He does not have diarrhoea.

Ebai's mother says that she has had no problem breastfeeding him and that he breastfeeds 6 or 7 times in 24 hours. She has not given him any other milk or drinks. The health worker checks his weight for age.

Since Ebai is low weight for age, the health worker decides to assess breastfeeding. His mother says that he is probably hungry now, and puts him to the breast. The health worker observes that Ebai's chin touches the breast, his mouth is wide open and his lower lip is turned outward. More areola is visible above than below the mouth. He is suckling with slow deep sucks, sometimes pausing. His mother continues feeding him until he is finished. The health worker see no ulcers or white patches in his mouth.

Ebai has had no immunizations.

1. Read the infant's assessment results and classify on the recording form.
2. Determine whether or not the young infant should be urgently referred. If so, write just the urgent treatments needed. If the infant does not need urgent referral, write all recommended treatments and advice to the mother on the back of the recording form.
3. If the infant needs an antibiotic, also write the name of the antibiotic that should be given and the dose and schedule.

Pic 13. (p29 in booklet 1)

Pic 14. (p30 in booklet 1)

F. Follow-up

Exercise 16. Case study: Pandit

Read about the child who came for follow-up of pneumonia. Then answer the questions about how you would manage this child. Refer to any of the case management charts as needed.

> At this clinic, cotrimoxazole paediatric tablets (the first-line antibiotic) and amoxycillin tablets (the second-line antibiotic) are both available for pneumonia.

Pandit's mother has brought him back for follow-up. He is one year old. Two days ago he was classified as having PNEUMONIA and you gave him cotrimoxazole. You ask how he is doing and if he has developed any new problems. His mother says that he is much better.

a. How would you reassess Pandit today? List all the signs you would look at and write the questions you would ask his mother.

_____

_____

_____

_____

When you assess Pandit, you find that he has no general danger signs. He is still coughing and he has now been coughing for about 10 days. He is breathing 38 breaths per minute and has no chest indrawing and no stridor. His mother said that he does not have fever. He is breastfeeding well and eating some food (he was refusing all food before). He was playing with his brother this morning.

b. Based on Pandit's signs today, how should he be treated?

_____

_____

_____

_____

Exercise 17. Case study: Lin

Read about the child who returns for follow-up of MALARIA and answer the questions. Refer to any of the case management charts as needed.

In this clinic, chloroquine is the first-line oral antimalarial (150 mg base tablets). Sulfadoxine-pyrimethamine (Fansidar) is the second-line oral antimalarial. Cotrimoxazole is the first-line oral antibiotic for pneumonia.

Lin's mother has brought him back to the clinic because he still has fever. The risk of malaria is high. Two days ago he was given chloroquine for MALARIA. He was also given a dose of paracetamol. His mother says that he has no new problems, just the fever. He is 3 years old and weighs 14 kg. His axillary temperature is 38.5 °C.

a. How would you reassess Lin?

When you reassess Lin, he has no general danger signs. He has no cough and no diarrhoea. He has now had fever for 4 days. He does not have stiff neck. There is no runny nose or generalized rash. He has no ear problem. He is classified as having NO ANAEMIA AND NOT VERY LOW WEIGHT. There is no other apparent cause of fever.

b. How would you treat Lin? If you would give a drug, specify the dose and schedule.

Selected exercises from the IMCI training course for first-level health workers

Facilitator's notes

Preparations

Organization of work

The briefing takes the form of a guided tour through the charts. The chart booklet is followed throughout. The modules are introduced but not used during the briefing. It is suggested that during the briefing only selected exercises are used. The photo booklet and video are used in discussion of some of the exercises.

The briefing is intended to be very interactive. The facilitator acts as the guide and explains things as the tour progresses. She/he must be able not only to provide a very clear understanding of the content and flow of the charts but also to furnish the participants with some information that participants in a course would get from the modules. There are bound to be some technical discussions, but it is suggested that any questions that require a lot of discussion should be referred to a special session.

If there are more than 10 participants, divide them into smaller groups (not more than 8–10 participants in a group). The purpose of the groups is to make interaction easier. If some people know the course well, it would be good to mix them with the newcomers so that some of the interaction can be with them.

