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GUIDE FOR THE INTRODUCTION OF
Integrated Management of
Childhood Illness

December, 1997

Support for Analysis and Research in Africa (SARA)
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**GUIDE FOR THE INTRODUCTION OF
INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS
DECEMBER, 1997**

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LIST OF ACRONYMS

<i>ARI</i>	<i>Acute Respiratory Infections</i>
<i>BASICS</i>	<i>Basic Support for Institutionalizing Child Survival</i>
<i>CDC</i>	<i>Centers for Disease Control and Prevention</i>
<i>CDD</i>	<i>Control of Diarrheal Diseases</i>
<i>CDR</i>	<i>Division of Diarrheal and Acute Respiratory Disease Control (WHO)</i>
<i>CHD</i>	<i>Division of Child Health and Development (WHO), includes former CDD and ARI (CDR) as of April 1996</i>
<i>DTU</i>	<i>Diarrhea Training Unit</i>
<i>EPI</i>	<i>Expanded Program of Immunization</i>
<i>IEC</i>	<i>Information, Education, and Communication</i>
<i>IMCI</i>	<i>Integrated Management of Childhood Illness</i>
<i>MCH</i>	<i>Maternal and Child Health</i>
<i>MOH</i>	<i>Ministry of Health</i>
<i>NGO</i>	<i>Non-Governmental Organization</i>
<i>PHC</i>	<i>Primary Health Care</i>
<i>PVO</i>	<i>Private Voluntary Organization</i>
<i>UNICEF</i>	<i>United Nations International Children's Fund</i>

The World Health Organization (WHO) has developed an integrated approach to the assessment, classification, treatment, and counseling of sick children and their care-takers. The approach forms the basis for new treatment guidelines. It provides for integrated management of childhood illnesses (IMCI)—acute respiratory infection, diarrhea, malaria, measles, and malnutrition. IMCI leads to an accurate identification of illnesses in outpatient settings, promotes treatment of major illnesses, and speeds up referral of severely ill children. Each child's immunization status is checked, vaccination is given as needed, and nutrition counseling is provided. For more information about IMCI, see Annex 1.

Many developing countries and international agencies are interested in the development and implementation of an integrated approach to both the technical and programmatic management of sick children. Studies have shown that children brought to health facilities often are ill from multiple causes. Some causes are acute, others are underlying and often unrecognized. The *World Development Report*, published by The World Bank in 1993, estimates that integrated management of childhood illnesses is one of the most cost-effective public health interventions in developing countries.

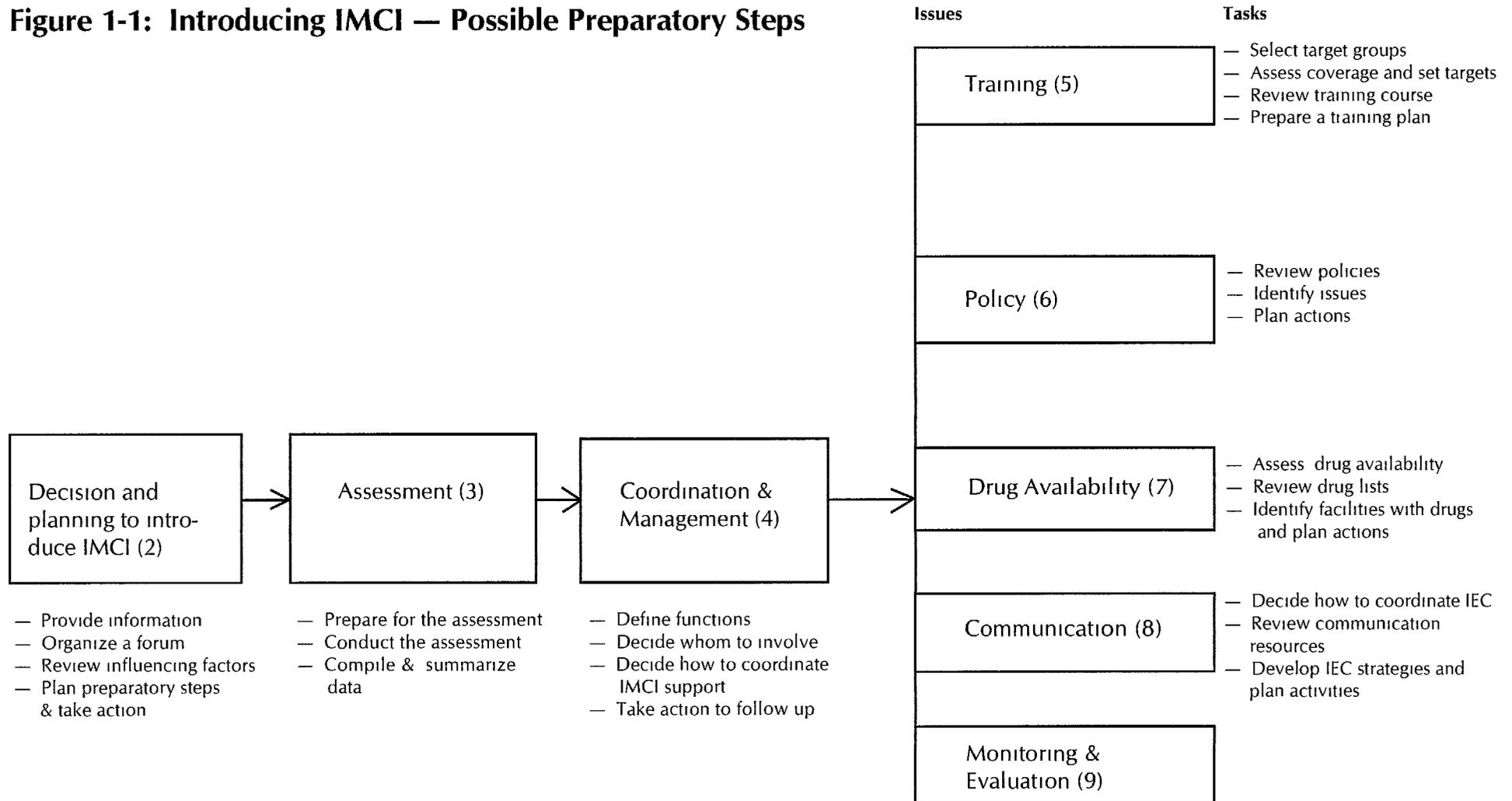
The new approach to IMCI requires new skills. WHO and UNICEF have prepared a training course (available in November 1995) for health workers at first-level health facilities to teach the skills of integrated management of childhood illnesses including the interpersonal skills necessary to communicate effectively with caregivers. Other aspects of public health programs require modification to accommodate IMCI—for example, monitoring, provision of drugs, and communication activities. This guide addresses issues requiring attention in preparing for the introduction of IMCI.

Program managers and other decision makers at all levels of the health system need to make an informed decision to introduce IMCI. They need to assess the existing situation,

**WHAT IS AN
INTEGRATED
APPROACH TO
THE SICK
CHILD?**

**WHAT ARE THE
PREPARATORY
ISSUES?**

Figure 1-1: Introducing IMCI — Possible Preparatory Steps



() = refers to chapters in guide

address issues of coordination and management, formulate any needed policies, and plan for training, drug availability, monitoring of health workers' performance, communication activities, and evaluation of progress in the implementation of IMCI (See Figure 1-1) This guide addresses each of these preparatory issues and refers to other available tools and guidelines that are useful for the introduction of IMCI

A checklist for the development of a preparatory plan to introduce IMCI is found on page 9, Chapter 2

This guide has been prepared to serve as a practical aid in preparing an integrated approach to the sick child. It serves three main purposes:

- **Assessment**—to provide guidance for gathering the information necessary for analysis and decision making
- **Decision process**—to provide a process for systematically addressing the issues in preparation for IMCI
- **Participation**—to ensure that all appropriate officials, at all administrative levels of the health system, from all relevant programs, are engaged in the process

Most issues are country-specific and will require local approaches and solutions. This guide helps identify country-specific issues and offers suggestions for addressing them.

WHY A GUIDE?

Purposes

Chapter 1 — Introduction

WHAT ARE THE OUTPUTS?

Preparatory actions

This guide helps managers to take the following actions to introduce integrated case management

Decision and planning to introduce IMCI

- Make a decision and draft a preparatory plan to introduce IMCI

Coordination and management

- Define the national, regional, and district levels' functions in support of integrated management of childhood illness (IMCI) at district level
- Identify the managers responsible for IMCI at national/regional levels
- Establish a mechanism to coordinate IMCI—for example, a functional IMCI task force, committee, or other body at the national and regional level

Policy formulation

- Identify issues that require a policy decision
- Make recommendations for the formulation of national drug policies that are consistent with IMCI treatment guidelines

Planning training

- Develop training strategies on who to train, how to train, and the content of case management training for health workers at first-level health facilities
- Establish training targets
- Develop a training plan to support implementation of district-level IMCI training, including interpersonal communication training

Drug Availability

- Recommend ways to improve availability of drugs in health facilities
- Include key IMCI drugs in the national drug lists
- Identify linkages between training activities and drug availability

- Decide how to coordinate and manage IEC activities.
- Review IEC resources and activities
- Prepare for the development of IEC strategies and planning of communication activities
- The preparatory actions will be included in this guide in 1997 when tools are available to address these issues

This guide has been prepared for program managers, decision makers in ministries of health at national and regional levels, and their technical advisers. The process engages district-level decision makers and, where appropriate, others—for example, relevant ministries, non-governmental organizations (NGOs), and private sector institutions.

Consultants working for international or bilateral agencies or private voluntary organizations (PVOs) may find the guide useful as a manual or planning tool when working with national, regional, and district managers to prepare for integrated case management training at the district level.

It will be especially useful to those who facilitate the various preparations needed. This guide can assist in

- reviewing issues and facilitating discussions,
- gathering and analyzing data,
- examining options and making decisions, and
- identifying available resources.

As the guide is used, it will be refined to incorporate country experience in planning and implementing integrated case management.

Communications

Monitoring

Evaluation

THE PREPARATORY PROCESS

*Who will use this
guide*

Chapter 1 — Introduction

The sequence of preparatory steps

The sequence of preparatory steps as suggested in Figure 1.1, page 2, will differ according to the country context. This guide is designed to facilitate the whole preparatory process, or to be used in part to address a specific issue only. For example, some countries already have a coordinating mechanism and will not need to address this issue, others have the required information readily available and will not need to conduct a review prior to addressing a specific issue.

How long will initial preparations take?

The time involved in planning for support to integrated case management will vary depending on the activities undertaken. For comprehensive preparations, the time frame may be as follows:

Review of available data and data collection*	1-2 weeks
Planning coordination and management	2-3 days
Planning of training	3-4 days
Policy review	5 days
Adaptation of IMCI algorithm and preparation of training materials	6 months see below
Planning for drug availability	2-3 days
Planning for communication	5 days
Planning for monitoring and evaluation	

* If an in-depth review, survey, or formative research is needed, six weeks or more may be required.

Thus, it may be necessary to devote 24-34 work days to the initial preparations. Preparations can be phased over a period of several months, or addressed in intensive sessions over a two- to three-week period.

The adaptation of the algorithm and training materials will require additional time and should therefore start as soon as possible. How to do the adaptation is described in the "Management of Childhood Illness Adaptation Guide" prepared by WHO, CHD. A working draft is available (July 1996) for limited distribution and use with the assistance of trained adaptation experts. WHO has estimated that it will take about six months to adapt the WHO/UNICEF training course and to do the necessary course preparations. See Annex 1.6 for the WHO/UNICEF approach to initial planning by countries for IMCI and Annex 6 for an outline of the Adaptation Guide.

Most preparatory activities can be carried out as the mandate of a coordinating committee (working group or task force), established at the national or regional level, within the scope of work and budget of their regular work. The adaptation and preparation of IMCI guidelines and materials and initial training of trainers will require funding and technical support during the preparatory phase.

Data-gathering activities and meetings to facilitate decision making may involve additional costs.

For more information about integrated management of childhood illnesses see Annex 1. See Annex 1.6 for the WHO/UNICEF approach to initial planning of IMCI and Annex 6 for an outline of the steps involved in the adaptation of the IMCI training course prepared by WHO/UNICEF.

Adaptation and preparation of IMCI algorithm and training materials

What does preparing for IMCI cost?

Background reading

Chapter 2 — *Decide and Plan to Introduce IMCI*

This chapter suggests how to make an informed decision about whether to introduce integrated management of childhood illness (IMCI) and how to develop a preparatory plan. It includes activities to inform decision makers and factors to consider in introducing IMCI.

An explicit and informed decision to introduce IMCI is often needed as explained below.

A common understanding of the specific approach described in the WHO/UNICEF sick child algorithm and training course is important. Perceptions may differ regarding what needs to be done at district, regional, and national levels. Familiarity with the adaptation module will help in understanding what steps are involved in adapting generic IMCI materials to specific country conditions (see Annex 6).

Although general interest in IMCI is widespread, the commitment of high-level decision makers is needed. Implementing IMCI requires specific actions—for example, establishing a coordinating body and conducting training activities. These activities require commitments of time, manpower, and funds. The process of deciding to support IMCI can help initiate such commitment and develop consensus.

Factors that influence efficient and effective implementation of IMCI need to be considered—for example, previous positive experiences of case management training, involvement of an active program manager, and structural readiness (reorganization that facilitates coordination and integration of health service delivery).

This chapter suggests tasks—see Table 2-1—involved in making an informed decision and to prepare for implementation of IMCI.

PURPOSE

RATIONALE

A common understanding

Commitment

Effective implementation

APPROACH

Chapter 2 — *Decide and Plan to Introduce IMCI*

Tasks

1	Provide information
1.1	Gather documentation
1.2	Conduct informal discussions
2.	Organize an orientation forum
2.1	Identify participants
2.2	Prepare agenda
3.	Review factors influencing the decision
3.1	Identify and discuss key factors
3.2	Make a decision
4.	Plan next steps and take action
4.1	Plan preparatory steps
4.2	Prepare for an assessment

Who to involve

Early in the process, involve all key partners and collaborators. Seek their input so they can help guide the preparatory phase and mobilize resources. Potential partners are listed on page 4 (section 2.1) of this chapter.

DECIDING TO INTRODUCE IMCI

1. *Provide information*

1.1 Gather documentation

The World Health Organization (WHO) and several other agencies have prepared materials that can be helpful in informing decision makers and potential partners about IMCI and the requirements for implementation. Materials in the IMCI information kit (included in Annex 1) are

- Introduction to the new approach to IMCI (CHD/WHO folder and update)
- Description of the IMCI course (CHD/WHO)

Chapter 2 — Decide and Plan to Introduce IMCI

- Excerpts from the World Development Report 1993 ("Investing in Health")
- The WHO/UNICEF approach to initial planning for IMCI
- Figure Pathway to survival From the USAID CDC "Framework for program development Integrated childhood illness management consolidating and extending a decade of child survival gains" (June 1994).
- Overheads for IMCI presentation (CHD/WHO)

In addition, specific **country information** will be helpful—for example, health facility survey information on childhood case management, household survey data, disease burden estimates, and other data on childhood mortality and morbidity, health services, and training

Review and presentation of these data will help to show the potential benefits of IMCI

Use as many opportunities as possible to inform interested parties about IMCI and advocate support for its implementation. Informal discussions with key decision makers in the ministry of health and with others (for example, NGOs, international agencies, private sector institutions) help mobilize support for active participation in introducing IMCI. Informal discussions also prepare partners to be active participants in IMCI planning.

Make a list of all potential partners to visit. Arrange informal meetings to discuss IMCI and share documentation.

Organizing an orientation forum—for example, a national seminar—is a useful way to inform and advocate for implementation of IMCI. The forum can serve as an opportunity to inform and involve key partners in the decision to introduce IMCI and start preparations for implementing IMCI. Selection of participants and agenda design are important for reaching consensus and achieving commitment.

1.2 Conduct informal discussions

2. Organize an orientation forum

Chapter 2 — *Decide and Plan to Introduce IMCI*

2.1 Identify participants

An orientation forum requires advance planning to ensure that decision makers and other key persons attend. Persons to invite to a forum include

- ministry of health officials—national, regional, and district managers of disease-specific programs and directors of maternal and child health, primary health care, training and manpower, health education (or IEC) and drug policy divisions,
- other ministries with responsibility for health—for example, ministry of local government,
- international agencies, including WHO, UNICEF, The World Bank, bilateral agencies, and PVOs,
- medical and other professional associations,
- non-governmental organizations involved in child health or health services; and
- universities and training institutions

It may be practical to include a large group in the presentations and to involve a smaller group in the decision-making process and in the actual preparations and planning

2.2 Prepare agenda

In collaboration with key partners, prepare the agenda for a forum. Below are suggestions for meeting objectives

Proposed objectives

- To provide information on IMCI and the WHO/UNICEF charts and training course
- To discuss factors influencing effective and efficient introduction of IMCI.
- To decide (or recommend) whether or not to introduce IMCI in the country or in a region or district
- To develop a preparatory plan

Table 2-2 presents a sample agenda for a one-day forum to orient and discuss IMCI. It will need to be finalized in collaboration with interested parties

Chapter 2 — Decide and Plan to Introduce IMCI

Topic	Method	Responsible
Morning: Opening	Keynote address	High-level official
Introduction to IMCI	Presentation	WHO or other IMCI expert
Country situation	Presentation and Discussion	Ministry of health
The IMCI Training Course	Presentation and discussion	Presenter who is familiar with WHO/UNICEF course
	Break	
Afternoon: Preparing for implementation of IMCI	Presentation of preparatory steps including adaptation	Facilitator familiar with IMCI implementation issues
Review IMCI implementation factors	Guided discussion*	Facilitator familiar with this guide
Recommendations		Ministry of health
Closing remarks		

*Guided discussion is described in section 3 below

Identify and discuss important factors that influence IMCI implementation and make a decision about whether to introduce IMCI. The discussion can be held during the orientation forum as described above, or in a separate smaller meeting with key decision makers. It should follow the presentation of information on IMCI, it may be advisable to make the decision at a later stage when all participants are knowledgeable about the factors to be considered

3. *Review factors influencing the decision*

Chapter 2 — *Decide and Plan to Introduce IMCI*

3.1 Identify and discuss key factors

Identify the key factors influencing IMCI implementation. List factors on a flip chart. Lead a discussion on each of the factors mentioned. Ask persons who propose factors to explain why they are important in the decision to undertake IMCI and for the preparation.

The questions and comments on key factors listed below may be helpful in stimulating discussion.

Conclude and summarize the discussion of each important factor by indicating whether the conditions for introducing IMCI exist.

Question: Do childhood illnesses contribute to the major burden of diseases in the population?

IMCI is a potential cost-effective approach in an area where ARI, diarrhea, measles, malaria, and malnutrition are major causes of death and significantly contribute to the burden of diseases.

Question: Are there any potential gains to introducing IMCI?

The expected gains from activities aimed at improving the management of childhood illnesses, including implementation of preventive activities (nutrition counseling, immunization, and vitamin A supplementation) may have to be weighed against possible trade-offs. Among the gains are improved quality of care, increased attention to missed opportunities, increased efficiency in training, and reduced drug costs by selective use of essential drugs. Possible trade-offs are reduced attention to other competing problems and to preventive interventions at household level.

Question: Is there knowledge of and commitment to IMCI?

Commitment to undertake integrated case management activities must be based on a common understanding of what is involved and knowledge about the available tools and materials.

Chapter 2 — Decide and Plan to Introduce IMCI

Question Does consensus exist on how to support an integrated approach to the management of childhood illnesses, or can it be achieved?

Consensus about how to support IMCI may evolve during the review process and in making joint decisions

Question Is it timely to start IMCI activities in a specific district or area?

This question is best answered after reviewing the current situation, but the group may know that a certain district is suitable for effective implementation

Question Can support and resources be mobilized for IMCI?

IMCI is estimated to be one of the most cost-effective public health and essential health services interventions, but there are initial additional costs for adaptation and preparation of materials, training of trainers, upgrading facilities for training, implementing training courses, and the provision of drugs. To obtain the resources needed for initial implementation activities, collaboration with a donor organization is helpful

Question What other factors affect IMCI implementation?

Health reform and reorganization within the ministry of health may make this an opportune time to bring programs concerned with child survival together at the national and district levels

Previous positive case management training experiences may be encouraging

The availability and involvement of an active program manager can expedite implementation

Well coordinated training and IEC efforts can increase demand, caregiver satisfaction, and enhance health promoting behaviours in the home as well as in health facilities

Chapter 2 — *Decide and Plan to Introduce IMCI*

	<p>Severe infrastructure problems—for example, nonfunctional drug systems—may be important constraints</p> <p>Limited access to and use of health facilities may limit the benefits of IMCI training of health facility staff, analyzing the reasons for low access and making the new service known in the community can improve effective implementation</p>
3.2 Make a decision	<p>Decide whether to introduce IMCI based on a discussion of key influencing factors</p> <ul style="list-style-type: none">• If all the conditions are met (for example, yes to all the questions in section 3.1, pages 6-7), the time is suitable for introduction of IMCI• If only some conditions are met (no to questions in section 3.1), it may not be the right time to introduce IMCI. Other activities may be of higher priority <p>Once a decision has been made, the next step is to develop a preparatory plan to address the major implementation issues described in this guide</p>
4. <i>Plan next steps and take action</i>	
4.1 Plan preparatory steps	<p>Review the flow chart in Figure 1-1 and browse through the rest of the guide. Review the tasks involved in addressing each issue and the steps in the adaptation process (Annex 1.6 and 6). Reach agreement on the next steps to take, assign responsibilities for actions, and choose a date to complete the actions</p> <p>The development of a plan for the preparation phase should include actions to address the major implementation issues. The initial plan might be preliminary, revised as the result of review activities and as issues are dealt with. In the development of a preparatory plan to introduce IMCI, the following planning check list will be useful. The guide and tools developed by WHO/UNICEF will be helpful in planning and completing the steps</p>

Chapter 2 — Decide and Plan to Introduce IMCI

CHECK LIST OF POSSIBLE PREPARATORY TASKS

Tasks	Where in the guide?
<input type="checkbox"/> Provide information	Chapter 2
<input type="checkbox"/> Gather documentation	
<input type="checkbox"/> Conduct informal discussions	
<input type="checkbox"/> Organize an orientation forum	Chapter 2
<input type="checkbox"/> Identify participants	
<input type="checkbox"/> Prepare agenda	
<input type="checkbox"/> Conduct orientation	
<input type="checkbox"/> Prepare for assessment	Chapter 3
<input type="checkbox"/> Select assessment team	
<input type="checkbox"/> Decide on issues	
<input type="checkbox"/> Review protocol and data sources	
<input type="checkbox"/> Select documents for assessment	
<input type="checkbox"/> Identify key informants	
<input type="checkbox"/> Determine needs for health facility visits	
<input type="checkbox"/> Select site for visits	
<input type="checkbox"/> Train the assessment team	
<input type="checkbox"/> Conduct the assessment	Chapter 3
<input type="checkbox"/> Review documents	
<input type="checkbox"/> Interview key informants	
<input type="checkbox"/> Visit health facilities	
Issue: Organization & Management	Chapter 4
<input type="checkbox"/> Select IMCI coordination team	
<input type="checkbox"/> Decide how to coordinate and manage IMCI	

Chapter 2 — *Decide and Plan to Introduce IMCI*

Issue: Training

Chapter 5*

- Develop a training preparation plan with all the adaptation steps
 - Review of case management policies and conditions to be included in course
 - Development of new policies and guidelines
 - Health facility visits
 - Nutrition consultation
 - adaptation of feeding advise
 - Agreement and finalization of case management guidelines and system of patient records
 - Incorporation of new guidelines into charts, modules other existing job aids etc
 - Translation
 - Layout and printing
 - First course
 - Selection of Participants
 - Identification of Training sites
 - Selection of Facilitators
 - Scheduling of course

- Develop a training implementation plan

Chapter 5

- Select target groups
- Set training targets
- Review training course

Issue: Policy

Chapter 6

- Identify policy issues
- Plan followup actions

* See also WHO Adaptation guide outline (Annex 6)

Chapter 2 — Decide and Plan to Introduce IMCI

Issue: Drugs

Chapter 7

- Assess IMCI drug availability
- Review existing drug guidelines and lists
- Plan followup actions

Issue: Communication

Chapter 8

- Decide how to coordinate IEC activities
- Review current IEC resources and activities
- Develop strategies and plan activities
 - Identify behaviors, audiences, strategies
 - Plan formative research
 - Decide on IEC strategies and messages
 - Develop materials production plan
 - Plan to improve and maintain health worker communication skills

Issue: Monitoring & Evaluation

Chapter 9

This chapter describes how to assess the existing situation for treating sick children. The purpose of the rapid assessment is to collect the information needed to make decisions or recommendations for coordinating and managing integrated management of childhood illness (IMCI), planning training, setting policies, identify communication messages and their channels, and ensuring drug availability.

Information about the current situation and the country context is needed to prepare for effective implementation of IMCI activities. For example, planning requires knowledge of existing policies, available resources, logistics constraints, current and planned training activities, epidemiological data, and case management practices. Managers at district, regional, and national levels and health workers in health facilities can help provide the needed information, other information is available from records and reports.

The assessment is an integral part of the preparatory process for IMCI. A list of questions are found at the end of this chapter on pages 10-15. Each item provides information for a step in the decision-making process (chapters 4-8). Sample protocols for key informant interviews and health facility visits are presented in Annex 3. These will provide answers to the questions listed. The pages are color-coded for easy reference, and the same numbers are used in the sample protocol and the list of questions. These numbers are also given in the decision-making process [in brackets] to make the data easier to use.

Suggested review methods include

- **Desk review**—review of household and health facility surveys or rapid integrated health facility assessment, reports on monitoring and supervisory visits, planning documents, and other reports and records of the ministry of health (MOH)

PURPOSE

RATIONALE

ASSESSMENT METHODS

- **Key informant interviews**—structured interviews with managers within and outside the MOH at national, regional, and district levels
- **Visits to health facilities**—structured interviews and observations of facility management and case management services

REVIEW TASKS

Table 3-1 presents a summary of the assessment tasks

Table 3-1 Summary of Assessment Tasks	
1.	Prepare for the assessment <ul style="list-style-type: none"> 1.1 Select assessment team 1.2 Decide on issues 1.3 Review protocols and data sources 1.4 Select documents for assessment 1.5 Identify key informants 1.6 Determine needs for health facility visits* 1.7 Select sites for visits* 1.8 Prepare schedule and logistics 1.9 Train the assessment team
2.	Conduct the assessment <ul style="list-style-type: none"> 2.1 Review documents 2.2 Interview key informants 2.3 Visit health facilities
3.	Compile and summarize data <ul style="list-style-type: none"> 3.1 Compile and summarize data 3.2 Plan the next step

*see also Rapid Integrated Health Facility Assessment (The BASICS Project/USAID)

Analyses of the data are described in chapters 4-8

Preparation for the assessment should be initiated at least a month before the actual review

Select a team of managers from district, regional, and national levels of the ministry of health to participate in the assessment—if possible, the decision makers who will be actively involved in the analysis, planning, and preparations for IMCI. Include potential partners (for example, international agencies and representatives of the private sector)

Agree on the issues to be addressed. A comprehensive review addresses the issues presented in the guide—coordination and management, training, policy, drug availability, and communication. If necessary, divide the assessment team into sub-groups to address one or more issues.

Review the list of questions at the end of this chapter (pages 10-15) and adapt the selected sample protocols (Annex 3). Decide whether to do pretesting. For easy reference, numbers in the protocols correspond to sections and paragraphs in the guide. Additional country-specific questions and issues may be included. Identify relevant sources of data within the country. **Many different sources of information provide the data to answer questions in the sample protocols. If the information is available in program documents, reports, and records, consider conducting a desk review only. However, interviews with key informants and visits to health facilities will help to obtain information from additional sources and involve managers and health professionals in the process.**

Identify and collect documents that are needed for the assessment. Among the documents to consider are

- planning documents—for example, plans of actions of disease-specific programs,
- health services statistics and reports on health facilities, staffing, and training,

1. Prepare for the assessment

1.1 Select review team

1.2 Decide on issues

1.3 Review protocols and data sources

1.4 Select documents for review

Chapter 3 — IMCI Assessment

	<ul style="list-style-type: none">• health facility and household surveys on childhood morbidity, mortality, treatment rates, and case management practices,• focused ethnographic surveys and other studies related to childhood morbidity and mortality,• treatment and drug policy guidelines,• evaluations, and• consultant reports on IMCI-related topics. <p>To collect these documents, contact program managers in the ministry of health and other organizations involved in support to health services delivery and evaluation</p> <p>If available data are extensive, further investigation—for example, key informant interviews and health facility visits—may be unnecessary</p>
1.5 Identify key informants	<p>Select individuals to be key informants for interviews at national, regional, and district levels. Among the persons to consider are</p> <ul style="list-style-type: none">• program managers from disease-specific programs at national, regional, and district levels,• other managers in charge of training, health services, pharmaceuticals, and drug policy• experts on clinical case management, clinical training, drug policy and management, manpower development, communication, and health education and nutrition,• health professionals,• medical professional associations, and• representatives of NGOs, PVOs, and international agencies
1.6 Determine needs for health facility visits	<p>Decide whether to include health facility visits as part of the assessment. If data are available from health facility surveys or supervisory visits, there may be no need for visits to health facilities. If visits to health facilities are made,</p>

rapid assessment of a few selected facilities using structured interview and observation protocols is proposed (Annex 3). A rapid integrated health facility assessment can be carried out as described in the guidelines prepared by The BASICS Project. Reasons for including visits to health facilities to conduct rapid assessment might include

- to involve and interview selected health workers and their supervisors,
- to visit health facilities in the district where IMCI training is likely to start to assess facility functions and training sites, and
- to get firsthand impressions of case management practices

The Rapid Integrated Health Facility Assessment protocols will help

- to determine current knowledge and practices, barriers to effective case management practices, and the adequacy of training and supervision of health care workers

Visits can focus on a region or district where IMCI may be initiated—for example, in an area that has high childhood mortality, an interested donor to support activities, and the advantage of regular availability of drugs. Sites to visit include training facilities and central and regional medical stores. In selecting regions, districts, and facilities to visit, a statistically representative sample is **not** necessary.

If a Rapid Integrated Health Facility Assessment is planned, see BASICS guidelines for how to prepare and conduct the assessment.

A time schedule for the assessment is proposed below, adapt it to fit the country context. Add time to summarize the findings and impressions, if necessary.

1.7 Select sites for visits

1.8 Prepare schedule and logistics

Logistical arrangements have to be made in advance and will depend on the number of assessment subgroups and site selection

Day	Activity	Location
1-2	Review of documents Interviews at national level	Central
3-6	Health facility visits (3-6) Interviews at district level Interviews at regional level	District/ region
7	Continued review of documents Interviews at national level	Central
8-10	Compilation Summary and report writing	
<p>Note If health facility visits are not included, the assessment can be completed in a week This sample time schedule does not include a Rapid Integrated Health Facility Assessment as described by The BASICS Project</p>		

1.9 Train the review team

To ensure that the team has a common understanding of the purposes of the questions, and that they ask the questions in the same way, go through all the questions in the protocols together. Make sure all team members understand their roles and are adequately prepared for the tasks to be undertaken. Team members who will be observing health care workers will require special training

2. Conduct the review

2.1 Review documents

Collect information from available planning documents, records, and reports and complete the selected protocols. Use health facility and household case management surveys to assess the current status and coverage of case management practices. If available information is extensive, for example, on key indicators and gaps in program implementation, further investigation may be unnecessary

Chapter 3 — IMCI Assessment

Interview key informants to collect information on organization and management, training, policies, and drug availability. Divide the team into subgroups to enable them to focus on one issue and/or one geographical area.

Visit selected health facilities to collect information from health workers about facility functions and to observe case management performance.

Plan the visits to health facilities in each district or region for consecutive days. Three subgroups visiting two facilities a day over a three-day period can complete 18 facility visits and 18-36 interviews. (See BASICS guidelines for planning of health facility visits as part of the Rapid Integrated Health Facility Assessment.)

Compile assessment findings and summarize results. To facilitate analysis and decision making, organize the findings so they answer questions relating to each issue according to the protocols.

Prepare a summary report of the main findings to present to decision makers and to assist in sharing the main findings at meetings.

After completing the assessment, use the information collected to address key issues and prepare plans, as described in chapters 4-8. Depending on the issues selected for the assessment, each designated subgroup can work on one issue.

Unless there is already an established coordinating mechanism, start by examining the organization and management issue. Chapter 4 provides further guidance.

2.2 Interview key informants

2.3 Visit health facilities

3. *Compile and summarize data*

3.1 Compile and summarize data

3.2 Plan the next step

Chapter 3 — IMCI Assessment

SAMPLE

PROTOCOLS: BRIEF DESCRIPTION

Sample protocols for each of the issues—coordination and management, training, policy, and drug availability—are organized to draw information from a variety of sources (Annex 3). Thus, each protocol can be used to collect information from different informants or documents, or can be modified by the review team to use with other sources. Questions are organized to correspond to sections of the guide and are identified in the guide by numbers in brackets (for example [prot 4 3]).

Coordination and management

The protocol for key informant interviews can be used at all levels (district, regional, and national) and can be modified to fit specific country needs.

Training

The questionnaire relating to training can be used to gather information from key informants, health facility and household survey data, and other reports. The draft protocol identified questions that are answered most reliably by health facility or household survey data. Because health facility and household survey data may not be available, information from supervisory or health facility visits can be used.

Policy

The checklist for reviewing current policies is brief because policy issues are addressed in depth in the adaptation module prepared by WHO. Most information can be gathered by contacting different programs or divisions at the national level in the ministry of health. Information regarding the status, dissemination, and implementation of policies may require investigation at other levels.

Drug availability

The protocol for drug availability draws on information from different sources, including key informants at all levels, visits to medical stores, private pharmacists, and health facilities.

A rapid health facility survey instrument has been developed by USAID/BASICS. It is designed to collect information on the quality of case management for common causes of childhood mortality and information on availability of drugs, supplies, materials, and clinic organization. This tool can be used by district, regional, and central MOH staff to review and plan for IMCI, including collecting information useful in addressing the issues in the guide.

A sample protocol for health facility visits is included in this guide for

- facility management—interview and observation,
- health worker interview, and
- case management observation

Information from health facility visits is useful in completing protocols on training and drug availability. The health facility assessment protocol in the guide also provides data on policy, monitoring, and communications. Data obtained can be useful when information from surveys and supervisory visits is sparse. Observation of case management is optional.

The protocol should be pretested during preparation for the review. If observation of case management is planned, observers should be trained in IMCI by a trainer who has the appropriate clinical skills.

*Health facility
assessment tool*

*Other health facility
assessment protocols*

Chapter 3 — IMCI Assessment

LIST OF QUESTIONS

Issue: Coordination and management

Questions for addressing the issue of IMCI coordination and management

1 2-1 7 What functions are carried out at different levels of the ministry of health?

1.1 policy

1.2 technical advice

1.3 coordination

1 4 planning and implementation

1 5 supervision

1 6 drug management

1 7 budgeting and financing

1 8 Who are responsible for carrying out these functions within the ministry of health? Are others outside the ministry of health involved and responsible for any of these functions?

1 9 Is there any functioning task force, committee, or other coordinating body concerned with case management and quality of care of sick children? Who are involved within and outside the ministry of health? What decisions do they make?

1 10 Who at the different levels, if any are responsible for planning and implementation of

- maternal child health (MCH) activities?
- diarrheal diseases control (CDD)?
- ARI?
- malaria prevention and control?
- nutrition promotion?
- immunization activities (EPI)?
- training activities/case management skills training?
- integrated child health activities?
- IEC activities?

1 11 Who currently provides financial resources to support child health activities? Who may be interested in supporting case management of sick children? Is there any experience with user-fee initiatives?

1 12 What does the ministry of health's organizational chart look like?

1 13 What staffing changes may happen as a result of integration? What will be the roles of national managers in charge of disease-specific programs? Who are most likely to be in favor of integrated activities?

1 14 What programs have clearly defined goals and targets—any experiences that will be useful for integrated case management activities?

1 15 Which health issues currently have high visibility and high-level political commitment and support? What factors contribute to this?

Questions for the planning of training

2 1 What does the health facility system look like in the area (district, region, or country)? What types of health facilities are considered first-level facilities?

2 2 How many first-level health facilities (by category) are there in the area (district/region/country)?

2 3 How many health workers assess and treat children in all the first-reach health facilities in the area?

2 4 What are the tasks of (each category of) health worker who manages children? Do they assess, treat, and give advice or only give advice and refer?

2 5 What are the current case management skills and knowledge (of each category) of health providers? What are the gaps/weaknesses in the current case manage-

Issue: Training

ment performance (of each category) of health provider?
What are the most important case management deficiencies that have been identified?

2.6 What are the language and reading skills of health workers at first-level health facilities?

2.7 Who supervises case management practices at first-level health facilities (internal supervision and/or external visits from outside)?

2.8 Who do most caretakers of sick children seek treatment from (include the most common health providers—for example, public, private, NGO)?

2.9 How many health workers at first-level health facilities, have, and have not, been trained (clinical hands-on practical training) in the area, in

- ARI case management?
- diarrhea case management?
- nutrition counselling?
- malaria case management?
- measles case management?
- integrated sick child case management?
- interpersonal communication skills?

2.10 Who are the most influential health professionals?

2.11 What categories of health workers are most likely to benefit from the current WHO/UNICEF training course on integrated case management of childhood illnesses (with minor modification if any), considering their language and reading skills?

2.12 In what population group are most of the sick children found? Any identified risk group—for example, urban/rural or refugee population?

2 13 What functioning training sites (for example, diarrhea training units or DTUs) exist?

2 14 When are most cases of ARI, diarrhea and malaria available for clinical training? Is there any period of overlap in peak seasons?

2 15 How many trained trainers can be made available to conduct case management (including communication skills) training?

2 16 What funds are or can be made available for training activities? What are potential sources of funding?

2 17 Is any decentralized case management training being conducted?

2 18 What experiences in on-the-job training exist?

2 19 What, if any, training of private sector health providers exist?

2 20 What has the experience been in informing or orienting health providers on case management?

2 21 What are the most common causes of death in children?

2 22 What essential drugs are or can be made available to treat the most common causes of death?

2 23 For what duration of training can health workers be away from work?

Chapter 3 — IMCI Assessment

Issues: Policy

Questions for addressing IMCI case management policy issues

What is the national policy on

3.1 the case management of children with diarrhea (including drugs for dysentery and cholera) in health facilities?

3.2 home case management of diarrhea including recommended home fluids and foods during and after diarrhea?

3.3 breastfeeding?

3.4 home case management of ARI?

3.5 the case management of ARI in health facilities (including drugs for moderate and severe pneumonia)?

3.6 malaria prevention and case management?

3.7 measles case management?

3.8 nutritional management and advice of sick children? Vitamin A supplementation? Growth monitoring?

3.9 immunization?

3.10 drugs (essential drugs) for first-level government and private sector drug use?

3.11 prescription and use of antibiotics by level of care and category of health workers?

3.12 prescription and use of injections by level of care and category of health worker?

For any of the above policies,

What is the status of each policy

Is it fully endorsed by the ministry of health?

Is it disseminated outside of the ministry of health? If yes, how?

Does it cover public and private sectors?

Is it implemented? How?

Questions for the review of IMCI drug availability

4.1 What IMCI drugs and vaccines are available at first-level health facilities, at central and regional medical stores, and in private pharmacies?

4.2 What IMCI drugs are out of stock at health facilities?

4.3 What are possible reasons why some of the IMCI drugs are missing or available at irregular intervals in health facilities?

4.4 Why are some drugs available in central/medical stores and not in health facilities?

4.5-4.6 What IMCI drugs are not included in major drug lists, manuals, and guidelines, covering public and private health sectors?

4.7 What standard drug lists and guidelines are present in health facilities?

4.8 Do the first-health facilities keep drug inventories and records on orders and reordering?

Issue: Drug availability

Issue:
Communication

4 9 If yes to 4 8, what percent of the time have IMCI drugs been out of stock during the previous year?

4 10 Which of the IMCI drugs are used for other purposes than management of childhood illnesses?

4 11 Which health facilities have some IMCI drugs available at some time?

Questions for addressing communication

8 1 What IEC services are currently provided by what units, to which units, in the MOH?

8 2 What form of coordination of IEC activities exists between disease specific programmes?

8 3 How can the development of messages and other communication activities be coordinated between units/divisions?

8 4 Who are active in health communication outside of the MOH, and how are they involved in MOH communication activities?

8 5 Who are involved in health communication at each level of the health care system?

8 6 What do managers or other staff (at national, regional, district levels) responsible for health communication do? What are the roles and responsibilities of each position?

8 7 Can IMCI be assigned as a responsibility for any of the health communicators listed above (8 5)? What task can be done by whom at what level?

8 8 How do the health communicators functions at the national, regional, district levels—are they able to carry out their assigned tasks?

8.9 Does the MOH have the capacity to develop a communication strategy and plan for IMCI? Do staff have skills in conducting formative research? Message development and testing?

8.10 Does the MOH have the capacity to implement a communication plan for IMCI? Do staff have the capacity to develop materials, manage commercial resources such as media and printers? Do they have trainers skilled in interpersonal communication?

8.11 What communication components are missing (ref 8.8-8.10)? Can communication tasks be carried out elsewhere, by outside experts? Would training of staff improve the capacity?

8.12 Can an IEC monitoring and evaluation system be established and operationalized?

Possible behaviors

8.13 What preventive, care seeking and home case management behaviors have been found most likely to achieve and maintain good health in children?

8.14 Which of these behaviors will be targeted?

Possible determinants

8.15 What are people currently doing in these behavior areas?

8.16 What are barriers to changing their current behaviors to the ideal behaviors?

8.17 What might motivate them to change their behaviors?

Possible target audiences

8.18 Who are the different target audiences that might influence performance of these behaviors?

8 19 What resources are available in the family, community, or health system that could be employed to bring about behavior change?

Developing IEC strategy and messages

8 20 Which behaviors are most important to change?

8 21 Which determinants of those behaviors are probably the most critical?

8 22 Which determinants are most likely to be amenable to change?

8 23 Which strategies would be most likely to bring about the desired change with each target audience?

8 24 Which messages are the most likely to be understood, to motivate people to change, and to lead to maintenance of the new behavior?

8 25 What strategies and messages are being implemented by other units/programs within the MOH that need to be integrated or coordinated?

Improving health worker communication

8 26 What gaps exist in the correct performance of the communication of case management? What are the identified weaknesses in advising caretakers?

8 27 What non-training approaches will most likely improve health worker communication performance?

8 28 Where and how can communication training, coaching, supervision, or other non-training methods be integrated or coordinated with training in clinical skills?

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Chapter 4 — Issue: Coordination and Management

This chapter addresses three management questions affecting integrated management of childhood illness (IMCI)

- What are the functions of managers at national and regional levels in support of child health services delivery and quality care?
- Who should be actively involved in IMCI at the national and regional levels?
- How should the IMCI initiative be coordinated and managed?

To move toward an integrated approach to the management of sick children, coordination and management of support are needed at all levels of the health care system

Changes may require consensus among many decision makers in the Ministry of Health. Changes affect the roles of, and the need for coordination and linkages between disease-specific programs. In the longterm, it may affect the organizational structure and functions of health services

In most countries, disease-specific programs are at different stages of development, often operating within maternal and child health or primary health care divisions. Managers may be concerned about the roles of existing disease-specific programs in the implementation of integrated activities. Some degree of integration may exist at the district level and staff may be ready for IMCI training, but a clearly defined approach is often needed at the national level

Where health services are being decentralized, the IMCI initiative can provide an epidemiologically rational and cost-effective way to improve delivery of care within the framework of such efforts. Because organizational structures differ among countries, national strategies that build on existing experiences, use available expertise, and recognize current functions and responsibilities within the ministry of health will probably be the most effective ones to

PURPOSE

RATIONALE

Chapter 4 — Issue: Coordination and Management

APPROACH

Tasks

implement. A coordinating mechanism may be needed, with clearly defined linkages to programs that already provide services to mothers and children. Some countries may choose an interim or temporary IMCI coordinating mechanism until a permanent organizational solution is established.

The assessment team's interviews with managers at national, regional, and district levels provide information that is useful in addressing coordination and management (Chapter 3 outlines the assessment process). Numbers in square brackets—for example [prot 1.1], refer to relevant sections of the sample protocol on coordination and management. A list of questions is also found at the end of this chapter, on pages 13-14.

Table 4-1 outlines the tasks for reaching consensus on coordination and management.

1.	Define functions
	1.1 Assess current functions in the MOH
	1.2 Assess future IMCI functions
2.	Decide whom to involve
	2.1 Identify relevant organizational units
	2.2 Select IMCI coordination team
3.	Decide how to coordinate IMCI support
	3.1 Review and discuss examples of organizational coordination
	3.2 Consider other factors
4.	Take actions to follow up

Chapter 4 — Issue: Coordination and Management

The assessment team (or a subgroup of the team) may assess information on coordination and management and make recommendations (see Chapter 3). Alternatively, a unit with responsibilities for (integrated) health services delivery or a high-level decision-making body within the ministry of health may address issues of coordination and management.

Persons to include are

- representatives of the technical and managerial aspects of IMCI,
- representatives from district and regional levels, and
- persons authorized to make decisions

Representatives from other involved ministries, NGOs, and donor agencies may participate too, but keep the group small enough to ensure full participation and efficiency.

Decisions on coordination and management can be handled in a two-day meeting, during a series of planning sessions on a weekly basis, or during the first preparatory meeting described in Chapter 2 (page 3).

Start the meeting on coordination and management by presenting a summary of the findings of the assessment (see Chapter 3).

Review the current ministry functions that are related to IMCI using information collected during the assessment. Table 4-2 presents a matrix to assist in defining functions at various levels of the health care system.

*The numbers in brackets refer to items in the review list of questions and in the sample protocols.

Who to involve

How long does it take?

