

GUIDE FOR THE INTRODUCTION OF *Integrated Management of Childhood Illness*

September, 1996

*Support for Analysis and Research in Africa (SARA)
Health and Human Resources Analysis for Africa (HHRAA)
USAID, Africa Bureau, Office of Sustainable Development
in collaboration with BASICS*

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**GUIDE FOR THE INTRODUCTION OF
INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS**

SEPTEMBER, 1996

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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> |

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The World Health Organization (WHO) has developed an integrated approach to the assessment, classification, treatment, and counseling of sick children and their caretakers. 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.

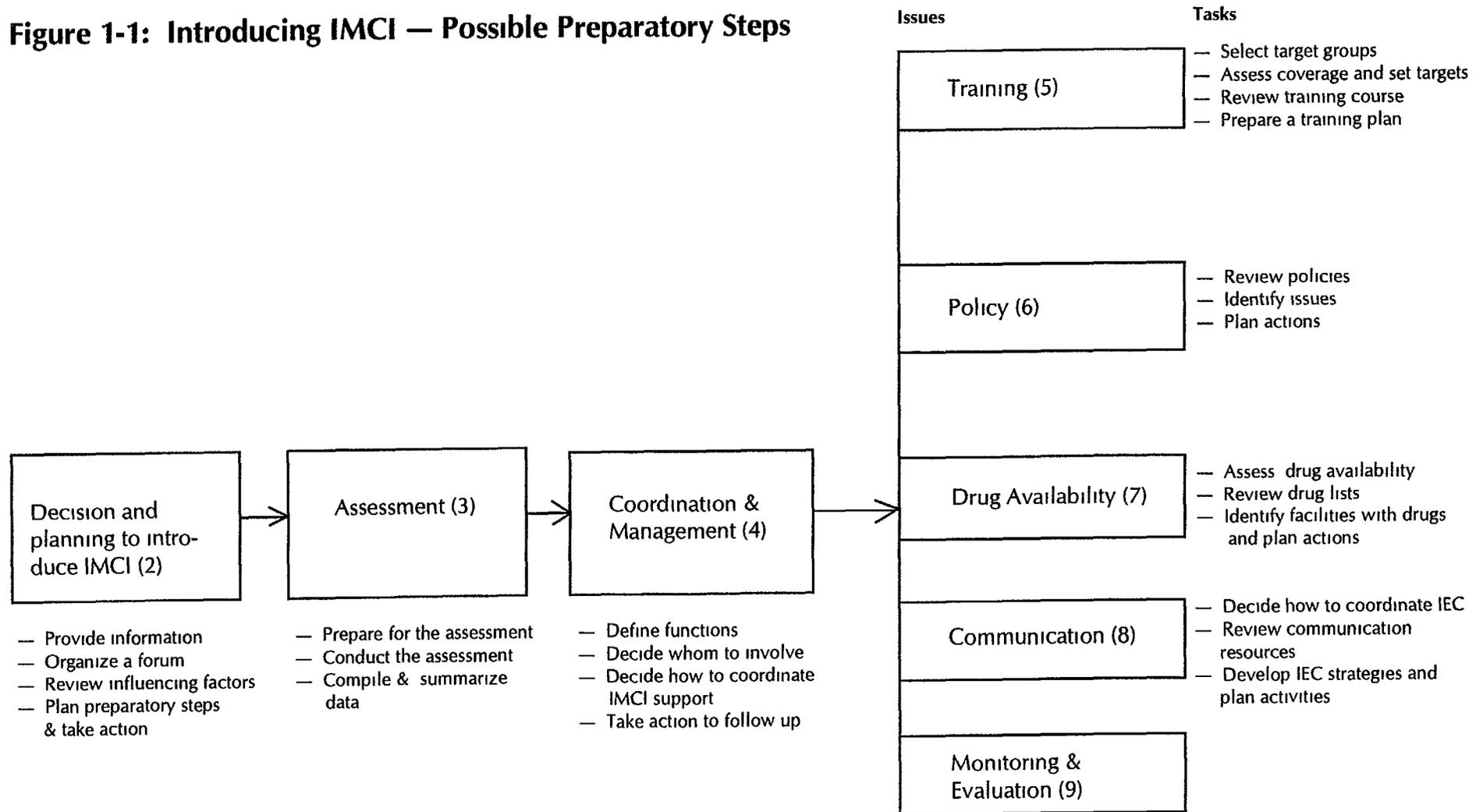
The new approach to IMCI requires new skills. WHO and UNICEF have prepared a training course (available in November 1995) for health workers at first-level health facilities to teach the skills of integrated management of childhood illnesses including the interpersonal skills necessary to communicate 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



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

Communications

Monitoring

Evaluation

THE PREPARATORY PROCESS

*Who will use this
guide*

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.