You will need for the session

- A copy of Annex J. *Selected exercises from the IMCI training course for first-level health workers: Participant's notes*—one for each participant
- A copy of the IMCI chart booklet—one for each participant
- A copy of the IMCI Photographs module—one for each participant
- One flipchart and felt pens—one set for a small group
- An IMCI video and TV with VCR—one set for a small group
- One full set of IMCI modules from a standard 11-day course (for demonstration)
- One set of IMCI wall charts (for display)—one for a small group
- An overhead projector (optional, if you will be using additional transparencies)

Objective and outcome

At the end of the briefing, the participants should be familiar with what the course covers and the way in which the course integrates or links the components. They should also be familiar with the methods of teaching that are employed to enable them to contribute actively to discussions on the operational aspects of adaptation, planning and implementation.

Introduction

1. Tell participants that this is not a training session. The purpose is to demonstrate the content of the IMCI course *Integrated Management of Childhood Illness* for first-level healthworkers, not to teach it.
2. Explain that the course is 50% practical work in the clinic and 50% classroom work with the modules. The practical builds up as the course progresses. In this exercise, participants will just be looking at the classroom teaching, but they should think of the implications for organizing the practical part.
3. Show them a complete set of modules.
4. Explain and show the overall shape of the algorithm. Use a full-size chart that should be displayed in the room (if available). Say that the intention is not to go through the chart at this stage, but simply to point out the different blocks and the fact that it is a coherent process that starts at the top and goes all the way down. If the participants have never seen CDD/ARI guidelines before, take them through the ARI section to show the principles:
   - Gather information by asking a few standard questions and looking for standard, simple clinical signs
   - Use the information to choose between the Signs boxes—always starting with the pink box and working downwards. Stop when you reach the first box that fits the signs
   - Move to the right and read the classification
   - Move to the right again and see the treatment needed
5. Discuss the significance of the colours: pink—referral, yellow—management at first level health facility, and green—home management.

A. Assess and classify

1. **Explain** that the first step in the chart is asking the mother about the child's problem. This is an excellent opportunity to establish good contact with the mother.
2. **The General Danger Signs.** Explain the need for these as an indication of the child who needs urgent attention but who may not have a specific diagnosis. The chart gives priority throughout to the child who is most sick. Danger signs are elicited first and then kept until the assessment is complete.

Let them imagine an arrow with 'THIS WAY IN' on it pointing to the top of the Danger Signs box, to show that the chart is a one way system with only one entrance, at the very top, and only one exit, at the bottom.

3. **The Patient Recording Form.** Introduce it now as a simple way of remembering the information as they go along. For now, just let participants see where the danger signs will be entered. Help them to use the form throughout the briefing in the demonstration exercises in parallel with the chart. Using the form helps participants to understand how the health worker can handle all this information.

4. **Cough and difficult breathing.** The arrow now continues from the bottom of the General Danger Signs box to the top of the 'Then ask about main symptoms' box. This imaginary arrow (which can be drawn on the chart) goes straight down the chart, of course. It is useful to keep referring to it to keep the participants moving down the chart and seeing the flow.

5. **Go through the ARI section of the guidelines as far as Classify.** Don't let participants stray into Treat. Explain that the first task of the health worker is to assess and classify and that the *Assess and Classify* module restricts itself to that. They will come to Treat in due course. Go through the questions and the signs and then let them look at how the signs are distributed in the Signs column of the Classification table. Introduce the separation of the signs according to the severity they imply. Discuss particularly the concept of a unique classification under a particular heading. Do all of this with questions to individuals and with reference to the patient record form.

6. **Use Exercise 1**—Case study: Wambui. Read the case aloud and ask participants to check off the signs in the Patient Recording Form. Then go to the chart booklet and get one or more participants to transfer the signs to the Signs column and conclude on the classification. Draw attention to the fact that the history starts with danger signs, not with examination for cough or difficult breathing—this theme should be repeated often. For those who know their ARI well, you may need to discuss the absence of wheeze and the different terminology of the classification. Keep it short and defer any longer discussion.

7. **Diarrhoea**
   Start with the imaginary arrow and follow it down from Cough and Difficult Breathing to the Diarrhoea box. If participants have grasped the principle of the guidelines, they will go through this easily. As with ARI, discuss your way through the questions, signs and classification. Use Exercise 2—the photos of dehydration—as an example. Head off any questions about the simplification of the classification scheme by explaining that absence of tears and dry mouth are superfluous. The lack of starred signs may also need explaining.