COORDINATION AND MANAGEMENT

1. Define functions

- 1.1 **Assess current functions in the MOH** [prot 1 1-1 7]*

Chapter 4 — Issue: Coordination and Management

The following questions may be helpful in guiding discussion

- **Policy:** Which levels of the health care system are involved in setting policies on case management, drugs, and other topics that affect case management in health facilities [prot 1 1]?
- **Technical advice:** Which levels of the health care system make decisions on technical issues and provide technical advice on case management (for example, case management guidelines, training materials, courses, and health education messages) [prot. 1.2]?
- **Coordination:** Which levels of the health care system coordinate activities to improve case management (for example, training of health workers) [prot 1 3]?
- **Planning and implementation:** Which levels of the health care system prepare work plans for implementation at the health facility level (for example, work plans for case management training of health workers) [prot 1 4]?
- **Supervision:** Which levels of the health care system supervise the case management performance in health facilities [prot 1 5]?
- **Drug procurement and supply:** Which levels of the health care system are involved in the procurement and distribution of drugs and vaccines [prot 1 6]?
- **Budget and financing:** Which levels of the health care system receive funds and are responsible for managing the budgeting and financing of case management activities (for example, training) [prot 1 7]?

Chapter 4 — Issue: Coordination and Management

Table 4-2 Managerial Functions for Case Management by Levels of the Health Care System			
Functions	National level	Regional level	District level
Policy			
Technical advice			
Coordination			
Planning and implementation			
Supervision			
Drug procurement and supply			
Budget and financing			

After completing Table 4-2, review the information provided and assess future functions and responsibilities for IMCI activities. For each task, ask which level of the ministry of health should carry out the preparation, planning, and implementation of support to district-level IMCI activities. Discuss and clarify the roles at different levels.

Summarize the future functions of national, regional, and district levels for management of IMCI activities.

Outcome of task 1.2 Future responsibilities for the management of support to IMCI activities are clarified.

1.2 Assess future IMCI functions



Chapter 4 — Issue: Coordination and Management

2. *Decide whom to involve*

2.1 **Identify relevant organizational units** [prot 1 8-1 10]

Identify the specific units or persons within the ministry of health who carry out the functions listed in Table 4-2. For each function, identify others outside the MOH who are involved in IMCI functions—for example, other ministries, NGOs, PVOs, or collaborating agencies.

2.2 **Select IMCI coordination team**

Select the appropriate divisions or units to coordinate and manage support for IMCI implementation. From among the many units involved, select a core management team (working group or task force members) consisting of those who need to be involved on a day-to-day basis. Consider the following criteria in selecting team members:

- good managerial skills,
- experience in implementing public health programs, and
- technical skills in ARI, CDD, malaria, nutrition, measles, drug management, training, or communication.

Discuss and decide how to keep those who are not part of the core management team informed and involved.

Outcome of task 2.2: Managers who will form the core management team supporting IMCI are selected.

3. *Decide how to coordinate IMCI support* [prot 1 9-1 12]

3.1 **Review and discuss examples of organizational coordination**

The selected IMCI coordination team may involve persons in different units that do not routinely coordinate their activities. This section outlines several examples of organizational coordination. Use the examples to assist in reviewing the existing country context and select the most suitable

Chapter 4 — Issue: Coordination and Management

arrangement. The following examples are neither mutually exclusive nor exhaustive. Each country needs to develop its own approach to coordinating support for IMCI.

Example 1: An IMCI task force

The first example is to form an IMCI task force, committee, or working group, bringing together the relevant departments to work at the national level. The task force designates responsibilities and may or may not have a full-time coordinator. To manage activities at the district level, a similar task force may have to be established at district and/or regional levels.

An IMCI task force may be useful and feasible when one or more of the following conditions apply:

- There is high-level commitment to IMCI
- The programs involved are in different departments
- Existing programs cannot be merged into one integrated program
- Disease-specific programs are in early stages of development and need to remain separate programs at the national level

Example 2: A case management unit

The second example is to form an IMCI case management unit managed within the maternal and child health (MCH) or primary health care (PHC) divisions of the ministry of health. The unit might be managed as a project. Existing programs either take on an expanded coordinating role or they are merged into a new integrated unit.

The IMCI unit may have a full-time manager and objectives, strategies, targets, and plans of action similar to those of a comprehensive program. A mechanism for allocation of funds exists and some funds may be channeled directly to



Chapter 4 — Issue: Coordination and Management

district-level activities. The IMCI unit coordinates with other divisions (for example, malaria and pharmaceuticals) to set policies and plan activities. If the unit is a project, it may have a limited time span (for example, two to three years).

An IMCI unit may be useful and feasible when one or more of the following conditions apply.

- Case management programs (for example, CDD and ARI) are already in one division and can merge or coordinate their activities easily
- A strong MCH or PHC division exists, with CDD and/or ARI programs that can effectively manage a priority public health initiative and collaborate with other divisions
- The CDD and ARI programs are in the same stages of development and coordination, or integration into one case management program would be efficient and effective

Example 3: A national IMCI program

The third organizational example is a national IMCI program coordinated at the national level and supporting implementation at all levels. The national program has all the elements of a comprehensive public health program (stated objectives, strategies, specified targets, and activities). It may have its own funding, which may be allocated directly to national and district levels. A national manager coordinates activities. A national program encompasses, and may replace, disease-specific case management programs.

A national IMCI program may be useful and feasible when one or more of the following conditions apply.

- There is high-level commitment to child survival

Chapter 4 — Issue: Coordination and Management

- Existing disease-specific programs can merge easily into a new integrated program, or no disease-specific programs exist
- Most disease-specific programs are located in the same unit in the ministry of health
- Staff have experience in managing child survival program activities

Example 4: IMCI activities at district level

The fourth example is to introduce IMCI as an activity or a set of activities at district level

IMCI activities may be an option when one or more of the following conditions apply

- There are no functional disease-specific programs, but the need for integrated activities at the regional or district level has been identified and planned at that level
- Public health interventions are planned and managed at the district level with little or no national level support
- No one is designated to coordinate child survival programs at the national level
- Child survival activities are carried out on an ad hoc basis, sometimes by NGOs or other organizations in the private sector
- There is a need to introduce IMCI as a pilot project (or operations research project) in a district to provide lessons learned prior to deciding on IMCI as a national priority

Chapter 4 — Issue: Coordination and Management

3.2 Consider other factors [prot 1 11, 1 13-1 15]

After reviewing the various possible examples of organizational coordination, consider other relevant factors

- **Funding** [prot 1 11]
IMCI activities require funding (often external) in the early stages of development. Which arrangement will most likely mobilize funds or shift resources for the implementation of planned activities?
- **Goals and targets** [prot 1 13]
Which arrangement will be able to establish recognized goals and targets and achieve them?
- **Effectiveness** [prot 1 14]
Which arrangement will be the most effective in reaching consensus and getting things done?
- **High visibility** [prot 1 15]
Which arrangement is most likely to achieve high visibility and high-level political commitment and support?

Decide (or recommend) a way to coordinate and manage support for IMCI activities. Summarize the decision in a proposal to be submitted for high-level endorsement.

Outcome of task 3.2: A decision is made on how to organize IMCI and whom to actively involve in its management.

Chapter 4 — Issue: Coordination and Management

Possible actions to follow up on the decisions regarding coordination and management are listed below

- Establish the coordinating mechanism to support the planning and implementation of IMCI activities
Assign responsibilities and tasks
- Prepare a plan of action and budget (and briefing) for potential donors (see Chapter 5 on training)
- Organize a policy meeting (see Chapter 6 on policy)
- Advocate and coordinate with others—for example, by briefing relevant staff, conducting a child survival seminar, organizing regular meetings to keep all interested parties informed, and involving the medical professional associations

4. *Take actions to follow up*

Chapter 4 — Issue: Coordination and Management

LIST OF QUESTIONS

Questions for addressing the issue of IMCI coordination and management

1 2-1 7 What functions are carried out at different levels of the ministry of health?

1 1 policy?

1 2 technical advice?

1.3 coordination?

1 4 planning and implementation?

1 5 supervision?

1 6 drug management?

1 7 budgeting and financing?

1 8 Who is responsible for carrying out these functions within the ministry of health? Are others outside the ministry of health involved and responsible for any of these functions?

1 9 Is there any functioning task force, committee, or other coordinating body concerned with case management and quality of care of sick children? Who is involved within and outside the ministry of health? What decisions do they make?

1 10 Who, if anyone, at the different levels is responsible for planning and implementation of

- maternal child health (MCH) activities?
- diarrheal diseases control (CDD)?
- ARI?
- malaria prevention and control?
- nutrition promotion?
- immunization activities (EPI)?
- training activities/case management skills training?
- integrated child health activities?
- communication activities?

Issue: Coordination and management

Chapter 4 — Issue: Coordination and Management

1.11 Who currently provides financial resources to support child health activities? Who may be interested in supporting case management of sick children? Is there any experience with user-fee initiatives?

1.12 What does the organizational chart of the ministry of health look like?

1.13 What programs have clearly defined goals and targets—any experiences that will be useful for integrated case management activities?

1.14 What changes in staffing may happen as a result of integration? What will be the roles of national managers in charge of disease-specific programs? Who is most likely to be in favor of integrated activities?

1.15 Which health issues currently have high visibility and high-level political commitment and support? Why?

This chapter addresses three major questions

- **Who** needs training in case management of sick children?
- **How** can training coverage be increased?
- **What** case management skills are needed?

The answers to these questions form the basis for a comprehensive training strategy and plan

This guide suggests steps to develop a training plan that considers both the preparatory phase and the broader issues of the implementation phase

In integrated management of childhood illness (IMCI), only hands-on, practical training, including communication skills, is defined as training. Training can be given through formal courses and on-the-job-training. Seminars and lectures without practice are referred to as orientation

Introducing IMCI at home and in health facilities can reduce the mortality of sick children. Although a number of changes are needed to shift from a disease-specific to an integrated approach at district level, one of the most critical components is the training of health workers in integrated case management

In most countries, training activities are ongoing, in particular those training activities organized by disease-specific programs. Trainers and facilities for hands-on practical training may be available. Existing training plans can be revised to include IMCI training. Retraining available trainers, upgrading facilities, and revising plans may be the most efficient way to introduce IMCI training

WHO and UNICEF have developed treatment charts and an 11-day training course for health workers at first-level facilities. The course and a draft adaptation module are available

PURPOSE

RATIONALE



Chapter 5 — Issue: Training

APPROACH

Tasks

Developing a comprehensive training plan for health workers at first-level health facilities (for example, district health centers or hospitals) involves selecting target groups, assessing and deciding how to increase training coverage, and making operational decisions on the training course. Table 5-1 outlines the tasks.

1.	Select target groups
1.1	Identify target groups
1.2	Estimate training denominators
1.3	Decide priority target groups and selection criteria
2.	Assess training coverage and set targets
2.1	Assess training coverage and targets
2.2	Decide how to increase coverage and revise targets
3.	Review training course
3.1	Assess case management needs and health worker's skills level
3.2	Review training materials
4.	Prepare a training plan

Information and data gathered in the assessment section are used to complete the tasks. Numbers in square brackets (for example, [prot 2.1]) refer to the list of questions and to relevant sections of the sample protocols.

Whom to involve

The IMCI team can plan training as part of their work in coordinating and managing support for IMCI activities at the district level (see Chapter 4 on coordination and management).

Alternatively, the task can be assigned to a team of managers and trainers representing the district, regional, and national levels. A team of eight to 10 persons is optimal. One member of the team should serve as a facilitator to ensure that the team is informed about IMCI and the IMCI training course developed by WHO and UNICEF. The facilitator can also guide the group through the planning tasks.

A preparatory training plan can be developed at the very beginning of the process to introduce IMCI (see Chapter 2, page 8), followed by a more comprehensive plan as a result of the initial exploratory phase. Alternatively, a training plan can be drafted that is reviewed and revised after the initial preparatory phase, as experiences of introducing IMCI is gained.

Analysis of relevant data and preparation of a training plan require three to four days.

Developing a training plan involves selecting target groups, assessing and planning ways to increase training coverage, and deciding on training courses or materials. This section discusses each task. At the end of the chapter are two worksheets.

The selection of target groups involves identifying whom to train and estimating how many people are in each group. To guide the process, this section is organized around a series of questions.

When to plan training?

How long does it take?

DEVELOPING A TRAINING PLAN

1. *Select target groups*

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Chapter 5 — Issue: Training

1.1 Identify target groups for training [prot 2 1-2 8]*

Question: What facilities provide first-level health care services for sick children?

Draw an organogram of the health care system on a flip chart [prot 2 1] This will help to identify target groups for case management training The organogram shows the different health facilities at different levels of the health care system There may be more than one system of health facilities operating under different ministries or divisions The organogram may cover only the public health care system, or it may also show private health facilities Note any missing data on health facilities (to be added later) Define first-level health facilities

Question: Who manages sick children at first-level health facilities?

Identify the key categories of health workers who manage (assess, treat, advise, refer) sick children at first-level facilities [prot 2 2] (If job descriptions exist, refer to them) Write the categories in the organogram

Question: How many health care providers manage sick children at first-level health facilities?

In some settings it will be possible to determine the actual number of providers in all local areas [prot 2 3] In other settings, use the organogram to estimate the minimal number of providers

If there are no records of the exact number of providers, estimate the number of first-level health facilities on the organogram and the number of health workers treating sick children at each facility Plan to train at least two providers at each facility that has two or more health care providers

On the organogram, write the actual or estimated numbers of health providers who treat sick children at first-level health facilities

*The numbers in brackets refer to items in the review list of questions and in the sample protocols

Question • *What are the tasks, responsibilities, and skill levels of the health care providers managing sick children at first-level facilities?*

Discuss the tasks of health care providers [prot 2 4] If possible, refer to their job descriptions Consider whether their tasks include all aspects of case management (assessment, treatment, advice), prescription dispensing only, or advice and referral only For example, in some settings the health workers who assess cases are not allowed to treat them (for example, by prescribing drugs) IMCI tasks may be divided among available health workers An assistant weighs and records children on arrival, a doctor examines and prescribes, and a nurse explains and counsels

Assess current knowledge and skills based on available health facility survey data, supervisory/monitoring reports, and/or impressions of health workers' performance based on visits to selected facilities [prot 2 5] If no case management skills training has been conducted, or there is a high turnover rate of trained health workers, case management skills are probably needed

Assess the language and reading skills of health workers at first-level health facilities [prot 2 6]

Define the tasks, responsibilities, and skill levels of the various health care providers Summarize the major case management deficiencies and gaps (This information will be useful at a later stage in the planning of training)

Question: *Who supervises case management practices in first-level health facilities?*

Identify who supervises the health workers who manage cases [prot 2 7] In planning, include these supervisors in the same training with health workers who manage cases, if appropriate

Question • *Who are other important providers of health care to sick children (inside or outside the public health system) [prot 2 8]?*

If data suggest that at least 30 percent of sick children are seen by providers outside the public health system, list



these health workers and estimate their numbers. Professional associations may be a source of information on pharmacists and private practitioners.

Outcome of task 1.1: An organogram shows all the health providers who manage sick children at first-level health facilities in the public health care system, their numbers and responsibilities. Other providers in the private sector also are identified. The tasks and current skills of health care providers are described briefly.

1.2 Estimate training denominators

Worksheet 5-1 (page 21) provides a format for estimating how many of the health providers who manage sick children, need training. This is called the training denominator. In the first column of the worksheet, write the categories of staff with responsibilities for case management at first-level health facilities. (The information was written on the organogram during identification of target groups.) Include all the identified categories of providers.

In the second column, write estimates of the numbers of each category. These are training denominators that will be used to estimate the training targets, the proportion of health workers needing training who can actually be trained.

In the third column, for each category, write the total number of persons already trained in some aspects of case management of sick children [prot 2.9]. It may be useful to divide the column into subcategories (for example, ARI, CDD, malaria, IMCI) to provide an overview of previous experiences in clinical skills training. If there are any health workers trained in integrated clinical skills training, describe the content and methodology to compare it with the new WHO/UNICEF IMCI training course.

In the fourth column, calculate the number of health workers who have not been trained in IMCI (column 2 minus column 3).

This provides an overview of currently trained and un-trained health workers. Note that even if health workers have been trained in disease-specific case management, integrated case management training provides new clinical skills on how to assess, classify, treat and advise.

Outcome of task 1.2: Target groups and training denominators are clarified.

The number of health workers who need to be trained (column four) may be very large. Options to consider are ordering priorities, phasing of activities over time, and focusing geographically.

Question: Who are priority target groups for training?

Review the information on Worksheet 5-1. In establishing priorities, consider the following questions:

- Who treats most cases [prot 2.8]?
- Who are the most influential providers of care [prot 2.10]?
- Who are first-level care providers [prot 2.4]?
- For which health workers can appropriate training materials be made available for timely implementation [prot 2.11]?
- Who serves the patient population in greatest need [prot 2.12]?

Question: What selection criteria will be used?

List important criteria to be used in selecting trainees and trainers.

For trainees, consider the following criteria:

- Worker is directly responsible for case management or supervision of case management.

1.3 Decide priority target groups and selection criteria

Chapter 5 — Issue: Training

- Worker will practice case management after training
- Worker has no prior training in case management

For trainers, consider the following criteria

- Worker is available full-time throughout training
- Worker is available for follow-up after training
- Worker is convinced of and committed to correct case management
- Worker is confident in hands-on case management and training
- Worker is enthusiastic about the topics
- Worker is a good communicator

Outcome of task 1.3: Priority target groups and selection criteria are identified.

2. *Assess training coverage*

Although many health workers need training, only a few can receive quality case management training in a short period of time. Increasing training coverage involves reviewing training targets and exploring strategies to increase training coverage.

2.1 **Assess training coverage and targets** [prot 2 13-2 16]

Using Worksheet 5-1 (page 21, remaining columns), make a preliminary assessment of how many health workers can be trained per year [prot 2 13-2 16] and estimate the training targets. First determine the optimal number of participants per course. The number will depend on the estimated caseload, and it is usually not more than 15-20 participants per course. Then determine the average number of courses that are feasible per year, taking into account

- availability of functioning training sites [prot 2 13],
- the season for case management training (when there will be sufficient cases of ARI, malaria, and/or diarrhea [prot 2 14],

- the availability of trained trainers [prot 2 15] and the ratio of trainers to trainees, and
- availability of funds [prot 2 16].

In column five, estimate the total number of participants to be trained annually by multiplying the number of participants per course by the number of courses per year

In column six, estimate the annual training target for each category of trainers by dividing the total number of participants to be trained (from column five) by the number needing training (from column four)

In column seven, identify whom will be responsible for organizing the training courses and whom to involve in collaboration. Consider collaboration with non-governmental organizations (NGOs), professional associations, private sector institutions, universities, and other health worker training schools

Preliminary estimates developed in the preceding section may indicate a need to accelerate training and increase coverage. Decisions on how to increase training coverage have major implications in planning for manpower, materials, scheduling, and budget. This section assists in making these decisions by presenting a number of advantages and disadvantages for each training strategy

Using information gathered in the review [prot 2 17-2 22] and the information on Worksheet 5-1 (page 21), discuss the various options for increasing training coverage and decide whether to include any of them in the training plan

Decentralized training courses [prot 2 17]

Advantages:

- Training can be conducted in small hospitals without specially equipped training sites
- Training can be planned and implemented by regional/district team

2.2 Decide how to increase training coverage and revise targets [prot 2 17-2 22]

Chapter 5 — Issue: Training

- Training can be adapted to meet local needs
- Decentralized training may reduce travel and per diem costs for participants

Disadvantages:

- Smaller facilities may have fewer cases with the signs and symptoms needed for hands-on practice
- Quality may be affected by the availability of fewer experienced trainers
- Training materials, equipment, and supplies may not be readily available

On-the-job training [prot 2 18]

Health workers can be trained at their own facilities during the regular work day. For example, trainers or co-workers may work with health workers as part of a follow-up to formal training to reinforce skills or as part of supervision or monitoring. Distance learning training courses provide another type of on-the-job training. Each type of training deserves consideration as a way to increase training coverage and improve performance. On-the-job training may require modification of training materials and methods and field testing and evaluation to assess feasibility and effectiveness.

Advantages:

- On-the-job training can be focused on observed individual needs
- Individualized training and feedback are possible
- Problems specific to the workplace can be identified and solved
- Workers remain on the job
- On-the-job training can occur when there is a sick child available for immediate practice

Disadvantages:

- On-the-job training requires a trained co-worker, tutor, supervisor, or coach to provide feedback
- Hands-on supervised practice may be limited, affecting the quality of training

Preservice training

In the long run, improving basic training for medical students and nurses is the most effective way to ensure that all health workers have the skills to assess and treat sick children and advise caretakers. Activities to improve basic training merit consideration.

Advantages:

- Preservice training establishes correct case management from the beginning of health workers' training
- Preservice training involves specialists and the medical establishment, both are important for peer influences and program support
- Establishing correct practices in training institutions can provide a model for health professionals
- By institutionalizing improved case management, preservice training may be more likely to achieve sustained change than on-the-job training

Disadvantages:

- Changing the curricula of medical and nursing schools requires considerable resources
- Many steps are involved, including policy making, materials development, and working with deans
- The effects on child survival may be delayed for several years
- Medical curricula may not be a responsibility of the ministry of health

Private sector training [prot 2 19]

Private sector providers may be difficult to reach. However, many private practitioners belong to professional associations that may be interested in collaborating with the ministry and international agencies. Many private practitioners are employed in both public and private sectors.

Advantages:

- Private sector providers may have credibility and influence in the community
- Private sector providers often see children first, before help is sought at public facilities

Disadvantages:

- Private providers may not want to leave their practices to attend training
- Performance after training may be difficult to assess
- Many private providers depend on drug prescriptions for their income
- Private providers may not treat the children who are most in need

Information and orientation [prot 2 20]

When formal training and other options to increase coverage have been considered, there may still be large numbers of health providers who are unable to attend any training activities over the next few years. Providing them with information or orientation on the management of sick children is important. Orientation activities are less effective than training in changing practices and influencing quality of care. They require time and personnel. Thus the cost should be weighed against the outcome. Information imparted through face-to-face communications is usually more effective than written information.

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Advantages:

- Seminars and other forms of orientation can reach large audiences
- Orientations can influence knowledge and attitudes
- Seminars can be relatively easy to plan and implement, and can be presented throughout the year
- Seminars and orientations can reinforce training activities

Disadvantages:

- Information without practice is not likely to change behaviors
- Seminars do not provide hands-on practice
- Seminars and orientations may divert scarce resources from more effective kinds of training

After considering all options, summarize the decisions on ways to increase training coverage. Assess whether the targets on Worksheet 5-1 (page 21) can be increased. Revise the targets and enter them on the worksheet.

Common causes of death among children in most developing countries are acute respiratory infections, diarrhea, measles, malaria, malnutrition, and related complications. Often, these diseases are missed or assessed incorrectly. WHO and UNICEF have prepared a course to assist in training health workers at first-level health facilities in integrated case management. The course is accompanied by an adaptation guide. The integrated course provides skills that most health workers need. For the training to have a positive effect on quality of care, health workers also need essential drugs. Thus, in planning and implementing the IMCI training course, the availability of drugs and other factors must be considered.

This section provides guidance in identifying training weaknesses and gaps. It is not intended to make major changes in the core content of the integrated training course prepared by WHO and UNICEF, but rather to decide on skills

3. Review training course

to emphasize in training and to make other country-specific recommendations for preparation, modification, and adaptation of the course. The process can help to confirm the relevance and appropriateness of the WHO/UNICEF course in addressing country-specific needs, and help gain local ownership of the training course. The subsequent adaptation process will further these goals.

Note: The WHO/UNICEF IMCI training course does not present disease-specific topics "back-to-back," but describes a more holistic integral process for assessment of a sick child.

3.1 Review case management needs and health workers' skill levels
[Prot 2 5, 2 9, 2 21-2 23]

Assess factors that may influence the effectiveness of the IMCI training. Use information collected during the assessment [prot 2 5, 2 9, 2 21-2 23] and on Worksheet 5-2 (page 22) to facilitate the process. Worksheet 5-2 (page 22) can be drawn on a flip chart. Factors to be considered and worksheet instructions are outlined below.

Topics/diseases [prot 2 21]

- What diseases are the most common cause of death in children under five years of age?

List the diseases in order of magnitude in the first column of Worksheet 5-2 (page 22).

Case management skills needed [prot 2 5 and 2 22]

- Which of the diseases identified need improvements in assessment, treatment, or counselling?

In the second column of Worksheet 5-2 (page 22), check (✓) the diseases of sick children (listed in the first column) that require improved case management skills.

Drugs available [prot 2 23]

- For which diseases are the essential drugs required for correct case management usually available?

In the third column, check (✓) the diseases for which drugs are or can easily be made available to provide cor-

rect case management A list of the IMCI drugs is found in Annex 2

Case management training has not been conducted: [prot 2 9]

- What case management training has not been conducted?

In the fourth column of Worksheet 5-2 (page 22), check (✓) the diseases that have **not** been covered in past or current case management training courses (disease-specific or integrated) of health workers at first-level facilities

Review Worksheet 5-2 (page 22) and identify the priority topics for improvement in case management The diseases that have a check mark in all columns may be prioritized, however, some factors may be more important than others and may influence the priority For example, previous training may be less important than other factors, even health workers who have been trained may not practice correct case management and may need retraining Write the top five priority subjects in column five

Outcome: Priority topics for case management training have been identified.

Review the IMCI training course prepared by WHO and UNICEF to assess whether the priority topics (identified in 3 1) are covered by the materials and the methodology is appropriate for the target group selected

In assessing the appropriateness of the course for first-level health workers, consider such factors as

- the reading ability of participants [prot 2 11],
- the language skills of participants [prot 2 11], and
- the duration of the course and the time health workers can be away from work [prot 2 24]

3.2 **Review training materials** [prot 2 11 and 2 24]

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Chapter 5 — Issue: Training

Discuss ways to train health workers on priority topics that are not covered in the course. For example, how to incorporate a topic (e.g. dengue fever), or replace malaria (if it does not exist) with other prevalent febrile illness. Note: The need to include additional priority topics have to be weighed against the duration and current design of the course.

What specific recommendations for modification of the course emerge from this planning exercise? For example

- What topics need emphasis?
- What skills need emphasis?
- Is there need for translation?
- Is there need for modification of training methods for first-level health workers?
- Are specific adaptations needed for different areas of the country, region, or district?

Summarize recommendations for modification and adaptation, some are already included in the WHO adaptation module. List the training course to be used for the priority topics identified and complete the final column of Worksheet 5-1 (page 21)

Outcome of task 3.2: Training materials are reviewed and possible modification needs identified.

Use the information in Worksheets 5-1 and 5-2 (pages 21 and 22) to prepare a detailed training plan. A plan outline is presented below. This training plan includes the overall planning of support to training activities and focuses on the preparatory activities. A more detailed work plan for training first-level health workers will need to be developed at the district level.

Describe the current status of training, including the status of case management and past and current training activities. Explain the need for integrated case management training at first-level health facilities.

State the specific objectives for the training plan at national, regional, and/or district levels.

Outline the main strategy decisions made regarding whom to train, how to increase coverage, and what to focus on in implementation. Examples of topics to be covered are given below.

- *priority target groups;*
- *numbers to be trained;*
- *selection of trainers and trainees;*
- *plans for training coverage (decentralization, phased integration, preservice, private sector, on-the-job training);*
- *training courses and materials to be used;*
- *when and where to train (timing and geographic phasing);*
and
- *monitoring activities to provide skills reinforcement.*

4. *Prepare a Training plan*

OUTLINE

Current status

Objectives

Strategies

Chapter 5 — Issue: Training

Preparatory activities

Specify the preparatory activities needed to implement training and identify who is responsible for each of these activities and for the sources of funding (some of these preparatory tasks are also described in Chapter 2, page 9-11) Examples of topics to be covered are listed below

- ***Adaptation and preparation of training materials and charts***

Who will adapt the IMCI course prepared by WHO and UNICEF and modify it, if needed? When? Prepare a plan for modification, adaptation, and translation (see Annex 1 6 and 7 for more information on preparation for training and adaptation) Include the following adaptation steps (see WHO/UNICEF Adaptation Module)

- Review of case management policies and guidelines (see Chapter 6 on policy)
- Review feeding problem, identify feeding recommendations, draft nutrition guidelines for IMCI feeding box
- Adapt guidelines and incorporate into charts and modules
- Translate course materials
- Layout and print all materials

- ***Availability of drugs***

Plan activities to ensure sustained availability of selected drugs for use during training and for case management after training (see Chapter 7 on drug availability)

- ***Training sites***

Indicate plans for expanding existing training sites and for monitoring their quality

- ***Training of Trainers***

Plan training of trainers course and identify individuals to be trained

- ***Coordination***

Identify plans to coordinate the introduction of IMCI training with training for other health sector initiatives

- ***Communication***

Coordinate training with other communication activities (see Chapter 8 on communication)

- ***Monitoring***

Plan the monitoring of trained health workers during and after Who will monitor and how? (See chapter Chapter 9 on monitoring)

- ***Funding***

Identify partners interested in funding the planning and implementation of IMCI training

Prepare a table with the budget for all preparatory training activities with the source of funding indicated and confirmed

Budget



WORKSHEET 5 1, PLANNING IMCI TRAINING

(1) Category of health worker	(2) Number of each category	(3)* Total number trained in IMCI	(4)* Number needing training in IMCI	(5) Numbers to be trained annually			(6) Trained by _____ (year)	(7) Respon- sible for training	(8) Training courses/ material to be used
				Number per course (i)	Number of courses/ year (ii)	Total (i)x(ii)			

* Columns can be divided into subcategories e g , trained in CDD, ARI, malaria, nutrition, measles, IMCI (as appropriate)

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WORKSHEET 5-2, TRAINING ASSESSMENT

Topics. Diseases	Case management skills needed/ missed diagnosis (✓)	Drugs available (✓)	Case management training has not been conducted (✓)	Priority topics	Comments

Questions for the planning of training

- 2 1 What does the health facility system look like in the area (district, region, or country)? What types of health facilities are considered first-level health facilities?
- 2 2 How many first-level health facilities (by category) are in the area (district/region/country)?
- 2 3 What is the total number of health workers who assess and treat children in all the first-reach health facilities in the area?
- 2 4 What are the tasks of (each category of) health worker managing children? Do they assess, treat, and give advice or only give advice and refer?
- 2 5 What are the current case management skills and knowledge (of each category) of health providers? What are the gaps/weaknesses in the current case management performance (of each category) of health provider? What are the most important case management deficiencies, including missed diagnosis, that have been identified?
- 2 6 What are the language and reading skills of health workers at first-level health facilities?
- 2 7 Who supervises case management practices at first-level health facilities (internal supervision within and/or external visits from outside)?
- 2 8 Who do most caretakers of sick children seek treatment from (include the most common health providers—e.g., public, private, NGO)?

LIST OF QUESTIONS



Chapter 5 — Issue: Training

2 9 How many health workers at first-level health facilities, have and have not been trained (clinical hands-on practical training) in the area, in

- ARI case management?
- diarrhea case management?
- nutrition counseling?
- malaria case management?
- measles case management?
- integrated sick child case management?
- interpersonal communication skills?

2 10 Who are the most influential health professionals?

2 11 What categories of health workers are most likely to benefit from the current WHO/UNICEF training course on integrated case management of childhood illnesses (without any or minor modification), considering their language and reading skills?

2 12 In what population group are most of the sick children found? Any identified risk group—eg , urban/rural or refugee population?

2 13 What functioning training sites (e g , DTUs) exist?

2 14 When are most cases of ARI, diarrhea, and malaria available for clinical training? Is there any period of overlap in peak seasons?

2 15 How many trained trainers can be made available to conduct case management (including communication skills) training?

2 16 What funds are or can be made available for training activities? What are potential sources of funding?

2 17 Is any decentralized case management training being conducted?

2 18 What experiences in on-the job training exist?

2 19 What, if any, training of private sector health providers exists?

2.20 What has been the experience in informing or orienting health providers on case management?

2 21 What are the most common causes of death in children?

2 22 For the most common causes of death, what are the main case management weaknesses and gaps?

2 23 What essential drugs are or can be made available to treat the most common causes of death?

2 24 For what duration of training can health workers be away from work?



This chapter addresses the following policy questions

- What current national and regional policies are inconsistent with integrated case management (IMCI) of sick children?
- What aspects of IMCI (assessment, classification and treatment, and advice) require policy decisions?
- What activities (other than training) are influenced by new or revised policy decisions?

In many countries, case management policies have been established—for example, policies developed by the national ARI, CDD, EPI, and malaria programs, some of these might require modification. Other countries do not have established policies to guide decisions such as when to prescribe drugs (in treatment of malaria or diarrhea, etc.), or what advice to give mothers on nutrition, or when to provide vitamin A and measles vaccine.

National policies are needed to adapt training materials, ensure that essential drugs are provided, make communication messages consistent, and for the organization of work at the health facility.

Integrated management of childhood illness (IMCI) must be based on state-of-the-art principles for case management at home and in health facilities. The WHO and UNICEF guidelines and the generic sick child case management charts provide an algorithm for assessment, classification, and treatment. The guidelines are expected to be applicable in most developing countries where infant mortality is higher than 40 per 1,000 live births and where there is *P. falciparum* malaria.

This guide helps managers to review and identify case management and other policy issues in **preparation** for the adaptation of training materials, and to make other recommendations for action.

PURPOSE

RATIONALE

APPROACH

Tasks

Chapter 6 — Issue: Policy

The adaptation module prepared by WHO and UNICEF will help in ascertaining policies and guidelines for the adaptation of clinical modules and charts (*Ref Adaptation Guide, Management of Childhood Illness, WHO/UNICEF*)

Table 6-1. Tasks Involved in Assessing Current Policies

- | | |
|----|---|
| 1. | Review current case management policies |
| 2. | Identify case management policy issues |
| 3. | Identify other policy issues |
| 4. | Plan follow-up actions |

The process for gathering the information needed is described in Chapter 3, review, the sample protocol for assessing drug policy questions is found in Annex 3. A summary list of policy questions is also found at the end of this chapter (pages 7-8)

Whom to involve

The IMCI management team should be involved in setting policies related to IMCI. Other persons may also participate in development of specific policies that go beyond the mandate of the IMCI management team.

Because broad participation and consensus are important in the development of policy, call on national expertise and resource persons when needed. Endorsement of policy often requires presentation of policies at the highest levels

How long does it take?

Using this guide to review policies and prepare for adaptation takes a few days. Completion of the tasks described in the WHO Adaptation Guide may take several (six) months, depending on the issues, the need to conduct research and the procedures used. The development of official policy and formal endorsement may also take a long time

Review any existing policies on the case management of ARI, diarrhea, measles, malaria, and malnutrition. How to do it is described in the WHO Adaptation Guide. Also review any drug policies, nutrition, and immunization policies related to IMCI. Summarize the current policies and the status of endorsement, dissemination, and implementation. Identify any inconsistencies between current case management policies as stated in program policy documents and the new IMCI case management chart.

List all the policy issues that need to be addressed. To facilitate identification of specific policy issues, Table 6-2 presents examples of IMCI policy issues.

Review Table 6-2 and the Adaptation Guide. Identify items that require a policy decision.

REVIEW POLICIES

1. *Review current case management policies*
[prot 3.1-3 12]*
2. *Identify case management policy issues*

*The numbers in brackets refer to items in the review list of questions and in the sample protocols.

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Table 6-2 Examples of national IMCI policy issues	
Drug policies	<p>Recommended first- and second-line antibiotics for pneumonia, acute ear infection, signs of severe disease, dysentery, cholera</p> <p>Recommended first- and second-line antimalarial.</p> <p>Recommended cough remedies (and harmful cold/cough remedies to avoid)</p> <p>The formula for each drug that should be provided to health facilities:</p> <p>Cotrimoxazole pediatric and/or adult tablets Chloroquine syrup and tablets Iron syrup and/or tablets ORS, including volume of water</p> <p>Level of health facilities having first- and second-line oral drugs</p> <p>Level of health facilities having intramuscular drugs (quinine, chloramphenicol)</p> <p>ORS solution for home case management</p> <p>Is mebendazole an appropriate drug to have available? (In what areas are hookworm and whipworm affecting children?)</p>

<p>Nutrition policies</p>	<p>Which children should be given vitamin A supplementation? Should all children be given vitamin A at regular intervals, or should it only be given to children with signs of vitamin A deficiency (foamy patches on white of eye) or measles?</p> <p>Locally appropriate breast milk substitutes</p> <p>Locally appropriate energy- and nutrient-rich foods</p>
<p>Case management policies</p>	<p>Is the country a high-, low-, or no-malaria risk setting? Are selected areas high-risk?</p> <p>What method is to be used for timing one minute when counting breathing rates? (If a timing device is to be used, who will procure timing devices for all health workers?)</p> <p>The appropriate signs of anemia Can eyelid pallor be used? (Or does the incidence of other eye problems make eyelid pallor a difficult sign to use?)</p> <p>The fluids to recommended for home case management of diarrhea</p>
<p>Immunization policy</p>	<p>The recommended immunization schedule.</p> <p>What are the national guidelines on missed opportunities?</p>

Chapter 6 — Issue: Policy

3. *Identify other policy issues*

Introducing IMCI at first-level health facilities will influence many aspects of how work is organized. It may require policy changes—for example, changes in personnel responsibilities and tasks, job descriptions, record keeping, and patient flow.

Identify issues that will require a policy decision and plan when the policy review and revision can take place and who will do it.

4. *Plan follow-up actions*

After policy and adaptation decisions (or recommendations) have been made, disseminate the policies widely. Consider activities that are influenced by the new or revised policies and plan follow-up actions.

Possible actions include

- Prepare a national or regional IMCI policy statement for wide distribution.
- Adapt generic materials—for example, the case management chart (as outlined in the adaptation guide), training materials, drug lists (essential and other drug supply), and communication messages (advice to mothers) and their channels.
- Review and revise other relevant policies—for example, personnel policies, and organization of work.

Questions for addressing IMCI case management issues

LIST OF QUESTIONS

Questions	Possible Sources of information
What is the national policy on	
3 1 the case management of children with diarrhea (including drugs for dysentery and cholera) in health facilities?	The National CDD Programme or MCH
3 2 home case management of diarrhea (including recommended home fluids and foods during and after diarrhea)?	The National CDD Programme or MCH
3.3 breastfeeding?	MCH
3 4 home case management of ARI?	The ARI Programme or MCH
3 5 the case management of ARI in health facilities (including drugs for moderate and severe pneumonia)?	The ARI Programme or MCH
3 6 malaria prevention and case-management?	The Malaria Programme
3 7 measles case management?	EPI or MCH
3 8 nutritional management and advice of sick children? Vitamin A supplementation? Growth monitoring?	Nutrition or MCH

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Chapter 6 — Issue: Policy

Questions	Possible Sources of information
3.9 immunization?	The EPI Programme
3.10 drugs (essential drugs) for first-level government and private sector drug utilization?	Pharmaceutical Division/The Essential Drugs Programme
3.11 prescription and use of antibiotics by level of care and category of health workers?	Pharmaceutical Division/The Essential Drugs Programme
3.12 prescription and use of injections by level of care and category of health worker?	Pharmaceutical Division/The Essential Drugs Programme
<u>For any of the above policies,</u>	
What is the status of each policy	
Is it fully endorsed by the MOH?	
Is it disseminated outside of the MOH? If yes, what are the communication channels?	
Does it cover both public and private sectors?	
Is it implemented? How?	
(See also the WHO/UNICEF Adaptation module for the management of childhood illnesses)	

Chapter 7 — Issue: Drug Availability

This chapter addresses three drug management issues related to the treatment of the sick child.

- What drugs and vaccines needed for integrated management of childhood illness (IMCI) are available or missing at health facilities? Why?
- What IMCI drugs are included in or absent from essential drug lists, national formularies, and other drug lists in public and private sectors?
- In what locations are IMCI drugs and vaccines usually available? Why?

A selection of essential drugs, vaccines, and supplies must be available in health facilities to sick children. To ensure drug availability, it is important to assess the drug availability pattern, review existing drug lists and guidelines, identify bottlenecks in the drug supply system, and take appropriate action. Major problems in the drug system are beyond the scope of this guide.

Data collected in the review help to address the drug issues. Numbers in brackets—for example, [prot 4.3]—refer to relevant items of the sample protocol for review of drug availability. Table 7-1 identifies three tasks to address basic drug availability issues.

Table 7-1 Tasks in Assessing Drug Availability	
1.	Assess availability of IMCI drugs and vaccines
1.1	Review data on essential IMCI drugs and vaccines
1.2	Identify influencing factors
1.3	Identify possible actions
2.	Review drug guidelines and lists
2.1	Examine drug guidelines and lists
2.2	Make recommendations for including IMCI drugs
3.	Identify facilities with drugs and plan actions
3.1	Identify facilities with drugs and vaccines available
3.2	Plan follow-up activities

PURPOSE

RATIONALE

APPROACH

Tasks

16

Chapter 7 — Issue: Drug Availability

Whom to involve

National, regional, and district managers in charge of coordinating the support to IMCI need to be involved in assessing drug availability. For effective problem solving and action, also involve the persons in charge of drug policy, pharmaceuticals, and procurement and supplies of drugs and vaccines. If possible, involve representatives of the private sector, for example, drug manufacturers or distributors.

How long does it take?

Drug availability issues can be addressed in a one- to two-day meeting. Implementation of recommendations will require more time, especially if new drugs are being added to the national drug lists, or if improvements are being made in the drug supply system.

ASSESSING DRUG AVAILABILITY

1. *Assess availability of IMCI drugs and vaccines [prot 4 1-4 10]**

The purpose is to assess the drug availability pattern using data from health facilities (for example, health facility surveys, health facility assessment) and other sources of information. Possible reasons for nonavailability of essential drugs and actions to ensure availability of IMCI drugs will be identified.

1.1 *Review data on essential IMCI drugs [prot 4 1-4 2]*

Review available data and list (on a flip chart) the IMCI drugs and vaccines that are usually missing in all or most health facilities. Possible sources of information include reports on supervisory visits, health facility surveys, drug utilization studies, EPI reports, and other documents available from the authorities responsible for drug and vaccine procurement and distribution. Data gathered during the review using the sample protocol (Annex 3) and visits to health facilities will provide additional information to assess drug availability.

*The numbers in brackets refer to items in the review list of questions and in the sample protocols.

Chapter 7 — Issue: Drug Availability

Discuss and list possible reasons why drugs are not regularly available. Consider the following factors.

Drug policies and guidelines [prot 4 5-4 6]

- Are the essential IMCI drugs included in the national essential drug list?

Logistics problems [prot 4 3, 4 4, 4 8]

- Are the drugs in stock at national and regional medical stores but not at health facilities? If yes, why?
- Are the drugs available at some facilities and not others? Are drugs available at irregular intervals? If yes, why?
- Are the drugs ordered or reordered?
- Are there problems with stock keeping at central, regional, or district levels?

Public sector problems [prot 4 1]

- Are the drugs available in the private sector but not in public health facilities?

Inappropriate drug use [prot 4 10]

- Are drugs unavailable because they are used for other purposes?

List possible actions to take to address each of the most likely influencing factors. Further investigations may be needed to understand and deal with factors influencing drug availability.

1.2 Identify influencing factors [prot 4 2-4 10]

1.3 Identify possible actions

Chapter 7 — Issue: Drug Availability

2. Review drug guidelines and lists [prot 4 5-4 7]

2.1 Examine drug guidelines and lists

Identify and review all drug guidelines, lists, and formularies. Compare the drugs on the lists with the IMCI drug list (Annex 2). Identify the drugs that need to be incorporated into the different guidelines and drug lists.

Examples of drug lists to review are

- essential drug lists,
- national drug formularies,
- drug guidelines for health facilities,
- national pharmacopoeias,
- UNICEF drug supply list and list of other agencies providing drugs, and
- emergency relief drug supply lists

2.2 Make recommendations for including IMCI drugs

Make recommendations and plan actions for incorporating IMCI drugs into major drug guidelines or lists. Actions may include the following elements

- For each unavailable drug, prepare a proposal with a rationale, backed up with scientific references that indicate why the specific drug needs to be included
- Organize a drug policy review meeting to achieve consensus for action
- Petition for the inclusion of the relevant drugs on the agenda of planned drug policy review meetings

Identify and list the health facilities where IMCI drugs are available or can be made available most of the time

Possible activities to improve drug availability and management include

- Plan to start IMCI training activities in a district where drugs are available (or can be made available) in health facilities (see 3.1 above)
- Coordinate actions to improve drug availability with training activities to improve drug use.
- Make recommendations or take action to solve any problems with the unavailability of drugs in facilities.
- Plan and conduct training on drug management at health facilities (*)
- Plan actions to involve the private sector in the provision and supply of IMCI drugs
- Conduct further investigation into drug supply problems

The BASICS project and WHO have developed a training course on how to manage drugs at the health facility. For further information, contact CHD at WHO or The BASICS Project

3. Identify facilities with drugs and plan actions

3.1 Identify facilities with IMCI drugs and vaccines available [prot 4.11]

3.2 Plan follow-up activities

* **Training on drug management at the health facility**



Chapter 7 — Issue: Drug Availability

Questions for the review of drug availability

4 1 What IMCI drugs and vaccines are available at first-level health facilities, at central and regional medical stores, and in private pharmacies?

4 2 What IMCI drugs are out of stock at health facilities?

4.3 What are possible reasons why some of the IMCI drugs are missing or available at irregular intervals in health facilities?

4 4 Why are some drugs available in central/medical stores and not in health facilities?

4 5-4 6 What IMCI drugs are not included in major drug lists, manuals, and guidelines covering public and private health sectors?

4 7 What standard drug lists and guidelines are present in health facilities?

4 8 Do the first-line facilities keep drug inventories and records of orders and reordering?

4 9 If yes to 4 8, what percent of the time have IMCI drugs been out of stock during the previous year?

4 10 Which IMCI drugs are used for purposes other than management of childhood illnesses?

4.11 Which health facilities have some IMCI drugs available at some time?

LIST OF QUESTIONS



Chapter 8 — Issue: Communications

This chapter addresses the following communication questions

- How can communication activities in support of IMCI be efficiently organized?
- What IEC resources are available to support IMCI?
- What preparatory steps are required to develop and implement an IMCI communication plan?

The answers to these questions help to draft communication strategies and to plan IEC activities in support of IMCI.