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 1 — Introduction



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

| Table 2-1 Tasks for Deciding and Planning to Introduce IMCI | |
|---|--|
| 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 (CDR/WHO folder and update)

Description of the IMCI course (CDR/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 (CDR/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

| Table 2-2 Sample Agenda One-Day IMCI Orientation | | |
|--|--|--|
| 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> <p>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</p> <p>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> <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

Chapter 5

- Develop a training implementation plan
 - 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

Chapter 2 — Decide and Plan to Introduce IMCI



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 |
| 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 |
| 2.1 | Review documents |
| 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 |

*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**

- 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

To collect these documents, contact program managers in the ministry of health and other organizations involved in support to health services delivery and evaluation

If available data are extensive, further investigation—for example, key informant interviews and health facility visits—may be unnecessary

1 5 Identify key informants

Select individuals to be key informants for interviews at national, regional, and district levels Among the persons to consider are

- 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

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,

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

Chapter 3 — IMCI Assessment

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 | |

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

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.

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.

2 2 Interview key informants

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

2 3 Visit health facilities

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.)

3. Compile and summarize data

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.

3 1 Compile and summarize data

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.

3 2 Plan the next step

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

Chapter 3 — IMCI Assessment

SAMPLE PROTOCOLS: BRIEF DESCRIPTION

Coordination and management

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]).

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.

***Health facility
assessment tool***

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

***Other health facility
assessment protocols***

- 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.

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

Chapter 3 — IMCI Assessment

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?

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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?

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 12-13

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

| Table 4-1 Tasks to Address 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

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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



SS

LIST OF QUESTIONS

Questions for addressing the issue of IMCI coordination and management

Issue 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?

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*

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]**

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.

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

3 2 **Review training materials** [prot 2 11 and 2 24]

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]

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

Chapter 5 — Issue: Training



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)

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?

Chapter 5 — Issue: Training



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*)

| | |
|---|---|
| 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.

| 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 |

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) | |

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

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 7 — Issue: Drug Availability



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

Chapter 8 — Issue: Communications

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 2.3 Assess communication capacity |
| 3 | 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 |

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 | | |

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 resource—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 crosscutting, 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]

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 2 Conduct formative research to fill in information gaps

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)

3 3 Decide on communication strategies and messages [prot 8 20-8 25]

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

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?

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 8 — Issue: Communications



WORK IN PROGRESS

**[MONITORING AND EVALUATION
WILL BE INCLUDED IN 1997]**

Chapter 9 — Issue: Monitoring and Evaluation



**GUIDE FOR THE INTRODUCTION OF
INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS
SEPTEMBER, 1996**

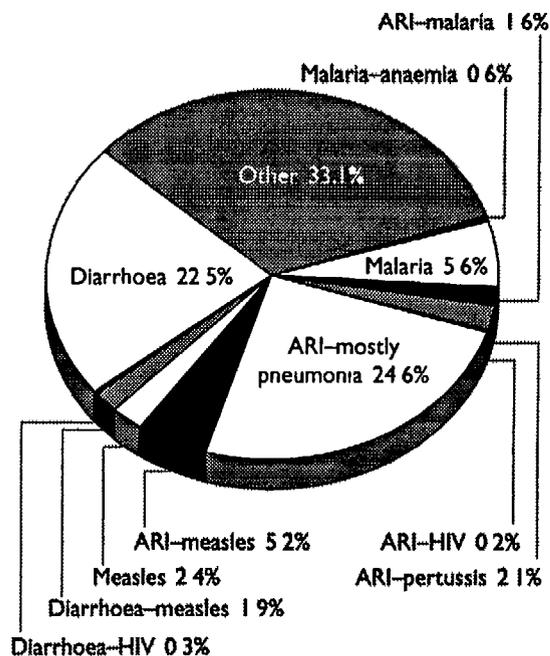
ANNEX 1. BACKGROUND MATERIALS "INFORMATION KIT"