   Show how the general danger signs keep recurring in the pink boxes.

8. Then use **Exercise 3**—Case study Adeola—as a useful demonstration of the major points. As before, get the group to talk their way through the exercise.

9. **Fever**
   This will be new to most participants and needs some initial explanation. Show the principles on the chart:

   - The guidelines work like all the others
   - The principle division comes from the risk of malaria
   - Where there is a high risk of malaria every child with fever is classified as having malaria, BUT MAY HAVE OTHER THINGS AS WELL, including other conditions on the chart
   - In low-risk areas, the child is only classified as malaria if no other cause for the fever can be found—give examples from the chart

   There may he confusion about the part of the box below the dotted line. Explain that because measles is an important disease in its own right and in relation to other conditions, all children with fever are assessed for the possibility of measles. The bottom part of the box is used only if the child has a history of measles in the past three months or signs suggestive of measles.

10. **Use Exercise 4** (uses photo booklet) to illustrate how participants learn about rash.

    Make the point that this is one part of the chart that will almost always require adaptation. Discuss briefly differences in malaria endemicity and the existence of other causes of fever, which may have to be included (e.g. dengue haemorrhagic fever).

11. **Use Exercise 5**—Case study Surita—to take the group though the fever section of the chart, discussing each step. Draw attention at this stage, using the Patient Recording Form and the chart, to show how the classification picture for the child is building up.

12. **Ear Problem**
    Take the group through the chart section. The importance of acute ear infections rests with both the (relatively rare) mortality from mastoiditis and meningitis, and the considerable and severe morbidity and long-term disability.

13. **Malnutrition**
    This is a new section and needs explanation.

    The imaginary arrow ALWAYS passes through this section, so ALL children are assessed for their nutritional status.

    The principles of the algorithm are the same:

    - Four clinical signs—wasting, palmar pallor, oedema, weight-for-age
    - Use of these signs to classify the child's nutritional status

14. **Use Exercises 6 and 7** to demonstrate the first half of each and then do the second half going round the class or by popular acclamation.

15. **Use Exercise 8**—Case study Kalisa—to show the flow as far as nutrition.

16. **Check Immunization Status and assess other problems**
    State the obvious about not missing opportunities for vaccination.

Discuss with the group the management of a child who is brought in with a skin infection. The whole chart would be used as a quick screen for other, more dangerous, conditions before coming to examination of the skin condition. You might like to note at this point that the whole chart provides a useful preliminary screening that could be applied to all children coming to the health facility.

17. **Video**
Use Exercise 9—Video case study: FADIMA—(Video 1, minutes 44–62) to show the use of the whole algorithm. Discuss as necessary.

B. Identify treatment

1. Introduce principles of the treatment identification. Use the text and figure under B. IDENTIFY TREATMENT. Show how to move from Classify to Treat on the chart.
2. **Use exercise 10**—Case studies—to show linkage (this relates only to referral, but it makes the point).
3. Demonstrate the use of the backside of the Patient Recording Form for writing down treatment needs. **Use Example**—Case study Veda.

C. Treat the child

1. Show the basic form and content of the TREAT THE CHILD chart. It is a reference document to support the clinical guidelines.
2. **Use Exercise 11**—Case studies—to demonstrate how the treatment boxes are to be used
3. Refer back to **Example**—Case study Veda—to see how the guidelines relate to the Patient Recording Form and the treatment chart.

   NOTE that this chart needs adaptation to suit country needs.
4. **Communication skills**: describe the approach taken in communication skills training:
   - Ask, Praise, Advise, Check
   - Give information
   - Show an example
   - Let her practise
5. **Treat local infections at home**: Walk through chart boxes and show how they relate to the various boxes in the TREATMENT column in the Assess and Classify chart.
6. **Priority of Advice**. Participants may he worried that the health worker may he flooding the mother with advice and medicine. Show and discuss the text on Determine Priority of Advice. Then take them through **Exercise 12**—Case study Mela—to summarize the treatment process, including prioritizing. Let

them follow the Patient Recording Form while you read the information on the case aloud.

7. Explain that the module has a number of annexes that are there to provide additional information on specific treatment issues.