The effectiveness of IMCI will depend to a large extent on the communication skills of the trained health workers—listening, advising, and motivating caretakers to take the appropriate measures at home to prevent disease, recognizing danger signals, and taking action when a child becomes ill to speed the child's recovery. Through the mass media and other means, health communicators can aim directly at caretakers and their communities with accurate information that reinforces appropriate behaviors to prevent and treat illness and seeks to change those which are inappropriate. The development of IMCI communication strategies must address health worker communication skills and identify other means to reach caretakers.

In many situations the health worker may be the principal means of reaching the caretaker. Health workers must be able to elicit and process information from the caretaker in order to make culturally appropriate recommendations.

To improve the communication performance of health care providers adopting IMCI is therefore essential. Communication skills form an integral part of the health worker/caretaker interaction in IMCI clinical training. Health workers ask the caretakers many questions about the child's symptoms and what has been done at home to treat the child. They use this information to classify the disease, treat the child and advise the caretaker on home care of the sick child.

PURPOSE

RATIONALE

Equally important are communication efforts aimed directly at caretakers through various channels, i.e., the mass media and community approaches. A child spends most of his/her life in the home, and the family usually does not seek contact with the health system until the child is sick. The responsibility for keeping the child in good health through good nutrition, hygiene behaviors, and timely immunization; for recognizing danger signs and seeking care, and for managing the sick child at home rests with the caretakers and those around them.

Planning IMCI communication activities presents a challenge to provide appropriate messages that reflect the different worlds of the caretaker and the health workers, and that meet the demands of, and are consistent with the new treatment guidelines.

APPROACH

Tasks

Table 8-1: Tasks in Preparing for IMCI Communication Activities	
1.	Decide how to coordinate and manage IEC activities 1.1
	Review influencing factors 1.2
	Decide how to coordinate IMCI IEC
2.	Review current IEC resources and activities
	2.1 Assess manpower resources
	2.2 Review IEC activities and identify IMCI responsibilities
3.	2.3 Assess communication capacity
	Develop strategies and plan activities
	3.1 Identify behaviors, audiences, strategies
	3.2 Plan formative research
	3.3 Decide on IEC strategies and messages 3.4
Develop materials production plan 3.5	
	Plan to improve and maintain health worker communication skills

Chapter 8 — Issue: Communications

All the programme managers and technical experts involved in the coordination of IMCI (See Chapter 4, Coordination) need to be involved in the review and planning of IMCI IEC activities. Communication specialists and representatives of interested parties (e.g. donors, academic institutions, private sector) with extensive experiences in IEC also should be included. To manage the ongoing IEC efforts, a committee might be formed (See first task below)

Research and early developmental work is still ongoing to identify the key determinants to effective homecare of sick children and to learn how to most effectively influence those behaviors. This need not delay efforts to improve advice to caregivers through multiple channels at the same time as IMCI services are made available. IMCI provides a unique opportunity to coordinate and integrate training and communication efforts from the preparation phase through implementation to evaluation.

Addressing the IEC issues in this guide, i.e., conducting the tasks (1.1-2.3) listed above, might take a few days or weeks depending on how readily available the information is. Message development and other planned activities (3.1 - 3.5) take a few months to implement in preparation for IMCI communication interventions. For example, the steps in the WHO/UNICEF Adaptation guide for training takes up to six months to implement, this includes some IEC preparatory activities such as the review and development of feeding advice—not covered in this guide.

Whom to involve

When to start IMCI communication efforts

How long does it take?

Chapter 8 — Issue: Communications

1. *Deciding on the coordination and management of IEC [prot 8 1 - 8.4]**

1.1 Review influencing factors [prot 8 1-8 4]

In deciding how to organize IEC efforts consider the following factors for effective and efficient coordination and management.

- Integration of IMCI communication efforts with other MOH IEC efforts

The current organization and management of IEC throughout the MOH system, including the degree of decentralization of IEC planning and management

- The need to facilitate the coordination and management of related functions (i e., formative research, strategy and message development, materials development, management of mass media, monitoring and evaluation) without creating a separate “vertical” IMCI communication unit
- The involvement of available communication specialists from different levels, managers familiar with the IMCI technical content, and communication experts outside of the MOH, i e. academic institutions, media organizations, NGOs and PVOs with extensive communication experience

1.2 **Decide how to coordinate IMCI IEC**

After considering all the above factors and other country specific factors, a decision needs to be made how to best address them. An option is to use and strengthen an existing group/unit within the MOH or an existing interagency IEC group

*footnote the number in brackets refer to items in the review list of questions (p 13) and in the sample protocols

The second task is to assess the current IEC capacity including previous IEC efforts related to child health and who the potential resource persons are and what they are doing. A worksheet is provided on page 6 to facilitate an overview of whom to involve at what level, assess what they do and what their capacities are to support IMCI.

While IMCI may be new to many ministries of health, many may already have conducted substantial IEC work in certain areas that are part of IMCI, such as diarrhea or ARI. Review of these prior experiences, including formative research, media materials, and evaluation data on results will help the IEC planning team set priorities.

Question: Who is involved in health communication at each level of the health care system?

Identify possible “health communicators”* at each level of the health care system. List them in column (1) of the worksheet.

Question: What do managers or other staff (at national, regional and district levels) responsible for health communication do? What are the roles of each position?

In assessing the current roles and functions, refer to job descriptions if they exist. The health care providers are included at the health facility level. List the roles and functions in column (2) of the worksheet.

Question: Can responsibilities for IMCI elements be assumed by any of the staff listed above?

List possible IMCI communications tasks in column (3) of the worksheet. You might consider any of the following examples of possible assignments for the managers responsible for communication activities at the national, regional and district levels.

*footnote: Health communicators will be used to describe those persons whose primary role is to plan, manage, and implement health-related IEC activities, for example, IEC specialists or coordinators and health educators.

2. Review current IEC resources and activities [prot 8 5-8 12]

2.1 Assess manpower resources [prot 8 5-8 8]

2.2 Review IEC activities and identify IMCI responsibilities

Chapter 8 — Issue: Communications

WORKSHEET 8–2: REVIEW OF IEC MANPOWER AND IDENTIFICATION OF IMCI FUNCTIONS

(1) IEC manpower "Health communication"	(2) Current roles and responsibilities	(3) Possible IMCI tasks
National level		
Regional level		
District level		
Health facility level		

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Chapter 8 — Issue: Communications

National level

- Allocate resources for IMCI communication activities
- Act as liaison with international technical and donor agencies.
- Develop IEC strategies
- Develop IMCI messages
- Produce materials e.g mother's card in coordination with the development of training materials
- Manage national media

Regional or provincial level

- Adapt IMCI messages, if necessary
- Manage budget and planning (if decentralized system)
- Provide logistical support
- Store IEC materials
- Coordinate training of health workers and supervisors
- Conduct monitoring.

District level

- Provide front-line communication services to communities
- Train community health workers
- Collect and analyze quantitative and qualitative data and use this to plan local strategies and activities
- Act as catalyst for community participation

Chapter 8 — Issue: Communications

2.3 Assess communication capacity [prot 8 9-8 12]

The overview of available manpower resources and their potential roles and functions (Sections 2 1-2.2) forms the basis for assessing the capacity of the MOH to plan and implement communications activities. The following issues need to be addressed next

Skills—Does the MOH have the capacity to develop a communication strategy and plan for IMCI? Who has the skills to develop and test messages? Who has the skills in formative research, interpersonal communication training, management of media and printers, materials development?

Financial—Does the MOH have the financial capacity to implement a communication plan? What are potential sources, and who are the potential interested donors?

Missing components—What components are missing in planning and implementing IEC? Can they be met by training or identified elsewhere?

Other resources—Consider other IEC manpower and financial resources (e.g. private sector, NGOs, professional associations and academic institutions) to work with and mobilize in support of IMCI. Radio and television organizations, both public and private, are particularly important to potential partners

Identify and agree on possible IMCI responsibilities to assign them

This information regarding skills, financial resources and other identified needs and resources will be useful in the next step to develop a communication plan, including communication training, resources mobilization etc

In developing the strategies and messages, a series of steps, starting with identification of the ideal caretaker behaviors and leading to a change from current behaviors to the ideal behaviors, need to be taken

How to do all the important tasks is beyond the scope of this guide, including how to identify behaviors, audiences, and strategies for behavior change, conduct formative research to fill in gaps in information, decide on strategies and messages, and develop and implement a materials production plan. Below is a brief description of some of the essential activities to review and consider in preparation of IMCI communication:

An important starting point in the development of strategies and messages is to examine the desired caretaker behavior in the adapted IMCI chart (See Annex 5 for the generic charts). These include behaviors in three areas: prevention, recognition of danger signs and care seeking and correct home case management. Some of these behaviors are cross-cutting, or apply to all illnesses. Others are disease specific. Working closely with clinical experts, communicators should examine the messages for consistency.

A few key behaviors can be selected on which to focus IEC efforts. This can be done based on a set of criteria, agreed on by the MOH. Possible criteria, in addition to the potential to decrease morbidity and mortality, might include:

- percentage of caretakers already practicing the behavior,
- strength of the belief system or tradition acting as a barrier to changing the behavior, and,
- feasibility of changing the behavior

3. *Develop IEC strategies and plan activities*

[prot 8 13-8 28]

3.1 *Identify behaviors, audiences, and strategies for behavior change*

[prot 8 13-8 19]



3.2 Conduct formative research to fill in information gaps

The selected behaviors can be influenced by an approach aimed at eliminating barriers to individual behavior change, motivating people to change, and reinforcing positive behaviors (See "A Tool Box For Building Health Communication Capacity", obtained from The BASICS Project) In summary, a behavioral approach to message development, would include a review of key behaviors, identification of the determinants of those behaviors, and design of interventions which will influence directly specific determinants.

3.3 Decide on communication strategies and messages [prot 8 20-8 25]

There may be a lot of information available in some areas and very little in others For example, some countries have well developed strategies and messages regarding diarrhoeal diseases, but little is known about caretakers' current behavior and the determinants of that behavior for ARI and other childhood diseases Communicators may be aware that words exist in the mother tongue for chest indrawing, but little is known about why women do not seek help immediately or what might motivate them to do so Before strategies and messages for broader communication efforts can be developed, focused formative research may be needed to fill in these gaps in information (For more information, see A Toolbox For Building Health Communication Capacity, The BASICS Project)

Once data has been collected and analyzed for its implications, and communicators have gone through the tasks briefly described in 3 1 and 3 2, decisions regarding strategies and messages can be made

A variety of communication strategies exist To effect changes in caretaker behavior, communicators may choose mass media, community participation approaches, focus resources on health workers as the primary communication vehicle, combine face-to face advice with scheduled demonstrations or they may use a mix of these and other approaches Each medium has different audiences and functions, as indicated in the table on the following page.

Communication Strategies	Target Audiences
Mass media, counseling, social marketing	Individual caretakers
Community mobilization	Communities
Training, motivation, maintenance	Health workers
Organizational development, policy advocacy	Health institutions

A variety of **message strategies** is also possible, and these need careful consideration. Messages broadcast on national media are by necessity, of a different nature than those disseminated by health workers or groups in a particular community. National media messages must be more generic and universal and local messages more specific. For example, national radio programs about diarrhea might promote the generic message of promoting more fluids and continued feeding, while local health and community workers could teach specific solutions. Logical phasing or **sequencing** of messages must also be taken into account—e.g., teaching about the danger of a particular illness before teaching how best to treat it in the home.

The operational plan for the development of IEC materials should include designation of personnel to accomplish the plan, a timetable for each activity, and estimated costs. Activities should include identifying target audiences, developing creative briefs* for each material, selecting communication channels, determining media mix, developing a distribution strategy, pre-testing materials and producing and distributing materials. The preparation of training materials is a key component of the planning of IMCI training (see Chapter 5, Training), preparation of additional IEC materials needs to be coordinated with the development of such core IMCI training materials.

* A creative brief is an outline of target audiences and key technical information provided to the materials production team.

3.4 Develop a materials production plan

Chapter 8 — Issue: Communications

3.5 Plan to improve and maintain health worker communication [prot 8 26-8 28]

In the WHO/UNICEF case management training course, interpersonal communication skills training is an integral part. In order to improve and maintain health worker communication, other issues to consider in addition to training are

- non-training approaches that will increase health workers' performance of appropriate and effective communication
- where and how communication training, coaching, supervision, or other non-training methods can be integrated into interventions aimed at improving clinical performance

Correct performance of IMCI requires the health worker to treat the caretaker with respect; ask questions about symptoms and treatment at home, listen attentively to the caretakers' responses, know how to estimate the caretaker's capacity and willingness to follow advice, know how to advise appropriate home care, have a follow-up procedure in place to demonstrate and work closely with mothers to provide appropriate follow-up and preventive measures in the home, and verify that the caretaker has understood the information given and knows when to come back. However, the few minutes available for face-to-face interaction during a clinical encounter is an important limiting factor.

For more information how to address these communication issues (3.1-3.5), see Annex 4

The following check list will help ensure that all the necessary IEC preparatory steps are taken. This list can be used both when developing a communication plan and in monitoring the activities.

IEC PREPARATORY STEPS: A CHECK LIST

- Establish a mechanism for the management of IMCI communication activities. Define its relationship with the IMCI coordinating team
- Identify the functions to be carried out in support of IMCI (i.e. formative research, message development, materials development, supervision). Decide how these functions are managed and integrated within or coordinated with the MOH health education unit
- Identify who at the district, regional, and national levels do communication and what their responsibilities are.
- Conduct an assessment of the capacity to plan and implement a communication strategy
- Identify who outside the MOH are involved in communication efforts for IMCI that could be mobilized for IMCI
- Review the ideal home case management (including careseeking) behaviors
- Conduct (participate in) the adaptation of food and fluid recommendations, identification of local terms, and drafting and pretesting of the mothers card) as outlined in the adaptation steps for the IMCI chart and training course (The WHO Adaptation Guide)
- Identify feasible target behaviors
- Collect and review existing child health messages and materials (e.g. diarrhea, ARI, or nutrition messages)
- Review existing formative research, if any, and plan formative research to fill in any gaps in information and data needs
- Develop a communication strategy based on the data
- Develop a materials production plan including incorporation of adapted guidelines and chart, translation, layout, and print
- Plan supervision of communication activities.
- Develop a communication training plan to address gaps in communication skills—including the training of health workers in interpersonal communication skills an integral part of IMCI case management training
- Prepare a time table for planned IEC activities
- Develop a budget for one year or two years
- Decide how monitoring and evaluation will be carried out, consider integration with overall IMCI monitoring and evaluation of health workers performance

Chapter 8 — Issue: Communications

Questions for addressing communication (Reference to pages 4-12)

- 8.1 What IEC services are currently provided by what units, to which units, in the MOH?
- 8.2 What form of coordination exists between disease specific programmes?
- 8.3 How can the development of messages and other communication activities be coordinated between units/divisions?
- 8.4 Who is active in health communication outside of the MOH, and how are they involved in MOH IEC programme activities?
- 8.5 Who is involved in health communication at each level of the health care system?
- 8.6 What do managers or other staff (at national, regional, district levels) responsible for health communication do? What are the roles and responsibilities of each position?
- 8.7 Can IMCI be assigned as a responsibility for any of the health communicators listed above (8.5)? What task can be done by whom at what level?
- 8.8 How do the health communicators function at the national, regional, district levels—are they able to carry out their assigned tasks?
- 8.9 Does the MOH have the capacity to develop a communication strategy and plan for IMCI? Do staff have skills in conducting formative research? Message development and testing?

LIST OF QUESTIONS

Chapter 8 — Issue: Communications

8.10 Does the MOH have the capacity to implement a communication plan for IMCI? Do staff have the capacity to develop materials, manage commercial resources such as media and printers? Do they have trainers skilled in interpersonal communication?

8.11 What communication components are missing (ref 8.8-8.10)? Can communication tasks be carried out elsewhere, by outside experts? Would training of staff improve the capacity?

8.12 Can an IEC monitoring and evaluation system be established and operationalized?

Selecting target behaviors

8.13 What preventive, care seeking and home case management behaviors have been found most likely to achieve and maintain good health in children?

8.14 Which of these behaviors will be targeted?

Possible determinants

8.15 What are people currently doing in these behavior areas?

8.16 What are barriers to changing their current behaviors to the ideal behaviors?

8.17 What might motivate them to change their behaviors?

Possible target audiences

8.18 Who are the different target audiences that might influence performance of these behaviors?

8.19 What resources are available in the family, community, or health system that could be employed to bring about behavior change?

Chapter 8 — Issue: Communications

Developing IEC strategy and messages

- 8.20 Which behaviors are most important to change?
- 8.21 Which determinants of those behaviors are probably the most critical?
- 8.22 Which determinants are most likely to be amenable to change?
- 8.23 Which strategies would be most likely to bring about the desired change with each target audience?
- 8.24 Which messages are the most likely to be understood, to motivate people to change, and to lead to maintenance of the new behavior?
- 8.25 What strategies and messages are being implemented by other units/programs within the MOH that need to be integrated or coordinated?

Improving health worker communication

- 8.26 What are the communication gaps in the case management of sick children? What are the identified weaknesses in advising caretakers?
- 8.27 What non-training approaches will most likely improve health worker communication performance?
- 8.28 Where and how can communication training, coaching, supervision, or other non-training methods be integrated or coordinated with training in clinical skills?

Chapter 9 — Issue: Monitoring and Evaluation

WORK IN PROGRESS

**[MONITORING AND EVALUATION
WILL BE INCLUDED IN 1998]**

10/2/97

**GUIDE FOR THE INTRODUCTION OF
INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS
DECEMBER, 1997**

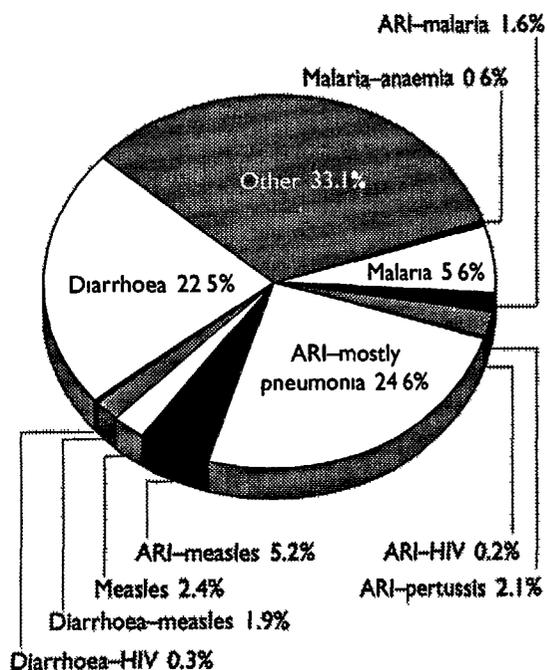
ANNEX 1. BACKGROUND MATERIALS "INFORMATION KIT"

ANNOTATED BIBLIOGRAPHY

1. *WHO Brochure*
2. *The WHO/UNICEF Approach to Integrated Management of the Sick Child*
3. *WHO Integrated Management of the Sick Child Presentation Charts*
4. *BASICS Pathway to Survival*
5. *From the World Development Report, The World Bank, 1993:*
 - Table B.6 Distribution of the disease burden in children in demographically developing economies, showing the ten main causes, 1990*
 - Table 3.2 Actual and proposed allocation of public expenditure on health in developing countries, 1990*
6. *The WHO/UNICEF approach to Initial Planning by Countries for Integrated Management of Childhood Illness, Update 1995 and Course Description*

DEATHS AMONG CHILDREN

Distribution of 12.2 million deaths among children less than 5 years in all developing countries, 1993



Seven out of 10 childhood deaths in developing countries are associated with one or more of these five conditions

- acute respiratory infections (chiefly pneumonia)
- diarrhoea
- malaria
- measles
- malnutrition

Integrated management of the sick child

THE ROLE OF THE WORLD HEALTH ORGANIZATION

During the past 15 years, WHO has developed and widely promoted simple methods for the diagnosis and treatment of diarrhoea and acute respiratory infections

These approaches are preventing an estimated 15 million deaths each year

Measles vaccination has also been vigorously promoted and most of the world's children are now protected

Now WHO, in collaboration with UNICEF, is developing an integrated approach to the management of the five major fatal childhood illnesses pneumonia, diarrhoea, malaria, measles, and malnutrition

The *integrated management of the sick child* recognizes that many children have two or more diseases at the same time. It helps health workers deal effectively with most of the cases they see. And it is cost-effective for programme management, training and supervision



For further information
please contact

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Integrated management of the sick child

25,000 deaths
every day that
don't make the
headlines

Integrated management of the sick child

WHAT KILLS 25,000 CHILDREN EACH DAY IN THE DEVELOPING WORLD?

Pneumonia

Children in all countries of the world suffer from frequent coughs and colds but in developing countries these are often associated with life-threatening pneumonia, the leading cause of death in children under five years

Diarrhoea

While diarrhoea sometimes occurs in sudden epidemics – cholera being the best known example – most forms of diarrhoea are frequent unwelcome aspects of daily life. Diarrhoea is the second most common cause of death in children

Malaria

Both the malaria parasite and the mosquitos that carry it have shown a remarkable ability to adapt to human efforts to control this widespread disease. Malaria takes its highest toll in children, most of the one million deaths each year are among African children

Measles

Since the introduction of effective measles vaccines, this disease has become rare in the industrialized world and its occurrence in developing countries has been dramatically reduced. The cases that continue to occur, however, may lead to death, often associated with pneumonia or diarrhoea

Malnutrition

One in every four children in the developing world suffers from malnutrition. In addition to the misery of constant hunger, these children are much more likely to succumb to infections. Almost one-third of childhood deaths are among the malnourished

Malnutrition may result simply from a lack of sufficient food. More commonly, the quality of food given to children is deficient in its energy content, in the proteins needed for growth, or in other essential nutrients. In addition, many children are deprived of the critical nutritional and protective benefits of breastfeeding

WHY DO THESE DEATHS OCCUR ?

- ❑ Children in many parts of the developing world live in conditions which favour these diseases: general poverty, poor water supply, sanitation and hygiene, inadequate and crowded housing; and excessive air pollution
- ❑ When children fall ill with one of these diseases they may be at particular risk because their families do not immediately recognize the danger or take them to an inappropriate health care provider who is unable to provide life-saving treatment.
- ❑ Even when treatment is sought at a health care facility, it may not be adequate, health workers are often poorly trained and supervised or lack the essential drugs and equipment needed to provide good care
- ❑ Lack of awareness and inaccessible or ineffective treatment are compounded by widespread harmful practices. These include some traditional treatments, the increasing use of breast-milk substitutes which heighten the risk of infection and death, and the wasted expenditure on useless, and sometimes dangerous, pharmaceutical products

All of these factors can be addressed. The most urgent need is to ensure that children who are taken to a health care provider are correctly assessed and provided with the treatment they require.

WHAT CAN BE DONE ABOUT THIS TRAGEDY ?

For Pneumonia

Health workers can be taught to detect pneumonia early by recognizing visible danger signs

Treatment is with antibiotics, in most cases costing only 15 US cents for a full course of tablets. Some cases need treatment in hospital including injectable antibiotics and oxygen

For Diarrhoea

Half of all diarrhoea-related deaths are due to dehydration. Most of these can be prevented by giving more fluids along with continued feeding at home and by treating dehydration with oral rehydration salts costing as little as 10 US cents

Some diarrhoeal episodes are persistent and need simple dietary management, while dysentery requires treatment with antibiotics – in most cases inexpensive oral tablets

For Malaria

While control of malaria is complex, in most cases life-saving treatment is a short course of inexpensive oral medication, usually resulting in rapid and complete recovery

For Measles

Although there is no treatment for the measles virus itself, the disease need not be fatal if adequate attention is given to treatment of associated illnesses and to the child's nutrition

For Malnutrition

Changing children's diets is not easy and depends on appropriate food being available. Mothers can be taught, however, which foods are important for their children, that frequent feeding is important, and that prompt treatment of infections is essential to keep their children well-nourished

Breastfeeding must be promoted as critical to the nutrition of young children and to their resistance to infection. It should be the exclusive source of nourishment and fluid in the first four to six months of life and should be continued along with complementary feeding

Integrated Management of Childhood Illness

Five diseases cause 7 out of 10 child deaths

Since 1990, around 80 million children have died before their fifth birthday. Fifty-five million of them were killed by diarrhoea, pneumonia, measles, malaria or malnutrition. The five diseases will claim many more millions of children's lives before the year 2000. Inexpensive treatments would save most of those lives.

At least three in every four of the children seeking health care every day suffer from one or more of these five conditions. Since symptoms may overlap, it is not always easy to decide which conditions are present.



World Health Organization

Division of Child Health and Development
Division of Emergencies and other Communicable Diseases Surveillance and Control
Division of Control of Tropical Diseases
Action Programme on Essential Drugs
Global Programme for Vaccines
Division of Reproductive Health (Technical Support)
Programme of Nutrition
Oral Health Programme for the Prevention of Blindness
Special Programme for Research and Training in Tropical Diseases in collaboration with UNICEF and the World Bank

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WHO/CDR/95.5 Rev. 1
DISTR. GENERAL
ORIGINAL ENGLISH

Standard treatment guidelines

Newly developed treatment guidelines for integrated management of childhood illness cover the most common potentially fatal conditions. The health worker assesses every child for:

- non-specific danger signs
- four main symptoms
 - cough or difficult breathing
 - diarrhoea
 - fever
 - ear problems
- nutritional status
- immunization status

The guidelines enable the health worker to classify each child's illness according to whether the child needs:

- urgent referral
- specific medical treatment and advice
- simple advice on home management

The child is given vaccinations as needed and other problems are assessed.

Guidelines for integrated management of childhood illness in outpatient settings are available on wallcharts and in booklets.

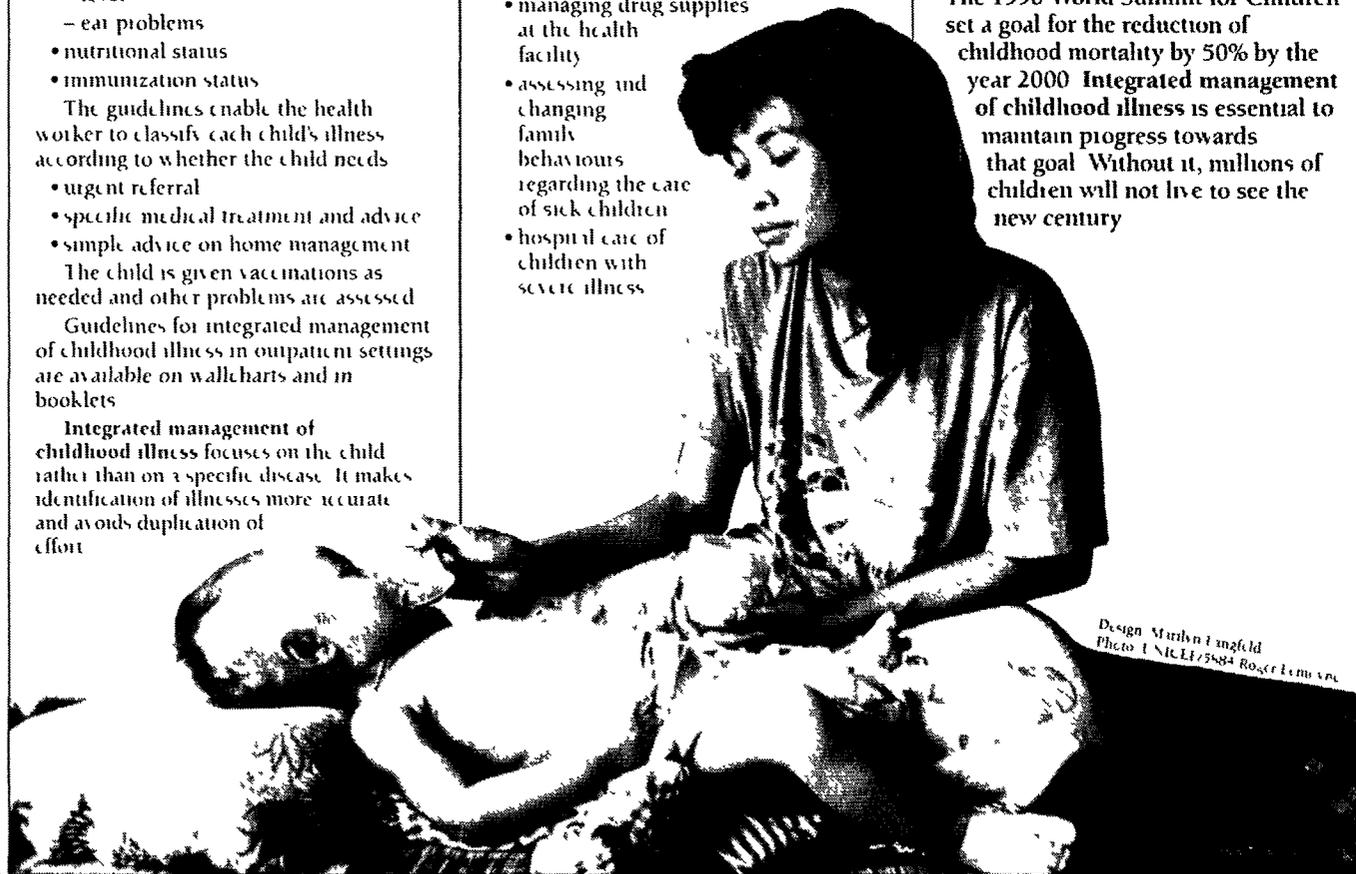
Integrated management of childhood illness focuses on the child rather than on a specific disease. It makes identification of illnesses more accurate and avoids duplication of effort.

Training

Training of health workers is based on the treatment guidelines and emphasizes hands-on practice. The guidelines and the training materials must be adapted to local situations so that, for instance, local foods and drinks can be mentioned or locally appropriate drugs recommended.

Further guidelines and training materials will cover:

- improving health workers performance
- managing drug supplies at the health facility
- assessing and changing family behaviours regarding the care of sick children
- hospital care of children with severe illness



Impact

According to the World Development Report 1993, integrated management of childhood illness is among the most cost-effective health interventions in both low- and middle-income countries.

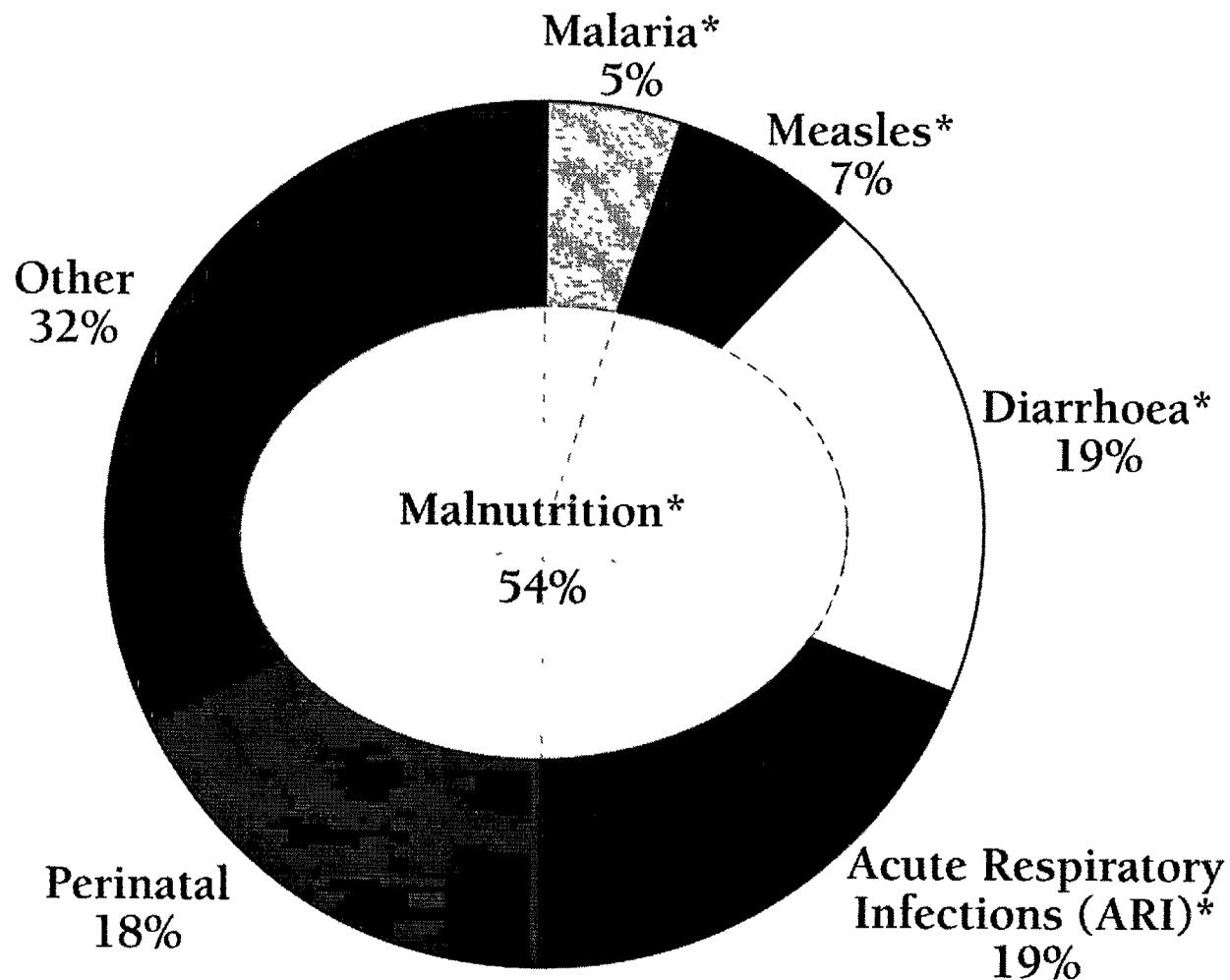
It was assessed to be the intervention likely to have the greatest impact in reducing the global burden of disease.

The 1990 World Summit for Children set a goal for the reduction of childhood mortality by 50% by the year 2000. Integrated management of childhood illness is essential to maintain progress towards that goal. Without it, millions of children will not live to see the new century.

Design: Marilyn Langford
Photo: UNICEF/5584 Roger Lemoine

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Distribution of 11.6 million deaths among children less than 5 years old in all developing countries, 1995



** Approximately 70% of all childhood deaths are associated with one or more of these 5 conditions*

Based on data taken from *The Global Burden of Disease 1996*, edited by Murray CJL and Lopez AD and *Epidemiologic evidence for a potentiating effect of malnutrition on child mortality*, Pelletier DI, Frongillo FA and Habicht JP, *AMJ Public Health* 1993,83:1130-1133

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**World Health
Organization**

UNICEF



United Nations Children's Fund

The WHO/UNICEF approach to

Integrated Management of Childhood Illness

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and Development

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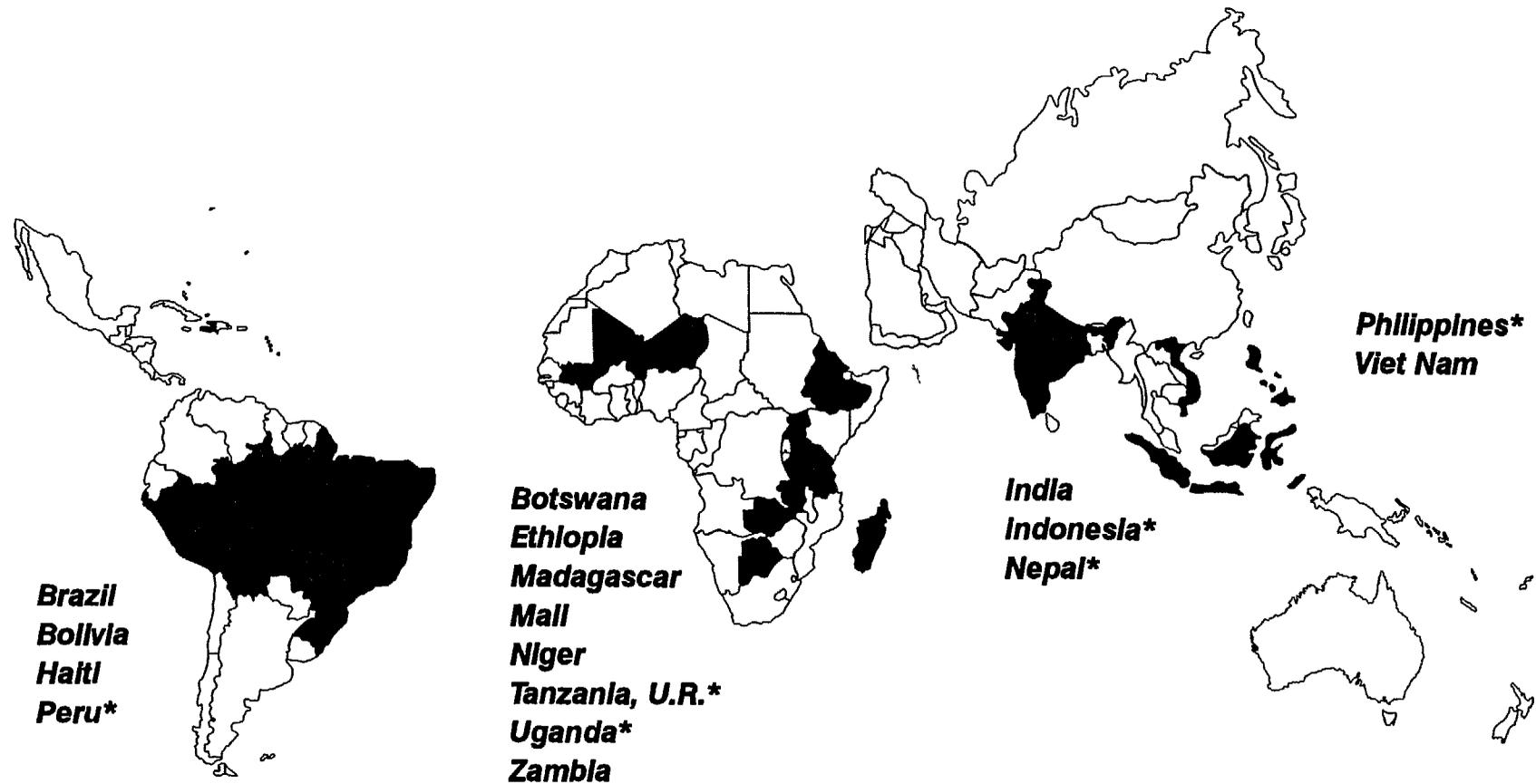
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Update - November 1996

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Countries preparing for the introduction of Integrated Management of Childhood Illness training



** Countries participating in early use of the IMCI course with intensive CHD collaboration*

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Progress to November 1996

Since June 1995, significant progress has been made on the WHO/UNICEF initiative on integrated management of childhood illness (IMCI). Progress in research and development and technical support to countries is summarized here.

Research and Development

The WHO/UNICEF training course *Management of Childhood Illness for first-level facility health workers*, was fully revised following the March 1994 field test in Arusha, Tanzania, and was finalized and printed. It is now available for adaptation to individual country needs, and over forty staff and consultants have been trained to assist countries with the adaptation, planning, and implementation.

Work was initiated in 1995 on the development of training for the **integrated management of childhood illness in referral-level facilities**. Clinical guidelines for referral-level services are being developed, and the Division is exploring innovative methods of teaching and introducing these guidelines into appropriate health facilities.

In collaboration with the USAID/BASICS project, the monitoring tool *Health Facility Quality Review* has been developed and tested, and is now being used in Indonesia.

A consultative meeting of experts, held in Geneva in January 1996, strongly supported the need to **introduce IMCI into the curricula of medical schools** around the world. At this meeting, objectives and methods for doing this were recommended. Developmental work in this area will depend on the completion of the referral-level guidelines.

An informal consultation on the *Behaviour Change Intervention Project* was held in Geneva in September 1995. The small group of social scientists and programme implementers discussed and reviewed a project to develop interventions to improve household response to childhood illness. This consultation strongly endorsed the project, and emphasized the need to identify desired behaviours and systematize development of messages related to IMCI. The initial steps of the "planning guide" have been developed and will be field tested in the first half of 1997.

Since June 1995, four CHD-supported research projects have been completed and an additional eleven projects have been initiated. Although these projects are mostly related to management of diarrhoea and nutrition they are of direct relevance to IMCI and their findings will, in due course, be incorporated into IMCI guidelines.

A double blind clinical trial evaluating the efficacy of cotrimoxazole in the treatment of persistent diarrhoea showed that there is no benefit in its routine use

Two projects tested interventions to promote appropriate complementary feeding practices

- Results of an intervention to promote thicker foods show a nearly four-fold increase in the proportion of children 6-12 months receiving energy-dense complementary foods two or more times per day
- An intervention to increase frequency of feeding resulted in a six-fold increase in the proportion of mothers knowing that children should eat five times or more per day, and a 60% increase in the proportion of mothers who reporting actually feeding their child this often. Correct knowledge was directly related to the frequency of exposure to the intervention

A quantitative and qualitative study to examine the adequacy of recommendations to continue breastfeeding beyond 12 months, the study concluded that breastfeeding continues to have an important positive role in child health after the first year of life and should be promoted

The 11 new research projects are:

Two studies in Viet Nam, being conducted in collaboration between WHO/CHD and the WHO/UNDP/World Bank Special Programme on Research and Training in Tropical Diseases (TDR)

- development of an algorithm for Dengue Haemorrhagic Fever and the integration of this algorithm into the IMCI chart, and
- evaluation of the use of the amended chart in one province

A multicentre study to evaluate the safety and efficacy of short course treatment with ciprofloxacin of shigellosis in children, developed in collaboration with Bayer (Pty) Ltd, Johannesburg, South Africa. This study will be carried out in South Africa and Zimbabwe.

Two multicentre studies to evaluate the efficacy and safety of reduced osmolarity ORS solution in children with acute non-cholera diarrhoea (Bangladesh, Brazil, India, Peru, and Viet Nam) and in adults with cholera (Bangladesh and Indonesia)

An evaluation of the effects of training health workers on lactation counselling on their ability to assist mothers to resolve breastfeeding problems. The training is provided using the *Lactation Counselling. A Training Course*, developed by the Division in collaboration with UNICEF. Breastfeeding counselling is an integral part of the IMCI approach

An evaluation of the impact of the national diarrhoeal disease control programme of the Philippines on diarrhoea morbidity and mortality among under fives

A case control study in Peru will examine whether bulging fontanelle observed in association with vitamin A supplementation is associated with impairment in child development

A study in Bangladesh will assess the validity of maternal responses to a questionnaire on the home management of diarrhoea by comparing responses related to changes in fluid intake by the child during the episode with observed changes in intake.

Three projects have been supported to examine the effect of vitamin A supplementation on the response to vaccines delivered in early infancy

- In India, two studies will examine the effects of supplementation on the immune responses to measles and polio vaccines
- In Peru a study will examine the effect of supplementation on the immune response to measles vaccine

Technical Support to Countries

During 1995/1996, WHO has focused on assisting directly a small number of "early use" countries to prepare for and implement IMCI. In these countries full technical assistance is being provided in planning, adaptation of the guidelines and training modules for the IMCI course, implementing the first training courses and following up on training. The experience gained in these "early use" countries is being carefully documented, to learn more about the process through which individual countries adapt and implement the course, and about the implications for countries in terms of organization and resources.

The following briefly summarizes progress to date in these countries:

- **Indonesia** commenced in 1995 with an orientation of high level decision-makers, programme managers, professional associations and representatives from major donor agencies. Plans for the adaptation process and preparation for training were prepared. A national Task Force, which draws on all the technical programmes involved, has now almost completed the adaptation of the guidelines and modules and the first training course should take place early in 1997. The Asian Development Bank and the World Bank are strongly interested in including IMCI in their supported programmes for the future.
- **Nepal** established a "Sick Child Working Group" which is undertaking the adaptation process. An adaptation workshop, designed to achieve consensus on the technical issues among all concerned parties, will round off the adaptation in November 1996 and the first course is planned for early 1997.
- In **Peru**, a draft translation of the course materials into Spanish produced by AMRO served as the basis for planning and adaptation. An adaptation workshop took place in July 1996 and was used as an opportunity to introduce workers from other countries in the Region to the process of adaptation. In October two courses were held to train national trainers, with the participation of senior paediatricians from a number of neighbouring countries that are planning to introduce IMCI.
- In the **Philippines**, the first steps were taken in 1995, with a national orientation and planning workshop. In February 1996 a national IMCI task force was established and took charge of the adaptation process. Two adaptation groups, consisting of Department of Health staff, paediatricians and technical experts, undertook the technical review and adaptation and the process is expected to be completed by the end of 1996. The first course is planned for February 1997. It is expected that IMCI will be included as a component of the Early Child Development Project funded by the Asian Development Bank.
- In mid-1995, **Uganda** established an active Task Force to steer its broadly-based IMCI effort. The adaptation was completed in July 1996 and the first course, for national-level trainers, was conducted successfully in Mulago Hospital in Kampala during August. This was followed immediately by a course to train

district trainers. In their turn these trainers carried out a training course in each of two districts, under close supervision. The follow-up of trainees is an essential feature of the IMCI learning process, and Uganda was supported in the development and introduction of tools for effective supervision, which aims both to reinforce the training and to monitor the progress of the trainees. Supervisors were trained specially for this purpose. After reviewing and benefitting from the experience so far, Uganda plans to expand the training to further districts in the same region during 1997. An adaptation of the materials for use in a further region is now under way.

- **The United Republic of Tanzania** has also made good progress. The course had been partially adapted for the field test of the generic course, carried out in Arusha in early 1995, and the national programme completed the adaptation by August 1996. The first course, for national trainers, took place in Morogoro in September and was followed by a workshop to develop the follow-up procedures. With financial support from UNICEF, GTZ, ODA and IDRC, the first round of training for trainers started in October. The first training for first level health workers is planned for November. This course, and most of the subsequent training, will be in Kiswahili, a translation having been completed in October. The workers will be followed up in the 4 to 6 weeks after their training. Tanzania recognizes the importance of including the IMCI skills and knowledge in the basic training of paramedical staff. In early 1997 it is planned to explore the possibility of using the present course materials for basic training of medical assistants in a small number of schools in Tanzania.