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 1.5 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

Division of Diarrhoeal and
Acute Respiratory Disease Control
World Health Organization
1211 Geneva 27
Switzerland

Tel +41 22 791 2632 / Fax +41 22 791 4853

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 the Sick Child

Five diseases cause 7 out of 10 child deaths

Since 1990 around 60 million children died before their fifth birthday. Forty two million of them were killed by diarrhoea, pneumonia, measles, malaria or malnutrition. Unless action is taken now an even larger number of lives will be lost 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 Diarrhoeal and Acute Respiratory Disease Control

Division of Communicable Diseases, Division of Control of Tropical Diseases, Action Programme on Essential Drugs, Global Programme for Vaccines, Maternal and Child Health and Family Planning, Nutrition, Oral Health Programme for the Prevention of Blindness, and Special Programme for Research and Training in Tropical Diseases, in collaboration with UNICEF and the World Bank.

WHO/CDR/95.5
DISTR. GENFRAI
ORIGINAL ENGLISH

Standard treatment guidelines

Newly developed treatment guidelines for the sick child 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 management of the sick child in outpatient settings are available on wallcharts and in booklets.

Integrated management of the sick child 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 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:

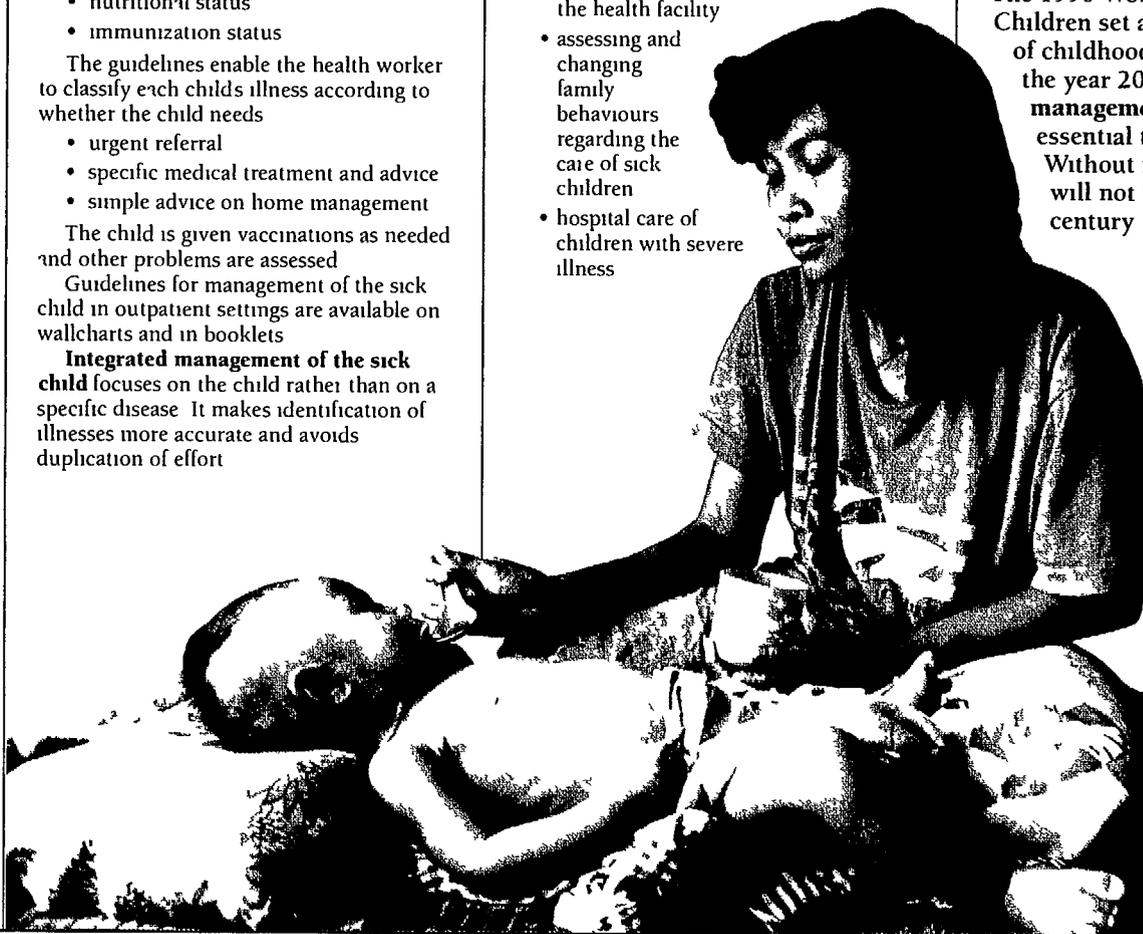
- improving health workers performance
- managing drug supplies at the health facility
- assessing and changing family behaviours regarding the care of sick children
- hospital care of children with severe illness