D. Counsel the mother

1. This will be new to most participants and discussion needs to centre on the principles behind it.
2. **Feeding Recommendations**: Introduce the principle, using **page 27** in the IMCI Chart booklet:
   - For children in each of five age groups there is a standard for the type of food they should be receiving and the frequency of feeds. These are locally specific.
   - The health worker assesses the child's present feeding with reference to these standards and bases advice to the mother on them.
3. **Use Exercise 13**—Case Studies—to show how the chart provides information to the worker.
4. **Feeding problems:** The principle is that in assessing the child's feeding the health worker may uncover problems other than those covered by the feeding recommendations. The chart contains suggested solutions to common problems.
5. **Use Exercise 14**—Case study Marwan—to demonstrate how it works.
6. **Adaptation.** Discuss with the group the need for local adaptation for feeding recommendations and feeding problems.

E. Young infant

1. The approach is the same as for older children. The algorithm is simpler because of the emphasis on referring most young infants with serious illness and on nutrition.
2. Go through the list of signs in the Ask, Look, Listen, Feel box. Show how they translate into the Signs box and the classification.
3. **Use Exercise 15**—Case study Ebai—to demonstrate the use of the Patient Recording Form and the chart as far as Does the Child have Diarrhoea.
4. Check for feeding problems. Outline the principles, using the chart.
   - Questions concerning how and with what the child is fed.
   - Determine weight-for-age.
   - Assess breastfeeding if indicated.
   - Classify using the signs.
5. **Assess breastfeeding**. Show the video on breastfeeding assessment (Video 2 minutes 102–112).

6. **Return to Exercise 15**—Case study Ebai—to demonstrate the complete Assessment and Treat process. The group should follow each stage on the chart and the Patient Recording Form.

F. Follow-up

1. Follow-up has its own module. The chart splits follow-up between the two age groups. Introduce and illustrate on the chart the principle that the chart gives a standard follow-up procedure for each type of illness.
2. Use **Exercise 16**—Case study Pandit—and **Exercise 17**—Case study Lin—to show how the follow-up uses the Assess and Classify chart and the treatment charts.

G. General discussion

This may be a time to return to some of the technical questions.

Answer Sheets

A. Assess and classify

Exercise 1. Case study: Wambui

Pic 15. (p10 in booklet 2)

Exercise 2. Photo booklet

Part 1

Photograph 1: This child's eyes are sunken.

Photograph 2: The skin pinch for this child goes back very slowly.

Part 2

Photograph 3: This child has sunken eyes.

Photograph 4: The child has sunken eyes.

Photograph 5: The child does not have sunken eyes.

Photograph 6: The child has sunken eyes.

Photograph 7: The child's skin pinch goes back very slowly.

Exercise 3. Case study: Adeola

When classifying diarrhoea, the child may have one, two or three classifications related to diarrhoea.

Compare the participant's answers with those on the answer sheet and discuss any differences. Make sure that the participant records information correctly on the Patient Recording Form. As you talk through the case, ask for a description of how the child's classifications were selected. Reinforce points such as:

- Always start from the pink (or top) row.
- There must be two signs present to select a classification of either SEVERE or SOME DEHYDRATION.
- Only classify Persistent Diarrhoea if the child has had diarrhoea for 14 days or more.
- Only classify Dysentery if the child has blood in the stool.

Pic 16. (p11 in booklet 2)

Exercise 4. Photo booklet

Part 1

Photograph 8: This child has the generalized rash of measles and red eyes.

Photograph 9: This example shows a child with heat rash. It is not the generalized rash of measles.

Photograph 10: This is an example of scabies. It is not the generalized rash of measles.

Photograph 11: This is an example of a rash due to chicken pox. It is not a measles rash.

Part 2

	Is the generalized rash of measles present?	
	YES	**NO**
Photograph 12	✔	
Photograph 13		✔ This child has scabies.
Photograph 14	✔	
Photograph 15		✔ This child has scabies.
Photograph 16		✔ This child has tinea versicolor.
Photograph 17		✔ This child has chicken pox.
Photograph 18		✔ This child is malnourished and has normal skin.
Photograph 19		✔ This child has heat rash.
Photograph 20	✔	
Photograph 21		✔ This child has normal skin.

Exercise 5. Case study: Surita

Pic 17. (p13 in booklet 2)

Exercise 6. Photo booklet

Part 1

Photograph 38: This child's skin is normal. There is no palmar pallor.

Photograph 39a: The hands in this photograph are from two different children. The child on the left has some palmar pallor.