In all the early-use countries the principle has been adopted that IMCI will be introduced initially into a small number of districts. The experience over the first year or so will be closely monitored and the information gained will be used to steer the plans for expansion and further use. In all countries, CDD/ARI training is continuing in those areas for which IMCI is not yet planned.

Progress and plans in other countries

In several other countries, initial discussions and some planning for implementation of IMCI has taken place to date.

- In **Ethiopia**, a pre-test of the IMCI guidelines was conducted in Gondar in 1994, an international consultant training course was held in late 1995 and again in March 1996. A national task force has now been established to complete the adaptation and to make preparations for the first national courses. Ethiopia is also interested in introducing IMCI into the basic training of health workers, one possibility being to include it in the curriculum of the newly re-established health sciences schools. WHO will provide technical support to this.
- In **Madagascar**, orientation meetings have taken place attended by MoH officials and staff of WHO and the USAID/BASICS Project.

- In Viet Nam, the adaptation is well advanced and should be completed by December 1996. Like Philippines and Indonesia, Viet Nam has introduced an algorithm for the management of dengue fever to the standard guidelines. The course will eventually be taught in Vietnamese and a translation is underway. The first course is planned for early 1997.
- The health authorities in Zambia, together with the USAID/BASICS Project, have completed an adaptation and have undertaken training courses at national and district levels. Adjustments to the adaptation as well as a systematic follow up of those trained in the first courses will be completed before further expansion. A review of the first year of activities is planned for May 1997.

Regional Plans and activities

The African region of WHO has prepared a strategy which aims to support countries in the systematic introduction of IMCI. The strategy includes strengthening the capacity of the Regional Office to provide consultant and technical support, as well as encouraging the countries themselves to take greater financial responsibility for the initiative. The strategy was formulated in conjunction with UNICEF, the World Bank and other major donors committed to health development in Africa.

In the Region of the Americas, a regional proposal for early implementation has been developed outlining objectives, strategies and implementation phases. Regional staff discussed the proposal with national programme staff from countries in the Region in a meeting in Santa Cruz de la Sierra, Bolivia, and agreed to initiate the implementation of IMCI in four countries of the Region during 1996/1997. The training in Peru described above was the first step in this. Training will start in Bolivia and Brazil before the end of 1996.

Global activities.

In addition to its close involvement in all the early use countries, WHO Headquarters, in collaboration with the regions, has organized two training courses for consultants to try to meet the technical needs of the countries in planning and adaptation. The strategy will be extended in 1997 with the special training for course directors and further training for adaptation consultants.

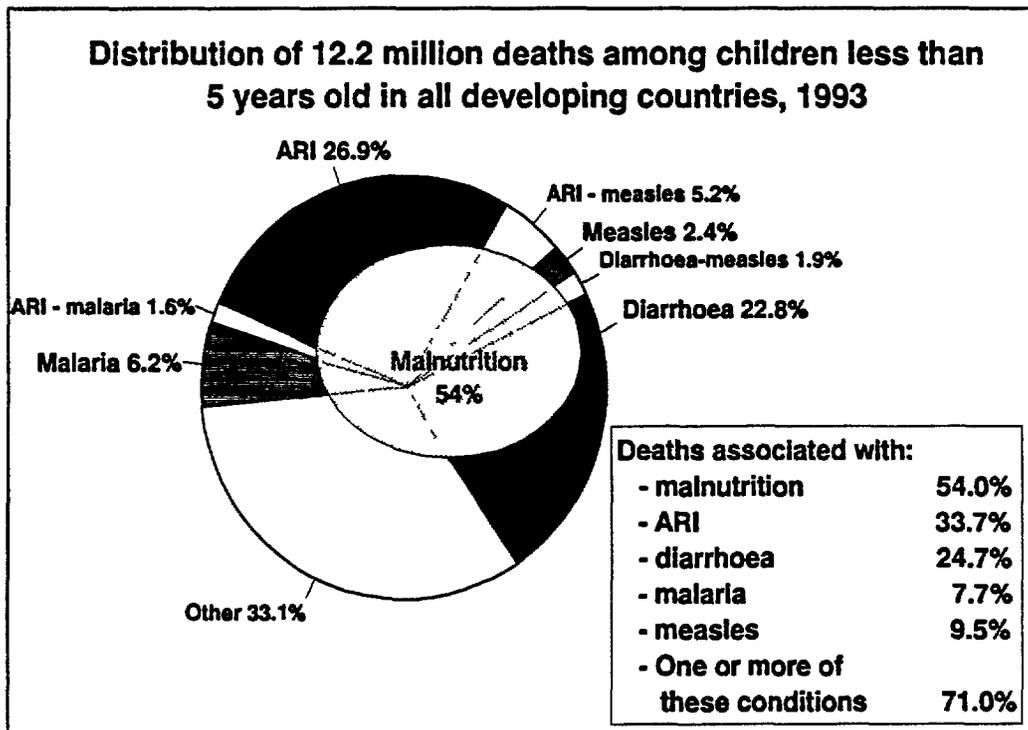
Partnership with the World Bank

To introduce IMCI within the child health component of World Bank projects, CHD and the Human Development Department of the World Bank initiated intensified, country-focused collaboration in mid-1995. A WHO/CHD staff member was seconded to the World Bank to work closely with task managers responsible for support to health projects in developing countries. This partnership has resulted in wide interest in IMCI among World Bank staff, and in direct WHO participation in the planning for IMCI activities in Brazil, Bangladesh, India and the Philippines.

Background information on IMCI

Why an integrated approach to management of the sick child?

Every year some 12 million children die before they reach their fifth birthday, many of them during the first year of life. Seven in every 10 of these child deaths are due to diarrhoea, pneumonia, measles, malaria or malnutrition - and often to a combination of these conditions. Every day, millions of parents seek health care for their children, taking them to hospitals, health centres, pharmacists, community health care providers and traditional healers. At least three out of four of these children are suffering from one of these five conditions. The distribution of the main causes of death in children under five years in developing countries is shown in the figure.



Because there is considerable overlap in the signs and symptoms of several of the major childhood diseases, a single diagnosis for a sick child is often inappropriate as shown in the following table. Focusing on the most apparent problem may lead to an associated, and potentially life-threatening, condition being overlooked. Treating the child may be complicated too by the need to combine therapy for several conditions.

For many sick children a single diagnosis may not be apparent or appropriate

<u>Presenting complaint</u>	<u>Possible cause or associated condition</u>
Cough and/or fast breathing	Pneumonia Severe anaemia <i>P. falciparum</i> malaria
Lethargy or unconsciousness	Cerebral malaria Meningitis Severe dehydration Very severe pneumonia
Measles rash	Pneumonia Diarrhoea Ear infection
"Very sick" young infant	Pneumonia Meningitis Sepsis

This situation argues for child health programmes that address not single diseases but the sick child as a whole. A lot has been learned from disease-specific control programmes in the past 15 years. The challenge is to combine these lessons into a single more efficient and effective approach to managing childhood illness. A number of programmes in WHO and UNICEF have responded to this challenge by developing an approach now referred to as integrated management of the sick child. Already a number of other agencies, institutions and individuals are contributing to this initiative.

What are the advantages of this approach?

Integrated management of the childhood illness leads to more accurate identification of illnesses in outpatient settings, ensures more appropriate and, where possible, combined treatment of all the major illnesses and speeds up referral of severely ill children. Health workers are trained in how to communicate key health messages to mothers, thus helping them understand how best to ensure the health of their children.

Evidence from surveys of health worker performance and of management of illness in the home suggest that, in both these areas, improvements can be made that are likely to reduce mortality significantly. As potentially fatal illnesses in children are often brought to the attention of health workers at first-level health facilities, the initiative for integrated management of the sick child is focusing first on improving their performance through training and support. At the same time work has started on approaches to changing family behaviour in relation to sick children including when and where families seek care outside the home.

The IMCI approach gives attention to prevention of childhood disease as well as to treatment. It emphasizes the importance of immunization, vitamin A supplementation if necessary, and improved infant feeding, including exclusive breastfeeding.

Providing care for sick children, along with interventions to keep them healthy, is an integral and essential component of the development of health systems to deliver Primary Health Care.

Approaching improvement to the management of childhood illness in an integrated manner means efficiency in training, and in the supervision and management of outpatient health facilities. Wastage of resources is reduced because children are treated with the most cost-effective intervention for their condition. The approach avoids the duplication of effort that may occur in a series of separate disease control programmes.

According to the World Bank's *World Development Report 1993*, integrated management of the sick child is the intervention likely to have the greatest impact in reducing the global burden of disease. This approach alone is calculated to be able to prevent 14% of that burden in low-income countries. According to the same report, management of the sick child ranks among the most cost-effective health interventions in both low-income and middle-income countries.

The importance and advantages of IMCI are summarized in Annex 1.

Management of childhood illness: a training course for first-level health facility workers

Integrated outpatient management of childhood illness at the first-level health facility has been described on four wallcharts which are also available in booklet form. The content of these is based on experience to date and on the findings of specially conducted research studies. The case management guidelines focus on detecting and managing the most common potentially fatal illnesses and associated conditions; they do not attempt to cover all childhood illnesses.

The case management guidelines constitute the technical core of a training course that has been developed for first-level health facility workers. The materials used for the course are listed in Box 1. Using these materials, the course facilitators teach the health workers a systematic case management process (see Box 2). The course emphasizes hands-on practice of the skills taught. Communication skills are emphasized in the course and are taught from the first day, in each module and throughout the clinical practice as well as in role plays in the classroom. A full description of the course is available from CHD.

The generic guidelines and training course prepared by WHO and UNICEF require adaptation to each country's local situation.

A draft guide to local adaptation has been prepared and is currently being revised and improved. This includes guidance on modification of such things as advice concerning

foods and fluids to be included when counselling the mother, antimicrobials of choice in a particular epidemiological context, and other policy decisions (see Box 3)

Guidelines for conducting a training workshop on management of drug supplies followed by supervised practice in the place of work have been developed in collaboration with the USAID-funded BASICS Project to help health workers better manage the drugs essential for management of sick children. They will be field-tested soon and are expected to be ready for use by the end of 1996.

Collaborating partners

Many institutions are collaborating in this initiative, as listed in Annex 2.

Numerous bilateral agencies and international organizations are also supporting these efforts through their funding of CHD (CDR) and other WHO programmes. Financial assistance to CHD is offered by Australia, Austria, Canada, China, Denmark, Germany, Italy, Japan, Luxembourg, Netherlands, Nigeria, Norway, Spain, Sweden, Switzerland, United Kingdom, and the USA. The World Bank, UNDP, and UNICEF also give financial and/or technical support. Funds specifically designated for the Integrated Management of Childhood Illness have been provided to WHO by the Governments of Australia, Japan, Luxembourg, Netherlands, Norway and Switzerland and by the US Agency for International Development. In addition, UNICEF and some bilateral agencies have allocated funds in their health projects in countries.

Box 1

Management of Childhood illness Course Materials

Modules

Introduction
Assess and Classify the Sick Child Age 2 Months up to 5 Years*
Identify Treatment
Treat the Child*
Counsel the Mother*
Management of the Sick Young Infant Age 1 Week up to 2 Months*
Follow-Up

Other training materials/job aides

4 wall charts (titles marked with * above)
Chart booklet
Mother's counselling card
Recording forms (for assess and classify)
Photo booklet
Video

Guides

Course Director's Guide
Facilitator Guide for Teaching Modules
Facilitator Guide for Clinical Practice in the Inpatient Ward
Facilitator Guide for Outpatient Clinical Practice

Box 2

Management of Childhood Illness Case Management Process

- The health worker is taught to first **assess** the child, asking questions and examining the child and checking immunization status.
- Then the health worker is taught to **classify** the child's illness. The classification of illness is based on a colour-coded stage system with which many health workers are already familiar through use of the WHO case management guidelines for diarrhoea and acute respiratory infections (ARI). This classifies each illness according to whether it requires
 - urgent referral,
 - specific medical treatment and advice, or
 - simple advice on home management
- **After classifying, specific treatments are identified.** If the child is being referred urgently, health workers learn to give only the urgent treatments before departure.
- **Practical treatment instructions** are provided, including how to teach the mother to administer oral drugs, to increase fluids during diarrhoea, and to treat local infections at home. The mother is advised on the signs which indicate the child should immediately be brought back to clinic and when to return for follow-up.
- Feeding is assessed (in children less than 2 years and those who are malnourished), any feeding problems are recorded, and **counselling on feeding problems** provided (summarized on the chart Counsel the mother).
- **Follow-up instructions** for the various conditions is provided on the chart. Treat the child and explained in a module.

Box 3

Management of Childhood Illness **Steps in country-specific adaptation**

- 1 Review of current national policies and guidelines on the management of the conditions to be included in the course. This may involve consideration of additional conditions not covered in the generic course (e.g. dengue in some Asian countries) or deleting conditions (e.g. malaria in some countries). The specific policies and guidelines recommended by the MOH, modified if necessary, should be included in the adapted version of the course.
- 2 Development of new policies and guidelines. In some instances the MOH may not yet have policies and guidelines, and decisions will need to be made on desired recommendations.
- 3 Observation of actual case management practices, through visits to health facilities and comparison with official recommendations.
- 4 Adaptation of feeding recommendations and identification of common local feeding problems. This will require expert input in many countries to draft guidelines on nutrition-related aspects of the course.
- 5 Agreement on draft case management guidelines to be included in the course and on a system of patient records that can be used by health workers after training.
- 6 Circulation of all draft guidelines to relevant MOH staff. This step will often require a number of rounds of consultation and redrafting.
7. Finalization of adapted guidelines and notification of central/regional staff if these constitute a change from current practice or previous recommendations.
- 8 Incorporation of guidelines into the generic charts and modules, including the "mother's card". This step will also involve testing and modifying if necessary the mother's card to ensure it is understood.
- 9 Translation of all course materials.
- 10 Layout and printing of all materials.

Annex 1

Why Integrated Management of the Sick Child is a Priority

The health system and the services it delivers should

- address major health problems
- respond to the demands of the population
- have a significant impact on health status
- address prevention as well as cure
- be cost-effective and, if possible, cost saving
- improve equity

Integrated management of the sick child meets all of these criteria

- **Addressing a major health problem:** Pneumonia, diarrhoea, measles, malaria and malnutrition together account for 7 out of 10 of the 33 000 deaths that occur daily among the children of the developing world
- **Responding to a demand:** Every day millions of parents take their children for care to hospitals and health centres, pharmacists and community health care providers. At least 3 out of 4 of these sick children are suffering one of these five conditions
- **Impact on health status:** The World Bank's World Development Report 1993 *Investing in Health* identified management of the sick child as the intervention likely to have the greatest impact on the global burden of disease, potentially averting 14% of that burden in low-income countries or more than twice the amount averted by the next most effective intervention, childhood immunization
- **Prevention as well as cure:** While integrated management of the sick child focuses on treatment, it also provides the opportunity for, and emphasizes, the two most important preventive interventions for child health: immunization and improved nutrition, especially breastfeeding
- **Cost-effectiveness:** The same World Bank report ranked management of the sick child among the 10 most cost-effective interventions in both low- and middle-income countries
- **Cost saving:** Inappropriate management of childhood disease is wasteful of scarce resources such as intravenous fluids and antibiotics. Control programmes specific to a single disease have been effective but can be inefficient because of duplication of effort. Integrated management of the sick child addresses both of these concerns and should result eventually in cost saving although an initial increased investment will be needed for training and reorganization
- **Improving equity:** Virtually all children of the developed world and most well-off children in the developing world have ready access to the simple, affordable treatments needed to protect them from death due to these five diseases. However, most children of the developing world do not have access to this life-saving care. Given that this is one aspect of inequity which can be addressed immediately, with proven, inexpensive interventions, it should be addressed as a matter of urgency

Annex 2

Collaborating Institutions

This initiative has been coordinated by the WHO Division of Diarrhoeal and Acute Respiratory Disease Control (CDR) This Division, now known as Child Health and Development (CHD), will continue this role Other WHO Divisions that have collaborated are

World Health Organization (Divisions/Programmes)

Office of HIV/AIDS and Sexually Transmitted Diseases (ASD)
Division of Control of Tropical Diseases (CTD)
Action Programme on Essential Drugs (DAP)
Division of Emerging, and other Communicable Diseases Surveillance and Control (EMC)
Global Programme for Vaccines and Immunization (GPV)
Maternal Health and Safe Motherhood (MSM)
Nutrition (NUT)
Oral Health (ORH)
Programme for the Prevention of Blindness (PBL)
Special Programme for Research and Training in Tropical Diseases (TDR)

World Bank

Department of Population, Health and Nutrition

UNICEF

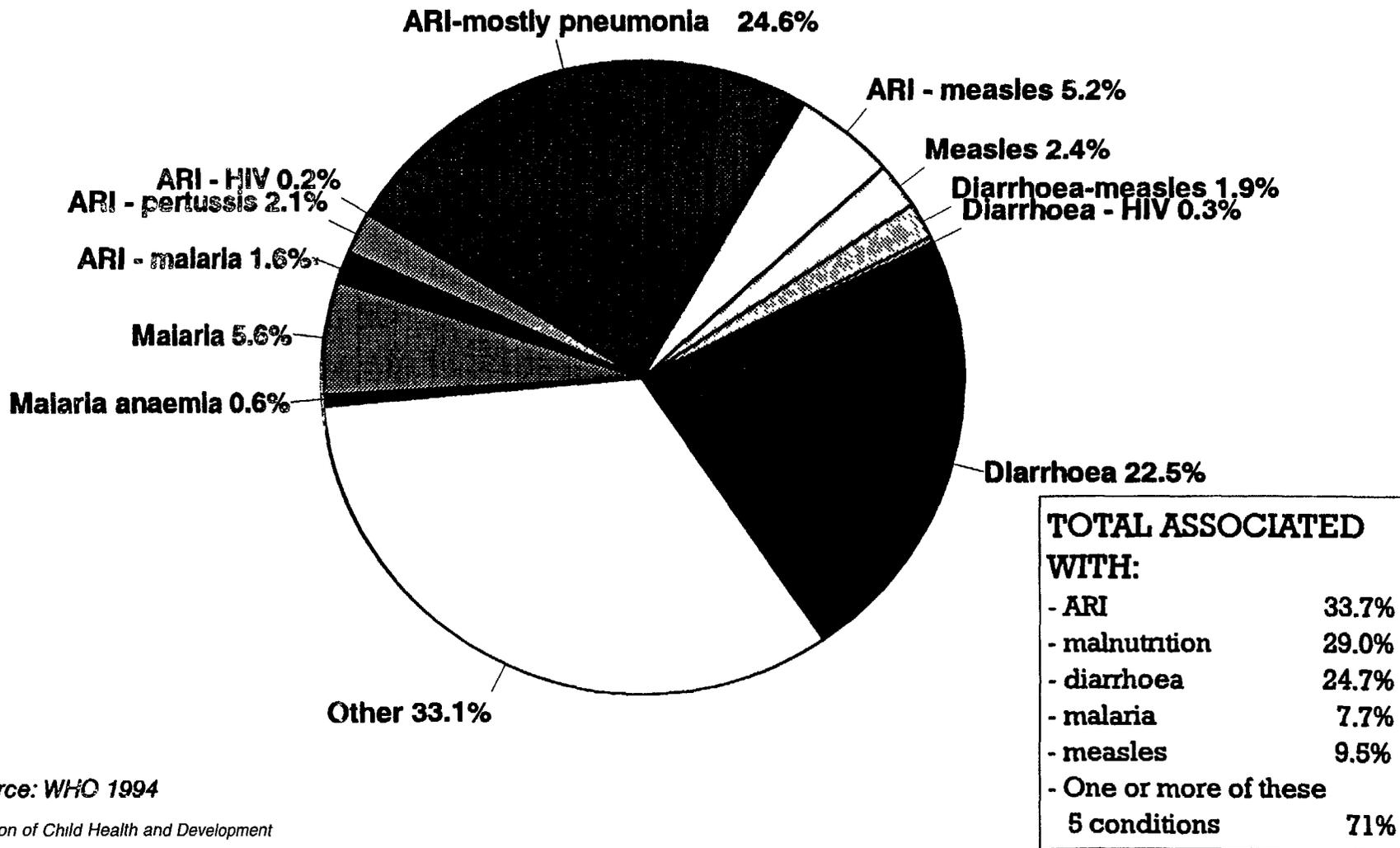
Child Survival Unit
Bamako Initiative Unit
Nutrition Unit

In addition to the Ministries of Health in countries where activities related to integrated management of the sick child have been carried out, other research and academic institutions in the following countries have been involved in the development and early implementation activities:

Australia	Kenya
Canada	South Africa
Ethiopia	Tanzania
The Gambia	UK
India	USA
Italy	Viet Nam

A complete list of collaborating institutions may be made available on request

Distribution of 12.2 million deaths among children less than 5 years old in all developing countries, 1993



Source: WHO 1994

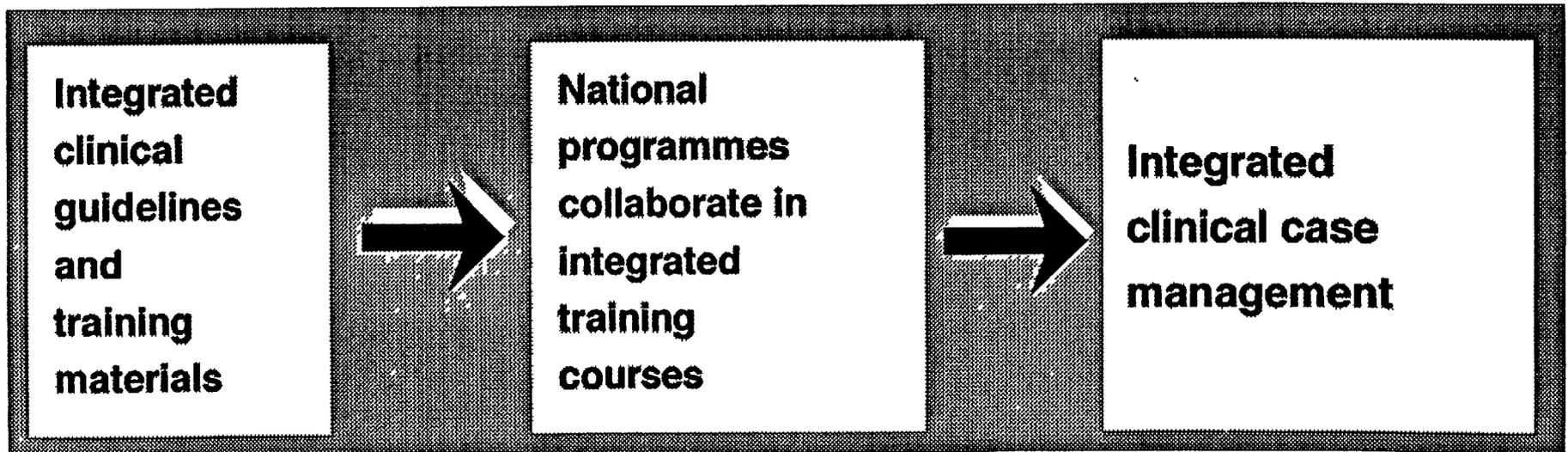
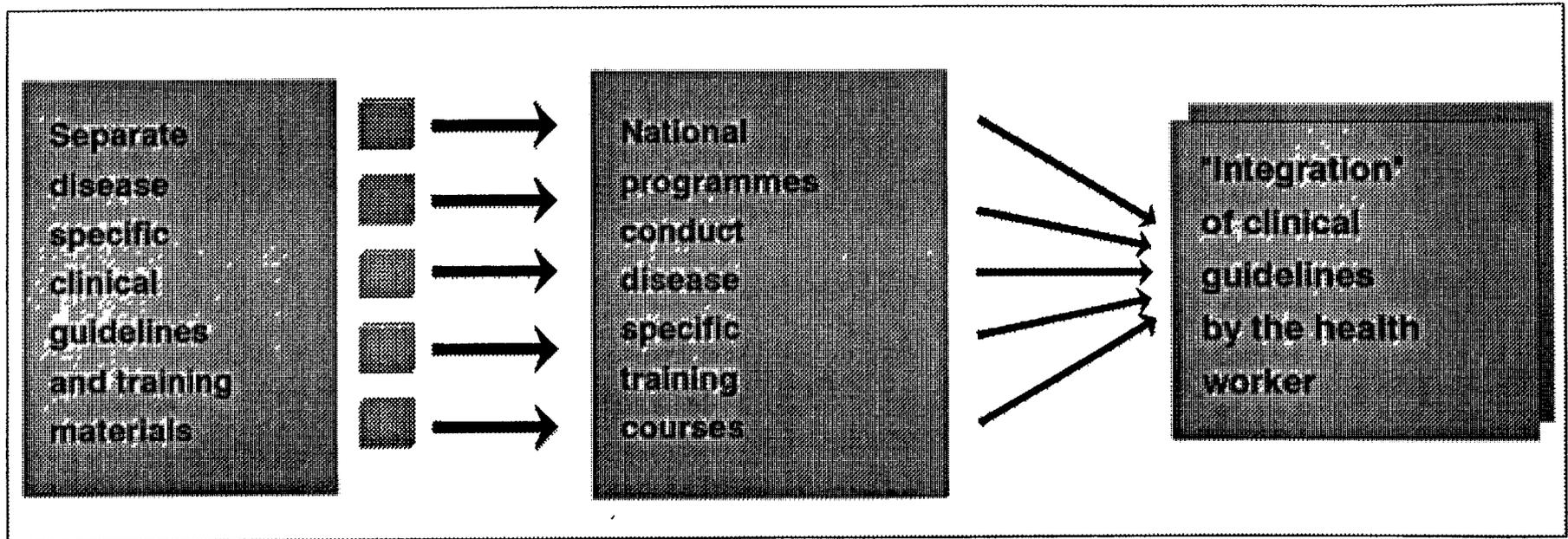
Division of Child Health and Development

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For many sick children a single diagnosis may not be apparent or appropriate

Presenting complaint	Possible cause or associated condition
Cough and/or fast breathing	Pneumonia Severe anaemia <i>P. falciparum</i> malaria
Lethargy or unconsciousness	Cerebral malaria Meningitis Severe dehydration Very severe pneumonia
Measles rash	Pneumonia Diarrhoea Ear infection
"Very sick" young infant	Pneumonia Meningitis Sepsis

Integrated management of childhood illness



Integrated management of childhood illness

WHO/UNICEF training course for first level health facilities

Assess the child

Check the child for danger signs.

Then ask:

Does the child have cough or difficult breathing?

Does the child have diarrhoea?

Has the child had fever?

Does the child have an ear problem?

Then check the child for malnutrition and anaemia.

Then check the child's immunization status.

Integrated management of childhood illness

WHO/UNICEF training course for first level health facilities

Charts

- **Assess and classify the sick child**
Age 2 months up to 5 years
- **Treat the child**
- **Advise the mother**
- **Assess, classify and treat the sick young infant**
Age 1 week up to 2 months

Integrated management of childhood illness

WHO/UNICEF training course for first level health facilities

Further assess the child and classify the illness

Integrated management of childhood illness
WHO/UNICEF training course for first level health facilities

Assess the child

Check the child for danger signs.
Then ask.
Does the child have cough or difficult breathing?
Does the child have diarrhoea?
Has the child had fever?
Does the child have an ear problem?

Then check the child for malnutrition and anaemia.

Then check the child's immunization status.

For any "yes" answer,

ASK further questions

LOOK, LISTEN, FEEL

Based on this:

Classify the illness(es)

For all children:

Classify nutritional status

Integrated management of childhood illness

WHO/UNICEF training course for first level health facilities

Treat the child

- Teach the mother to give oral drugs at home (antibiotic, antimalarial paracetamol, iron, vitamin A)
- Teach the mother to treat local infections at home (eye, ear, mouth, throat)
- Drugs for clinic administration (quinine, chloramphenicol)
- Give increased fluids for diarrhoea and continue feeding

IMCI essential drugs: First level facility

Drug description	Generic MCI course, using common first- and second-line drugs	Your country's drug list for IMCI
ORAL DRUGS First-line antibiotic for pneumonia, ear infection	Cotrimoxazole	
Second-line antibiotic-pneumonia, ear infection	Amoxicillin	
First-line antibiotic for local bacterial infection in young infants	Cotrimoxazole	
Second-line antibiotic for local bacterial infection in young infants	Amoxicillin	
First-line antimalarial	Chloroquine	
Second-line antimalarial	Sulfadoxine-pyrimethamine	
First-line antibiotic for shigella	Cotrimoxazole	
Second-line antibiotic for shigella	Nalidixic acid	
First-line antibiotic for cholera	Tetracycline	
Second-line antibiotic for cholera	Furazolidone	
Vitamin A	Vitamin A	
Anthelmintic	Mebendazole	
Antipyretic	Paracetamol	
Iron formulation	Iron syrup/iron-folate tablet	
LOCAL TREATMENT For thrush, mouth ulcers	Gentian violet	
Antibiotic eye ointment	Tetracycline eye ointment	
PARENTERAL DRUGS. Pre-referral antibiotic treatment	Chloramphenicol	
Pre-referral treatment for serious bacterial infection in young infant	Benzylpenicillin Gentamicin	
Pre-referral antimalarial treatment	Quinine	
VACCINES	DPT Measles OPV BCG	
Other drugs, depending on adaptation		

Integrated management of childhood illness

WHO/UNICEF training course for first level health facilities

Advise the mother

- Food
- Fluids
- When to return

Process: ask, praise, advise, check

Integrated management of childhood illness

WHO/UNICEF Training Course for First-Level Facility Health Workers

4 other sets of materials in development

- ▶ Monitoring and improving health worker performance**
- ▶ Management of drug supplies at health facilities**
- ▶ Interventions for family behaviour change, particularly related to careseeking and home case management**
- ▶ Inpatient case management training course**

Integrated management of childhood illness (IMCI)

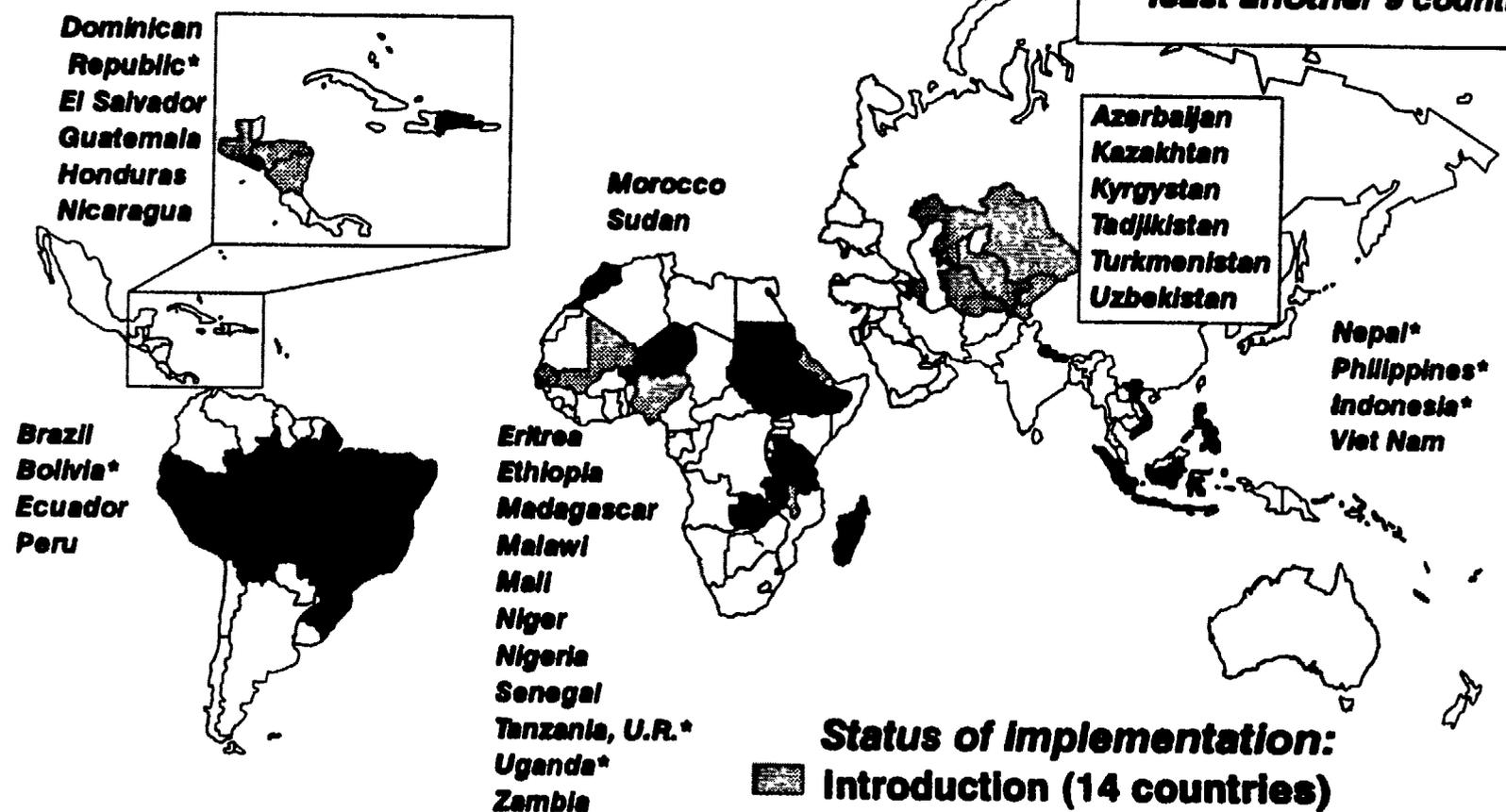
Tools under development

- **Guidelines for country-specific adaptation of the first-level IMCI training course**
- **Guidelines on training facilitators**
- **Guidelines on follow-up after training**
- **Guidelines and training materials on referral-level IMCI**
- **Training materials for less-literate health workers (in collaboration with BASICS)**
- **Guidelines on planning and programme management including monitoring and evaluation**
- **Training materials on drug management**
- **Tools to improve family practices in relation to child health**

1/20

Integrated Management of Childhood Illness (IMCI)

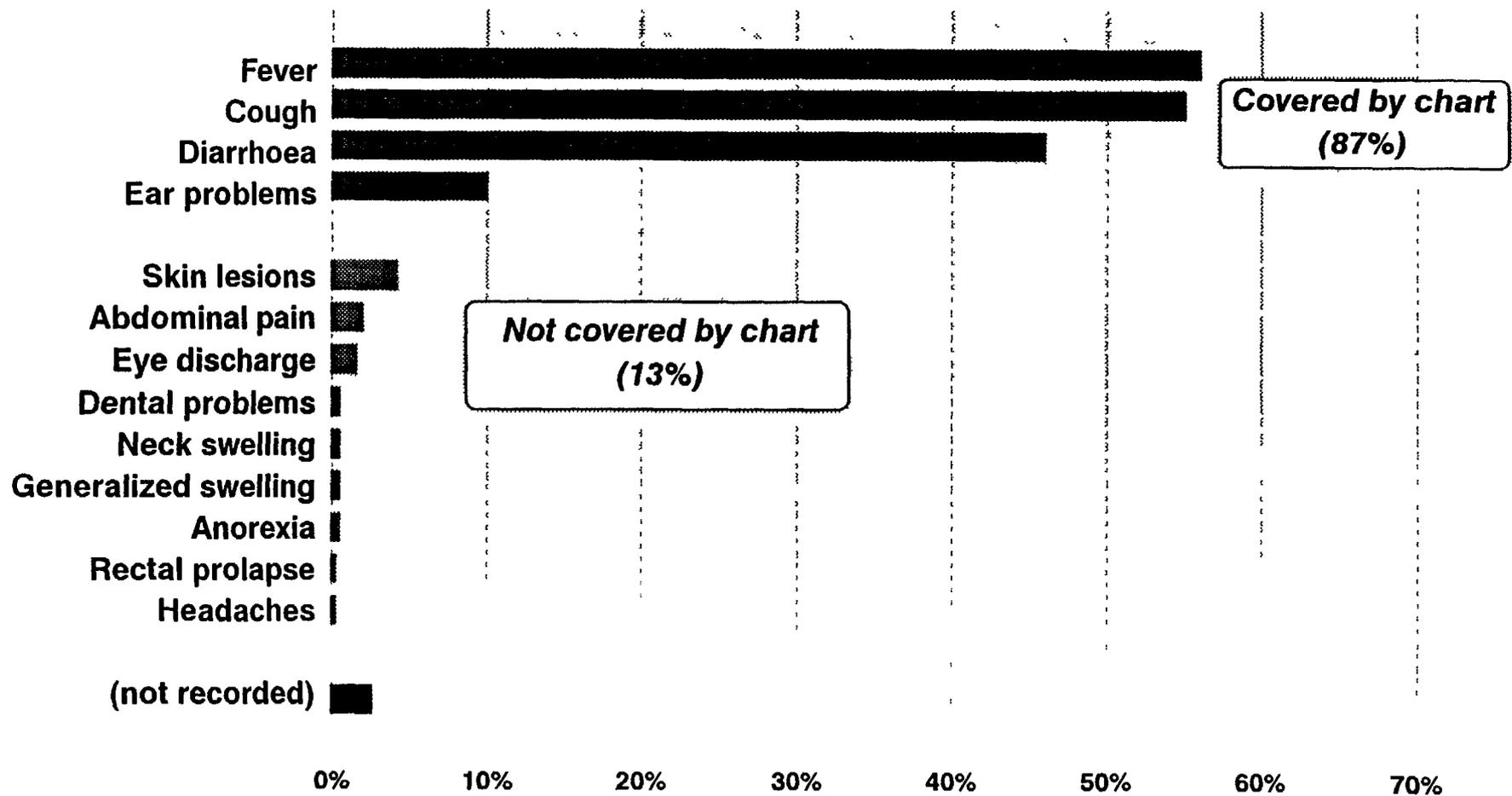
Countries implementing IMCI (May 1997)



* Countries participating in early use of IMCI course with intensive CHD collaboration

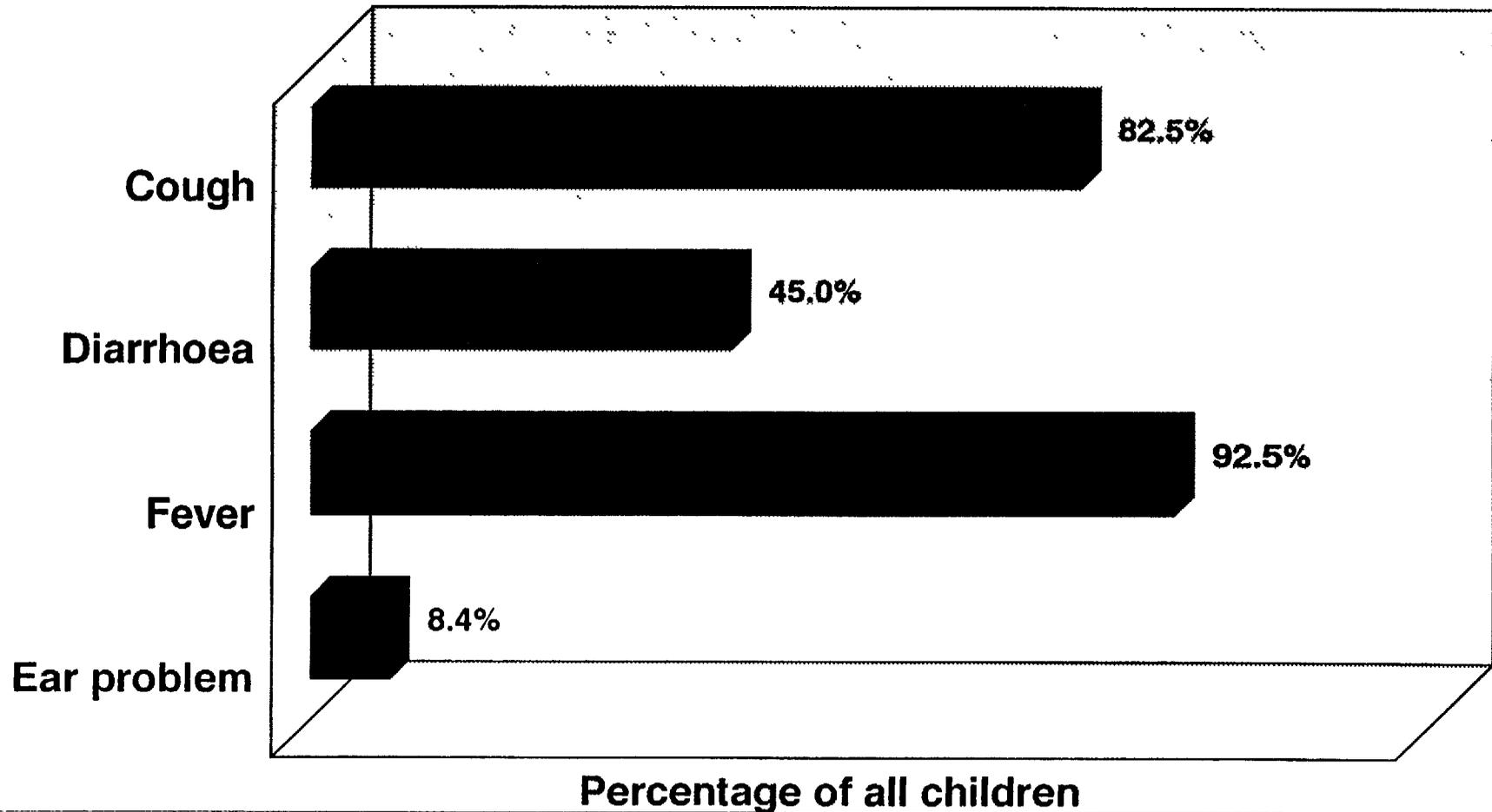
Status of Implementation:
 Introduction (14 countries)
 Early Implementation (17 countries)
 Expansion (1 country)

Frequency of presenting complaints of 450 children (as volunteered by their mothers), Gondar, Ethiopia, 1994



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Main symptoms of 440 sick children MRC, Gambia



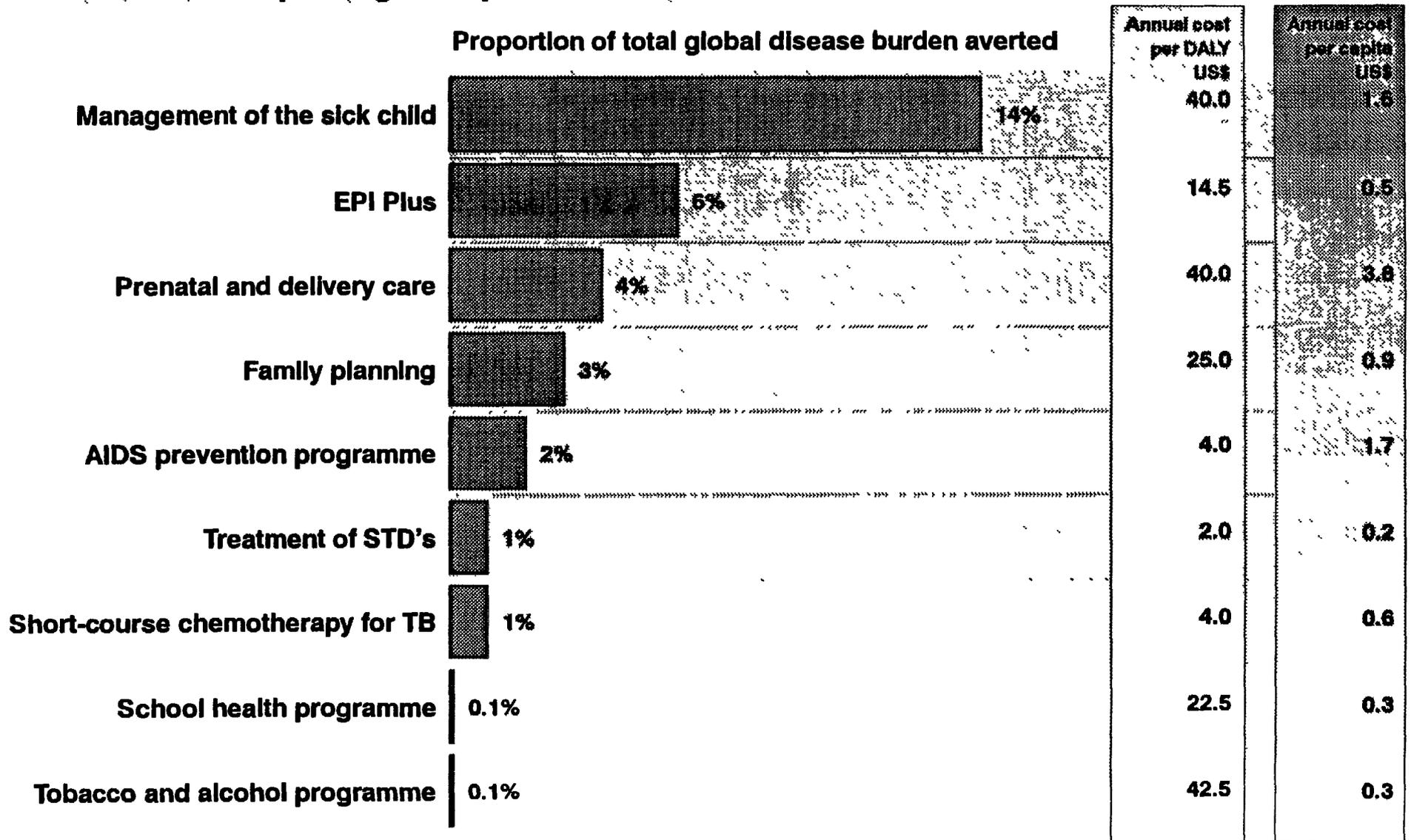
17/11/04

Health worker using sick child chart versus expert clinician with laboratory

	Sensitivity	Specificity
Pneumonia		
- Gambia	78%	90%
- Kenya	98%	62%
- Ethiopia	86%	92%
Malaria - History fever		
- Kenya (high risk)	96%	21%
- Gambia (low risk)	100%	1.3%
Malaria - T > 37.9 or splenomegaly		
- Gambia (dry season)	81%	50%
Ear infection		
- Gambia	39%	97%
- Kenya	51%	88%
Malnutrition		
- Kenya	95%	78%

hh

Cost-effective packages of public health interventions and essential clinical services