Impact

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

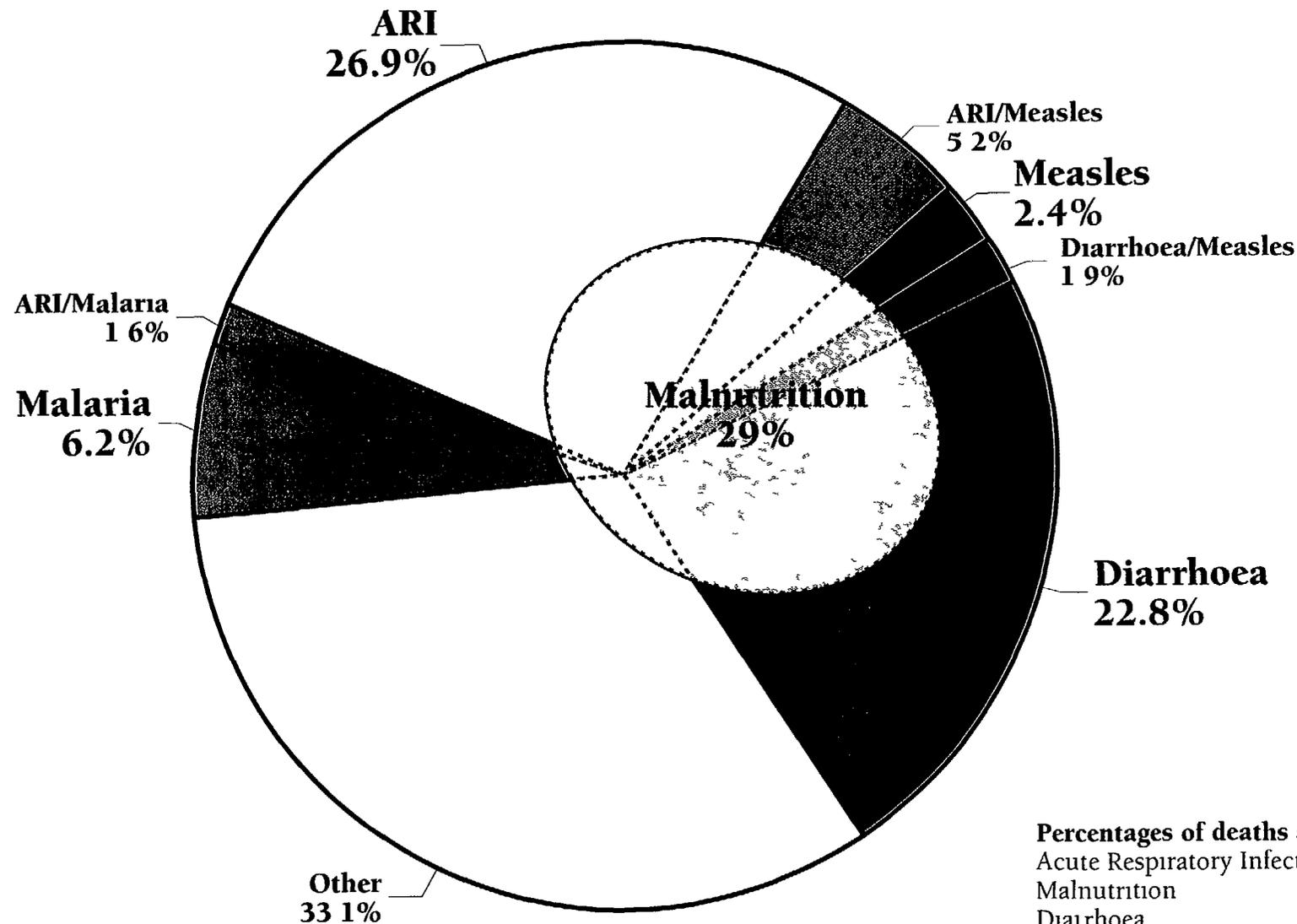
It was assessed to be the intervention likely to have the greatest impact in reducing the global burden of disease.