Photograph 39b: The child on the right has no palmar pallor.

Photograph 40a: The hands in this photograph are from two different children. The child on the left has no palmar pallor.

Photograph 40b: The child on the right has severe palmar pallor.

Part 2

	Does the child have signs of:		
	Severe pallor	**Some pallor**	**No pallor**
Photograph 41		✔	
Photograph 42			✔
Photograph 43a	✔		
Photograph 43b			✔
Photograph 44	✔		
Photograph 45		✔	
Photograph 46	✔		

Exercise 7. Photo booklet

Part 1

Photograph 47: This is an example of visible severe wasting. The child has small hips, thin legs relative to the abdomen. There is still cheek fat on the child's face.

Photograph 48: This is the same child as in photograph 47 showing loss of buttock fat.

Photograph 49: This is the same child as in photograph 47 showing folds of skin ('baggy pants') due to loss of buttock fat. Not all children with visible severe wasting have this sign. It is an extreme sign.

Photograph 50: This child has oedema.

Part 2: For each photograph, answer the question:

	Does the child have visible severe wasting?	
	YES	**NO**
Photograph 51		✔
Photograph 52	✔	
Photograph 53		✔
Photograph 54	✔	
Photograph 55	✔	
Photograph 56	✔	
Photograph 57		✔
Photograph 58	✔	
	Does the child have oedema?	
	YES	**NO**
Photograph 59	✔	

Exercise 8. Case study: Kalisa

Pic 18. (p16 in booklet 2)

Exercise 9. Video Case study: Faduma

Pic 19. (p17 in booklet 2)

B. Identify treatment

Exercise 10. Case studies

1. No. Sara has no general danger signs and no severe classifications.
2. No. Neema has no general danger signs and no severe classifications.
3. Yes. David has a severe classification: MASTOIDITIS.
4. Yes. Marcel has a general danger sign: convulsions.
5. No. Habib has a general danger sign which may be related to dehydration. His only severe classification is SEVERE DEHYDRATION. The clinic should use Plan C. Since this clinic can give IV therapy, Habib should be given IV therapy at the clinic.

C. Treat the child

Exercise 11. Case studies

1. A 6-kg child needs an oral antimalarial for MALARIA.

   Give dose of first-line antimalarial for 3 days.
   If chloroquine, dose =
   1/2 tablet (150 mg) once a day for all 3 days, ***or***
   1 tablet (100 mg) once a day on days 1 and 2, 1/2 tablet on day 3, ***or***
   7.5 syrup once a day on days 1 and 2, 5.0 ml on day 3

   (If child also has cough with fast breathing, cotrimoxazole would be the correct choice.)

2. A 4-month-old needs an antibiotic for an ACUTE EAR INFECTION and an oral antimalarial for MALARIA.

   Give dose of cotrimoxazole 2 times daily for 5 days.
   Dose =
   1/2 adult tablet, ***or***
   2 pediatric tablets, ***or***
   5.0 ml of syrup

3. A 12-kg child needs an oral antimalarial for MALARIA and paracetamol for high fever.

   Give dose of first-line antimalarial for 3 days.
   If chloroquine, dose =
   1 tablet (150 mg) once a day on days 1 and 2, and
   1/2 tablet on day 3, ***or***
   1 1/2 tablets (100 mg) once a day on days 1 and 2, and
   1/2 tablet on day 3, ***or***
   15.0 syrup once a day on days 1 and 2, 5.0 ml on day 3

   and

   Give one dose of paracetamol for high fever.
   Dose = 1 tablet (100 mg) or 1/2 tablet (500 mg)

4. A 9-month-old needs vitamin A for MEASLES.

   Give first dose of vitamin A in clinic; give mother 1 dose for next day.
   Dose =
   ½ capsule if 200 000 IU, ***or***
   1 capsule if 100 000 IU, ***or***
   2 capsules if 50 000 IU

5. A 4-year-old needs vitamin A for MEASLES.

   Give first dose of vitamin A in clinic; give mother 1 dose for next day.
   Dose =
   1 capsule if 200 000 IU, ***or***
   2 capsules if 100 000 IU, ***or***
   4 capsules if 50 000 IU

6. A 2-year-old child (11 kg) has ANAEMIA with some palmar pallor and needs iron and mebendazole. The child's card shows he was given mebendazole 3 months ago.