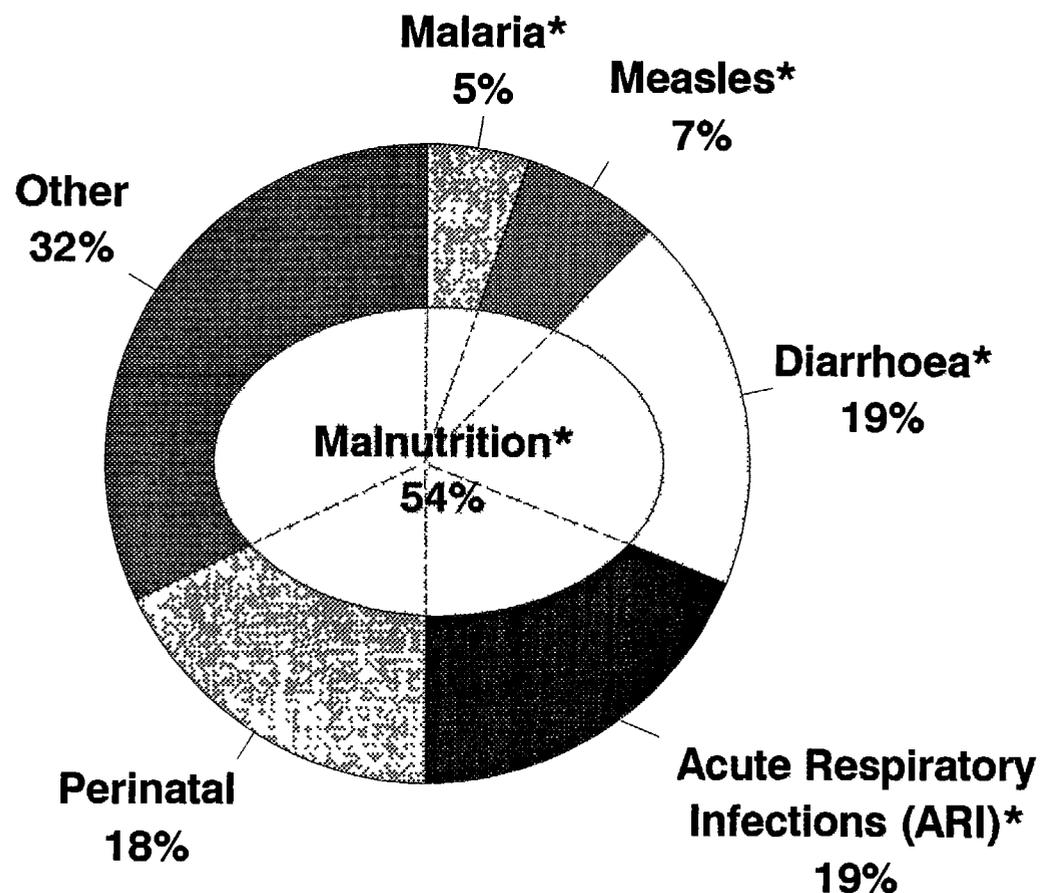


DALY = Disability-adjusted life year

Potential interventions for a "universal package" with a cost-effectiveness of less than US\$ 150 per DALY averted, Mexico 1994

	Cost per DALY averted in US\$
1 Management of the sick child	17
2 Treatment of ARI in children	25
3 Treatment of diarrhoea in children	25
4 Treatment of leprosy	54
5 Detection and treatment of phenylketonuria	57
6 Treatment of persistent diarrhoea and dysentery in children	88

Distribution of 11.6 million deaths among children less than 5 years old in all developing countries, 1995



*** Approximately 70% of all childhood deaths are associated with one or more of these 5 conditions**

Based on data taken from *The Global Burden of Disease 1996*, edited by Murray CJL and Lopez AD, and *Epidemiologic evidence for a potentiating effect of malnutrition on child mortality*, Pelletier DL, Frongillo EA and Habicht JP, *AmJ Public Health* 1993;83:1130-1133



Pathway to Survival

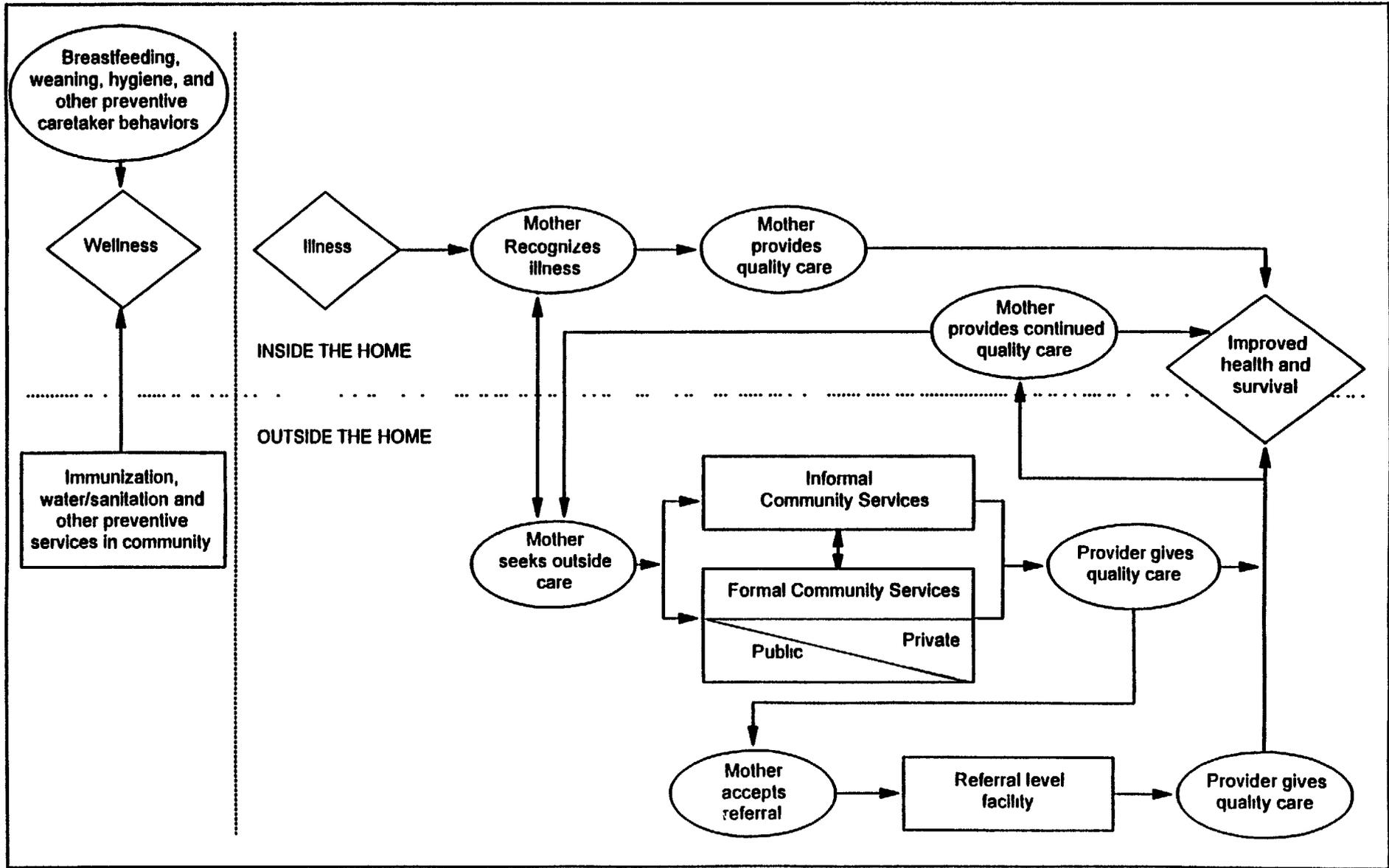


Table B.6 Distribution of the disease burden in children in demographically developing economies, showing the ten main causes, 1990

	Children under 5				Children ages 5-14			
	Female		Male		Female		Male	
<i>Total DALYs lost (millions)</i>	250		268		67		75	
<i>Diseases and injuries</i>	<i>Rank</i>	<i>Percent</i>	<i>Rank</i>	<i>Percent</i>	<i>Rank</i>	<i>Percent</i>	<i>Rank</i>	<i>Percent</i>
Communicable and perinatal		73.2		74.6		57.1		52.0
Infectious and parasitic		37.5		37.2		48.5		45.2
Tuberculosis		0.5		0.5	5	5.7	7	4.1
STDs and HIV		1.0	10	1.0	10	2.4		1.9
Syphilis		0.5		0.5		0.0		0.0
Human immunodeficiency virus		0.5		0.5		0.3		0.1
Diarrheal diseases	3	16.2	3	15.7	4	7.1	4	6.1
Childhood cluster	4	10.7	4	10.6	2	8.6	2	8.1
Pertussis		1.8		1.9		1.6		1.5
Polio		0.3		0.4		2.0		2.5
Measles		5.6		5.5		4.1		3.4
Tetanus		2.9		2.9		0.8		0.7
Malaria	6	4.7	6	4.7	6	4.9	6	4.3
Intestinal helminths		0.0		0.0	1	12.3	1	11.4
Ascaris		0.0		0.0		7.6		7.1
Trichuris		0.0		0.0		4.6		4.2
Respiratory infections	1	18.5	2	17.6	3	7.9	3	6.9
Perinatal	2	17.2	1	19.9		0.0		0.0
Noncommunicable		21.1		19.9		28.4		27.2
Nutritional and endocrine		6.4		6.1		3.7		2.4
Protein-energy malnutrition	7	2.4	8	2.1		0.3		0.3
Iodine deficiency	9	1.3	9	1.2		0.2		0.2
Vitamin A deficiency	8	2.3	7	2.2		0.0		0.0
Anemias		0.3		0.3	8	3.0		1.9
Neuropsychiatric		1.1		1.0		7.5		9.1
Epilepsy		0.2		0.3	9	2.6	8	3.5
Respiratory		2.0		1.8		3.2		4.0
Asthma		0.2		0.2		2.3		2.6
Congenital	5	6.5	5	6.6		1.2		1.0
Injuries		5.7		5.5		14.5		20.7
Unintentional		4.6		4.6		12.6		18.1
Motor vehicle		0.4		0.4	7	3.7	5	4.4
Falls	10	1.2		1.0		1.9	10	3.1
Drowning		0.6		0.7		1.7	9	3.2
Intentional		1.0		0.8		2.0		2.6

Note: The rankings refer to health intervention priorities, disease groups are ranked only when there is a single intervention or accepted cluster of interventions for controlling the diseases included in the group

□ Can be substantially controlled with cost-effective intervention less than \$100 per DALY saved

▤ Can be partially controlled with moderately cost-effective interventions, \$250 to \$999 per DALY saved (There are few or no interventions in the range of \$100 to \$250 per DALY saved)

□ Cannot be controlled in a cost-effective manner \$1,000 or more per DALY saved

▤ Preventive and therapeutic interventions have not been evaluated for cost-effectiveness

Table 3.2 Actual and proposed allocation of public expenditure on health in developing countries, 1990
(dollars per capita)

Package component	Spending under the proposed package			Estimated actual spending all developing countries	Contents
	Low-income countries ^a	Middle-income countries ^b	All developing countries		
Public health	4	7	5	1	EPI Plus, school health programs, tobacco and alcohol control, health, nutrition, and family planning information, vector control, STD prevention, monitoring and surveillance
Essential clinical services (minimum package)	8	15	10	4-6	Tuberculosis treatment, management of the sick child prenatal and delivery care, family planning, STD treatment, treatment of infection and minor trauma, assessment, advice, and pain alleviation
Total, public health and minimum essential clinical services	12	22	15	5-7	
Discretionary clinical services ^c	-6	40	6	13-15	All other health services, including low-cost-effectiveness treatment of cancer, cardiovascular disease, other chronic conditions, major trauma, and neurological and psychiatric disorders
Total	6	62	21	21	

Note: Current spending on essential clinical services is estimated to be 20-30 percent of total public expenditure on health on the basis of estimates in World Bank health sector reports. The numbers reported should be regarded as approximations.

a Estimated for an income level of \$350 per capita

b Estimated for an income level of \$2,500 per capita

c Estimated residually. The negative number for low-income countries reflects total spending below the cost of the package.

Source: World Bank calculations. World Bank sector reports on Ghana (1989), India (1992), Indonesia (1991), Jamaica (1989), Jordan (1989), Mexico (1989), Nigeria (1991), Pakistan (1992), Turkey (1990), and Venezuela (1992).

to cost-effective public health measures and essential clinical care, delivered mainly in health centers and communities. In many countries the share of public spending devoted to these basic services has been falling in recent years. In Brazil 64 percent of public spending on health in 1965 was for preventive and public health activities, but by the mid-1980s the share had dropped to 15 percent, and hospitals absorbed fully 70 percent of expenditure. The resulting weakness of the primary care network leads patients to seek care in hospitals, up to 80 percent of the cases crowding hospital emergency rooms could be treated as effectively, but more cheaply, at the primary level.

In the world as a whole, almost half the existing disease burden is from communicable diseases, nutritional disorders, and maternal and perinatal causes. It is primarily these problems that an ap-

propriate package of cost-effective care would address. Even the best-designed care package could not prevent all the health damage from these diseases because of the low cost-effectiveness of some interventions and the increasing marginal costs of even the best ones. Still, because of the size of the burden and the low cost per DALY of the interventions, it is reasonable to conclude that public expenditure on health should initially be concentrated on those conditions. What this implies for the distribution of spending by type of input or level of facility is less clear, but it probably means that facilities above the district hospital level should account for only a small share of the total, primarily for dealing with referrals.

Table 3.2 illustrates the degree of misallocation of health spending by comparing estimated actual expenditure with what would be spent for a pack-

The WHO/UNICEF approach to

**Initial Planning by Countries
for Integrated Management of
Childhood Illness**

Update - November 1995



**World Health
Organization**



UNICEF
United Nations Children's Fund

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Initial planning by countries for integrated management of childhood illness

Introduction

The development of an improved system for providing care for sick children will be a long-term undertaking in all countries. While the potential benefits and cost-effectiveness of an integrated approach to case management are important and realistically promising, development needs to be seen as incremental, and will eventually include initial training of health staff and other providers of care, reliable provision of essential drugs, reinforcement of skills through monitoring and supervision, and changes in home management and care seeking practices.

Countries interested in planning for the provision of improved integrated care will have already accumulated valuable experience with single disease programmes such as CDD and ARI, and in some cases with training in breastfeeding counselling. A challenge in building on these programmes will be to preserve them while more integrated approaches are being developed. It is suggested that countries begin by providing opportunities for coordination between current programmes, postponing consideration of the possibility of structural changes to ensure integrated programmes.

At the present time, the only "sick child" guidelines available to countries are those in the WHO/UNICEF training course "Management of Childhood Illness," and the accompanying Adaptation Guide. While a number of other guidelines and materials are being developed (e.g. inpatient treatment guidelines, tools for monitoring and evaluation), it is not expected that these will be available before 1997, with the possible exception of a course on management of drug supplies in health facilities. The broad range of materials already available for single disease programmes, however, are available, and these should continue to be used. They can often be used in a combined manner.

Thus, in considering how they can begin developing improved integrated case management, countries are considering how to do two things:

1. Plan to carry out "Management of Childhood Illness" courses.
2. Continue to carry out single or combined programme activities.

Other guidelines are available on the second of these subjects, and these notes will thus concentrate on planning for use of the new sick child training course.

Initial orientation meeting

Some countries will be approaching the subject by creating a working group or task force devoted to "sick child planning". Others may have designated a particular individual to begin planning. Others may simply be interested in learning more about the general "sick child initiative" or the new WHO/UNICEF course.

WHO and other agencies can make available a small team of consultants to work with countries on planning and early implementation of the course. It is suggested that, in each country, two consultants participate in an initial orientation meeting, a clinician familiar with the technical foundations that underlie the course; and a manager or planner familiar with the development of sound training plans within the context of disease control programmes. The first training course should not be planned for a date less than six months after this initial visit. The need for careful course adaptation makes this long lead time necessary.

Because part of the job of the consultants will be to provide information as the basis for MOH decisions about whether and how further steps to plan and carry out courses will be developed, they will need to work with staff who are in a position to make such decisions. If a working group has not already been established, it is recommended that one be created, and that it include the Programme Managers of various disease programmes (CDD, ARI, Malaria, Nutrition, BFHI, EPI, etc.), as well as a senior MOH official, who may serve as chairman. Since this is a "working" group, it should be kept small. Some countries may wish, however, to include other MOH staff (staff responsible for Maternal and Child Health, Communicable Disease Control, Training, Essential Drugs), influential paediatricians or heads of training institutions, or representatives of donor agencies.

The introduction of the "Management of Childhood Illness" course in some "early use" countries during the forthcoming year will provide an important opportunity to progressively train a pool of individuals who would be able to assist other countries in the regions in the crucial steps in preparing, adapting and planning the introduction of the course and monitoring the process and outcomes.

During the orientation meeting, the necessary steps in planning and carrying out the course will need to be described. The following subjects should be included:

- 1 Prerequisites. WHO believes that the only prerequisites to using the course are an understanding of what is involved, a willingness to make the necessary commitments necessary to meet the resource and organizational requirements of the course, and a practical plan for the introduction of training and associated follow-up activities as described below.

The existence of properly functioning drug supply systems, staff performance monitoring systems, fully acceptable case management at referral centres, well designed interventions for improving household care, and a health system which integrates the functions of the programmes concerned with the sick child are all desirable and can be developed in time. Health facility staff are already treating the conditions covered in the course, however, and adequate clinical skills, including those involved in managing cases in an integrated manner, are essential to improving care. Even prior to a more comprehensive system, such training can be expected to result in improved performance. In nearly all health facilities some drugs are available some of the time, and their rational use will improve case management and ensure that limited supplies are used more effectively. By planning the introduction of the integrated training to focus on those parts of the

country where drug supplies and referral are of acceptable quality, and visits to facilities for supervision are feasible, countries can gain the confidence to improve these essential elements to support the phased introduction of integrated case management.

2. Description of the "Management of Childhood Illness" course. A brief description of the course, including the target audience, the course content, the training methods, the role of and selection criteria for facilitators and participants, and training site requirements is provided in Annex 1.
3. Description of the course adaptation process. The section of this document titled "Adaptation Process" describes this step. At the initial meetings, the consultants can explain the technical basis for the clinical guidelines, respond to questions from the group, and begin to explore those areas where adaptation will be necessary (see reference document, the draft "Adaptation Guide").

Decision to introduce "Management of Childhood Illness"

At this point, MOH staff will be able to decide whether they wish to use the course and are ready to make the commitments necessary for its introduction. Some countries may find that the course and the processes involved in its introduction are more complex than they had appreciated prior to the consultant visit, and may conclude that they will not develop further plans for its introduction. Other countries may decide that the investment is justified. In these countries the development of a plan for introducing the course is the next step.

Plan for introduction of "Management of Childhood Illness"

A plan should be developed for introducing the new "Management Of Childhood Illness" course, with technical assistance by the programme management consultant. In most countries, this plan would cover only the first year. Before the end of this year, decisions will have to be taken about the future use of the course and planning for subsequent years. An important aim of the first year activities should thus be to gain experience in the use of the course and to clarify the organizational and technical requirements for its effective large-scale implementation. Plans for subsequent training will be more realistic if they are made with the benefit of the experience of the initial courses.

It should be noted that the process by which this plan is prepared may vary widely between countries. The consultants will help the national authorities to develop the process that best suits the country situation.

The planning process would focus on:

1. *The organizational framework within which the course will be implemented.* As the first year is intended to be a learning period for those involved with the training, it is not proposed that major structural or organizational changes be made in the Ministry as a first step. It is, however, essential that initial courses be planned and implemented with the full participation of the concerned disease control programmes and in a context that makes use of training and follow-up resources likely to be available in the longer term.
2. *Adaptation process.* The process of adapting the generic course materials to country-specific policies and guidelines (as described below and in the draft "Adaptation Guide") is one that involves several steps and may take up to four to six months. Laying out the details of how these steps will be carried out in a logical and timely sequence needs to be part of the overall planning process.
3. *Participants.* The participants for the first course(s) should be selected from among first-level facility staff who have day-to-day responsibility for managing sick children. They should be from health facilities where drug supplies are acceptable and where follow-up is feasible and likely to occur. The initial course should not be considered a "Training of Trainers" course, because the country will need to assess the performance of trained staff as they actually treat cases. Training these staff will also provide the best opportunity for subsequent monitoring of the impact of the course. For the same reason, it may be preferable for the training in the first year to focus on one or two regions, or districts.
4. *Facilitators.* As indicated in the course description, the role of the trainers or facilitators in this course is even more critical than it was for other CDD and ARI courses. The basic training method involves modelling or demonstrating correct performance and then working closely with participants on the application of the specific skills contained in the modules. The specific tasks of the facilitators are described in the "Facilitator Guide for Teaching Modules" (pages A 1-5 and I 3-8, see Annex 2) and the "Facilitator Guide for Conducting Clinical Practice"

Facilitators should be chosen from among staff who have extensive clinical experience (see "Course Director's Guide, p. 20-21). They should also have experience in training that has involved practice.

Facilitators may best be chosen from already existing training centres, such as DTUs or ATUs. If this is done, and these centres are designated as "Sick Child Training Units," they can serve as the focus for both the initial course and the first group of subsequent courses. Staff of the SCTUs can then also participate in carrying out the Health Facility Quality Review, where monitoring and skill reinforcement following initial training are emphasized.

In addition to the course facilitators, a special staff member to organize work at the inpatient facility is needed, as described in the "Course Director's Guide" (on p.19/20), and this person needs to be particularly well qualified in clinical skills.

- 5 *Training site.* The criteria for selecting the sites for clinical practice are described in the "Course Director's Guide" (p.4-7). In addition to outpatient facilities, at least one inpatient facility is required to ensure that enough patients with danger signs and signs requiring referral are available for demonstration. These sites must also already have or be able to procure the essential drugs needed for training and case management following training. The operational and logistic requirements for conducting the courses will most likely best be met in established DTU/ATUs.
6. *Season.* It is desirable that the training be conducted during a time of peak incidence of as many of the diseases covered in the course (pneumonia, diarrhoea, malaria, measles, malnutrition) as possible.
- 7 *Monitoring and evaluation.* A brief summary of these important activities is available in Annex 3. They include assessments of the course adaptation process, of the quality of the courses themselves, and of the performance of participants during the courses, as well as careful documentation of performance following training and analysis of factors influencing performance (see "Course Director's Guide", p.101-114). The information derived from this monitoring process will guide the planning for subsequent activities both in the medium and longer term.

The process of monitoring trained personnel will also aim to reinforce the training and address some practical problems encountered in the day-to-day use of the new skills. This is considered particularly important for a course of this length and complexity.

- 8 *Subsequent courses.* Although long- or even medium-term plans are best developed after the initial courses have been assessed, plans for follow-up to the first courses should be made. In many countries priority can be given to those health facilities and staff who treat the greatest number of cases.
9. *Other uses of the course.* Some countries will also want to consider use of the course in pre-service training at this early stage. Until guidelines on in-patient care are developed, pre-service training of physicians in medical schools will not be possible. Use of the course in nursing and other para-medical schools might be possible, however, and this can be explored following the initial in-service experience. Although WHO is not developing a generic guide for preservice training in such schools, it is currently exploring the modifications needed for pre-service use in nursing and other paramedical schools.

Adaptation process

A major part of the collaborative effort between the MOH and the technical consultants will be devoted to carrying out the processes described in the "Adaptation Guide". This requires an extensive effort, and may take four to six months. It includes the following steps:

- 1 Review of current national policies and guidelines on the management of the conditions to be included in the course. This may involve consideration of additional conditions (e.g. dengue in some Asian countries) or deleting conditions included in the generic course (e.g malaria in countries where this is not a problem). Countries should be cautious about introducing too many new elements into an already extensive course. For all conditions selected, the specific policies and guidelines recommended by the MOH, modified if necessary, need to be included in the adapted version of the course. This may be as simple as "filling in the blanks" of the charts, or as complex as developing new sections of the charts and modules.
2. Development of new policies and guidelines. In some instances the MOH may not yet have policies and guidelines, and decisions will need to be made on desired recommendations.
- 3 Confirmation of actual case management practices through visits to health facilities. These visits are not as complex as those included in processes such as the WHO/CDR "Health Facility Surveys." The purpose is simply to observe actual practice and contrast it with official recommendations.
- 4 Visit by a nutrition consultant, or guidance given to local nutritionists to carry out adaptations of feeding recommendations. The need to identify specific feeding recommendations and to match these with actual feeding practices will require a special consultant visit in many countries. At the conclusion of this consultancy, draft nutrition guidelines will have been prepared.
- 5 Agreement on draft case management guidelines to be included in the course. The adaptation process also needs to include agreement on a system of patient records that can be used by health workers after training.
- 6 Circulation of all draft guidelines and adaptations to relevant MOH staff. This step will often require a number of rounds of consultation and redrafting.
- 7 Finalization of adapted guidelines. Once revised guidelines are finalized, central/regional staff need to be informed if these constitute a change from current practice or previous recommendations.
- 8 Incorporation of guidelines into the generic charts and modules, including the "mother's card". This step will also involve testing the mother's card to make sure that it is understood by the mothers for whom it is designed.
- 9 Translation of all course materials.
- 10 Layout and printing of all materials.

This is the final step prior to actually preparing for and carrying out the initial course.

The planning described in this document is intentionally limited to preparing for the first few "Management of Childhood Illness" courses. As indicated above, WHO/CDR suggests that longer term and more comprehensive planning not be undertaken until the country has had the experience of carrying out these courses and assessing their impact on staff performance and the operational implications of their use

Annexes:

1. **Course Description**
2. **Facilitator Guide for Teaching Modules (pages A 1-5, I 3-8)**
3. **Monitoring and Evaluation Description**

Reference Documents:

Adaptation Guide (draft)
Course Director's Guide

Management of childhood illness: course description

Every year some 12 million children die before they reach their fifth birthday, many of them during the first year of life. Seven in every 10 of these child deaths are due to diarrhoea, pneumonia, measles, malaria or malnutrition — and often to a combination of these conditions. In addition to this substantial mortality, these conditions are the reason for seeking care at a health facility in at least three out of four sick children. Health facility staff are already treating these conditions, and adequate clinical skills are essential to improving care. Because there is considerable overlap in the signs and symptoms of several of the major childhood diseases, a single diagnosis for a sick child is often inappropriate. Focusing on the most apparent problem may lead to a co-existing, and potentially life-threatening, condition being overlooked. Treating the child may be complicated too by the need to combine therapy for several conditions.

The WHO/UNICEF course *Management of Childhood Illness* trains health workers in first-level facilities (outpatient clinics and health centres) to manage these illnesses effectively in an integrated fashion in sick children between the ages of 1 week and 5 years. The course approaches case management in an *integrated* way, combining the steps needed for each condition. Training health workers is a key activity in the long-term undertaking to improve the system for providing care for sick children.

Integrated management of the sick child leads to more accurate identification of illnesses in outpatient settings, ensures appropriate combined treatment of all the major illnesses and speeds up referral of severely ill children. Health workers are trained in how to communicate key health messages to mothers, thus helping them understand how best to ensure the health of their children.

Target audience

The course is aimed at literate first-level facility health workers who can comfortably read and understand textual learning materials.

The pretest in Gondar, Ethiopia in July 1994 and the fieldtest of the draft course in Arusha, Tanzania in March 1995 demonstrated the effectiveness of the course for inservice training of doctors, medical assistants, and clinical nurses. It also showed that health workers with less prior training (in Tanzania, rural medical aides and MCH aides) were also able to learn the case management process and performed well in clinic, however, because they had difficulty reading the modules in English, they required more active facilitation and they were not able to complete the full course in the available time. Later this year the revised course will be translated into the local language to more adequately test its effectiveness in training other literate first level facility health workers with less prior training such as health assistants and rural medical aides.

The course is currently being extensively revised based on suggestions from the fieldtest, to simplify the charts and the module text, to improve the video and photographs, and to solve specific technical problems raised by the fieldtest. The revised course will be available by the end of August 1995.

WHO is also exploring how the course might be used during pre-service training for nurses and health assistants.

□ Course content

The integrated guidelines try to bring together the simplest possible expression of what needs to be done to treat children in order to reduce mortality or to avert significant disability *The guidelines rely on detection of cases based on simple clinical signs and empirical treatment, without laboratory tests* A careful balance has been struck between sensitivity and specificity using as few clinical signs as possible and ones that health workers of varying backgrounds can be trained to recognize accurately In addition to case management of the most important diseases, the course incorporates significant prevention of disease through the promotion of breastfeeding, counseling to solve feeding problems, and improving immunization coverage by ensuring the immunization of sick children

The integrated guidelines are described on four wallcharts which are used in booklet form as a job aide and are taught using 7 training modules and by clinical practice These guidelines are based on clinical experience to date and on the findings of some focused research studies

COURSE MATERIALS

Modules

Introduction

Assess and Classify the Sick Child Age 2 Months up to 5 Years*

Identify Treatment

Treat the Child*

Counsel the Mother*

Management of the Sick Young Infant Age 1 Week up to 2 Months*

Follow-Up

Other training materials/job aides

4 wall charts (titles marked with * above)

Chart booklet

Mother's counseling card

Recording form (for assess and classify)

Photo booklet

Videos

Guides

Course Director's Guide

Facilitator Guide for Teaching Modules

Facilitator Guide for Conducting Clinical Practice

The guidelines focus on detecting and managing the most common potentially fatal illnesses and associated conditions. They do not attempt to cover all childhood illnesses. Using these guidelines and the supporting course materials, the facilitators teach the health workers a systematic case management process.

CASE MANAGEMENT PROCESS

- The health worker is taught to first **assess** the child, asking questions and examining the child and checking immunization status
- Then the health worker is taught to **classify** the child's illness. The classification of illness is based on a colour-coded triage system with which many health workers are already familiar through use of the WHO case management guidelines for diarrhoea and acute respiratory infections (ARI). This classifies each illness according to whether it requires
 - urgent referral,
 - specific medical treatment and advice, or
 - simple advice on home management
- After classifying, **specific treatments are identified**. If the child is being referred urgently, health workers learn to give only the urgent treatments before departure
- Practical **treatment instructions** are provided, including how to teach the mother to administer oral drugs, to increase fluids during diarrhoea, and to treat local infections at home. The mother is advised on the signs which indicate the child should immediately be brought back to clinic and when to return for follow-up
- Feeding is assessed (in children less than 2 years and those who are malnourished), any feeding problems are recorded, and **counseling on feeding** problems provided (summarized on the chart *Counsel the mother*)
- **Follow-up** instructions for the various conditions is provided on the chart *Treat the child* and explained in a module

Health workers use a recording form which helps them keep track of the assessment findings and the child's classifications. They are taught to make brief chart entries, recording the child's classifications (including feeding problems), treatments, and scheduled follow-up visits.

Communication skills are emphasized in the course and are taught from the first day, in each module and throughout the clinical practice as well as in role plays in the classroom.

The following boxes summarize the case management and prevention content of the course

COURSE CONTENT: SICK CHILDREN AGE 2 MONTHS UP TO 5 YEARS: CASE MANAGEMENT

- **General danger signs**

The first step in the process is to check for general danger signs the child is lethargic or unconscious not able to drink or breastfeed, vomiting everything, and convulsions (during this illness) These danger signs are not disease-specific Their presence indicates the child is severely ill and almost always needs urgent referral

Following this, for all children, the health worker asks about four main presenting symptoms cough or difficult breathing, diarrhoea, fever and ear problems

- **Cough or difficult breathing**

The child presenting with cough or difficult breathing is assessed by counting the breathing rate, looking and listening for chest indrawing and stridor, and asking about the duration of the cough Children with fast breathing but no chest indrawing, stridor or a general danger sign are classified as having pneumonia Chest indrawing, stridor when calm or a general danger sign indicates severe pneumonia or very severe disease, requiring referral Children with none of these signs have a simple cough or cold and can be managed at home with a remedy to soothe the throat and relieve the cough Those who have been coughing for more than 30 days are referred for further assessment, to consider the possibility of tuberculosis and other conditions

These guidelines are identical to the WHO/ARI case management guidelines with the exception of not including the outpatient management of wheezing Children with severe bronchospasm would be referred to hospital for management on the basis of their having chest indrawing

- **Diarrhoea**

Health workers are taught how to manage acute watery diarrhoea (including cholera), dysentery (bloody diarrhoea) and persistent diarrhoea (diarrhoea that lasts 14 days or more) The assessment and classification of dehydration has been simplified, drawing on years of clinical experience with the CDD case management chart, and now relies on the child's general condition, how fast the skin pinch returns, the presence or absence of sunken eyes, and how the child drinks Rehydration therapy is provided to treat clinically apparent dehydration (fluid Plans B and C) or to prevent its developing (fluid Plan A) Dysentery is treated with an oral antibiotic effective for *Shigella* Careful nutritional management is provided for persistent diarrhoea, as well as treatment of extra-intestinal infections which may be contributing to the persistent diarrhoea These CDD guidelines have already proven to be both practical and effective in the global effort to reduce mortality and serious morbidity from diarrhoea in young children

- **Fever**

Children with fever with a stiff neck or a general danger sign may have severe malaria, meningitis or another very severe febrile disease They are referred urgently to hospital Management of febrile children without these severe signs depends on whether the risk of malaria is high or low In a high malaria risk area or season, all children with fever or a history of fever are treated with the oral first-line antimalarial In a low malaria risk area, children with fever or history of fever are only given an antimalarial if they have no runny nose (an acute upper respiratory infection), measles or other apparent cause of fever The decision on whether a site is high or low risk must be made before the course, based on knowledge of the seasonality of malaria locally and an estimate of the proportion of children presenting to clinic with fever who have parasitaemia (if less than 5%, the malaria risk is low) Any child with a fever every day for more than 7 days is referred for assessment for typhoid and other causes

Cotrimoxazole twice daily for 5 days has been shown to be an efficacious anti-malarial in young children, which eliminates the need to use both an antibiotic and an antimalarial Given the overlap in clinical presentation and the treatment of pneumonia and malaria, cotrimoxazole alone is recommended for the treatment of children presenting with cough, fast breathing and fever (in settings where *P. falciparum* malaria is sensitive to sulfadoxine-pyrimethamine and where this recommendation has been incorporated into national policy)

- **Measles**

Fever is also the starting point for a classification of measles. Despite substantial success in improving immunization coverage in many developing countries, many measles cases continue to occur. Their case-fatality rate can be reduced by using vitamin A and good case management of the common complications. Urgent referral to hospital is recommended for those with severe pneumonia, stridor when calm (which may indicate life-threatening laryngotracheitis), corneal clouding, severe malnutrition, or general danger signs. Mothers are taught to manage mouth ulcers and conjunctivitis at home. The management of diarrhoea, pneumonia and ear infection complicating measles is the same as when they occur in a child without measles.

- **Ear problem**

A history and simple examination can distinguish mastoiditis and acute and chronic ear infections. Health workers learn to refer mastoiditis, give antibiotics for acute ear infection and teach mothers how to wick dry a draining ear.

- **Malnutrition and anaemia**

After assessing danger signs and the four main symptoms (cough or difficult breathing, diarrhoea, fever and ear problems), nutritional status is assessed for all children. Visible severe wasting (marasmus) and oedema of both feet (kwashiorkor) identify children with severe malnutrition who need urgent referral to hospital. A very low weight for age identifies a group of malnourished children whose weight gain should be monitored in a follow-up visit and whose feeding needs careful assessment and any feeding problems remedied.

Severe palmar pallor is present in a high proportion of children with severe anaemia requiring referral to hospital for transfusion, others requiring transfusion present with cough or difficult breathing and are referred with the classification of severe pneumonia or very severe disease. Children with some palmar pallor are treated with oral iron for 2 months.

COURSE CONTENT: YOUNG INFANT AGE 1 WEEK UP TO 2 MONTHS: CASE MANAGEMENT

A similar process — assess, classify, identify treat, treatment and counsel — is presented for the young infant (age 1 week up to 2 months) and the sick child (age 2 months up to 5 years). Because the signs of pneumonia and other serious bacterial infections cannot be easily distinguished, every young infant is assessed for a set of signs and, if any one sign is present, classified as having a possible serious bacterial infection. These infants are referred urgently after initial treatment which includes antibiotics and breastmilk or sugar water to prevent low blood sugar. Young infants with diarrhoea are assessed and classified in the same way as older infants, with the exception that how eagerly they drink is not included.

Breastfeeding technique is observed for 4 minutes in any young infant with difficulty feeding, low weight-for-age, or who is not breastfeeding often enough or exclusively. This assessment determines whether attachment is good (chin touching breast, mouth wide open, lower lip turned outward, and more areola visible above than below the mouth) and whether the infant is suckling effectively (slow deep sucks in bursts, sometimes pausing). If not, the health worker is trained to help the mother improve the infant's position and attachment. Infants with problems breastfeeding are also checked for thrush.

COURSE CONTENT: PREVENTION

- **Nutritional counseling**

Children who are less than 2 years of age or are classified as malnourished based on very low weight-for-age have their feeding assessed and compared with age-specific feeding recommendations, with an aim of identifying specific, remediable feeding problems. These children are then seen in follow-up to provide further help in resolving feeding problems and to check on their weight gain. Local adaptation of these feeding recommendations and identification of common feeding problems are an important step in adapting the course to each country (or large region). To try to achieve an impact on child nutrition, the nutrition counseling focuses on helping to solve the most important remediable feeding problems which are common in the area, rather than providing general nutritional advice.

Sick child encounters provide an opportunity for the delivery of sound, consistent advice on the nutrition of the young child both during and after illness which may have a significant impact in reducing the adverse effect of infections on nutritional status. This includes the promotion of breastfeeding and improved weaning practices with locally appropriate energy- and nutrient-rich foods. Specific appropriate complementary foods are recommended and the frequency of feeding by age is clearly laid out. Exclusive breastfeeding is encouraged for the first 4-6 months, use of bottles is discouraged at any age, and guidance is provided to solve important problems with breastfeeding. This includes assessing the adequacy of attachment and suckling (see section on the Young Infant).

- **Immunization**

Each child's immunization status is checked and vaccinations given as needed. The importance and safety of immunizing sick children who are not being referred to hospital can be consistently taught and reinforced, resulting in fewer missed opportunities for immunization.

The guidelines define the minimum level of knowledge, skill and supplies required to ensure health care of reasonable quality, using a short list of essential drugs for outpatient use. In terms of equipment, the health worker needs only a timing device (a watch or other timer) to allow an accurate count of the respiratory rate, a litre measure for the preparation of oral rehydration salts, a scale and a thermometer. The course is applicable for facilities with and without the capacity to give intravenous fluids.

ESSENTIAL DRUGS FOR INTEGRATED OUTPATIENT MANAGEMENT OF THE SICK CHILD

- ORS
- Oral antibiotic
± second line
- Oral antimalarial
± second line
- Iron
- Vitamin A
- Paracetamol
- (mebendazole)
- Tetracycline eye ointment
- Gentian Violet
- Quinine
- Chloramphenicol IM

□ Training methods

The course requires a full 11 days and is a combination of classroom work and hands-on clinical experience. Every morning, with the exception of the first day, is spent in the clinic or hospital seeing sick children. The course provides substantial clinical experience in assessment, classification, treatment and counselling over these 10 clinical sessions. Each participant manages 30-50 sick children. Participants manage sick children under supervision in the outpatient clinic and assess and classify hospitalized children under the guidance of a skilled inpatient clinical instructor. The number of clinical sessions and the use of hospitalized children with signs of severe disease help assure that the clinical signs on which the algorithm is based are accurately assessed, including the less common signs indicating severe disease requiring urgent referral to hospital.

Every afternoon is spent working with modules with written exercises with individual feedback, group discussions, drills, presentations, demonstrations, short answer exercises and role plays. Several exercises are based on identification of clinical signs using a booklet of photographs and a video. The video also demonstrates how to perform the assessment and presents several case studies.

TRAINING METHODS

Presentations
 Demonstrations
 Reading
 Written case studies and other exercises with individual feedback
 Short answer exercises
 Practice preparing ORS and other drugs
 Role plays
 Group discussions
 Drills
 Photos demonstrations, exercises
 Video demonstrations, exercises, case studies

 Outpatient clinical practice — assess, classify, treat and counsel
 Inpatient clinical practice — assess, classify severe disease

❑ Selection and training of facilitators

Facilitators should be chosen from among staff who have extensive clinical experience. They should also have experience in training that has involved practice. Facilitators may best be chosen from already existing training centres, such as DTUs or ATUs.

As with other WHO CDR courses, the facilitator provides guidance on how to use the course materials, introduces each module, answers questions, guides group activities, models good clinical skills, including communications skills, and individually assesses each participant's performance on every exercise. For the module exercises and during clinical practice, participants are asked to show the facilitator how they used the charts to arrive at their answers and any problems in case management decisions are remedied on the spot. In the clinic and the inpatient ward, a facilitator sees every child seen by the participants and, when possible, observes the participants' case management. By using these teaching methods, the facilitator can make sure that participants have learned and are able to perform satisfactorily.

Preparation of facilitators requires 11 days of facilitator training. Facilitators must learn the case management process presented in the course, including areas which may be unfamiliar to them such as assessing breastfeeding technique, teaching good communication skills or nutrition counseling. Given the size of the course and the importance of demonstrations, drills, role plays, group discussions, extensive clinical practice and other teaching methods in complementing the reading, it is essential that facilitators be well trained and have time to practice their skills. It is also important to keep the facilitator participant ratio low (1 facilitator 3-4 participants).

Special efforts must be made to identify and prepare an effective **inpatient clinical instructor**. This person must have the competence and confidence to sort through a ward of inpatients and select cases appropriate for clinical practice, assign these cases to participants, discuss their assessment and classifications, and assure correct identification of as many abnormal clinical signs as possible.

3 Training site requirements

The criteria for selecting the sites for clinical practice are described in the Course Director's Guide. In addition to outpatient facilities, at least one inpatient facility is required to ensure that enough patients with danger signs and signs requiring referral are available for demonstration. These sites must also already have or be able to procure the essential drugs needed for training and case management following training. The operational and logistic requirements for conducting the courses will most likely best be met in hospitals with established DTU/ATUs.

3 Selection of participants for initial courses

The participants for the first course(s) should be selected from among first-level facility staff who have day-to-day responsibility for managing sick children. They should be from health facilities where drug supplies are acceptable and where follow-up is feasible and likely to occur. The initial course should not be considered a "Training of Trainers" course, because the country will need to assess the performance of trained staff as they actually treat cases. Training these staff will also provide the best opportunity for subsequent monitoring of the impact of the course. For the same reason, it may be preferable for the training in the first year to focus on one or two regions, or districts.

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□ Adaptation of the course content

The course requires adaptation in all countries. The process of adapting the generic course materials to country-specific policies and guidelines is one that involves an extensive effort and may take four to six months. The steps of the adaptation process are summarized in the box below and are described in the *Adaptation Guide*. Laying out the details of how these steps will be carried out in a logical and timely sequence needs to be part of the overall planning process.

Steps in the Adaptation Process

- 1 Review of current national policies and guidelines on the management of the conditions to be included in the course. This may involve consideration of additional conditions (e.g. dengue in some Asian countries) or deleting conditions included in the generic course (e.g. malaria in countries where this is not a problem). Countries should be cautious about introducing too many new elements into an already extensive course. Furthermore, there is a serious risk that the course will become too large if elements of Primary Health Care other than the care of sick children are included. For all conditions selected, the specific policies and guidelines recommended by the MOH, modified if necessary, need to be included in the adapted version of the course. This may be as simple as filling in the blanks of the charts, or as complex as developing new sections of the charts and modules.
- 2 Development of new policies and guidelines. In some instances the MOH may not yet have policies and guidelines and decisions will need to be made on desired recommendations.
- 3 Confirmation of actual case management practices through visits to health facilities. These visits are not as complex as those included in processes such as the WHO/CDR "Health Facility Surveys". The purpose is simply to observe actual practice and contrast it with official recommendations.
- 4 Visit by a nutrition consultant, or guidance given to local nutritionists to carry out adaptations of feeding recommendations and identification of common local feeding problems. The need to identify specific feeding recommendations and to match these with actual feeding practices will require a special consultant visit in many countries. At the conclusion of this consultancy, draft nutrition guidelines will have been prepared.
- 5 Agreement on draft case management guidelines to be included in the course. The adaptation process also needs to include agreement on a system of patient records that can be used by health workers after training.
- 6 Circulation of all draft guidelines and adaptations to relevant MOH staff. This step will often require a number of rounds of consultation and redrafting.
- 7 Finalization of adapted guidelines. Once revised guidelines are finalized, central/regional staff need to be informed if these constitute a change from current practice or previous recommendations.
- 8 Incorporation of guidelines into the generic charts and modules, including the "mother's card". This step will also involve testing the mother's card to make sure that it is understood by the mothers for whom it is designed.
- 9 Translation of all course materials.
- 10 Layout and printing of all materials.

INTRODUCTION TO THIS FACILITATOR GUIDE

How does this course differ from other training courses?

- * The material in the course is not presented by lecture. Instead, each participant is given a set of instructional booklets, called modules, that have the basic information to be learned. Information is also provided through demonstrations, photographs and videotapes
- * The modules are designed to help each participant develop specific skills necessary for case management of sick children. Participants develop these skills as they read the modules, observe live and videotaped demonstrations, and practice skills in written exercises, video exercises, group discussions, oral drills, or role plays
- * After practicing skills in the modules, participants practice the skills in a real clinical setting, with supervision to ensure correct patient care
- * Each participant works at his own speed
- * Each participant discusses any problems or questions with a facilitator, and receives prompt feedback from the facilitator on completed exercises (Feedback includes telling the participant how well he has done the exercise and what improvements could be made)

What is a FACILITATOR?

A facilitator is a person who helps the participants learn the skills presented in the course. The facilitator spends much of his time in discussions with participants, either individually or in small groups. For facilitators to give enough attention to each participant, a ratio of one facilitator to 3 to 6 participants is desired. In your assignment to teach this course, YOU are a facilitator.