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



Design: Marilyn Langfield
Photo: UNICEF/5884/Roger Lemoyne

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



Percentages of deaths associated with

| | |
|------------------------------------|-------|
| Acute Respiratory Infections (ARI) | 33.7% |
| Malnutrition | 29.0% |
| Diarrhoea | 24.7% |
| Malaria | 7.7% |
| Measles | 9.5% |
| One or more of these conditions | 71.0% |

For further information, contact The Director, Division of Diarrhoeal and Acute Respiratory Disease Control, World Health Organization, Avenue Appia, CH-1211 Geneva 27, Switzerland
Tel +41 22 791 2632 Fax +41 22 791 4853

The WHO/UNICEF approach to

**Integrated Management
of the
Sick Child**

Update - June 1995



**World Health
Organization**



UNICEF

United Nations Children's Fund

❑ 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.

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.

Selection of participants for initial courses

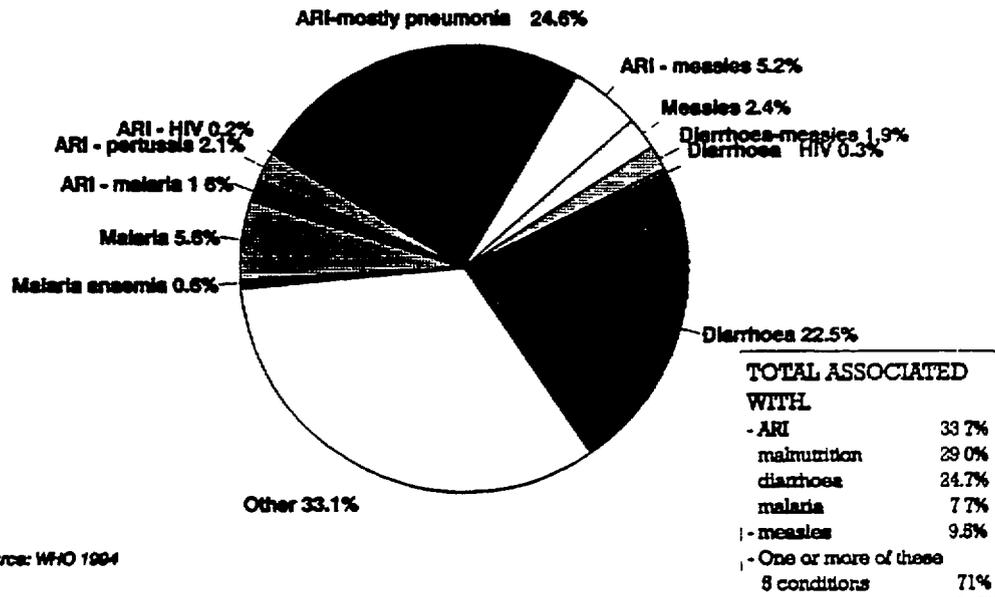
The participants for the first course(s) should be selected from among first-level facility staff who have day-to-day responsibility for managing sick children. They should be from health facilities where drug supplies are acceptable and where follow-up is feasible and likely to occur. The initial course 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.

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. 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.

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



Source: WHO 1994

What are the advantages of this approach?

Integrated management of the sick child 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.

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.

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 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.

Integrated management of the sick child 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*, 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.

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 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.