   Give ½ iron/folate tablet or 2.0 ml (½ teaspoon) iron syrup, once daily for 14 days.
   Do ***not*** *give mebendazole as a dose was given less than 6 months ago.*

7. A 3-year-old child (14 kg) has ANAEMIA with some palmar pallor and needs iron and mebendazole. The child's card shows he was not given mebendazole previously.

   Give ½ iron/folate tablet or 2.5 (½ teaspoon) iron syrup, once daily for 14 days

   and

   give 500 mg (1 tablet of 500 mg or 5 tablets of 100 mg) mebendazole, once in clinic.

8. A 6-month-old child (7 kg) has ANAEMIA with some palmar pallor and needs iron.

   Give 1.25 ml (½ teaspoon) iron syrup, once daily for 14 days.

9. A 16-kg child needs an oral antimalarial for MALARIA and iron for ANAEMIA with some palmar pallor. There is no hookworm or whipworm in the area.

   Give dose of first-line antimalarial for 3 days.
   If chloroquine, dose =
   1 ½ tablets (150 mg) once a day on days 1 and 2, and
   ½ tablet (100 mg) on day 3, ***or***
   2 tablets (100 mg) once a day on days 1 and 2, and
   1 tablet (100 mg) on day 3

   and

   give ½ iron/folate tablet or 2.5 ml (½ teaspoon) iron syrup, once daily for 14 days.

Exercise 12. Case study: Mela

4. Review your list of treatments, instructions and advice that Mela needs.

   Which ones are the most important for the health worker to teach the grandmother?

   - *How and when to give the **cotrimoxazole** to Mela*
   - *Instructions on **when Mela should return** (that is, 2 days for follow-up or earlier if Mela cannot drink or breastfeed or if she gets worse)*

5. Which treatments, instructions or advice could be omitted or delayed if the grandmother is clearly overwhelmed?

   - *Soothe the throat with a safe remedy*
   - *Instructions for giving paracetamol*
   - *Instructions on wicking the ear*

You will learn to complete this section in Counsel the mother

Pic 9. (p21 in booklet 1)

You will learn to complete this section in Counsel the mother

Pic 10. (p22 in booklet 1)

D. Counsel the mother

Exercise 13. Case studies

1. 3 times per day, since she is still breastfed
2. The mother can judge an adequate serving by how much food Samuel leaves. If Samuel leaves a spoonful uneaten, she has given enough food.
3. Replace the cow's milk with a fermented milk product such as yoghurt, OR give half the usual amount of cow's milk and replace the rest with other nutritious foods. Continue giving family foods 5 times per day as usual.

   Ramon should return for follow-up in 5 days.

Exercise 14. Case study: Marwan

Feeding Problem(s)—Recorded on the front of the Sick Child Recording Form:

Complementary foods are not given often enough and are not thick and nutritious.

Mother has stopped cereal during illness.

On the back of the form, the participant should have written advice such as:

At this age the child needs more complementary foods. Make cereal gruel thicker and add oil and mashed vegetables or fruit. Start now to give this 3 times daily, even during illness. Also try combinations such as rice with vegetables, meat, or fish. Keep breastfeeding as often as the child wants

E. Young infant

Exercise 15. Case study: Ebai

Pic 13. (p29 in booklet 1)

Pic 14. (p30 in booklet 1)

F. Follow-up

Exercise 16. Case study Pandit

a. How would you reassess Pandit today? List all the signs you would look at and write the questions you would ask his mother.

Is he able to drink or breastfeed?

Does he vomit everything?

Has he had convulsions?

See if he is lethargic or unconscious.

Is he still coughing? How long has he been coughing?

Count the breaths in one minute.

Look for chest indrawing.

Look and listen for stridor.

Is he breathing slower?

Is there less fever?

Is he eating better?

b. Based on Pandit's signs today, how should he be treated?

Tell his mother that he is improving nicely. She should continue giving him the pills as she has been until they are all gone.

Exercise 17. Case study: Lin

a. How would you assess Lin?

Completely assess Lin as on the ASSESS & CLASSIFY chart. Also, assess for other possible causes of the fever.

b. How would you treat Lin? If you would give a drug, specify the dose and schedule.

— *Treat with the second-line oral antimalarial, sulfadoxine-pyrimethamine. Give one tablet in clinic.*

— *Advise the mother to return again in 2 days if the fever persists.*