As a facilitator, you need to be very familiar with the material being taught. It is your job to give explanations, do demonstrations, answer questions, talk with participants about their answers to exercises, conduct role plays, lead group discussions, organize and supervise clinical practice in outpatient clinics, and generally give participants any help they need to successfully complete the course. You are *not* expected to teach the content of the course through formal lectures (Nor is this a good idea, even if this is the teaching method to which you are most accustomed.)

What, then, DOES a FACILITATOR do?

As a facilitator, you do 3 basic things

1 You INSTRUCT

- Make sure that each participant understands how to work through the materials and what he is expected to do in each module and each exercise
- Answer the participant's questions as they occur
- Explain any information that the participant finds confusing, and help him understand the main purpose of each exercise
- Lead group activities, such as group discussions, oral drills, video exercises, and role plays, to ensure that learning objectives are met
- Promptly assess each participant's work and give correct answers
- Discuss with the participant how he obtained his answers in order to identify any weaknesses in the participant's skills or understanding
- Provide additional explanations or practice to improve skills and understanding
- Help the participant to understand how to use skills taught in the course in his own clinic
- Explain what to do in each clinical practice session
- Model good clinical skills, including communication skills, during clinical practice sessions
- Give guidance and feedback as needed during clinical practice sessions

2 You MOTIVATE.

- Compliment the participant on his correct answers, improvements or progress

- Make sure that there are no major obstacles to learning (such as too much noise or not enough light)

3 You MANAGE

- Plan ahead and obtain all supplies needed each day, so that they are in the classroom or taken to the clinic when needed
- Make sure that movements from classroom to clinic and back are efficient
- Monitor the progress of each participant

How do you do these things?

- * Show enthusiasm for the topics covered in the course and for the work that the participants are doing
- * Be attentive to each participant's questions and needs. Encourage the participants to come to you at any time with questions or comments. Be available during scheduled times
- * Watch the participants as they work, and offer individual help if you see a participant looking troubled, staring into space, not writing answers, or not turning pages. These are clues that the participant may need help
- * Promote a friendly, cooperative relationship. Respond positively to questions (by saying, for example, "Yes, I see what you mean," or "That is a good question.") Listen to the questions and try to address the participant's concerns, rather than rapidly giving the "correct" answer
- * Always take enough time with each participant to answer his questions completely (that is, so that both you and the participant are satisfied)

What NOT to do.....

- * During times scheduled for course activities, do not work on other projects or discuss matters not related to the course
- * In discussions with participants, avoid using facial expressions or making comments that could cause participants to feel embarrassed

- * Do not call on participants one by one as in a traditional classroom, with an awkward silence when a participant does not know the answer. Instead, ask questions during individual feedback.
- * Do not lecture about the information that participants are about to read. Give only the introductory explanations that are suggested in the *Facilitator Guide*. If you give too much information too early, it may confuse participants. Let them read it for themselves in the modules.
- * Do not review text paragraph by paragraph. (This is boring and suggests that participants cannot read for themselves.) As necessary, review the highlights of the text during individual feedback or group discussions.
- * Avoid being too much of a showman. Enthusiasm (and keeping the participants awake) is great, but learning is most important. Keep watching to ensure that participants are understanding the materials. Difficult points may require you to slow down and work carefully with individuals.
- * Do not be condescending. In other words, do not treat participants as if they are children. They are adults.
- * Do not talk too much. Encourage the participants to talk.
- * Do not be shy, nervous, or worried about what to say. This *Facilitator Guide* will help you remember what to say. Just use it!

How can this FACILITATOR GUIDE help you?

This *Facilitator Guide* will help you teach the course **modules**, including the video segments. There is a separate guide to assist you with clinical practice sessions: the *Facilitator Guide for Clinical Practice*.

For each module, this *Facilitator Guide* includes the following:

- * a list of the procedures to complete the module, highlighting the type of feedback to be given after each exercise
- * guidelines for the procedures. These guidelines describe:
 - how to do demonstrations, role plays, and group discussions,
 - supplies needed for these activities,
 - how to conduct the video exercises,
 - how to conduct oral drills,
 - points to make in group discussions or individual feedback

- * answer sheets (or possible answers) for most exercises
- * a place to write down points to make in addition to those listed in the guidelines

At the back of this *Facilitator Guide* is a section titled "Guidelines for All Modules" (section I) This section describes training techniques to use when working with participants during the course It also includes important techniques to use when

- participants are working individually,
- you are providing individual feedback.
- you are leading a group discussion,
- you are coordinating a role play

The last four pages fold out so that you can refer to them as needed

To prepare yourself for each module, you should

- * read the module and *work the exercises*,
- * read in this *Facilitator Guide* all the information provided about the module,
- * plan exactly how work on the module will be done and what major points to make,
- * collect any necessary supplies for exercises in the module, and prepare for any demonstrations or role plays,
- * think about sections that participants might find difficult and questions they may ask,
- * plan ways to help with difficult sections and answer possible questions,
- * think about the skills taught in the module and how they can be applied in participants' own clinics,
- * ask participants questions that will encourage them to think about using the skills in their clinics Questions are suggested in appropriate places in the *Facilitator Guide*

GUIDELINES FOR ALL MODULES

FACILITATOR TECHNIQUES

A. *Techniques for Motivating Participants*

Encourage Interaction

- 1 During the first day, you will talk individually with each participant several times (for example, during individual feedback) If you are friendly and helpful during these first interactions, it is likely that the participants (a) will overcome their shyness, (b) will realize that you want to talk with them, and (c) will interact with you more openly and productively throughout the course
- 2 Look carefully at each participant's work (including answers to short-answer exercises) Check to see if participants are having any problems, even if they do not ask for help If you show interest and give each participant undivided attention, the participants will feel more compelled to do the work Also, if the participants know that someone is interested in what they are doing, they are more likely to ask for help when they need it
- 3 Be available to the participants at all times

Keep Participants Involved in Discussions

- 4 Frequently ask questions of participants to check their understanding and to keep them actively thinking and participating Questions that begin with "what," "why," or "how" require more than just a few words to answer Avoid questions that can be answered with a simple "yes" or "no "

After asking a question, PAUSE Give participants time to think and volunteer a response A common mistake is to ask a question and then answer it yourself If no one answers your question, rephrasing it can help to break the tension of silence But do not do this repeatedly Some silence is productive

- 5 Acknowledge all participants' responses with a comment, a "thank you" or a definite nod This will make the participants feel valued and encourage participation If you think a participant has missed the point, ask for clarification, or ask if another participant has a

suggestion. If a participant feels his comment is ridiculed or ignored, he may withdraw from the discussion entirely or not speak voluntarily again.

- 6 Answer participants' questions willingly, and encourage participants to ask questions when they have them rather than to hold the questions until a later time.
- 7 Do not feel compelled to answer every question yourself. Depending on the situation, you may turn the question back to the participant or invite other participants to respond. You may need to discuss the question with the Course Director or another facilitator before answering. Be prepared to say "I don't know but I'll try to find out."
- 8 Use names when you call on participants to speak, and when you give them credit or thanks. Use the speaker's name when you refer back to a previous comment.
- 9 Always maintain eye contact with the participants so everyone feels included. Be careful not to always look at the same participants. Looking at a participant for a few seconds will often prompt a reply, even from a shy participant.

Keep the Session Focused and Lively

- 10 Keep your presentations lively.
 - * Present information conversationally rather than read it.
 - * Speak clearly. Vary the pitch and speed of your voice.
 - * Use examples from your own experience, and ask participants for examples from their experience.
- 11 Write key ideas on a flipchart as they are offered. (This is a good way to acknowledge responses. The speaker will know his suggestion has been heard and will appreciate having it recorded for the entire group to see.)

When recording ideas on a flipchart, use the participant's own words if possible. If you must be more brief, paraphrase the idea and check it with the participant before writing it. You want to be sure the participant feels you understood and recorded his idea accurately. Do not turn your back to the group for long periods as you write.

- 12 At the beginning of a discussion, write the main question on the flipchart. This will help participants stay on the subject. When needed, walk to the flipchart and point to the question.

Paraphrase and summarize frequently to keep participants focused. Ask participants for clarification of statements as needed. Also encourage other participants to ask a speaker to repeat or clarify his statement.

Restate the original question to the group to get them focused on the main issue again. If you feel someone will resist getting back on track, first pause to get the group's attention, tell them they have gone astray, and then restate the original question.

Do not let several participants talk at once. When this occurs, stop the talkers and assign an order for speaking. (For example, say "Let's hear Dr. Samua's comment first, then Dr. Salvador's, then Dr. Lateau's.") People usually will not interrupt if they know they will have a turn to talk.

Thank participants whose comments are brief and to the point.

- 13 Try to encourage quieter participants to talk. Ask to hear from a participant in the group who has not spoken before, or walk toward someone to focus attention on him and make him feel he is being asked to talk.

Manage any Problems

- 14 Some participants may talk too much. Here are some suggestions on how to handle an overly talkative participant.

- * Do not call on this person first after asking a question.
- * After a participant has gone on for some time, say "You have had an opportunity to express your views. Let's hear what some of the other participants have to say on this point." Then rephrase the question and invite other participants to respond, or call on someone else immediately by saying, "Dr. Samua, you had your hand up a few minutes ago."

- * When the participant pauses, break in quickly and ask to hear from another member of the group or ask a question of the group, such as, "What do the rest of you think about this point?"
 - * Record the participant's main idea on the flipchart. As he continues to talk about the idea, point to it on the flipchart and say, "Thank you, we have already covered your suggestion." Then ask the group for another idea.
 - * Do not ask the talkative participant any more questions. If he answers all the questions directed to the group, ask for an answer from another individual specifically or from a specific subgroup. (For example, ask "Does anyone on this side of the table have an idea?")
- 15 Try to identify participants who have difficulty understanding or speaking the course language. Speak slowly and distinctly so you can be more easily understood and encourage the participant in his efforts to communicate.

Discuss with the Course Director any language problems which seriously impair the ability of a participant to understand the written material or the discussions. It may be possible to arrange help for the participant.

Discuss disruptive participants with your co-facilitator or with the Course Director. (The Course Director may be able to discuss matters privately with the disruptive individual.)

Reinforce Participants' Efforts

- 16 As a facilitator, you will have your own style of interacting with participants. However, a few techniques for reinforcing participants' efforts include
- * avoiding use of facial expressions or comments that could cause participants to feel embarrassed,
 - * sitting or bending down to be on the same level as the participant when talking to him
 - * answering questions thoughtfully, rather than hastily,

- * encouraging participants to speak to you by allowing them time,
 - * appearing interested, saying "That's a good question/suggestion "
- 17 Reinforce participants who
- * try hard
 - * ask for an explanation of a confusing point
 - * do a good job on an exercise
 - * participate in group discussions
 - * help other participants (without distracting them by talking at length about irrelevant matters)

B. Techniques for Relating Modules to Participants' Jobs

- 1 Discuss the use of these case management procedures in participants own clinics The guidelines for giving feedback on certain exercises suggest specific questions to ask (For example, in *Identify Treatment* ask where the participant can refer children with severe classifications, in *Treat the Child*, ask what fluids will be recommended for Plan A, and ask whether he dispensed drugs to mothers, in *Follow-up*, ask whether mothers will bring a child back for follow-up) Be sure to ask these questions and listen to the participant's answers This will help participants begin to think about how to apply what they are learning
- 2 Reinforce participants who discuss or ask questions about using these case management procedures by acknowledging and responding to their concerns

C. Techniques for Assisting Co-facilitators

- 1 Spend some time with the co-facilitator when assignments are first made. Exchange information about prior teaching experiences and individual strengths, weaknesses and preferences. Agree on roles and responsibilities and how you can work together as a team.
- 2 Assist one another in providing individual feedback and conducting group discussions. For example, one facilitator may lead a group discussion, and the other may record the important ideas on the flipchart. The second facilitator could also check the *Facilitator Guide* and add any points that have been omitted.
- 3 Each day, review the teaching activities that will occur the next day (such as role plays, demonstrations and drills), and agree who will prepare the demonstration, lead the drill, play each role, collect the supplies, etc.
- 4 Work *together* on each module rather than taking turns having sole responsibility for a module.

ANNEX 3 MONITORING AND EVALUATION

For countries who plan to introduce the "Management of Childhood Illness" course, it is recommended that monitoring and evaluation plans be developed early to allow them to learn as much as possible from their experience.

MONITORING OF COURSE IMPLEMENTATION

Monitoring is needed to help countries identify those aspects of the course that are going well, and those that need improvement. Monitoring should not interfere with the process of planning for and carrying out effective training; it should build on existing activities whenever possible. It is recommended that initial monitoring efforts be simple, addressing only the most important questions. Over time, countries may want to expand the monitoring to address additional questions about the course or the performance of participants. The following questions should be addressed in developing the monitoring plan:

1. *What should be monitored?* At a minimum, WHO believes that all countries implementing the "Management of Childhood Illness" course should plan to monitor the following:
 - a. whether the courses are carried out as planned. This would include the time spent during the course on each of the modules, the number of cases managed and reviewed by each course participant, and whether the methods used by facilitators were those recommended in the "Facilitator Guide for Teaching Modules" and the "Facilitator Guide for Conducting Clinical Practice". Simple recording forms for this information will be developed by WHO and distributed with the course materials
 - b. whether the course materials are adapted and translated appropriately. Careful attention should be directed to the identification of any sections of the written materials or exercises that are not consistent with national policy or guidelines, or are not clear to participants or facilitators. This will be particularly important the first time the course is carried out, and in later courses where participants are drawn from groups different from those who have been trained previously. Difficulties arising from adaptation and translation should be solicited from facilitators at the close of each training day, and systematically recorded.
 - c. whether participants are able to perform the new skills presented in the course. As a routine part of the course, facilitators will be observing and recording the performance of participants on written exercises and in clinical practice (a form for this purpose will be distributed with the course). These findings will be discussed by facilitators at the end of each day, and should

serve as the basis for monitoring whether participants are able to perform the new skills presented in the course. During the course itself, the Course Director should identify someone to be responsible for collecting and summarizing the observations made by facilitators. In initial courses, countries may want to look closely at the background and characteristics of participants who perform well, and those who have difficulty in learning the material. This information will be needed when developing longer-term plans for training.

d. whether the trained facilitators conduct subsequent courses. This information should be collected routinely through the use of a standardized tracking form for trained facilitators. A model form will be distributed with the course.

2. *Who should conduct the monitoring?* One or more individuals should be assigned clear responsibility for organizing the collection and summary of monitoring information. During the course, facilitators can systematically record information on participant performance, but they will be very busy and someone other than a facilitator will need to be responsible for ensuring that this information is collected and promptly summarized.
3. *How will the monitoring results be used to improve future courses?* Each country will need to specify how the information collected during each course will be incorporated into the planning of subsequent courses. If monitoring is effective, it results in a list of actions that need to be taken. The plan should specify who will be responsible for ensuring that monitoring results are acted upon.

MONITORING AND EVALUATION OF COURSE EFFECTIVENESS IN IMPROVING THE CASE MANAGEMENT OF CHILDHOOD ILLNESS

The objective of the "Management of Childhood Illness" course is to improve the quality of care provided in first-level facilities for children with a particular range of illnesses. After training has taken place, countries will need to assess how well trained workers are able to manage childhood illness in their own facilities. This assessment may take place on a small scale, as follow-up for individual workers after training, or on a larger scale, as a means of evaluating progress toward district or national targets after most workers in an area have been trained.

WHO and the USAID-funded BASICS project are currently developing a "Health Facility Quality Review" (HFQR) method for monitoring and evaluating the quality of case management of childhood illness after initial training. The method will not only assess case management and aspects of the health facility that may support or impede correct performance, it will also take advantage of the assessment visit to provide individual feedback and reinforcement. The "surveyors" who conduct the visits may be the facilitators who conduct the training. This would ensure that feedback and

reinforcement were provided by individuals who are competent in case management and familiar with the standards taught in the course. The HFQR guidelines will be ready for use by countries in 1996.

The HFQR will also be designed to support the measurement of a limited number of standard indicators that may be summarized across facilities, districts, or at a national level. These measures will not provide a complete picture of facility-based management of childhood illness, but instead can serve as indicators of progress, or a means of alerting those involved in planning and carrying out training or other key service areas (e.g., drug management, supervision) to potential problems.

In three to four years, WHO will modify the course based on lessons learned through country experiences. All countries who decide to carry out the course are therefore requested to prepare written summaries of their experiences in course adaptation, course planning, and course implementation and follow-up, and to share these summaries with WHO.

SUPPLIES NEEDED AT CLINICAL PRACTICE SITES

At the clinical practice sites, there should be a reliable supply of relevant sick-child drugs and other supplies, such as:¹

Antibiotics:

- * Cotrimoxazole
 - Adult Tablet
(80 mg trimethoprim + 400 mg sulphamethoxazole)
 - Pediatric Tablet
(20 mg trimethoprim + 100 mg sulphamethoxazole)
- * Cotrimoxazole Syrup
(40 mg trimethoprim + 200 mg sulphamethoxazole)
- * Amoxicillin Tablet (250 mg)
- * Amoxicillin Syrup (125 mg per 5 ml)
- * Chloramphenicol Intramuscular
(1000 mg vial mixed with 5 ml sterile water = 200 mg/ml)
- * Gentamicin intramuscular
 - 2 ml vials containing 20 mg=2ml at 10 mg/ml, or
 - 2 ml vials containing 80 mg=8ml at 10 mg/ml to be mixed with 6 ml sterile water
- * Benzylpenicillin intramuscular
Vials of 600 mg (1 000 000 units) to which sterile water will be added
- * Nalidixic Acid Tablets (250 mg)
- * Tetracycline Tablets (250 mg)
- * Furazolidone Tablets (100 mg)
- * Erythromycin Tablets (250 mg)

Antimalarials:

- * Chloroquine Tablets
 - 150 mg base
 - 100 g base
- * Chloroquine Syrup (50 mg base per 5ml)
- * Sulfadoxine and Pyrimethamine Tablets (500 mg sulphadoxine + 25 mg pyrimethamine)
- * Quinine Intramuscular
 - 300 mg/ml (in 2 ml ampoules) using quinine salt
 - 150 mg/ml (in 2 ml ampoules) using quinine salt

¹Not all of the forms or formulations listed here are universally available. The first-line and second-line oral antibiotics and antimalarials recommended for your country and the forms and formulations of all drugs will be identified when the materials are modified as directed in the adaptation guide

Antipyretics:

- * Paracetamol Tablet (500 mg)
- * Paracetamol Tablet (100 mg)

Other drugs:

- * Small bottles of safe, soothing cough remedy (*optional*)
- * Tetracycline Eye Ointment - small tubes
- * Gentian Violet - small bottles
- * Mebendazole Tablets (100 mg or 500 mg)
- * Iron/Folate Tablets (200 mg ferrous sulfate + 250 mcg folate [60 mg elemental iron])
- * Iron Syrup (100 mg ferrous fumarate per 5 ml [20 mg elemental iron per ml])
- * Vitamin A Capsules
 - 200 000 IU
 - 100 000 IU
 - 50 000 IU
- * Vitamin A Syrup

For rehydration therapy:

- * Ringer's Lactate Solution for IV administration
- * Oral Rehydration Salts Premixed Packets -- or the following ingredients with amounts specified for mixing with 1 litre water:
 - Glucose (20.0 g) -- (or 40 g sucrose)
 - Sodium chloride (3.5 g)
 - Trisodium citrate, dihydrate (2.9 g) -- (or 2.5 g sodium bicarbonate)
 - Potassium chloride (1.5 g)

Vaccines:

- * adequate supplies of BCG, OPV, DPT and Measles vaccines

Other supplies

- * Timers for counting fast breathing
- * Thermometers
- * Scales for weighing children and infants accurately
- * Cloth wicks for drying draining ears
- * Soft cloths for applying gentian violet
- * Clean drinking water for mixing ORS and for offering fluid to child when assessing for signs of dehydration
- * Glasses, cups and spoons

**Sample Protocol
to Assist in
Preparation for Integrated Management
of Childhood Illnesses**

September, 1996

**Coordination and Management
(See Guide, Chapter 4)**

Introduction

To move toward an integrated approach to the management of sick children, coordination and management of support are needed at all levels of the health care system. Understanding the current system is an important part of preparing for implementation. This draft protocol is intended to facilitate the process of understanding the current system of coordination and management and preparing to make changes. It is a **draft**, questions may be added, deleted, or modified to fit particular country circumstances.

Questions are organized to correspond to sections of the guide (especially Chapter 4) and are identified in the guide by numbers in brackets (for example, [prot 1 1]). The protocol may be used to collect information from managers in the health care system or to organize information available from studies or regular monitoring activities. Suggestions on whom to involve and how and when to gather data are presented in chapters 3 and 4.

Instructions for interviewers are presented in italics. Focus on collecting accurate data and data that can be analyzed and used. Remember that the goal is to collect information **needed** to make informed decisions.

Coordination and Management

Complete this section before beginning to conduct an interview or record data from documents

Date _____

Source of data _____
(name and title of respondent or titles of documents)

Level (circle one) National (name) _____
 Regional (name) _____
 District (name) _____

Interviewer (or person filling out questionnaire) _____

Begin by introducing yourself, establishing rapport with the interviewee, and explaining the purpose of the interview For example

We are collecting information from managers in various settings to better understand managerial functions for case management of childhood illnesses We are exploring opportunities to improve the cost-effectiveness and quality of care for sick children There are no right or wrong answers, we are just interested in your views on how things work today and your suggestions for improvement

Use the matrix on the following page to ask a series of questions and record responses Questions are listed in column 1, responses can be written in column 2 (and column 3, where applicable) The matrix corresponds to Table 4-2 in the Guide

<p>Functions of the Ministry of Health (MOH)</p> <p>Level: (circle one) National Regional District</p>	<p>Response: Write in response, or circle Y (yes), N (no), or "don't know."</p>	<p>1.8 Who is responsible?*</p> <p>(name of division, unit or program)</p>
<p>1.1 Policy</p> <p>At this level, are policy decisions been made on</p> <p style="padding-left: 40px;">case management</p> <p style="padding-left: 40px;">drugs selection</p>	<p>Y N Don't know</p> <p>Explain</p> <p>Y N Don't know</p> <p>Explain</p>	
<p>1.2 Technical advice</p> <p>Do you give technical advice on case management—for example do you prepare treatment guidelines?</p>	<p>Y N Don't know</p> <p>Explain</p>	
<p>1.3 Coordination</p> <p>During the past two years, has case management training been coordinated by this level?</p>	<p>Y N Don't know</p> <p>Explain</p>	

<p>Functions of the Ministry of Health (MOH)</p> <p>Level: (circle one) National Regional District</p>	<p>Response: Write in response, or circle Y (yes), N (no), or "don't know."</p>	<p>1.8 Who is responsible?*</p> <p>(name of division, unit or program)</p>
<p>1.4 Planning and implementation</p> <p>During the past two years, have plans of action been prepared for case management training?</p>	<p>Y N Don't know</p> <p>Explain</p>	
<p>1.5 Supervision</p> <p>Does someone (unit) supervise case management at health facilities?</p>	<p>Y N Don't know</p> <p>Explain</p>	
<p>1.6 Drug procurement and supply</p> <p>Are decisions and action regarding drug procurement and supply taken at this level?</p>	<p>Y N Don't know</p> <p>Explain</p>	
<p>1.7 Budget and financing</p> <p>Does management of funds for case management take place at this level?</p>	<p>Y N Don't know</p> <p>Explain</p>	

*Include others outside of the ministry of health who are involved in and responsible for, any of the functions listed

1.9 Describe any coordination at this level for ongoing programs for integrated child health Who is involved within and outside the MOH?

What are the achievements?

What are the difficulties?

1.10 Who at this level, if any one, is responsible for the planning and implementation of

- MCH ... _____
- CDD _____
- ARI _____
- Malaria prevention and control _____
- nutrition _____
- EPI _____
- training activities _____
- integrated child health activities _____

1.11 Who currently provides financial resources to support child health activities?

Are any user fees initiatives in place? Describe

1.12 What does the ministry of health's organizational chart look like (at this level)? If possible, draw the organogram

1.13 What programs have clearly defined goals and targets at this level?

1.14 We are interested in your views on ways to improve health services to sick children. Do you have suggestions?

What concerns do you have about the possible introduction of integrated case management? For example, do you expect any changes in staffing or in the roles and responsibilities of managers in charge of disease-specific programs?

Who is most likely to favor ICM?

Who is most likely to resist ICM?

What assistance, if any, do you anticipate needing as a manager, if there is a change to ICM?

Which three health issues currently have a high level of political commitment and support?

- | | | | |
|---|-------|------|-------|
| 1 | _____ | Why? | _____ |
| 2 | _____ | Why? | _____ |
| 3 | _____ | Why? | _____ |

Thank you for your assistance. If you would like to share additional thoughts or obtain additional information, please let me know.

Immediately following the interview, review the questionnaire to ensure that all responses are filled in properly and clearly.

**Sample Protocol
to Assist in
Preparation for Integrated Management
of Childhood Illnesses**

September, 1996

Training
(See Guide, Chapter 5)

Introduction

Integrated management of childhood illnesses calls for new skills. Understanding the current skills of health care providers is an important part of preparing for change. This draft protocol is intended to facilitate the process of understanding current skills, practices, and training arrangements. Data obtained can be used to determine who to train, how to increase training coverage, and course design. The protocol is a **draft**, questions may be added, deleted, or modified to fit particular country circumstances.

Questions are organized to correspond to sections of the guide (especially Chapter 5) and are identified in the guide by numbers in brackets (for example, [prot 2.1]). The protocol may be used to collect information from managers and health care providers in the health care system or to organize information available from studies or regular monitoring activities (for example, health facility or household survey data). Suggestions on whom to involve and how and when to gather data are presented in Chapters 3 and 5.

Instructions for interviewers are presented in italics. Focus on collecting accurate data and data that can be analyzed and used. Remember that the goal is to collect information **needed** to make informed decisions.

Training

Complete this section before conducting an interview or recording data from documents

Date _____

Source of data _____
(name and title of respondent or titles of documents)

Level (circle one) National (name) _____
 Regional (name) _____
 District (name) _____

Interviewer (or person filling out questionnaire) _____

Begin by introducing yourself, establishing rapport with the interviewee, and explaining the purpose of the interview For example

We are collecting information from managers and health care providers in various settings to better understand existing skills and practices in case management of childhood illnesses We are exploring opportunities to improve the quality of care for sick children There are no right or wrong answers, we are just interested in your views on how things work today and your suggestions for improving the current system

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2 1- Do you have an organogram for the health facility system in this area? Y N
 2 3

If yes, go over the organogram and make sure you understand it Attach a copy to this questionnaire

If no, ask respondent to draw an organogram Go over it together to make sure you understand

Of the following types of health facilities, which are considered first-level facilities? Indicate how many first-level facilities there are in this region (or district) and the total number of health workers who assess and treat sick children in those facilities

2 1 Type of facility (Circle first-level facilities)	2 2 How many first-level facilities in region (or district)?	2 3 Number of health workers assessing and treating children at first-level facilities
Health post		
Health clinic		
Health center		
District hospital		
Other _____		

2 4 We are interested in the tasks of health workers in providing health care to children in first-level health facilities, particularly who assesses, classifies, treats, advises, and refers sick children

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In the chart below, circle the categories of health worker in first-level facilities

For those categories that are circled, ask the questions

Do medical assistants assess? Classify? Treat? Advise? Refer?

Repeat for other categories of health worker that are circled and fill in the chart below by circling Y for yes and N for no Omit categories of health workers that do not work in first-level facilities

Category of Health Worker (Circle those in first-level facilities)	Does the health worker...				
	Assess?	Classify?	Treat?	Advise?	Refer?
Medical assistant	Y N	Y N	Y N	Y N	Y N
Nurse	Y N	Y N	Y N	Y N	Y N
Doctor-specialist	Y N	Y N	Y N	Y N	Y N
Doctor-other	Y N	Y N	Y N	Y N	Y N
Pharmacist	Y N	Y N	Y N	Y N	Y N
Other _____	Y N	Y N	Y N	Y N	Y N

Are there job descriptions that can provide additional information on the tasks of health workers? (Circle response If yes, obtain copies and attach them to this questionnaire)

Y N

2.5 What are the strengths in case management skills and knowledge for each category of health worker? How could case management performance be improved? [old 2.6]

(Write responses in the chart below Probe for specific examples of existing skills and specific examples of areas for improvement)

Category of health worker	2.5 Strengths in case management skills and knowledge	2.5 How could case management performance be improved?	2.6 Language skills and reading ability
Medical assistant			
Nurse			
Doctor-specialist			
Doctor-other			
Pharmacist			
Other _____			

2.6 What language(s) are first-level health workers fluent in? What is their ability to read extensive text and do written exercises?

Responses to 2.4-2.6 are based on *(Circle the appropriate)*

Opinion Supervisory visits Health Facility Survey

Health facility assessment Other sources

Obtain any report that provides additional information on health facility case management practices

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27 Who supervises case management practices at first-level health facilities?

(name) (title)

(Circle one of the following)

Is supervision internal (handled by internal staff)?
 external (visits from outside personnel)?

28 Do you have data on the percentage of caretakers who seek treatment for sick children at *(Circle response and fill in percentage)*

public facilities? _____
 private facilities? _____
 NGOs? _____
 Don't know _____

Source of Information _____

29 How many workers in first-level health facilities have received clinical, hands-on training in case management of various childhood illnesses? How many workers at first-level health facilities have not received training in case management of various childhood illnesses? *(Fill in the chart below. If respondent does not know, write d.k.)*

Area of case management training	How many workers at first-level health facilities HAVE received hands-on, practical training?	How many workers at first-level health facilities HAVE NOT received hands-on, practical training?
Acute respiratory infection (ARI) case management		
Diarrhea (CDD) case management		
Nutrition counseling		
Malaria case management		
Measles case management		
Integrated sick child case management		

210 In your view, who could be most helpful in influencing change in the current health care system? List categories of workers and, if appropriate, names and titles

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2 11 In your view, which health workers would benefit most from the currently available WHO/UNICEF training course on management of childhood illnesses, considering their language and reading skills?

2 12 Can you identify any population groups in which children are at high risk of severe illness? Give the reason for your opinion

2 13 What training sites exist in this area? Name them Are they functioning?

1	_____	Y	N	Don't know
2	_____	Y	N	Don't know

2 14-2 16 *The following information provides a framework for estimating information on training coverage
Please write in the answer or circle the appropriate response*

2 14 During which months are the most cases available for clinical training?

Diarrhea _____

ARI _____

Malaria _____

2 15 How many trained trainers can be made available to conduct integrated case management training?

2 16 What funds are or can be made available for training activities?

Please suggest potential sources of funding for training

2.17-2.20 Indicate the topic(s) for case management training.

2 17 Is any decentralized case management training being conducted?

2 18 Does any on-the-job training exist? Explain

2 19 What training exists for private health care providers?

2 20 During the past year, have any efforts been made to inform health providers about case management (for example, orientation)? Explain

2.21-2.24 The following questions will help to assess case management needs for the most common causes of death in children. In your view, what are the most common causes of death in children? What case management skills are most needed? What essential drugs are available for treatment?

Write responses in the first column on the left and ask other questions in relation to that response. Responses correspond to the first three columns of Worksheet 5-2 in Chapter 5.

Summary of Case Management Skills Needed		
2.21 What are the most common causes of death in children?	2.22 What case management skills are needed most?	2.23 What essential drugs are available for treatment?
Source of Information _____	Source of Information _____	Source of Information _____

2.24 In your view, for how long can the different categories of health workers at first-level health facilities be away for a training course? Suggest the maximum duration.

Thank you for your assistance. If you would like to share additional thoughts or obtain additional information, please let me know.

Immediately following the interview, review the questionnaire to ensure that all responses are filled in properly and clearly.

**Sample Protocol
to Assist in
Preparation for Integrated Management
of Childhood Illnesses**

September, 1996

Policy
(See Guide, Chapter 6)

Introduction

This sample protocol is designed to help managers review and identify policy issues and make recommendations for action. Many countries already have case management policies that were developed by specific programs, such as the national acute respiratory infection (ARI) program. Policies may be appropriate for integrated case management, or may require modification. Countries may not have established policies to guide decisions such as when to provide vitamin A or measles vaccines. National policies are important for integrated case management because they provide a standard for adapting training materials, providing essential drugs, and making communication messages consistent.

Chapter 6 provides examples of questions that may be answered by national policies. In this protocol, policy areas are organized in a chart that also indicates possible sources of policy information. Thus, the protocol provides a framework for a desk review of national policies. Additional information on policies is provided in the WHO/UNICEF Adaptation module.

Instructions for interviewers are presented in italics. Focus on collecting accurate data and data that can be analyzed and used. Remember that the goal is to collect information **needed** to make informed decisions.

Summarize information on the following chart and attach available policy statements

Questions and Possible Source of Information Regarding Policies Relevant to ICM					
Questions:	Possible Sources	Is policy endorsed by MOH?	Is policy disseminated to health care providers?	Circle sectors in which policy is applicable	Is policy implemented? How?
<p>What is the national policy on... (Summarize major policy items)</p>	<p>(Write or circle source used)</p>				
<p>3 1 Case management in health facilities of children with diarrhea (include any policies relating to dysentery or cholera)</p>	<p>National CDD program MCH</p>	<p>Y N D.K</p>	<p>Y N D K</p>	<p>Public Private</p>	<p>Y N D K</p>
<p>3 2 Home case management of diarrhea, including recommended home fluids and foods during and after diarrhea</p>	<p>National CDD program MCH</p>	<p>Y N D K</p>	<p>Y N D K</p>	<p>Public Private</p>	<p>Y N D K</p>

Questions and Possible Source of Information Regarding Policies Relevant to ICM					
Questions: What is the national policy on... (Summarize major policy items)	Possible Sources (Write or circle source used)	Is policy endorsed by MOH?	Is policy disseminated to health care providers?	Circle sectors in which policy is applicable	Is policy implemented? How?
3 3 Breastfeeding	MCH	Y N DK	Y N DK	Public Private	Y N DK
3 4 Home case management of acute respiratory infections (ARI)	ARI program MCH	Y N DK	Y N DK	Public Private	Y N DK
3 5 Case management of ARI in health facilities (including drugs for moderate and severe pneumonia)	ARI program MCH	Y N DK	Y N DK	Public Private	Y N DK

Questions and Possible Source of Information Regarding Policies Relevant to ICM					
Questions: What is the national policy on... (Summarize major policy items)	Possible Sources (Write or circle source used)	Is policy endorsed by MOH?	Is policy disseminated to health care providers?	Circle sectors in which policy is applicable	Is policy implemented? How?
3 6 Malaria prevention and case management	Malaria program	Y N DK.	Y N DK	Public Private	Y N DK
3 7 Nutrition management and advice for sick children (vitamin A supplementation ? Growth monitoring?)	Nutrition MCH	Y N DK	Y N DK	Public Private	Y N DK

Questions and Possible Source of Information Regarding Policies Relevant to ICM					
Questions: What is the national policy on... (Summarize major policy items)	Possible Sources (Write or circle source used)	Is policy endorsed by MOH?	Is policy disseminated to health care providers?	Circle sectors in which policy is applicable	Is policy implemented? How?
3 8 Measles case management	EPI MCH	Y N DK	Y N DK	Public Private	Y N DK
3 9 Immunization schedule, vaccination of sick children?	EPI program	Y N DK	Y N DK	Public Private	Y N DK
3 10 Drugs (essential for first-level government and private sector drug utilization)	Pharmaceutical Division Essential Drugs Program	Y N DK	Y N DK	Public Private	Y N DK

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Questions and Possible Source of Information Regarding Policies Relevant to ICM					
Questions: What is the national policy on... (Summarize major policy items)	Possible Sources (Write or circle source used)	Is policy endorsed by MOH?	Is policy disseminated to health care providers?	Circle sectors in which policy is applicable	Is policy implemented? How?
3 11 Who prescribes antibiotics (category of health worker)?	Pharmaceutical Division Essential Drugs Program	Y N DK	Y N DK	Public Private	Y N DK
3 12 Who prescribes injections (category of health worker)?	Pharmaceutical Division Essential Drugs Program	Y N DK	Y N DK	Public Private	Y N DK

After completing the chart, review it to be sure that responses are filled in properly and clearly Attach copies of relevant documents consulted

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**Sample Protocol
to Assist in
Preparation for Integrated Management
of Childhood Illnesses**

September, 1996

Drug Availability
(See Guide, Chapter 7)

Introduction

This sample protocol is designed to help managers assess the availability of drugs for integrated management of childhood illness (IMCI), review existing drug lists and guidelines, and examine the drug situation in health facilities. These are preparatory steps to improving the drug supply system and ensuring that essential drugs and supplies are available to sick children. Major problems in the drug system are beyond the scope of this protocol.

Chapter 7 provides overall guidance. This protocol provides a framework for interviewing knowledgeable individuals, such as pharmacists, drug vendors, and managers of medical stores, to obtain information on drug availability. Alternatively, it may be possible to gather data from existing surveys or evaluations to gain an understanding of the drug-related actions needed to prepare for IMCI.

Instructions for interviewers are presented in italics. Focus on collecting accurate data and data that can be analyzed and used. Remember that the goal is to collect information **needed** to make informed decisions.

Drug Availability

Complete this section before conducting an interview

Date _____

Source of data _____
(name and title of respondent or titles of documents consulted)

Level (circle one) National (name) _____
 Regional (name) _____
 District (name) _____

Interviewer _____

Begin by introducing yourself, establishing rapport with the interviewee, and explaining the purpose of the interview. For example,

We are collecting information from managers and health care providers in various settings to better understand existing patterns of drug availability. Our interest is in the case management of childhood illnesses. There are no right or wrong answers, we are just interested in your views on how things work today and your suggestions for improving the current system.

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4 1 Below is a list of IMCI drugs and vaccines that may be used in treating childhood illnesses Answer the questions in the chart to indicate availability and reasons for nonavailability in first-level facilities, central and regional medical stores, and private pharmacies Specify sources of information (opinion, records, supervisory reports, health facility assessment survey) _____

Circle Y for yes, N for no, and D K for don't know

If the answer is yes, in some but not all (facilities, stores or pharmacies), write in "some" after circling Y

If the answer is no, indicate reason for nonavailability (if you know)

Indicate the numbers or names of facilities, stores, pharmacies in the area reviewed

Summary of drug availability in first-level facilities, medical stores and pharmacies in area				
List of drugs	What drugs and vaccines are available in			
	First-level facilities? () numbers	Central medical stores? () names or numbers	Regional medical stores? () names or numbers	Private pharmacies? () numbers
Amoxicillin tablets/syrup	Y N DK	Y N DK	Y N DK	Y N DK
Chloramphenicol im	Y N DK	Y N DK	Y N DK	Y N DK
Chloroquine tablets	Y N DK	Y N DK	Y N DK	Y N DK
Cotrimoxazole pediatric/adult tablets	Y N DK	Y N DK	Y N DK	Y N DK
Erythromycin tablets	Y N DK	Y N DK	Y N DK	Y N DK
Gentamicin im	Y N DK	Y N DK	Y N DK	Y N DK
Naladixic acid tablets	Y N DK	Y N DK	Y N DK	Y N DK

Summary of drug availability in first-level facilities, medical stores and pharmacies in area				
List of drugs	What drugs and vaccines are available in			
	First-level facilities? () numbers	Central medical stores? () names or numbers	Regional medical stores? () names or numbers	Private pharmacies? () numbers
Normal saline	Y N DK	Y N DK	Y N DK	Y N DK
Oral rehydration salts	Y N DK	Y N DK	Y N DK	Y N DK
Paracetamol tablets	Y N DK	Y N DK	Y N DK	Y N DK
Pyrimethamine sulfa	Y N DK	Y N DK	Y N DK	Y N DK
Quinine im	Y N DK	Y N DK	Y N DK	Y N DK
Ringers lactate	Y N DK	Y N DK	Y N DK	Y N DK
Tetracycline eye ointment	Y N DK	Y N DK	Y N DK	Y N DK
Vaccines				
BCG	Y N DK	Y N D.K.	Y N DK Y N DK	Y N DK
OPV	Y N DK	Y N DK	Y N DK	Y N DK
DPT	Y N DK	Y N DK	Y N DK	Y N DK
Measles	Y N DK	Y N DK	Y N DK	Y N DK
Vitamin A capsule	Y N DK	Y N DK	Y N DK	Y N DK

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Summary of drug availability in first-level facilities, medical stores and pharmacies in area				
List of drugs	What drugs and vaccines are available in			
	First-level facilities? () numbers	Central medical stores? () names or numbers	Regional medical stores? () names or numbers	Private pharmacies? () numbers
Other _____	Y N D K	Y N D K	Y N D K	Y N D K

4 2 Go back over the list of drugs in the chart above and circle any that you know have been **out of stock** in health facilities during the past three months

4 3 In your opinion, what are the main reasons why some drugs and vaccines are not available in health facilities?

1 _____

2 _____

3 _____

4 4 Sometimes drugs are available in central medical stores, but are not available in health facilities Do you know why this occurs? Y N

Explain

4 5 Does this country have a national essential drug list? Y N D K
If yes, obtain a copy or find out where it can be obtained

4 6 What other drug lists and guidelines exist in public and private health sectors? What IMCI drugs are not included in the drug lists or guidelines? List the drugs in the table below

Drug list or guidelines	Public and/or private sectors	IMCI drugs not included
-------------------------	-------------------------------	-------------------------

4 7 Are any of the standard drug lists above present in health facilities? Y N D K

Explain (be specific) _____

4 8 Do health facilities keep a drug inventory? Y N D K

Explain _____

Do health facilities keep records of drug orders? Y N D K

Explain _____

4 9 If yes to 4 8, do you have information on the average percent of time that any of the IMCI drugs or vaccines were out of stock in the previous year?

Selected IMCI drugs out of stock	Percent of time last year (%)
----------------------------------	-------------------------------

4 10 Do you know if any of the IMCI drugs are used for purposes other than the management of childhood illnesses? Y N D K

Explain _____

4 11 List name or area of names of health facilities where some IMCI drugs were available in the past three months

First-level health facilities or area(s) with some IMCI drugs available _____

Thank you for your assistance. If you would like to share additional thoughts or obtain additional information, please let me know.

After completing the questionnaire, review it to be sure that responses are filled in properly and clearly. Attach copies of relevant documents consulted.

HEALTH FACILITY ASSESSMENT

See: “Rapid Integrated Health Facility Assessment Guidelines,” prepared by The BASICS Project for protocols and guidelines for how to conduct health facility assessment.

OPTION: SAMPLE Health Facility Assessment; Integrated Management of Childhood Illness

Purpose

To suggest gaps in applied knowledge and skills, to explain missed diagnosis (classifications), and indicate possible factors contributing to the performance of health workers. This will help to understand report of current practices, and to plan training and other activities to improve case management of sick children.

The information gathered during health facility visits will help to answer the questions related to planning of training and drug availability, as outlined in chapters 5 and 7 of *Guide for the Introduction of Integrated Management of Childhood Illness*.

When to use the protocols:

The instruments can be used during visits to selected health facilities for rapid assessment of case management of sick children and factors influencing care.

If the visitor/supervisor/surveyor is not trained in integrated case management, only forms 1 and 2 should be used. Procedures for analysis of the data are not included here.

The Health Facility Assessment instruments include

1 Facility management

Interview with head of health facility (for example, chief of hospital, department head of Pediatric OPD, etc.) and observation of the health facility regarding facility support to case management of sick children.

2 Health worker interview

Interview of health worker(s) managing outpatient pediatric cases on the day of the health facility visit.

3 Case management observation

To use this protocol the **observer** needs to be trained in case management of sick children, based on the integrated algorithm.

The cases include all sick children age two months up to five years seeking care for convulsions, inability to drink, cough or difficult breathing, diarrhea, fever, malaria, measles, or nutritional problems, or who are abnormally sleepy or difficult to wake

The health worker can be asked to state out loud what he or she is looking for and what is found during assessment and classification. If health workers do not volunteer information on how treatment is selected, they can be asked on what basis they made the decision. No prompting is done during observation.

Draft Form 1: FACILITY MANAGEMENT

Facility name _____ Date: _____
Facility type _____ (Hospital, Health Center)
Urban/Rural. _____ (U,R)
Interviewer: _____

INTERVIEW WITH CLINIC HEAD

- 1 How many people work at this facility?
2. How many of the staff who work here manage sick children?
- 3 How many of the staff who manage sick children have been trained in the case management of
diarrhea?
ARI?
measles?
malaria?
nutritional problems?
EPI training?
other case management training? Specify
4. How many hours per day is the OPD of this facility open?
- 5 Where are complicated cases referred?
- 6 How far away is the nearest referral site?
7. For how many of the last 90 days has the facility had stocks of the following drugs to dispense to patients?

	<u>0-30</u>	<u>31-60</u>	<u>61-90</u>
a. Cotrimoxazole tablets or syrup			
b. Amoxicillin tablets or syrup			
c. Erythromycin tablets			
d. Nalidixic acid tablets			
e. Chloramphenicol intramuscular			
f. Gentamicin Intramuscular			
g. Chloroquine tablets			
h. Quinine Intramuscular			
i. Fansidar			
j. Paracetamol tablets			
k. Tetracycline eye ointment			

- | | | | |
|-----|--|---|---|
| 15 | Have there been any training sessions in this facility?
If yes, describe | Y | N |
| 16 | Do you observe staff in their treatment of children? | Y | N |
| 17 | Do you use checklists to assess performance? | Y | N |
| 18 | Do you receive monitoring or supervisory visits for MCH, PHC, CDD, ARI, malaria, EPI activities, or any other activities by an external supervisor?
If yes, specify | Y | N |
| | (If yes go to ----> 19, If no ----> 22) | | |
| 19. | What did this supervisor do during the last visit | | |
| 20. | Are these visits helpful for your activities? | Y | N |
| 21 | How can they be improved? Describe | | |
| 22. | What are the most positive aspects to working in this place? | | |
| 23 | What do you think are the main factors that hinder health workers ability to manage sick children? | | |

OBSERVATION OF THE FACILITY

Site

- | | | | |
|-----|--|---|---|
| 24. | Is there any special area for MCH/PHC activities, such as an ORT area? | Y | N |
| 25 | Is there a special area for health education? | Y | N |
| 26 | Is there a functioning water tap nearby (within two minutes' walk)? | Y | N |
| 27 | Is there a latrine patients can use? | Y | N |

28	Is there a functioning weighing scale?	Y	N
29	Is there a functioning thermometer?	Y	N
30	Is there any timing device?	Y	N
31.	Is there a register book? If yes, how many cases of ... in the last five days.	Y	N
	a. malnutrition		
	b. measles		
	c. ARI		
	d. diarrhea		
	e. malaria		
	f. fever		
	g. pneumonia		
	h. do not know		
32	Are the following items readily available in the facility?		
	a. cups	Y	N
	b. spoons	Y	N
	c. IV supplies	Y	N
	d. needles disposable	Y	N
	e. hypodermic needles	Y	N
33	Salt or saline solution	Y	N
34.	Paper and pencils	Y	N
35.	Immunization cards	Y	N
36.	Mothers cards or handouts for mothers?	Y	N

Comments on observation of the facility site.