Research on the management of the sick child

Research is an essential component of all programmes to reduce mortality and morbidity in children. Several research studies have already been carried out to provide information for finalizing the four sick child case management charts (see below). These include evaluation of the *Assess and classify* chart in Bangladesh, Gambia, Kenya and Uganda and studies on the clinical predictors of anaemia in Gambia, Kenya, Malawi and Uganda. The studies have led to modification or validation of the following aspects of the protocol:

- the clinical signs for classifying children as requiring antimalarials in low-risk areas have been refined,
- the clinical signs for classifying children as having severe anaemia requiring referral have been improved for greater specificity,
- detection of fever by touch was shown to be sufficiently sensitive and specific to justify the recommendation to "feel the child for fever" if no thermometer is available,
- visible severe wasting was found to be adequate to detect most children with very low weight-for-height for referral to hospital,
- the rate of referral and antibiotic use with the revised protocol were found to be acceptable.

A multicentre study on persistent diarrhoea in Bangladesh, India, Mexico, Pakistan, Peru and Viet Nam has provided important findings that have been used to update the recommendations for management of persistent diarrhoea.

Findings from a study on pneumonia, sepsis and meningitis in Ethiopia, Gambia, Papua New Guinea and the Philippines have also been used to complete the recommendations for diagnosis and treatment in young infants.

WHO has drawn up a list of future research priorities related to management of the sick child. In addition to improving the detection and treatment of the five major illnesses, areas where more information is needed include:

- detection and management of anaemia and meningitis
- nutritional management
- management specific to the sick young infant
- reasons why mothers do not seek health care for sick children
- identification of high-risk children
- adequacy of clinical management in first-level health facilities

While much research is concerned with biomedical questions, there is also a need for further behavioural research on, for example, communication with mothers including the adaptation of advice on feeding to local conditions.

Research has been carried out by a number of collaborating institutions and coordinated by the WHO Division of Diarrhoeal and Acute Respiratory Disease Control and the WHO Special Programme for Research and Training in Tropical Diseases. From 1993 to now a series of consultations has been organized to obtain expert advice on various topics, to review research findings and to redefine research priorities. Two research and development coordination meetings have also been held with participation of a wide range of current or potential collaborators.

What tools are being developed?

Case management guidelines

Integrated outpatient management of the sick child at the first-level health facility has been described on four wallcharts which will also be available in booklet form. These guidelines are based on experience to date and on the findings of some focused research studies. The charts are titled, respectively

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

Management of childhood illness a training course

The case management guidelines constitute the technical core of a training course that has been developed for first-level health facility workers. This course consists of a set of six training modules for participants, still-photo exercises, video film and detailed instructions for the course director and course facilitators. It emphasizes hands-on practice of the skills taught. A full description of the course is presented in the Annex.

A guide to local adaptation of the training materials is also in preparation. This will include guidance on modification of such things as foods and fluids to be included when counselling the mother, antimicrobials of choice in a particular epidemiological context, and other policy decisions.

On-the-job training in management of drug supplies

Guidelines for conducting a training workshop 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 1995.

Other materials under development

Two other sets of guidelines - on improving health workers' performance and on assessing and changing family behaviours related to care for sick children - are being developed with the help of specialists in these areas

As many sick children require referral to a hospital, a further training course is being developed on inpatient case management of the sick child

Work has also begun on a survey manual for assessing health worker performance, based on those already available for diarrhoea and ARI. Guidelines for introducing the integrated approach in countries are also being put together

Field-testing of *Management of childhood illness*

A pretest of the course in Gondar, Ethiopia, in August 1994, followed by several weeks of observation of the trained health workers, yielded very promising results. Following the pretest course materials were finalized in preparation for a full field test including materials for course instructors. This field test was carried out in Arusha, Tanzania in February-March 1995.

A full report of the field test is available. The findings were largely positive. The course was conducted in English and, not surprisingly, health workers with a better command of English handled more readily the individual work requiring reading. Health worker performance during the course in both written exercises and clinical practice was evaluated. All three types of health workers included in the field test were able to learn and apply the process of assessment, classification, treatment and counselling at a very acceptable level of performance. The tables below show some of the more important findings from the field test.

Table 1 Proportion of children correctly classified by health worker type

| | Health worker type | | | | | |
|----------------------------|--------------------|------------------|---------------------|------------------|--------------------|------------------|
| | MCH aides | | Rural medical aides | | Medical assistants | |
| | (N=206) | | (N=161) | | (N=98) | |
| | % | (#) | % | (#) | % | (#) |
| Cough | 84% | (127/152) | 83% | (95/114) | 87% | (55/63) |
| Diarrhoea | 90% | (71/79) | 77% | (41/53) | 86% | (32/37) |
| Fever | 94% | (114/121) | 91% | (87/96) | 93% | (50/54) |
| Ear | 100% | (6/6) | 100% | (4/4) | 100% | (3/3) |
| Malnutrition/Anaemia | 97% | (148/152) | 87% | (109/125) | 83% | (53/64) |
| Feeding Problems | 50% | (7/14) | 81% | (13/16) | 100% | (14/14) |
| Total, all symptoms | 90% | (473/524) | 86% | (349/408) | 88% | (207/235) |

Table 2: Proportion of cases where treatment was correctly identified

| | | |
|---------------------|-----|-----------|
| MCH aides | 74% | (64/87) |
| Rural medical aides | 73% | (65/89) |
| Medical assistants | 92% | (37/40) |
| <hr/> | | |
| All combined | 77% | (166/216) |

Table 3: Proportion of treatments observed to have been given correctly

| | | |
|-----------------|------|-----------|
| Cotrimoxazole | 89% | (31/35) |
| Chloroquine | 92% | (49/53) |
| Paracetamol | 100% | (16/16) |
| Plan A | 84% | (21/25) |
| Soothing remedy | 93% | (27/29) |
| <hr/> | | |
| Total | 91% | (144/158) |

Plans for implementation

The concept of the integrated approach to childhood illness has been welcomed by many countries. In some it will fit well into reorganizations of health service management that are already under way. In others, organizational changes or clearly defined collaborative arrangements between existing disease-specific programmes will be needed.

WHO, UNICEF, the World Bank and their collaborative partners will work with countries to help adapt the new materials to the country context, to plan how implementation of activities can best be managed and to evaluate the experience. Particularly close monitoring of initial experience will be carried out in a small number of countries.

Collaborating partners

Many institutions are collaborating in this initiative as listed in the attached table.

Bilateral aid agencies from many countries, the World Bank, UNDP and UNICEF are supporting these efforts through their funding of WHO Programmes. Funds specifically designated for this initiative have been provided to WHO by the Governments of Australia, Luxembourg, Norway and Switzerland and by the US Agency for International Development. In addition, UNICEF and some bilateral agencies have allocated funds for management of the sick child in their health projects in countries.

Collaborating institutions

In addition to the Ministries of Health in countries where activities related to integrated management of the sick child have been carried out, the following institutions have collaborated

World Health Organization (Programmes/Units)

Division of Diarrhoeal and Acute Respiratory Disease Control (CDR)
Division of Communicable Diseases (CDS)
Division of Control of Tropical Diseases (CTD)
Action Programme on Essential Drugs (DAP)
Global Programme on AIDS (GPA)
Global Programme for Vaccines and Immunization (GPV)
Maternal and Child Health and Family Planning (MCH)
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