Drug supply:

37	Are the following drugs in stock.		
a.	Cotrimoxazole pediatric/adult tablets	Y	N
b.	Amoxicillin tablets/syrup	Y	N
c.	Erythromycin tablets	Y	N
d.	Nalidixic acid tablets	Y	N
e.	Chloramphenicol im	Y	N
f.	Gentamicin im	Y	N
g.	Chloroquine tablets	Y	N
h.	Quinine im	Y	N
l	Fansidar	Y	N
i	Paracetamol tablets	Y	N
j	Tetracycline eye ointment	Y	N
k.	Vitamin A capsule	Y	N
l	Ringers lactate	Y	N
m.	Oral Rehydration Salts	Y	N
n	Vaccines	Y	N
	BCG	Y	N
	OPV	Y	N
	DPT	Y	N
	Measles	Y	N
38	Does the facility have		
a	drug ordering forms	Y	N
b.	drug inventory	Y	N

Comments on observation of drug supply.

Draft Form 2: HEALTH WORKER INTERVIEW

Facility name. _____ Date: _____
Facility type _____ (Hospital, Health Center)
Urban/Rural. _____ (U,R)
Interviewer: _____

BASIC DATA

- 1 Category of health worker: nurse doctor
2 Sex. M F
3 How long have you worked in this hospital? _____
4 How many patients did you see yesterday? _____
5 Do you think that you treat
a fewer than you can handle? -
b as many as you can handle? -
c more than you can handle? -
6 Of the patients you saw yesterday, how many were sick children?
7 In the last month have you seen any children with.
a. severe pneumonia Y N
b. diarrhea with severe dehydration Y N
c convulsion Y N
d severe febrile illness Y N
e severe malaria Y N
f. severe malnutrition Y N

TRAINING

- 8 Have you attended any clinical training course on the case management of children with
ARI? Y N
Diarrhea? Y N
Other? Specify:
(If yes, go to -----> 9, if no -----> 19)
9 Where was this training held?
10 How long did this training last?
11 In this training did you treat patients yourself? Y N
(If yes ----->12, if no -----> 15)

12. What proportion of training involved direct patient care?
 a. less than half
 b. more than half
 c. about the same
13. In the training, did you take care of severe or complicated cases?
 If yes, specify Y N
14. Did the instructors provide feedback during practical sessions? Y N
15. During the training did you prepare plan of action?
 If yes----> 16, if no----> 18) Y N
16. Have you implemented this plan.
 a. not at all?
 b. some of it?
 c. all of it?
17. What did you find that helped in implementing your plans after training?
18. What (if any) were the problems you encountered in implementing what you learned?

SUPERVISION

19. When you have a complicated case, is there someone in this facility with whom you can discuss the case? Y N
20. Do you have an immediate supervisor (one based at this facility)? Y N
 (If yes ----> 21, if no ----->)
21. Does this person observe you treating patients? Y N
22. Who is the assigned person outside this hospital who is responsible for monitoring case management? (name/don't know)
23. Has he or she visited in the last three months? Y N
24. Did he or she observe you treating cases? Y N

INFORMATION

- 25 Do you or the hospital receive any newsletter or other materials to keep you current on nutrition, diarrheal disease, ARI, EPI, or other topics? Y N
If yes, specify

KNOWLEDGE

Assessment

- 26 What danger signs do you look for in a sick child?
a able to drink?
b. convulsions?
c. abnormally sleepy or difficult to wake?
Specify
- 27 What do you ask all mothers about, when they bring a sick child for treatment
a Danger signs
b If child has cough and/or difficulty breathing
c. Diarrhea
d. Fever
e. Why she has come.
f Other question, Specify.
28. If a child has cough or difficult breathing, what do you ask about?
a for how long?
b. other, specify:

What do you look for?
b counts per minute
c chest indrawing
d look and listen for stridor
e. other, specify
29. If a child has diarrhea, what do you ask about?
a for how long?
b is there blood in stool?
c. other, specify:

30. To decide if a child with diarrhea is dehydrated, what do you look for
- general condition
 - sunken eyes
 - tears
 - offer fluid to see thirst
 - skin pinch
 - other, specify
31. If the child has fever,
What do you ask about?
- is the child vomiting
 - other, specify
- What do you look for or do?
- measure temperature
 - look or feel for neck stiffness
 - look for runny nose
 - look for signs suggesting measles
 - other, specify
32. What are the signs suggesting that a child has measles?
- generalized rash
 - cough, runny nose, or red eyes
- If the child has measles, what did you look for.
- sore mouth
 - pus draining from the eye
 - clouding of the cornea
 - other; specify:
33. In addition to the above, what else do you check all sick children for?
- Immunization status
 - Nutritional status malnutrition, anaemia
 - Ear problem
 - Other problems, specify
34. What do you look for, or do, when you check a child for malnutrition and anaemia?
- visible severe wasting
 - eyelid pallor
 - clouding of cornea
 - foamy patches
 - edema of both feet
 - weigh the child
 - determine weigh for age
 - other, specify

Classification

- 35 How do you decide that a child has Pneumonia?
- a fast breathing
 - b. no chest indrawing
 - c other sign, specify
- 36 Diarrhea with some dehydration?
- a restless, irritable
 - b. sunken eyes
 - c. absent tears
 - d dry mouth and tongue
 - e thirsty, drinks eagerly
 - f skin pinch go back slowly
 - g other sign, specify
37. Malaria?
- a fever (in clinic or report)
 - b. fever and no runny nose or measles
 - c other, specify.
38. Complicated measles?
- a generalized rash
 - b cough
 - c. runny nose
 - d. red eyes
 - e. pus from eye
 - f. sore mouth
- 39 Severe malnutrition?
- a. visible, severe wasting
 - b severe eyelid and palmar pallor
 - c clouding of the cornea
 - d. edema of both feet
 - e other; specify

Treatment

How do you treat and/or advise a nine-month old child with

36. Pneumonia?
- a antibiotic
 - b soothe throat/relieve cough
 - c. return in two days or if worse
 - d. other
- 37 Diarrhea with some dehydration?
- a. give ORS (Plan B)
 - b. other
- 38 Dysentery?
- a antibiotic
 - b return in two days, if worse,
under one year
measles in last six weeks,
or dehydrated initially
 - c other
- 39 Persistent diarrhea?
- a advise on feeding—if advise on feeding, specify
 - b return in five days
 - c. other
- 40 Malaria?
- a. cotrimoxazole—if cotrimoxazole, give reason
 - b. oral antimalarial
 - c paracetamol
 - d return in two days if fever persists
 - e return if fever returns in 14 days
 - f. other
- 41 uncomplicated measles?
- a. vitamin A
 - b. return in five days if fever
 - c return in 14 days for follow-up
 - d other

- 42 Malnutrition or anemia?
- a vitamin A
 - b iron
 - c advise on feeding
 - d. return in 14 days
 - e other
- If a -d, give the reason(s)

- 43 Immunization status shows three DPT, four OPV, one BCG vaccinations according to card, what do you do?
- a give measles
 - b advise to go for measles immunization
 - c other, specify

Draft Form 3 (Optional) CASE MANAGEMENT OBSERVATION

Facility name: _____ Date _____
 Facility type _____ (Hospital, Health Center)
 Urban/Rural. _____ (U,R)
 Observer _____

Assessment and classification by observation

- | | | | |
|----|---|---|---|
| 1 | Does the health worker ask: | | |
| | a The mother why she has come? | Y | N |
| | If yes, specify | | |
| 2 | Does the health worker ask | | |
| | a. Is the child able to drink? | Y | N |
| | b. Has the child had convulsions? | Y | N |
| 3. | Does the health worker check to see if the child is abnormally sleepy or difficult to awaken? | Y | N |
| 4 | Does the health worker ask | | |
| | a Does the child have cough or difficult breathing | Y | N |
| | (If mother answers yes---> 4b, if no----> 5) | | |
| | b Does the health worker ask for how long? | Y | N |
| | c count the breaths in one minute? | Y | N |
| | d. look for chest indrawing? | Y | N |
| 5. | Does the health worker ask | | |
| | a Does the child have diarrhea? | Y | N |
| | (If mother answers yes---> 5b, if no----> 6). | | |
| | Does the health worker ask. | | |
| | b for how long? | Y | N |
| | c is there blood in the stool? | Y | N |
| | Does the health worker examine | | |
| | d child's general condition? | Y | N |
| | e sunken and dry eyes? | Y | N |
| | f tears? | Y | N |
| | g whether mouth is dry or moist? | Y | N |
| | h offer fluid to examine thirst? | Y | N |
| | i skin by pinching? | Y | N |

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- 6 Does the health worker ask
- | | | | |
|---|---|---|---|
| a | Has the child had fever?
(If mother answers yes---> 6b, if no----> 7) | Y | N |
| b | Does the health worker ask:
is the child vomiting repeatedly/not able to hold anything down? | Y | N |
| c | Does the health worker measure the temperature or feel the child for fever? | Y | N |

If yes, specify:

6. Does the health worker look or feel:
- | | | | |
|----|-------------------------------|---|---|
| d. | for neck stiffness? | Y | N |
| e | for runny nose? | Y | N |
| f | for signs suggesting measles? | Y | N |

If yes, specify

- | | | | |
|--|-------------------------------|---|---|
| | generalized rash | Y | N |
| | cough, runny nose or red eyes | Y | N |
- (If the child has measles---> 6g, if no-----> 7)

Does the health worker look for:

- | | | | |
|----|-------------------------|---|---|
| g. | sore mouth? | Y | N |
| h | pus draining from eyes? | Y | N |
| i | clouding of the cornea? | Y | N |

7. Does the health workers look for:
- | | | | |
|----|---|---|---|
| a | visible severe wasting? | Y | N |
| b. | clouding of the cornea? | Y | N |
| c. | foamy patches on the white of the eye? | Y | N |
| d. | edema of both feet? | Y | N |
| e. | Does the health worker weigh the child? | Y | N |
- If yes, does the health worker
- | | | | |
|----|---------------------------|---|---|
| f. | determine weight for age? | Y | N |
|----|---------------------------|---|---|

8 a. Health workers' (HW) classification(s)? Check below

9 b. Observers' (O) classification(s)? Check below.

10. Treatment given? Specify

Classifications	HW (a)	O (b)	Treatment given (c)
-----------------	-----------	----------	------------------------

Severe pneumonia or very severe disease

Pneumonia

Cough and cold

Diarrhea with severe dehydration

Diarrhea with some dehydration

Diarrhea with no signs of dehydration

Severe persistent diarrhea

Persistent diarrhea

Dysentery

Very severe febrile illness

Malaria

Severe complicated measles

Complicated measles

Uncomplicated measles

Severe malnutrition or severe anemia

Malnutrition or anemia

Other diagnosis or classifications

Specify.

11. Observer's conclusion about treatment decision.

12. If child has chest indrawing, stridor when calm, stiff neck, severe malnutrition or severe anemia, or severe classification (according to observer ___? health worker ___? both ___?), does the health worker admit or refer urgently?

Y N

13. Are antibiotics prescribed/given?

Y N

If yes, what was the reason?

14. a. blood in stool?

Y N

b. suspected cholera?

Y N

c. pneumonia?

Y N

d. severe measles?

Y N

e. other, specify

15	Is oral antimalarial drug given?	Y	N
16	Is drug administered by injection? If yes, specify and give the reason	Y	N
17	Is vitamin A given?	Y	N
18	If diarrhea, is treatment given according to Plan A, B, or C?	Y	N
	a. ORS at health facility?	Y	N
	b. IV rehydration?	Y	N
	c. home with ORS?	Y	N
	d. home with advice on homefluids?	Y	N
	e. other?	Y	N
19	Does the health worker check the child's immunization status?	Y	N

ADVICE TO MOTHERS

20	Does the health worker		
	a. ask questions to find out what the mother is already doing for her child?	Y	N
	b. praise the mother for what she does well?	Y	N
	c. advise her how to treat her child at home?	Y	N
	d. check the mother's understanding?	Y	N
21	Does the health worker advise the mother on		
	a. feeding during and after illness?	Y	N
	b. when to bring the child back ?	Y	N
	c. giving oral drugs at home?	Y	N
	d. immunization?	Y	N
	e. nutrition, including breastfeeding	Y	N
	f. other; specify		

If yes to any of above (19-21), describe:

COMMUNICATION RESOURCES

Resource People and Institutions:

Those who would like guidance in communication planning and development may contact.

The Director, CDR Division, The World Health Organization, 1121- Geneva 27, Switzerland

The Information Center at BASICS, 1600 Wilson Boulevard, Suite 300, Arlington, VA 22209, USA (703)-312-6800 -Phone (703)-312-6900 - Fax

Tools and Other Readings

A Tool Box for Building Health Communication Capacity

Date: April 1995

Produced by: HEALTHCOM/AED/USAID

Focus: This Tool Box was developed as a collection of practical, field-tested tools that can be used as needed by managers and practitioners of health communication in the developing world. It includes an overview of modern health communication methodology and a set of concepts, models, strategies and tools developed and used in the field. The materials are in the order one would normally follow in developing a program, and takes the reader from the first step of identifying target behaviors, through formative research, strategy development, implementation, and finally, monitoring and evaluation. They can be used one tool at a time, or as a guide to strengthen the personnel's skills and confidence to apply the methodology in their own communication programs.

A Program Planning Guide

Date: In progress

Produced by: BASICS

Focus: A guide to assist country managers to design, implement, and monitor communication/behavior change programs

Communication for Child Survival

Date: June 1988

Produced by: HEALTHCOM/AED/USAID

Authors: Mark R. Rasmuson, Renata E. Seidel, William A. Smith, Elizabeth Mills Booth

Focus: This manual presents a systematic public health communication methodology for child survival programs (includes several examples, charts, etc.)

The Handbook for Excellence in Focus Group Research

Date: 1995

Produced by: AED/HEALTHCOM/USAID

Author: Mary Debus

Focus: A practical guide to planning, conducting and using focus groups, including case studies and strategies

Immunization: the Behavioral Issues

Date: July 1990

Produced by: International Health and Development Associates for USAID Office of Health

Author: Barbara Pillsbury, Ph D

Focus: The goal of *Immunization the Behavioral Issues* is to bring together findings from qualitative research and the related literature about behavioral factors in immunization and to make recommendations to health planners for fine-tuning programs to increase and sustain immunization coverage

Notes from the Field: Communication for Child Survival

Date: April 1993

Produced by: HEALTHCOM/AED/USAID

Authors: Renata E. Seidel (Editor)

Focus: *Notes from the Field* is a collection of field notes and case studies that demonstrates problems and solutions in the process of changing health services and practices

MANAGEMENT OF CHILDHOOD ILLNESS



World Health Organization
Division of Diarrhoeal and
Acute Respiratory Disease Control



SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ASSESS AND CLASSIFY THE SICK CHILD

Assess, Classify and Identify Treatment	
Check for General Danger Signs	2
Then Ask About Main Symptoms	
Does the child have cough or difficult breathing?	2
Does the child have diarrhoea?	3
Does the child have fever?	4
Classify malaria	4
Classify measles	4
Does the child have an ear problem?	5
Then Check for Malnutrition and Anaemia	6
Then Check the Child's Immunization Status	6
Assess Other Problems	6

TREAT THE CHILD

Teach the Mother to Give Oral Drugs at Home	
Oral Antibiotic	7
Oral Antimalarial	8
Paracetamol	8
Vitamin A	8
Iron	8
Mebendazole	8
Teach the Mother to Treat Local Infections at Home	
Treat Eye Infection with Tetracycline Eye Ointment	9
Dry the Ear by Wicking	9
Treat Mouth Ulcers with Gentian Violet	9
Soothe the Throat, Relieve the Cough with a Safe Remedy	9
Give These Treatments in Clinic Only	
Intramuscular Antibiotic	10
Quinine for Severe Malaria	10
Prevent Low Blood Sugar	11

TREAT THE CHILD, continued

Give Extra Fluid for Diarrhoea and Continue Feeding	
Plan A Treat Diarrhoea at Home	12
Plan B Treat Some Dehydration with ORS	12
Plan C Treat Severe Dehydration Quickly	13
Immunize Every Sick Child, As Needed	13
Give Follow-up Care	
Pneumonia	14
Persistent Diarrhoea	14
Dysentery	14
Malaria (Low or High Malaria Risk)	15
Fever-Malaria Unlikely (Low Malaria Risk)	15
Measles with Eye or Mouth Complications	15
Ear Infection	16
Pallor	16
Very Low Weight	16
COUNSEL THE MOTHER	
Food	
Assess the Child's Feeding	17
Feeding Recommendations	18
Counsel About Feeding Problems	19
Fluid	
Increase Fluid During Illness	20
When to Return	
Advise the Mother When to Return to Health Worker	20
Counsel the Mother About Her Own Health	21

SICK YOUNG INFANT AGE 1 WEEK UP TO 2 MONTHS

ASSESS, CLASSIFY AND TREAT THE SICK YOUNG INFANT

Assess, Classify and Identify Treatment	
Check for Possible Bacterial Infection	22
Then ask Does the young infant have diarrhoea?	23
Then Check for Feeding Problem or Low Weight	24
Then Check the Young Infant's Immunization Status	25
Assess Other Problems	25
Treat the Young Infant and Counsel the Mother	
Oral Antibiotic	26
Intramuscular Antibiotics	26
To Treat Diarrhoea, See <i>TREAT THE CHILD</i> Chart	12 13
Immunize Every Sick Young Infant	27
Treat Local Infections at Home	27
Correct Positioning and Attachment for Breastfeeding	28
Home Care for Young Infant	28
Give Follow-up Care for the Sick Young Infant	
Local Bacterial Infection	29
Dysentery	29
Feeding Problem	30
Low Weight	30
Thrush	30
RECORDING FORMS	
SICK YOUNG INFANT	31
SICK CHILD	33
WEIGHT FOR AGE CHART	on back cover



ASSESS AND CLASSIFY THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS



ASSESS

CLASSIFY

IDENTIFY TREATMENT

ASK THE MOTHER WHAT THE CHILD'S PROBLEMS ARE

- Determine if this is an initial or follow-up visit for this problem
 - If follow-up visit, use the follow-up instructions on *TREAT THE CHILD* chart
 - If initial visit, assess the child as follows

CHECK FOR GENERAL DANGER SIGNS

ASK:

- Is the child able to drink or breastfeed?
- Does the child vomit everything?
- Has the child had convulsions?

LOOK:

- See if the child is lethargic or unconscious

A child with any general danger sign needs **URGENT** attention, complete the assessment and any pre-referral treatment immediately so referral is not delayed.

USE ALL BOXES THAT MATCH THE CHILD'S SYMPTOMS AND PROBLEMS TO CLASSIFY THE ILLNESS

THEN ASK ABOUT MAIN SYMPTOMS:

Does the child have cough or difficult breathing?

IF YES, ASK.

- For how long?

LOOK, LISTEN, FEEL:

- Count the breaths in one minute
- Look for chest indrawing
- Look and listen for stridor

CHILD MUST BE CALM

**Classify
COUGH or
DIFFICULT
BREATHING**

If the child is 2 months up to 12 months	Fast breathing is 50 breaths per minute or more
12 months up to 5 years	40 breaths per minute or more

SIGNS	CLASSIFY AS	TREATMENT <small>(Urgent pre-referral treatments are in bold print.)</small>
<ul style="list-style-type: none"> • Any general danger sign or • Chest indrawing or • Stridor in calm child 	SEVERE PNEUMONIA OR VERY SEVERE DISEASE	<ul style="list-style-type: none"> ▶ Give first dose of an appropriate antibiotic ▶ Refer URGENTLY to hospital *
<ul style="list-style-type: none"> • Fast breathing 	PNEUMONIA	<ul style="list-style-type: none"> ▶ Give an appropriate antibiotic for 5 days ▶ Soothe the throat and relieve the cough with a safe remedy ▶ Advise mother when to return immediately ▶ Follow-up in 2 days
No signs of pneumonia or very severe disease	NO PNEUMONIA COUGH OR COLD	<ul style="list-style-type: none"> ▶ If coughing more than 30 days, refer for assessment ▶ Soothe the throat and relieve the cough with a safe remedy ▶ Advise mother when to return immediately ▶ Follow-up in 5 days if not improving

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Does the child have diarrhoea?

IF YES, ASK*	LOOK AND FEEL*
<ul style="list-style-type: none"> For how long? Is there blood in the stool? 	<ul style="list-style-type: none"> Look at the child's general condition is the child <ul style="list-style-type: none"> Lethargic or unconscious? Restless and irritable? Look for sunken eyes Offer the child fluid Is the child <ul style="list-style-type: none"> Not able to drink or drinking poorly? Drinking eagerly, thirsty? Pinch the skin of the abdomen Does it go back <ul style="list-style-type: none"> Very slowly (longer than 2 seconds)? Slowly?

Classify DIARRHOEA

for DEHYDRATION

Two of the following signs <ul style="list-style-type: none"> Lethargic or unconscious Sunken eyes Not able to drink or drinking poorly Skin pinch goes back very slowly 	SEVERE DEHYDRATION	<ul style="list-style-type: none"> If child has no other severe classification <ul style="list-style-type: none"> Give fluid for severe dehydration (Plan C) OR If child also has another severe classification <ul style="list-style-type: none"> Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way Advise the mother to continue breastfeeding If child is 2 years or older and there is cholera in your area, give antibiotic for cholera
Two of the following signs <ul style="list-style-type: none"> Restless, irritable Sunken eyes Drinks eagerly, thirsty Skin pinch goes back slowly 	SOME DEHYDRATION	<ul style="list-style-type: none"> Give fluid and food for some dehydration (Plan B) If child also has a severe classification <ul style="list-style-type: none"> Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way Advise mother to continue breastfeeding Advise mother when to return immediately Follow-up in 5 days if not improving
Not enough signs to classify as some or severe dehydration	NO DEHYDRATION	<ul style="list-style-type: none"> Give fluid and food to treat diarrhoea at home (Plan A) Advise mother when to return immediately Follow-up in 5 days if not improving

and if diarrhoea 14 days or more

Dehydration present	SEVERE PERSISTENT DIARRHOEA	<ul style="list-style-type: none"> Treat dehydration before referral unless the child has another severe classification Refer to hospital
No dehydration	PERSISTENT DIARRHOEA	<ul style="list-style-type: none"> Advise the mother on feeding a child who has PERSISTENT DIARRHOEA Follow-up in 5 days

and if blood in stool

Blood in the stool	DYSENTERY	<ul style="list-style-type: none"> Treat for 5 days with an oral antibiotic recommended for <i>Shigella</i> in your area Follow up in 2 days
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*If referral is not possible, manage the child as described in *Management of Childhood Illness Treat the Child, Annex Where Referral is Not Possible* and WHO guidelines for inpatient care

Does the child have fever?

(by history or feels hot or temperature 37.5°C** or above)

IF YES
Decide Malaria Risk high or low

THEN ASK:

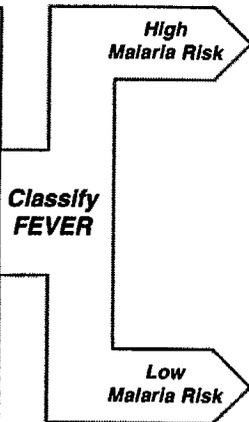
- For how long?
- If more than 7 days, has fever been present every day?
- Has the child had measles within the last 3 months?

LOOK AND FEEL:

- Look or feel for stiff neck
- Look for runny nose
- Look for signs of MEASLES
- Generalized rash and
- One of these cough, runny nose, or red eyes

If the child has measles now or within the last 3 months

- Look for mouth ulcers
Are they deep and extensive?
- Look for pus draining from the eye
- Look for clouding of the cornea



HIGH MALARIA RISK		
<ul style="list-style-type: none"> Any general danger sign or Stiff neck 	VERY SEVERE FEBRILE DISEASE	<ul style="list-style-type: none"> Give quinine for severe malaria (first dose) Give first dose of an appropriate antibiotic Treat the child to prevent low blood sugar Give one dose of paracetamol in clinic for high fever (38.5 C or above) Refer URGENTLY to hospital
<ul style="list-style-type: none"> Fever (by history or feels hot or temperature 37.5 C** or above) 	MALARIA	<ul style="list-style-type: none"> If NO cough with fast breathing, treat with oral antimalarial OR If cough with fast breathing, treat with cotrimoxazole for 5 days Give one dose of paracetamol in clinic for high fever (38.5 C or above) Advise mother when to return immediately Follow up in 2 days if fever persists If fever is present every day for more than 7 days refer for assessment.

LOW MALARIA RISK		
<ul style="list-style-type: none"> Any general danger sign or Stiff neck 	VERY SEVERE FEBRILE DISEASE	<ul style="list-style-type: none"> Give quinine for severe malaria (first dose) unless no malaria risk. Give first dose of an appropriate antibiotic Treat the child to prevent low blood sugar Give one dose of paracetamol in clinic for high fever (38.5 C or above) Refer URGENTLY to hospital
<ul style="list-style-type: none"> NO runny nose and NO measles and NO other cause of fever 	MALARIA	<ul style="list-style-type: none"> If NO cough with fast breathing, treat with oral antimalarial OR If cough with fast breathing, treat with cotrimoxazole for 5 days Give one dose of paracetamol in clinic for high fever (38.5 C or above) Advise mother when to return immediately Follow up in 2 days if fever persists If fever is present every day for more than 7 days refer for assessment
<ul style="list-style-type: none"> Runny nose PRESENT or Measles PRESENT or Other cause of fever PRESENT 	FEVER - MALARIA UNLIKELY	<ul style="list-style-type: none"> Give one dose of paracetamol in clinic for high fever (38.5 C or above) Advise mother when to return immediately Follow-up in 2 days if fever persists If fever is present every day for more than 7 days, refer for assessment

<ul style="list-style-type: none"> Any general danger sign or Clouding of cornea or Deep or extensive mouth ulcers 	SEVERE COMPLICATED MEASLES***	<ul style="list-style-type: none"> Give Vitamin A Give first dose of an appropriate antibiotic If clouding of the cornea or pus draining from the eye, apply tetracycline eye ointment Refer URGENTLY to hospital
<ul style="list-style-type: none"> Pus draining from the eye or Mouth ulcers 	MEASLES WITH EYE OR MOUTH COMPLICATIONS***	<ul style="list-style-type: none"> Give Vitamin A If pus draining from the eye, treat eye infection with tetracycline eye ointment If mouth ulcers treat with gentian violet Follow up in 2 days
<ul style="list-style-type: none"> Measles now or within the last 3 months 	MEASLES	<ul style="list-style-type: none"> Give Vitamin A

** These temperatures are based on axillary temperature. Rectal temperature readings are approximately 0.5 C higher

*** Other important complications of measles pneumonia stridor diarrhoea ear infection and malnutrition are classified in other tables

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Does the child have an ear problem?

IF YES, ASK

- Is there ear pain?
- Is there ear discharge?
If yes, for how long?

LOOK AND FEEL:

- Look for pus draining from the ear
- Feel for tender swelling behind the ear

**Classify
EAR PROBLEM**

<ul style="list-style-type: none"> • Tender swelling behind the ear 	MASTOIDITIS	<ul style="list-style-type: none"> ▶ Give first dose of an appropriate antibiotic ▶ Give first dose of paracetamol for pain ▶ Refer URGENTLY to hospital
<ul style="list-style-type: none"> • Pus is seen draining from the ear and discharge is reported for less than 14 days, or • Ear pain 	ACUTE EAR INFECTION	<ul style="list-style-type: none"> ▶ Give an antibiotic for 5 days ▶ Give paracetamol for pain ▶ Dry the ear by wicking ▶ Follow-up in 5 days
<ul style="list-style-type: none"> • Pus is seen draining from the ear and discharge is reported for 14 days or more 	CHRONIC EAR INFECTION	<ul style="list-style-type: none"> ▶ Dry the ear by wicking ▶ Follow-up in 5 days
<ul style="list-style-type: none"> • No ear pain and No pus seen draining from the ear 	NO EAR INFECTION	No additional treatment

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THEN CHECK FOR MALNUTRITION AND ANAEMIA

LOOK AND FEEL

- Look for visible severe wasting
- Look for palmar pallor Is it
 - Severe palmar pallor?
 - Some palmar pallor?
- Look for oedema of both feet
- Determine weight for age

Classify NUTRITIONAL STATUS

- Visible severe wasting or
- Severe palmar pallor or
- Oedema of both feet

SEVERE MALNUTRITION OR SEVERE ANAEMIA

- ▶ Give Vitamin A
- ▶ Refer **URGENTLY** to hospital

- Some palmar pallor or
- Very low weight for age

ANAEMIA OR VERY LOW WEIGHT

- ▶ Assess the child's feeding and counsel the mother on feeding according to the **FOOD** box on the **COUNSEL THE MOTHER** chart
 - If feeding problem, follow-up in 5 days
- ▶ If pallor
 - Give iron
 - Give oral antimalarial if high malaria risk
 - Give mebendazole if child is 2 years or older and has not had a dose in the previous 6 months
- ▶ Advise mother when to return immediately
- ▶ If pallor, follow-up in 14 days
If very low weight for age follow-up in 30 days

- Not very low weight for age and no other signs of malnutrition

NO ANAEMIA AND NOT VERY LOW WEIGHT

- ▶ If child is less than 2 years old, assess the child's feeding and counsel the mother on feeding according to the **FOOD** box on the **COUNSEL THE MOTHER** chart
 - If feeding problem, follow-up in 5 days
- ▶ Advise mother when to return immediately

THEN CHECK THE CHILD'S IMMUNIZATION STATUS

IMMUNIZATION SCHEDULE

AGE	VACCINE	
Birth	BCG	OPV-0
6 weeks	DPT-1	OPV-1
10 weeks	DPT-2	OPV-2
14 weeks	DPT 3	OPV-3
9 months	Measles	

ASSESS OTHER PROBLEMS

MAKE SURE CHILD WITH ANY GENERAL DANGER SIGN IS REFERRED after first dose of an appropriate antibiotic and other urgent treatments

Exception Rehydration of the child according to Plan C may resolve danger signs so that referral is no longer needed

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TREAT THE CHILD

CARRY OUT THE TREATMENT STEPS IDENTIFIED ON THE ASSESS AND CLASSIFY CHART



TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

Follow the instructions below for every oral drug to be given at home
Also follow the instructions listed with each drug's dosage table

- ▶ Determine the appropriate drugs and dosage for the child's age or weight
- ▶ Tell the mother the reason for giving the drug to the child
- ▶ Demonstrate how to measure a dose
- ▶ Watch the mother practice measuring a dose by herself
- ▶ Ask the mother to give the first dose to her child
- ▶ Explain carefully how to give the drug, then label and package the drug
- ▶ If more than one drug will be given, collect, count and package each drug separately
- ▶ Explain that all the oral drug tablets or syrups must be used to finish the course of treatment, even if the child gets better
- ▶ Check the mother's understanding before she leaves the clinic

▶ Give an Appropriate Oral Antibiotic

▶ FOR PNEUMONIA, ACUTE EAR INFECTION OR VERY SEVERE DISEASE

FIRST LINE ANTIBIOTIC
SECOND LINE ANTIBIOTIC

AGE or WEIGHT	COTRIMOXAZOLE (trimethoprim + sulphamethoxazole) ▶ Give two times daily for 5 days			AMOXYCILLIN ▶ Give three times daily for 5 days	
	ADULT TABLET 80 mg trimethoprim + 400 mg sulphamethoxazole	PEDIATRIC TABLET 20 mg trimethoprim + 100 mg sulphamethoxazole	SYRUP 40 mg trimethoprim + 200 mg sulphamethoxazole per 5 ml	TABLET 250 mg	SYRUP 125 mg per 5 ml
2 months up to 12 months (4 < 10 kg)	1/2	2	5.0 ml	1/2	5 ml
12 months up to 5 years (10 - 19 kg)	1	3	7.5 ml	1	10 ml

▶ FOR DYSENTERY

Give antibiotic recommended for Shigella in your area for 5 days

FIRST-LINE ANTIBIOTIC FOR SHIGELLA
SECOND LINE ANTIBIOTIC FOR SHIGELLA

AGE or WEIGHT	COTRIMOXAZOLE (trimethoprim + sulphamethoxazole) ▶ Give two times daily for 5 days	NALIDIXIC ACID ▶ Give four times daily for 5 days
	See doses above	TABLET 250 mg
2 months up to 4 months (4 < 6 kg)		1/4
4 months up to 12 months (6 < 10 kg)		1/2
12 months up to 5 years (10 - 19 kg)		1

▶ FOR CHOLERA

Give antibiotic recommended for Cholera in your area for 5 days

FIRST LINE ANTIBIOTIC FOR CHOLERA
SECOND LINE ANTIBIOTIC FOR CHOLERA

AGE or WEIGHT	TETRACYCLINE ▶ Give four times daily for 3 days	COTRIMOXAZOLE (trimethoprim + sulphamethoxazole) ▶ Give two times daily for 3 days	ERYTHROMYCIN ▶ Give four times daily for 3 days	FURAZOLIDONE ▶ Give four times daily for 3 days
	TABLET 250 mg	See doses above	TABLET 250 mg	TABLET 100 mg
2 months up to 4 months (4 < 6 kg)	1/2		1/4	
4 months up to 12 months (6 < 10 kg)			1/2	
12 months up to 5 years (10 - 19 kg)	1		1	1/4

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ANTIBIOTICS

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

Follow the instructions below for every oral drug to be given at home. Also follow the instructions listed with each drug's dosage table.

► Give an Oral Antimalarial

FIRST LINE ANTIMALARIAL _____

SECOND-LINE ANTIMALARIAL _____

► IF CHLOROQUINE

- Explain to the mother that she should watch her child carefully for 30 minutes after giving a dose of chloroquine. If the child vomits within 30 minutes, she should repeat the dose and return to the clinic for additional tablets.
- Explain that itching is a possible side effect of the drug, but is not dangerous.

► IF SULFADOXINE + PYRIMETHAMINE Give single dose in clinic

AGE or WEIGHT	CHLOROQUINE ► Give for 3 days									SULFADOXINE + PYRIMETHAMINE ► Give single dose in clinic
	TABLET (150 mg base)			TABLET (100 mg base)			SYRUP (50 mg base per 5 ml)			TABLET (500 mg sulfadoxine + 25 mg pyrimethamine)
	DAY 1	DAY 2	DAY 3	DAY 1	DAY 2	DAY 3	DAY 1	DAY 2	DAY 3	
2 months up to 12 months (4 < 10 kg)	1/2	1/2	1/2	1	1	1/2	7.5 ml	7.5 ml	5.0 ml	1/2
12 months up to 3 years (10 < 14 kg)	1	1	1/2	1 1/2	1 1/2	1/2	15.0 ml	15.0 ml	5.0 ml	1
3 years up to 5 years (14 - 19 kg)	1 1/2	1 1/2	1/2	2	2	1				1

► Give Paracetamol for High Fever (> 38.5°C) or Ear Pain

- Give paracetamol every 6 hours until high fever or ear pain is gone

PARACETAMOL		
AGE or WEIGHT	TABLET (100 mg)	TABLET (500 mg)
2 months up to 3 years (4 < 14 kg)	1	1/4
3 years up to 5 years (14 - 19 kg)	1 1/2	1/2

► Give Vitamin A

- Give two doses

- Give first dose in clinic
- Give mother one dose to give at home the next day

AGE	VITAMIN A CAPSULES			VITAMIN A SYRUP
	200 000 IU	100 000 IU	50 000 IU	Concentration _____
Up to 6 months		1/2 capsule	1 capsule	
6 months up to 12 months	1/2 capsule	1 capsule	2 capsules	
12 months up to 5 years	1 capsule	2 capsules	4 capsules	

► Give Iron

- Give one dose daily for 14 days

AGE or WEIGHT	IRON/FOLATE TABLET	IRON SYRUP
	Ferrous sulfate 200 mg + 250 mcg Folate (60 mg elemental iron)	Ferrous fumarate 100 mg per 5 ml (20 mg elemental iron per ml)
2 months up to 4 months (4 < 6 kg)		1.00 ml (< 1/4 tsp)
4 months up to 12 months (6 < 10 kg)		1.25 ml (1/4 tsp)
12 months up to 3 years (10 < 14 kg)	1/2 tablet	2.00 ml (< 1/2 tsp)
3 years up to 5 years (14 - 19 kg)	1/2 tablet	2.5 ml (1/2 tsp)

► Give Mebendazole

- Give 500 mg mebendazole as a single dose in clinic if
 - hookworm/whipworm are a problem in children in your area and
 - the child is 2 years of age or older, and
 - the child has not had a dose in the previous 6 months

TEACH THE MOTHER TO TREAT LOCAL INFECTIONS AT HOME

- ▶ Explain to the mother what the treatment is and why it should be given.
- ▶ Describe the treatment steps listed in the appropriate box
- ▶ Watch the mother as she does the first treatment in the clinic (except remedy for cough or sore throat)
- ▶ Tell her how often to do the treatment at home.
- ▶ If needed for treatment at home, give mother the tube of tetracycline ointment or a small bottle of gentian violet.
- ▶ Check the mother's understanding before she leaves the clinic

▶ **Treat Eye Infection with Tetracycline Eye Ointment**

- ▶ Clean both eyes 3 times daily
 - Wash hands
 - Ask child to close the eye
 - Use clean cloth and water to gently wipe away pus
- ▶ Then apply tetracycline eye ointment in both eyes 3 times daily
 - Ask the child to look up
 - Squirt a small amount of ointment on the inside of the lower lid
 - Wash hands again
- ▶ Treat until redness is gone
- ▶ Do not use other eye ointments or drops, or put anything else in the eye

▶ **Dry the Ear by Wicking**

- ▶ Dry the ear at least 3 times daily
 - Roll clean absorbent cloth or soft, strong tissue paper into a wick
 - Place the wick in the child's ear
 - Remove the wick when wet
 - Replace the wick with a clean one and repeat these steps until the ear is dry

▶ **Treat Mouth Ulcers with Gentian Violet**

- ▶ Treat the mouth ulcers twice daily
 - Wash hands
 - Wash the child's mouth with clean soft cloth wrapped around the finger and wet with salt water
 - Paint the mouth with half-strength gentian violet
 - Wash hands again

▶ **Soothe the Throat, Relieve the Cough with a Safe Remedy**

- Safe remedies to recommend
 - Breastmilk for exclusively breastfed infant

- Harmful remedies to discourage _____

GIVE THESE TREATMENTS IN CLINIC ONLY

- ▶ Explain to the mother why the drug is given.
- ▶ Determine the dose appropriate for the child's weight (or age).
- ▶ Use a sterile needle and sterile syringe. Measure the dose accurately.
- ▶ Give the drug as an intramuscular injection.
- ▶ If child cannot be referred, follow the instructions provided.

▶ Give An Intramuscular Antibiotic

FOR CHILDREN BEING REFERRED URGENTLY WHO CANNOT TAKE AN ORAL ANTIBIOTIC

- ▶ Give first dose of intramuscular chloramphenicol and refer child urgently to hospital

IF REFERRAL IS NOT POSSIBLE

- ▶ Repeat the chloramphenicol injection every 12 hours for 5 days
- ▶ Then change to an appropriate oral antibiotic to complete 10 days of treatment

AGE or WEIGHT	CHLORAMPHENICOL
	Dose 40 mg per kg Add 5.0 ml sterile water to vial containing 1000 mg = 5.6 ml at 180 mg/ml
2 months up to 4 months (4 - < 6 kg)	1.0 ml = 180 mg
4 months up to 9 months (6 - < 8 kg)	1.5 ml = 270 mg
9 months up to 12 months (8 - < 10 kg)	2.0 ml = 360 mg
12 months up to 3 years (10 - < 14 kg)	2.5 ml = 450 mg
3 years up to 5 years (14 - 19 kg)	3.5 ml = 630 mg

▶ Give Quinine for Severe Malaria

FOR CHILDREN BEING REFERRED WITH VERY SEVERE FEBRILE DISEASE

- ▶ Check which quinine formulation is available in your clinic
- ▶ Give first dose of intramuscular quinine and refer child urgently to hospital

IF REFERRAL IS NOT POSSIBLE

- ▶ Give first dose of intramuscular quinine
- ▶ The child should remain lying down for one hour
- ▶ Repeat the quinine injection at 4 and 8 hours later, and then every 12 hours until the child is able to take an oral antimalarial. Do not continue quinine injections for more than 1 week
- ▶ If low risk of malaria, do not give quinine to a child less than 4 months of age

AGE or WEIGHT	INTRAMUSCULAR QUININE	
	150 mg/ml* (in 2 ml ampoules)	300 mg/ml* (in 2 ml ampoules)
2 months up to 4 months (4 - < 6 kg)	0.4 ml	0.2 ml
4 months up to 12 months (6 - < 10 kg)	0.6 ml	0.3 ml
12 months up to 2 years (10 - < 12 kg)	0.8 ml	0.4 ml
2 years up to 3 years (12 - < 14 kg)	1.0 ml	0.5 ml
3 years up to 5 years (14 - 19 kg)	1.2 ml	0.6 ml

* quinine salt

► **Treat the Child
to Prevent Low Blood Sugar**

► ***If the child is able to breastfeed***

Ask the mother to breastfeed the child

► ***If the child is not able to breastfeed but is able to swallow***

Give expressed breastmilk or a breastmilk substitute

If neither of these is available, give sugar water

Give 30-50 ml of milk or sugar water before departure

**To make sugar water. Dissolve 4 level teaspoons of sugar
(20 grams) in a 200-ml cup of clean water**

► ***If the child is not able to swallow***

Give 50 ml of milk or sugar water by nasogastric tube

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GIVE EXTRA FLUID FOR DIARRHOEA AND CONTINUE FEEDING

(See FOOD advice on COUNSEL THE MOTHER chart)

► Plan A: Treat Diarrhoea at Home

**Counsel the mother on the 3 Rules of Home Treatment:
Give Extra Fluid, Continue Feeding, When to Return**

1 GIVE EXTRA FLUID (as much as the child will take)

► TELL THE MOTHER

- Breastfeed frequently and for longer at each feed
- If the child is exclusively breastfed, give ORS or clean water in addition to breastmilk
- If the child is not exclusively breastfed, give one or more of the following ORS solution, food-based fluids (such as soup, rice water, and yoghurt drinks), or clean water

It is especially important to give ORS at home when

- the child has been treated with Plan B or Plan C during this visit
- the child cannot return to a clinic if the diarrhoea gets worse

► TEACH THE MOTHER HOW TO MIX AND GIVE ORS GIVE THE MOTHER 2 PACKETS OF ORS TO USE AT HOME

► SHOW THE MOTHER HOW MUCH FLUID TO GIVE IN ADDITION TO THE USUAL FLUID INTAKE

Up to 2 years 50 to 100 ml after each loose stool
2 years or more 100 to 200 ml after each loose stool

Tell the mother to

- Give frequent small sips from a cup
- If the child vomits, wait 10 minutes Then continue, but more slowly
- Continue giving extra fluid until the diarrhoea stops.

2 CONTINUE FEEDING

3 WHEN TO RETURN

} See COUNSEL THE MOTHER chart

► Plan B: Treat Some Dehydration with ORS

Give in clinic recommended amount of ORS over 4-hour period

► DETERMINE AMOUNT OF ORS TO GIVE DURING FIRST 4 HOURS

AGE*	Up to 4 months	4 months up to 12 months	12 months up to 2 years	2 years up to 5 years
WEIGHT	< 6 kg	6 - < 10 kg	10 - < 12 kg	12 - 19 kg
In ml	200 400	400 700	700 - 900	900 - 1400

* Use the child's age only when you do not know the weight The approximate amount of ORS required (in ml) can also be calculated by multiplying the child's weight (in kg) times 75

- If the child wants more ORS than shown, give more
- For infants under 6 months who are not breastfed, also give 100-200 ml clean water during this period

► SHOW THE MOTHER HOW TO GIVE ORS SOLUTION

- Give frequent small sips from a cup
- If the child vomits, wait 10 minutes Then continue, but more slowly
- Continue breastfeeding whenever the child wants

► AFTER 4 HOURS

- Reassess the child and classify the child for dehydration
- Select the appropriate plan to continue treatment
- Begin feeding the child in clinic

► IF THE MOTHER MUST LEAVE BEFORE COMPLETING TREATMENT

- Show her how to prepare ORS solution at home
- Show her how much ORS to give to finish the 4-hour treatment at home
- Give her enough ORS packets to complete rehydration Also give her 2 packets as recommended in Plan A
- Explain the 3 Rules of Home Treatment

1 GIVE EXTRA FLUID

2 CONTINUE FEEDING

3 WHEN TO RETURN

} See Plan A for recommended fluids
and
See COUNSEL THE MOTHER chart

GIVE EXTRA FLUID FOR DIARRHOEA AND CONTINUE FEEDING

(See FOOD advice on COUNSEL THE MOTHER chart)

► Plan C: Treat Severe Dehydration Quickly

► FOLLOW THE ARROWS IF ANSWER IS "YES", GO ACROSS IF "NO", GO DOWN

START HERE

Can you give intravenous (IV) fluid immediately?

YES

- Start IV fluid immediately. If the child can drink, give ORS by mouth while the drip is set up. Give 100 ml/kg Ringer's Lactate Solution (or, if not available, normal saline), divided as follows

AGE	First give 30 ml/kg in	Then give 70 ml/kg in
Infants (under 12 months)	1 hour*	5 hours
Children (12 months up to 5 years)	30 minutes	2 1/2 hours

*Repeat once if radial pulse is still very weak or not detectable

- Reassess the child every 1-2 hours. If hydration status is not improving, give the IV drip more rapidly.
- Also give ORS (about 5 ml/kg/hour) as soon as the child can drink, usually after 3-4 hours (infants) or 1-2 hours (children).
- Reassess an infant after 6 hours and a child after 3 hours. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment.

NO

Is IV treatment available nearby (within 30 minutes)?

YES

- Refer URGENTLY to hospital for IV treatment.
- If the child can drink, provide the mother with ORS solution and show her how to give frequent sips during the trip.

NO

Are you trained to use a naso-gastric (NG) tube for rehydration?

YES

- Start rehydration by tube (or mouth) with ORS solution, give 20ml/kg/hour for 6 hours (total of 120 ml/kg).
- Reassess the child every 1-2 hours.
 - If there is repeated vomiting or increasing abdominal distension, give the fluid more slowly.
 - If hydration status is not improving after 3 hours, send the child for IV therapy.
- After 6 hours, reassess the child. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment.

NO

Can the child drink?

NO

Refer URGENTLY to hospital for IV or NG treatment

NOTE

- If possible, observe the child at least 6 hours after rehydration to be sure the mother can maintain hydration giving the child ORS solution by mouth.

IMMUNIZE EVERY SICK CHILD, AS NEEDED

2/14

GIVE FOLLOW-UP CARE

- ▶ Care for the child who returns for follow-up using all the boxes that match the child's previous classifications.
- ▶ If the child has any new problem, assess, classify and treat the new problem as on the **ASSESS AND CLASSIFY** chart.

▶ PNEUMONIA

After 2 days

Check the child for general danger signs

Assess the child for cough or difficult breathing } See **ASSESS & CLASSIFY** chart

Ask

- Is the child breathing slower?
- Is there less fever?
- Is the child eating better?

Treatment

- ▶ If **chest indrawing or a general danger sign**, give a dose of second-line antibiotic or intramuscular chloramphenicol. Then refer **URGENTLY** to hospital
- ▶ If **breathing rate, fever, and eating are the same**, change to the second-line antibiotic and advise the mother to return in 2 days or refer (if this child had measles within the last 3 months, refer)
- ▶ If **breathing slower, less fever, or eating better**, complete the 5 days of antibiotic

▶ PERSISTENT DIARRHOEA

After 5 days

Ask

- Has the diarrhoea stopped?
- How many loose stools is the child having per day?

Treatment

- ▶ If **the diarrhoea has not stopped (child is still having 3 or more loose stools per day)**, do a full reassessment of the child. Give any treatment needed. Then refer to hospital
- ▶ If **the diarrhoea has stopped (child having less than 3 loose stools per day)**, tell the mother to follow the usual feeding recommendations for the child's age

▶ DYSENTERY

After 2 days

Assess the child for diarrhoea > See **ASSESS & CLASSIFY** chart

Ask

- Are there fewer stools?
- Is there less blood in the stool?
- Is there less fever?
- Is there less abdominal pain?
- Is the child eating better?

Treatment

- ▶ If the child is **dehydrated**, treat dehydration
- ▶ If **number of stools, amount of blood in stools, fever, abdominal pain, or eating is the same or worse**

Change to second-line oral antibiotic recommended for Shigella in your area. Give it for 5 days. Advise the mother to return in 2 days.

Exceptions - if the child

- is less than 12 months old, or
- was dehydrated on the first visit, or
- had measles within the last 3 months

} Refer to hospital

- ▶ If **fewer stools, less blood in the stools, less fever, less abdominal pain, and eating better**, continue giving the same antibiotic until finished

2/5

GIVE FOLLOW-UP CARE

- ▶ Care for the child who returns for follow-up using all the boxes that match the child's previous classifications.
- ▶ If the child has any new problem, assess, classify and treat the new problem as on the **ASSESS AND CLASSIFY** chart.

▶ MALARIA (Low or High Malaria Risk)

If fever persists after 2 days, or returns within 14 days

Do a full reassessment of the child > See **ASSESS & CLASSIFY** chart
Assess for other causes of fever

Treatment

- ▶ If the child has **any general danger sign or stiff neck** treat as VERY SEVERE FEBRILE DISEASE
- ▶ If the child has any **cause of fever other than malaria**, provide treatment
- ▶ If **malaria is the only apparent cause of fever**
 - Treat with the second line oral antimalarial (If no second-line antimalarial is available, refer to hospital) Advise the mother to return again in 2 days if the fever persists
 - If fever has been present for 7 days, refer for assessment

▶ FEVER-MALARIA UNLIKELY (Low Malaria Risk)

If fever persists after 2 days

Do a full reassessment of the child > See **ASSESS & CLASSIFY** chart
Assess for other causes of fever

Treatment

- ▶ If the child has **any general danger sign or stiff neck**, treat as VERY SEVERE FEBRILE DISEASE
- ▶ If the child has any **cause of fever other than malaria**, provide treatment
- ▶ If **malaria is the only apparent cause of fever**
 - Treat with first-line oral antimalarial Advise the mother to return again in 2 days if the fever persists
 - If fever has been present for 7 days, refer for assessment

▶ MEASLES WITH EYE OR MOUTH COMPLICATIONS

After 2 days

Look for red eyes and pus draining from the eyes
Look at mouth ulcers
Smell the mouth

Treatment for Eye Infection

- ▶ If **pus is still draining from the eye**, ask the mother to describe how she has treated the eye infection If treatment has been correct, refer to hospital If treatment has not been correct, teach the mother correct treatment
- ▶ If **the pus is gone but redness remains**, continue the treatment
- ▶ If **no pus or redness**, stop the treatment

Treatment for Mouth Ulcers

- ▶ If **mouth ulcers are worse, or there is a very foul smell from the mouth**, refer to hospital
- ▶ If **mouth ulcers are the same or better**, continue using half-strength gentian violet for a total of 5 days

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GIVE FOLLOW-UP CARE

- ▶ Care for the child who returns for follow-up using all the boxes that match the child's previous classifications.
- ▶ If the child has any new problem, assess, classify and treat the new problem as on the **ASSESS AND CLASSIFY** chart.

▶ EAR INFECTION

After 5 days

Reassess for ear problem > See **ASSESS & CLASSIFY** chart
Measure the child's temperature

Treatment

- ▶ If there is *tender swelling behind the ear or high fever (38.5° C or above)*, refer **URGENTLY** to hospital
- ▶ **Acute ear infection** If *ear pain or discharge* persists, treat with 5 more days of the same antibiotic. Continue wicking to dry the ear. Follow-up in 5 days
- ▶ **Chronic ear infection** Check that the mother is wicking the ear correctly. Encourage her to continue
- ▶ If *no ear pain or discharge*, praise the mother for her careful treatment. If she has not yet finished the 5 days of antibiotic, tell her to use all of it before stopping

▶ FEEDING PROBLEM

After 5 days

Reassess feeding > See *questions at the top of the COUNSEL chart*
Ask about any feeding problems found on the initial visit

- ▶ Counsel the mother about any new or continuing feeding problems. If you counsel the mother to make significant changes in feeding, ask her to bring the child back again
- ▶ If the child is very low weight for age, ask the mother to return 30 days after the initial visit to measure the child's weight gain

▶ PALLOR

After 14 days

- ▶ Give iron. Advise mother to return in 14 days for more iron
- ▶ Continue giving iron every 14 days for 2 months
- ▶ If the child has palmar pallor after 2 months, refer for assessment

▶ VERY LOW WEIGHT

After 30 days

Weigh the child and determine if the child is still very low weight for age
Reassess feeding > See *questions at the top of the COUNSEL chart*

Treatment

- ▶ If the child is *no longer very low weight for age*, praise the mother and encourage her to continue
- ▶ If the child is still *very low weight for age*, counsel the mother about any feeding problem found. Ask the mother to return again in one month. Continue to see the child monthly until the child is feeding well and gaining weight regularly or is no longer very low weight for age

Exception

If you do not think that feeding will improve or if the child has *lost weight*, refer the child

**IF ANY MORE FOLLOW-UP VISITS ARE NEEDED
BASED ON THE INITIAL VISIT OR THIS VISIT,
ADVISE THE MOTHER OF THE
NEXT FOLLOW-UP VISIT**

**ALSO, ADVISE THE MOTHER
WHEN TO RETURN IMMEDIATELY
(SEE COUNSEL CHART)**



COUNSEL THE MOTHER



FOOD

▶ *Assess the Child's Feeding*

Ask questions about the child's usual feeding and feeding during this illness. Compare the mother's answers to the *Feeding Recommendations* for the child's age in the box below.

- ASK -**
- ▶ Do you breastfeed your child?
 - How many times during the day?
 - Do you also breastfeed during the night?

 - ▶ Does the child take any other food or fluids?
 - What food or fluids?
 - How many times per day?
 - What do you use to feed the child?
 - If very low weight for age. How large are servings? Does the child receive his own serving? Who feeds the child and how?

 - ▶ During this illness, has the child's feeding changed? If yes, how?

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► Feeding Recommendations During Sickness and Health

Up to 4 Months of Age



- Breastfeed as often as the child wants, day and night, at least 8 times in 24 hours
- Do not give other foods or fluids

4 Months up to 6 Months



- Breastfeed as often as the child wants, day and night, at least 8 times in 24 hours
- Only if the child
 - shows interest in semisolid foods, or
 - appears hungry after breastfeeding, or
 - is not gaining weight adequately,

add complementary foods (listed under 6 months up to 12 months)

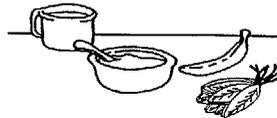
Give these foods 1 or 2 times per day after breastfeeding

6 Months up to 12 Months



- Breastfeed as often as the child wants
- Give adequate servings of

- 3 times per day if breastfed,
- 5 times per day if not breastfed

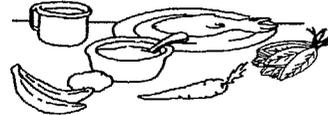


12 Months up to 2 Years



- Breastfeed as often as the child wants
- Give adequate servings of

or family foods 5 times per day



2 Years and Older



- Give family foods at 3 meals each day. Also, twice daily, give nutritious food between meals, such as



* A good daily diet should be adequate in quantity and include an energy-rich food (for example, thick cereal with added oil), meat, fish, eggs, or pulses, and fruits and vegetables

Feeding Recommendations For a Child Who Has PERSISTENT DIARRHOEA

- If still breastfeeding, give more frequent, longer breastfeeds, day and night
- If taking other milk
 - replace with increased breastfeeding OR
 - replace with fermented milk products, such as yoghurt OR
 - replace half the milk with nutrient-rich semisolid food
- For other foods, follow feeding recommendations for the child's age

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► Counsel the Mother About Feeding Problems

If the child is not being fed as described in the above recommendations, counsel the mother accordingly. In addition:



- If the mother reports difficulty with breastfeeding, assess breastfeeding (See *YOUNG INFANT* chart)
As needed, show the mother correct positioning and attachment for breastfeeding

- If the child is less than 4 months old and is taking other milk or foods:

- Build mother's confidence that she can produce all the breastmilk that the child needs
- Suggest giving more frequent, longer breastfeeds, day and night, and gradually reducing other milk or foods

If other milk needs to be continued, counsel the mother to

- Breastfeed as much as possible, including at night
- Make sure that other milk is a locally appropriate breastmilk substitute
- Make sure other milk is correctly and hygienically prepared and given in adequate amounts
- Finish prepared milk within an hour



- If the mother is using a bottle to feed the child.

- Recommend substituting a cup for bottle
- Show the mother how to feed the child with a cup

- If the child is not being fed actively, counsel the mother to

- Sit with the child and encourage eating
- Give the child an adequate serving in a separate plate or bowl



- If the child is not feeding well during illness, counsel the mother to

- Breastfeed more frequently and for longer if possible
- Use soft, varied, appetizing, favourite foods to encourage the child to eat as much as possible, and offer frequent small feedings
- Clear a blocked nose if it interferes with feeding
- Expect that appetite will improve as child gets better

- Follow-up any feeding problem in 5 days

FLUID

► Advise the Mother to Increase Fluid During Illness

FOR ANY SICK CHILD

- Breastfeed more frequently and for longer at each feed
- Increase fluid For example, give soup, rice water, yoghurt drinks or clean water

FOR CHILD WITH DIARRHOEA

- Giving extra fluid can be lifesaving Give fluid according to Plan A or Plan B on *TREAT THE CHILD* chart

WHEN TO RETURN

► Advise the Mother When to Return to Health Worker

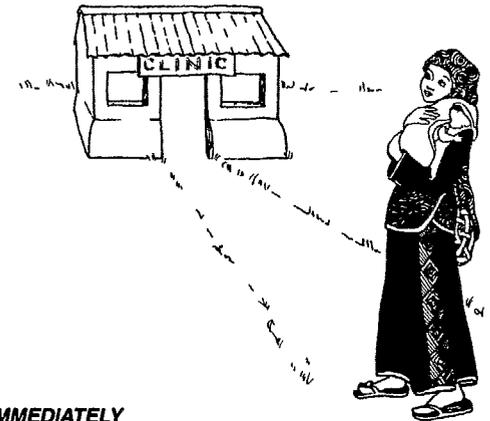
FOLLOW-UP VISIT

Advise the mother to come for follow-up at the earliest time listed for the child's problems

If the child has	Return for follow-up in
PNEUMONIA DYSENTERY MALARIA, if fever persists FEVER-MALARIA UNLIKELY, if fever persists MEASLES WITH EYE OR MOUTH COMPLICATIONS	2 days
PERSISTENT DIARRHOEA ACUTE EAR INFECTION CHRONIC EAR INFECTION FEEDING PROBLEM ANY OTHER ILLNESS, if not improving	5 days
PALLOR	14 days
VERY LOW WEIGHT FOR AGE	30 days

NEXT WELL-CHILD VISIT

Advise mother when to return for next immunization according to immunization schedule



WHEN TO RETURN IMMEDIATELY

Advise mother to return immediately if the child has any of these signs	
Any sick child	<ul style="list-style-type: none"> • Not able to drink or breastfeed • Becomes sicker • Develops a fever
If child has NO PNEUMONIA COUGH OR COLD, also return if	<ul style="list-style-type: none"> • Fast breathing • Difficult breathing
If child has Diarrhoea, also return if	<ul style="list-style-type: none"> • Blood in stool • Drinking poorly

► ***Counsel the Mother About Her Own Health***

- ▶ If the mother is sick, provide care for her, or refer her for help
- ▶ If she has a breast problem (such as engorgement, sore nipples, breast infection), provide care for her or refer her for help
- ▶ Advise her to eat well to keep up her own strength and health
- ▶ Check the mother's immunization status and give her tetanus toxoid if needed
- ▶ Make sure she has access to
 - Family planning
 - Counselling on STD and AIDS prevention

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ASSESS, CLASSIFY AND TREAT THE SICK YOUNG INFANT AGE 1 WEEK UP TO 2 MONTHS



ASSESS

CLASSIFY

IDENTIFY TREATMENT

ASK THE MOTHER WHAT THE YOUNG INFANT'S PROBLEMS ARE

- Determine if this is an initial or follow-up visit for this problem
 - If follow-up visit, use the follow-up instructions on the bottom of this chart
 - If initial visit, assess the young infant as follows

USE ALL BOXES THAT MATCH INFANT'S SYMPTOMS AND PROBLEMS TO CLASSIFY THE ILLNESS

CHECK FOR POSSIBLE BACTERIAL INFECTION		SIGNS:	CLASSIFY AS:	TREATMENT: <small>(Urgent pre-referral treatments are in bold print)</small>		
ASK: <ul style="list-style-type: none"> • Has the infant had convulsions? 	LOOK, LISTEN, FEEL: <ul style="list-style-type: none"> • Count the breaths in one minute Repeat the count if elevated • Look for severe chest indrawing • Look for nasal flaring • Look and listen for grunting • Look and feel for bulging fontanelle • Look for pus draining from the ear • Look at the umbilicus Is it red or draining pus? Does the redness extend to the skin? • Measure temperature (or feel for fever or low body temperature) • Look for skin pustules Are there many or severe pustules? • See if the young infant is lethargic or unconscious • Look at the young infant's movements Are they less than normal? 	} YOUNG INFANT MUST BE CALM	Classify ALL YOUNG INFANTS	<ul style="list-style-type: none"> • Convulsions or • Fast breathing (60 breaths per minute or more) or • Severe chest indrawing or • Nasal flaring or • Grunting or • Bulging fontanelle or • Pus draining from ear or • Umbilical redness extending to the skin or • Fever (37.5 C* or above or feels hot) or low body temperature (less than 35.5 C* or feels cold) or • Many or severe skin pustules or • Lethargic or unconscious or • Less than normal movement 	<p>POSSIBLE SERIOUS BACTERIAL INFECTION</p>	<ul style="list-style-type: none"> ▶ Give first dose of intramuscular antibiotics ▶ Treat to prevent low blood sugar ▶ Advise mother how to keep the infant warm on the way to the hospital ▶ Refer URGENTLY to hospital **
				<ul style="list-style-type: none"> • Red umbilicus or draining pus or • Skin pustules 	<p>LOCAL BACTERIAL INFECTION</p>	<ul style="list-style-type: none"> ▶ Give an appropriate oral antibiotic ▶ Teach the mother to treat local infections at home ▶ Advise mother to give home care for the young infant ▶ Follow up in 2 days

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THEN ASK:

Does the young infant have diarrhoea?

<p>IF YES, ASK:</p> <ul style="list-style-type: none"> • For how long? • Is there blood in the stool? 	<p>LOOK AND FEEL:</p> <ul style="list-style-type: none"> • Look at the young infant's general condition Is the infant Lethargic or unconscious? Restless and irritable? • Look for sunken eyes • Pinch the skin of the abdomen Does it go back Very slowly (longer than 2 seconds)? Slowly?
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Classify DIARRHOEA

for DEHYDRATION

<ul style="list-style-type: none"> • Two of the following signs • Lethargic or unconscious • Sunken eyes • Skin pinch goes back very slowly 	<p>SEVERE DEHYDRATION</p>	<ul style="list-style-type: none"> ▶ If infant does not have POSSIBLE SERIOUS BACTERIAL INFECTION - Give fluid for severe dehydration (Plan C) OR ▶ If infant also has POSSIBLE SERIOUS BACTERIAL INFECTION - Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way Advise mother to continue breastfeeding
<ul style="list-style-type: none"> • Two of the following signs • Restless, irritable • Sunken eyes • Skin pinch goes back slowly 	<p>SOME DEHYDRATION</p>	<ul style="list-style-type: none"> ▶ Give fluid and food for some dehydration (Plan B) ▶ If infant also has POSSIBLE SERIOUS BACTERIAL INFECTION - Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way Advise mother to continue breastfeeding
<ul style="list-style-type: none"> • Not enough signs to classify as some or severe dehydration 	<p>NO DEHYDRATION</p>	<ul style="list-style-type: none"> ▶ Give fluids to treat diarrhoea at home (Plan A)

and if diarrhoea 14 days or more

<ul style="list-style-type: none"> • Diarrhoea lasting 14 days or more 	<p>SEVERE PERSISTENT DIARRHOEA</p>	<ul style="list-style-type: none"> ▶ If the young infant is dehydrated, treat dehydration before referral unless the infant has also POSSIBLE SERIOUS BACTERIAL INFECTION ▶ Refer to hospital
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and if blood in stool

<ul style="list-style-type: none"> • Blood in the stool 	<p>DYSENTERY</p>	<ul style="list-style-type: none"> ▶ Treat for 5 days with an oral antibiotic recommended for Shigella in your area ▶ Follow-up in 2 days
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These thresholds are based on axillary temperature The thresholds for rectal temperature readings are approximately 0.5 C higher

*** If referral is not possible see Management of Childhood Illness, Treat the Child, Annex Where Referral Is Not Possible "*

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THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT:

<p>ASK:</p> <ul style="list-style-type: none"> • Is there any difficulty feeding? • Is the infant breastfed? If yes, how many times in 24 hours? • Does the infant usually receive any other foods or drinks? If yes, how often? • What do you use to feed the infant? 	<p>LOOK, LISTEN, FEEL:</p> <ul style="list-style-type: none"> • Determine weight for age 	<p>Classify FEEDING</p>	<ul style="list-style-type: none"> • Not able to feed or • No attachment at all or • Not suckling at all 	<p>NOT ABLE TO FEED - POSSIBLE SERIOUS BACTERIAL INFECTION</p>	<ul style="list-style-type: none"> ▶ Give first dose of intramuscular antibiotics ▶ Treat to prevent low blood sugar ▶ Advise the mother how to keep the young infant warm on the way to the hospital ▶ Refer URGENTLY to hospital
<p>IF AN INFANT Has any difficulty feeding, is breastfeeding less than 8 times in 24 hours, is taking any other foods or drinks, or is low weight for age,</p> <p>AND</p> <p>Has no indications to refer urgently to hospital</p>			<ul style="list-style-type: none"> • Not well attached to breast or • Not suckling effectively or • Less than 8 breastfeeds in 24 hours or • Receives other foods or drinks or • Low weight for age or • Thrush (ulcers or white patches in mouth) 	<p>FEEDING PROBLEM OR LOW WEIGHT</p>	<ul style="list-style-type: none"> ▶ Advise the mother to breastfeed as often and for as long as the infant wants, day and night <ul style="list-style-type: none"> • If not well attached or not suckling effectively, teach correct positioning and attachment • If breastfeeding less than 8 times in 24 hours, advise to increase frequency of feeding ▶ If receiving other foods or drinks, counsel mother about breastfeeding more, reducing other foods or drinks, and using a cup <ul style="list-style-type: none"> • If not breastfeeding at all <ul style="list-style-type: none"> - Refer for breastfeeding counselling and possible relactation - Advise about correctly prepare breastmilk substitutes and using a cup ▶ If thrush, teach the mother to treat thrush at home ▶ Advise mother to give home care for the young infant ▶ Follow-up any feeding problem or thrush in 2 days Follow-up low weight for age in 14 days
<p>ASSESS BREASTFEEDING</p> <ul style="list-style-type: none"> • Has the infant breastfed in the previous hour? <p>If the infant has not fed in the previous hour, ask the mother to put her infant to the breast. Observe the breastfeed for 4 minutes (If the infant was fed during the last hour, ask the mother if she can wait and tell you when the infant is willing to feed again)</p> <ul style="list-style-type: none"> • Is the infant able to attach? <i>no attachment at all not well attached good attachment</i> <div style="border: 1px solid black; padding: 5px;"> <p>TO CHECK ATTACHMENT, LOOK FOR</p> <p>Chin touching breast Mouth wide open - Lower lip turned outward More areola visible above than below the mouth</p> <p>(All of these signs should be present if the attachment is good)</p> </div> <ul style="list-style-type: none"> • Is the infant suckling effectively (that is, slow deep sucks, sometimes pausing)? <i>not suckling at all not suckling effectively suckling effectively</i> <p>Clear a blocked nose if it interferes with breastfeeding</p> <ul style="list-style-type: none"> • Look for ulcers or white patches in the mouth (thrush) 			<ul style="list-style-type: none"> • Not low weight for age and no other signs of inadequate feeding 	<p>NO FEEDING PROBLEM</p>	<ul style="list-style-type: none"> ▶ Advise mother to give home care for the young infant ▶ Praise the mother for feeding the infant well

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THEN CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS:

IMMUNIZATION SCHEDULE.	<u>AGE</u>	<u>VACCINE</u>	
	Birth	BCG	OPV-0
	6 weeks	DPT-1	OPV 1
	10 weeks	DPT-2	OPV 2

ASSESS OTHER PROBLEMS

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TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

► Give an Appropriate Oral Antibiotic

For local bacterial infection.

First-line antibiotic _____

Second-line antibiotic _____

AGE or WEIGHT	COTRIMOXAZOLE trimethoprim + sulphamethoxazole ► Give 2 times daily for 5 days			AMOXYCILLIN ► Give 3 times daily for 5 days	
	Adult Tablet single strength (80 mg trimethoprim + 400 mg sulphamethoxazole)	Pediatric Tablet (20 mg trimethoprim +100 mg sulphamethoxazole)	Syrup (40 mg trimethoprim +200 mg sulphamethoxazole)	Tablet 250 mg	Syrup 125 mg in 5 ml
Birth to 1 month (< 3 kg)		1/2*	1 25 ml*		1 25 ml
1 month to 2 months (3-4 kg)	1/4	1	2 5 ml	1/4	2 5 ml

* Avoid cotrimoxazole in infants less than 1 month of age who are premature or jaundiced

For dysentery:

Give antibiotic recommended for Shigella in your area for 5 days

First-line antibiotic for Shigella _____

Second-line antibiotic for Shigella _____

► Give First Dose of Intramuscular Antibiotics

► Give first dose of both benzylpenicillin and gentamicin intramuscular

WEIGHT	GENTAMICIN Dose 2.5 mg per kg		BENZYLPENICILLIN Dose 50 000 units per kg	
	Undiluted 2 ml vial containing 20 mg = 2 ml at 10 mg/ml	OR Add 6 ml sterile water to 2 ml vial containing 80 mg* = 8 ml at 10 mg/ml	To a vial of 600 mg (1 000 000 units) Add 2.1 ml sterile water = 2.5 ml at 400 000 units/ml	OR Add 3.6 ml sterile water = 4.0 ml at 250 000 units/ml
1 kg		0.25 ml*	0.1 ml	0.2 ml
2 kg		0.50 ml*	0.2 ml	0.4 ml
3 kg		0.75 ml*	0.4 ml	0.6 ml
4 kg		1.00 ml*	0.5 ml	0.8 ml
5 kg		1.25 ml*	0.6 ml	1.0 ml

* Avoid using undiluted 40mg/ml gentamicin. The dose is 1/4 of that listed

► Referral is the best option for a young infant classified with POSSIBLE SERIOUS BACTERIAL INFECTION. If referral is not possible, give benzylpenicillin and gentamicin for at least 5 days. Give benzylpenicillin every 6 hours plus gentamicin every 8 hours. For infants in the first week of life, give gentamicin every 12 hours.

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

▶ *To Treat Diarrhoea, See TREAT THE CHILD Chart.*

▶ *Immunize Every Sick Young Infant, as Needed.*

▶ *Teach the Mother to Treat Local Infections at Home*

- ▶ Explain how the treatment is given
- ▶ Watch her as she does the first treatment in the clinic
- ▶ Tell her to do the treatment twice daily She should return to the clinic if the infection worsens

To Treat Skin Pustules or Umbilical Infection

The mother should

- ▶ Wash hands
- ▶ Gently wash off pus and crusts with soap and water
- ▶ Dry the area
- ▶ Paint with gentian violet
- ▶ Wash hands

To Treat Thrush (ulcers or white patches in mouth)

The mother should

- ▶ Wash hands
- ▶ Wash mouth with clean soft cloth wrapped around the finger and wet with salt water
- ▶ Paint the mouth with half-strength gentian violet
- ▶ Wash hands

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

► *Teach Correct Positioning and Attachment for Breastfeeding*

- ▶ Show the mother how to hold her infant
 - with the infant's head and body straight
 - facing her breast, with infant's nose opposite her nipple
 - with infant's body close to her body
 - supporting infant's whole body, not just neck and shoulders

- ▶ Show her how to help the infant to attach She should
 - touch her infant's lips with her nipple
 - wait until her infant's mouth is opening wide
 - move her infant quickly onto her breast, aiming the infant's lower lip well below the nipple

- ▶ Look for signs of good attachment and effective suckling If the attachment or suckling is not good, try again

► *Advise Mother to Give Home Care for the Young Infant*

- ▶ FOOD } Breastfeed frequently, as often and for as long as the infant
- FLUIDS } wants, day and night, during sickness and health

- ▶ WHEN TO RETURN

Follow-Up Visit

If the infant has	Return for follow-up in
LOCAL BACTERIAL INFECTION DYSENTERY ANY FEEDING PROBLEM THRUSH	2 days
LOW WEIGHT FOR AGE	14 days

When to Return Immediately:

Advise the mother to return immediately if the young infant has any of these signs

- Breastfeeding or drinking poorly
- Becomes sicker
- Develops a fever
- Fast breathing
- Difficult breathing
- Blood in stool

- ▶ MAKE SURE THE YOUNG INFANT STAYS WARM AT ALL TIMES

- In cool weather, cover the infant's head and feet and dress the infant with extra clothing

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GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

▶ LOCAL BACTERIAL INFECTION

After 2 days

Look at the umbilicus Is it red or draining pus? Does redness extend to the skin?

Look at the skin pustules Are there many or severe pustules?

Treatment

- ▶ If **pus or redness remains or is worse**, refer to hospital
- ▶ If **pus and redness are improved**, tell the mother to continue giving the 5 days of antibiotic and continue treating the local infection at home

▶ DYSENTERY

After 2 days

Assess the young infant for diarrhoea > See "Does the Young Infant Have Diarrhoea?" above

Ask

- Are there fewer stools?
- Is there less blood in the stool?
- Is there less abdominal pain?
- Is the young infant eating better?
- Has fever developed?

Treatment

- ▶ If the young infant is **dehydrated**, treat dehydration
- ▶ If **number of stools, amount of blood in stools, abdominal pain, and eating are the same or worse, or fever develops**, refer to hospital If fever, give first dose of intramuscular antibiotics before referral
- ▶ If **fewer stools, less blood in the stools, less abdominal pain, and eating better**, continue giving the same antibiotic until finished

GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

► FEEDING PROBLEM

After 2 days

Reassess feeding > See "Then Check for Feeding Problem or Low Weight" above

Ask about any feeding problems found on the initial visit

- Counsel the mother about any new or continuing feeding problems. If you counsel the mother to make significant changes in feeding, ask her to bring the young infant back again.
- If the young infant is low weight for age, ask the mother to return 14 days after the initial visit to measure the young infant's weight gain.

Exception:

If you do not think that feeding will improve, or if the young infant has **lost weight**, refer the child

► LOW WEIGHT

After 14 days

Weigh the young infant and determine if the infant is still low weight for age

Reassess feeding > See "Then Check for Feeding Problem or Low Weight" above

- If the infant is **no longer low weight for age**, praise the mother and encourage her to continue.
- If the infant is **still low weight for age, but is feeding well**, praise the mother. Ask her to have her infant weighed again within a month or when she returns for immunization.
- If the infant is **still low weight for age and still has a feeding problem**, counsel the mother about the feeding problem. Ask the mother to return again in 14 days (or when she returns for immunization, if this is within 2 weeks). Continue to see the young infant every few weeks until the infant is feeding well and gaining weight regularly or is no longer low weight for age.

Exception

If you do not think that feeding will improve, or if the young infant has **lost weight**, refer to hospital

► THRUSH

After 2 days

Look for ulcers or white patches in the mouth (thrush)

Reassess feeding > See "Then Check for Feeding Problem or Low Weight" above

- If **thrush is worse**, or if the infant has **problems with attachment or suckling**, refer to hospital
- If **thrush is the same or better**, and if the infant is **feeding well**, continue half-strength gentian violet for a total of 5 days

MANAGEMENT OF THE SICK YOUNG INFANT AGE 1 WEEK UP TO 2 MONTHS

FEEDING PROBLEM
LOW WEIGHT, THRUSS
RECORDING FORM

Name _____ Age _____ Weight _____ kg Temperature _____ °C

ASK What are the infant's problems? _____ Initial Visit? ___ Follow-up Visit? ___

ASSESS (Circle all signs present) CLASSIFY

<p>CHECK FOR POSSIBLE BACTERIAL INFECTION</p> <ul style="list-style-type: none"> • Has the infant had convulsions? • Count the breaths in one minute _____ breaths per minute Repeat if elevated _____ Fast breathing? • Look for severe chest indrawing • Look for nasal flaring • Look and listen for grunting • Look and feel for bulging fontanelle • Look for pus draining from the ear • Look at the umbilicus Is it red or draining pus? Does the redness extend to the skin? • Fever (temperature 37.5°C or above or feels hot) or low body temperature (below 35.5°C or feels cool) • Look for skin pustules Are there many or severe pustules? • See if the young infant is lethargic or unconscious • Look at young infant's movements Less than normal? 									
<p>DOES THE YOUNG INFANT HAVE DIARRHOEA? Yes ___ No ___</p> <ul style="list-style-type: none"> • For how long? _____ Days • Is there blood in the stool? • Look at the young infant's general condition Is the infant Lethargic or unconscious? Restless and irritable? • Look for sunken eyes • Pinch the skin of the abdomen Does it go back Very slowly (longer than 2 seconds)? Slowly? 									
<p>THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT</p> <ul style="list-style-type: none"> • Is there any difficulty feeding? Yes ___ No ___ • Is the infant breastfed? Yes ___ No ___ If Yes, how many times in 24 hours? _____ times • Does the infant usually receive any other foods or drinks? Yes ___ No ___ If Yes, how often? • What do you use to feed the child? • Determine weight for age Low ___ Not Low ___ 									
<p>If the infant has any difficulty feeding, is feeding less than 8 times in 24 hours, is taking any other food or drinks, or is low weight for age AND has no indications to refer urgently to hospital</p> <p>ASSESS BREASTFEEDING</p> <ul style="list-style-type: none"> • Has the infant breastfed in the in the previous hour? <p style="text-align: center;">If infant has not fed in the previous hour, ask the mother to put her infant to the breast Observe the breastfeed for 4 minutes</p> <ul style="list-style-type: none"> • Is the infant able to attach? To check attachment, look for <table style="margin-left: 20px; border: none;"> <tr> <td>- Chin touching breast</td> <td>Yes ___ No ___</td> </tr> <tr> <td>- Mouth wide open</td> <td>Yes ___ No ___</td> </tr> <tr> <td>- Lower lip turned outward</td> <td>Yes ___ No ___</td> </tr> <tr> <td>- More areola above than below the mouth</td> <td>Yes ___ No ___</td> </tr> </table> <p style="text-align: center;"><i>no attachment at all not well attached good attachment</i></p> <ul style="list-style-type: none"> • Is the infant suckling effectively (that is, slow deep sucks, sometimes pausing)? <p style="text-align: center;"><i>not suckling at all not suckling effectively suckling effectively</i></p> <ul style="list-style-type: none"> • Look for ulcers or white patches in the mouth (thrush) 		- Chin touching breast	Yes ___ No ___	- Mouth wide open	Yes ___ No ___	- Lower lip turned outward	Yes ___ No ___	- More areola above than below the mouth	Yes ___ No ___
- Chin touching breast	Yes ___ No ___								
- Mouth wide open	Yes ___ No ___								
- Lower lip turned outward	Yes ___ No ___								
- More areola above than below the mouth	Yes ___ No ___								
<p>CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS Circle immunizations needed today</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">BCG</td> <td style="text-align: center;">DPT 1</td> <td style="text-align: center;">DPT 2</td> </tr> <tr> <td style="text-align: center;">OPV 0</td> <td style="text-align: center;">OPV 1</td> <td style="text-align: center;">OPV 2</td> </tr> </table>	BCG	DPT 1	DPT 2	OPV 0	OPV 1	OPV 2	<p>Return for next immunization on _____</p> <p style="text-align: center;">(Date)</p>		
BCG	DPT 1	DPT 2							
OPV 0	OPV 1	OPV 2							

ASSESS OTHER PROBLEMS

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MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

Child's Name _____ Age _____ Weight _____ kg Temperature _____ °C

ASK What are the child's problems? _____ Initial Visit? ___ Follow-up Visit? ___

ASSESS (Circle all signs present) CLASSIFY

<p>CHECK FOR GENERAL DANGER SIGNS</p> <p>NOT ABLE TO DRINK OR BREASTFEED LETHARGIC OR UNCONSCIOUS</p> <p>VOMITS EVERYTHING</p> <p>CONVULSIONS</p>	<p>General danger sign present? Yes ___ No ___</p> <p>Remember to use danger sign when selecting classifications</p>
<p>DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes ___ No ___</p> <p>• For how long? ___ Days</p> <p>• Count the breaths in one minute _____ breaths per minute Fast breathing?</p> <p>• Look for chest indrawing</p> <p>• Look and listen for stridor</p>	
<p>DOES THE CHILD HAVE DIARRHOEA? Yes ___ No ___</p> <p>• For how long? ___ Days</p> <p>• Is there blood in the stool?</p> <p>• Look at the child's general condition Is the child Lethargic or unconscious? Restless and irritable?</p> <p>• Look for sunken eyes</p> <p>• Offer the child fluid Is the child Not able to drink or drinking poorly? Drinking eagerly, thirsty?</p> <p>• Pinch the skin of the abdomen Does it go back Very slowly (longer than 2 seconds)? Slowly?</p>	
<p>DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5°C or above) Yes ___ No ___</p> <p>Decide Malaria Risk High Low</p> <p>• For how long? ___ Days</p> <p>• If more than 7 days, has fever been present every day?</p> <p>• Has child had measles within the last 3 months?</p> <p>• Look or feel for stiff neck</p> <p>• Look for runny nose</p> <p>Look for signs of MEASLES</p> <p>• Generalized rash and</p> <p>• One of these cough, runny nose or red eyes</p>	
<p>If the child has measles now or within the last 3 months</p> <p>• Look for mouth ulcers</p> <p style="padding-left: 20px;">If Yes, are they deep and extensive?</p> <p>• Look for pus draining from the eye</p> <p>• Look for clouding of the cornea</p>	
<p>DOES THE CHILD HAVE AN EAR PROBLEM? Yes ___ No ___</p> <p>• Is there ear pain?</p> <p>• Is there ear discharge?</p> <p style="padding-left: 20px;">If Yes, for how long? ___ Days</p> <p>• Look for pus draining from the ear</p> <p>• Feel for tender swelling behind the ear</p>	
<p>THEN CHECK FOR MALNUTRITION AND ANAEMIA</p> <p>• Look for visible severe wasting</p> <p>• Look for palmar pallor</p> <p style="padding-left: 20px;">Severe palmar pallor? Some palmar pallor?</p> <p>• Look for oedema of both feet</p> <p>• Determine weight for age</p> <p style="padding-left: 20px;">Very Low ___ Not Very Low ___</p>	
<p>CHECK THE CHILD'S IMMUNIZATION STATUS Circle immunizations needed today</p> <p>BCG _____ DPT 1 _____ DPT 2 _____ DPT 3 _____</p> <p>OPV 0 _____ OPV 1 _____ OPV 2 _____ OPV 3 _____ Measles _____</p>	<p>Return for next immunization on _____</p> <p style="text-align: center;">(Date)</p>
<p>ASSESS CHILD'S FEEDING if child has ANAEMIA OR VERY LOW WEIGHT or is less than 2 years old</p> <p>• Do you breastfeed your child? Yes ___ No ___</p> <p style="padding-left: 20px;">If Yes, how many times in 24 hours? ___ times Do you breastfeed during the night? Yes ___ No ___</p> <p>• Does the child take any other food or fluids? Yes ___ No ___</p> <p style="padding-left: 20px;">If Yes what food or fluids? _____</p> <p style="padding-left: 20px;">How many times per day? ___ times What do you use to feed the child? _____</p> <p style="padding-left: 20px;">If very low weight for age How large are servings? _____</p> <p style="padding-left: 20px;">Does the child receive his own serving? ___ Who feeds the child and how? _____</p> <p>• During this illness, has the child's feeding changed? Yes ___ No ___</p> <p style="padding-left: 20px;">If Yes, how? _____</p>	<p>Feeding Problems</p>

ASSESS OTHER PROBLEMS

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WEIGHT FOR AGE CHART

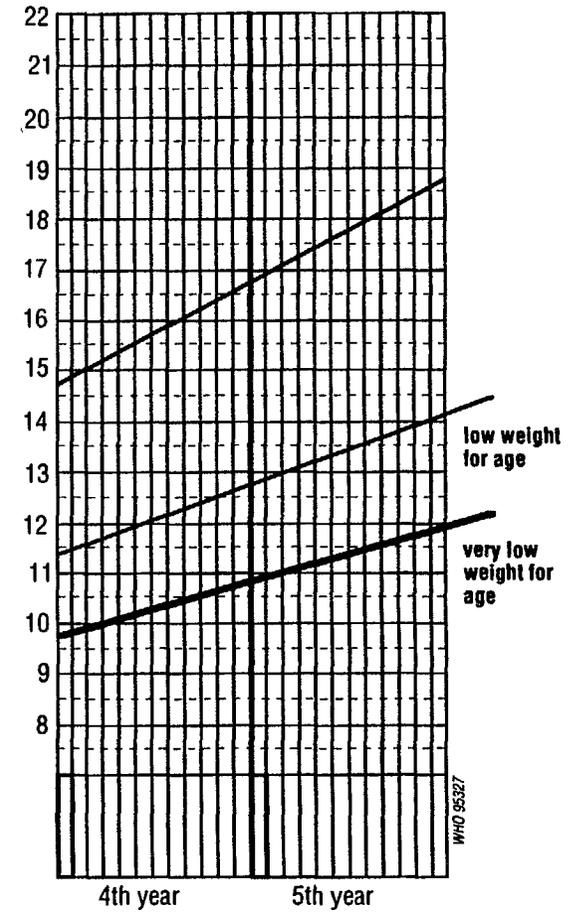
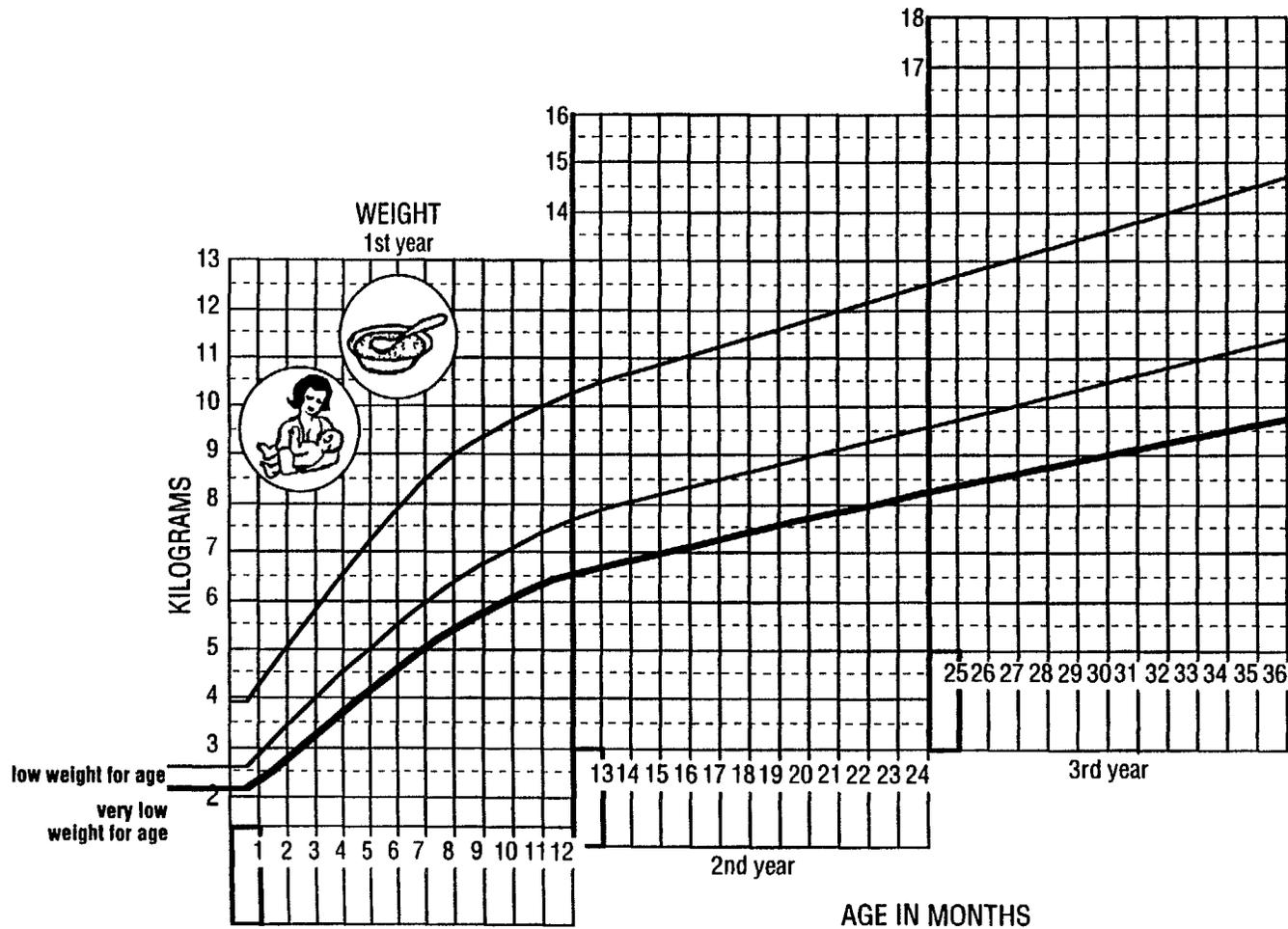


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Part 2

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Part 4

G. Changes in Materials Required for Specific Adaptations

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Essential adaptations:

1.0 Incorporate adapted feeding recommendations

1 1	Incorporate adapted feeding recommendations where there is only one set of feeding recommendations for the entire country	5
1 2	Incorporate adapted feeding recommendations where there are different regional feeding recommendations and Mother's Cards	33

Recommended adaptations:

2.0	Add referring to hospital young infants with blood in the stool	61
3.0	Add giving multivitamin/mineral supplement for 2 weeks to all children with persistent diarrhoea	101
4.0	Extend hypoglycemia treatment/prevention to include children with SEVERE MALNUTRITION and SEVERE PNEUMONIA OR VERY SEVERE DISEASE	129

Possible adaptations:

5.0	Add management of acute convulsions	149
6.0	Change the antibiotic options	
6 1	Oral antibiotic for pneumonia and ear infection: Substitute a first-line oral antibiotic other than cotrimoxazole	217

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6 2	Oral antibiotic for pneumonia and ear infection Add an additional second-line antibiotic	285
6 3	Oral antibiotic for Shigella Add a second-line antibiotic which is not currently on the chart (example shown is ciprofloxacin)	307
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9.0	Change the antimalarial options	
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