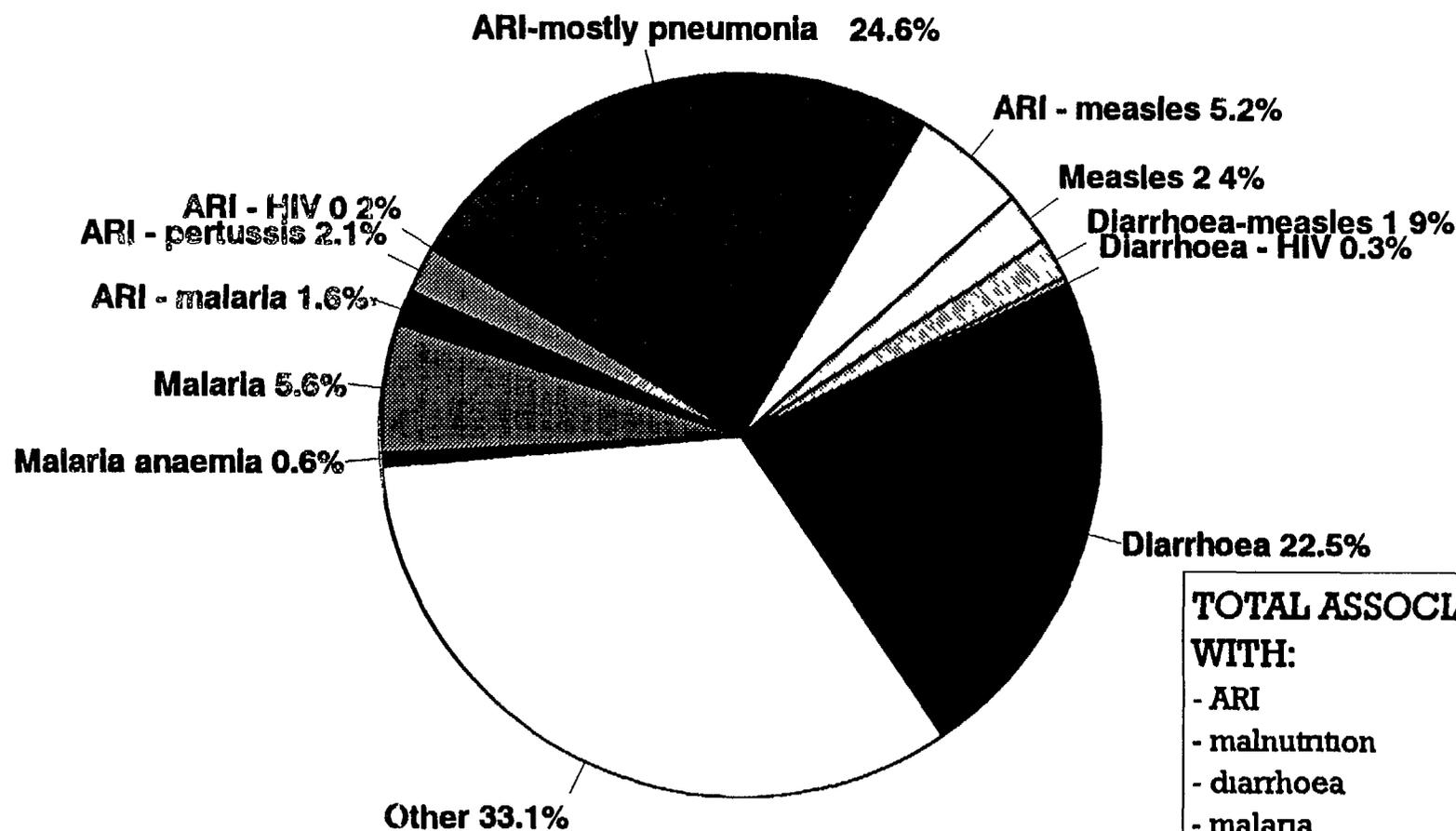
UNICEF

Child Survival Unit
Bamako Initiative Unit
Nutrition Unit

Other institutions

| | |
|--------------|--|
| Ethiopia | Addis Ababa University Gondar Medical College |
| The Gambia | Medical Research Council |
| Italy | Istituto "Burlo Garofalo" |
| Kenya | Kenya Medical Research Institute Wellcome Trust |
| South Africa | The South African Institute for Medical Research University of Cape Town |
| Tanzania | Tanzanian Food and Nutrition Unit |
| UK | Cambridge University London School of Hygiene and Tropical Medicine Liverpool School of Tropical Medicine Medical Research Council Save the Children Fund University of Edinburgh |
| USA | Academy for Educational Development, USAID/SARA Centers for Disease Control and Prevention Johns Hopkins University, USAID/Child Survival Project Harvard Institute for International Development, USAID/ADDR Michigan State University The Partnership for Child Health Care, Inc. USAID/BASICS University of Colorado University Research Corporation, USAID/Quality Assurance Project |
| Viet Nam | Wellcome Trust |

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



| TOTAL ASSOCIATED WITH: | |
|-------------------------------------|-------|
| - ARI | 33.7% |
| - malnutrition | 29.0% |
| - diarrhoea | 24.7% |
| - malaria | 7.7% |
| - measles | 9.5% |
| - One or more of these 5 conditions | 71% |

Source WHO 1994

12.2

Overlaps in clinical presentation

**SICK CHILD
AGE 2 MONTHS
UP TO 5 YEARS**

Cough & fast breathing:
P. falciparum malaria
Pneumonia
Severe anaemia

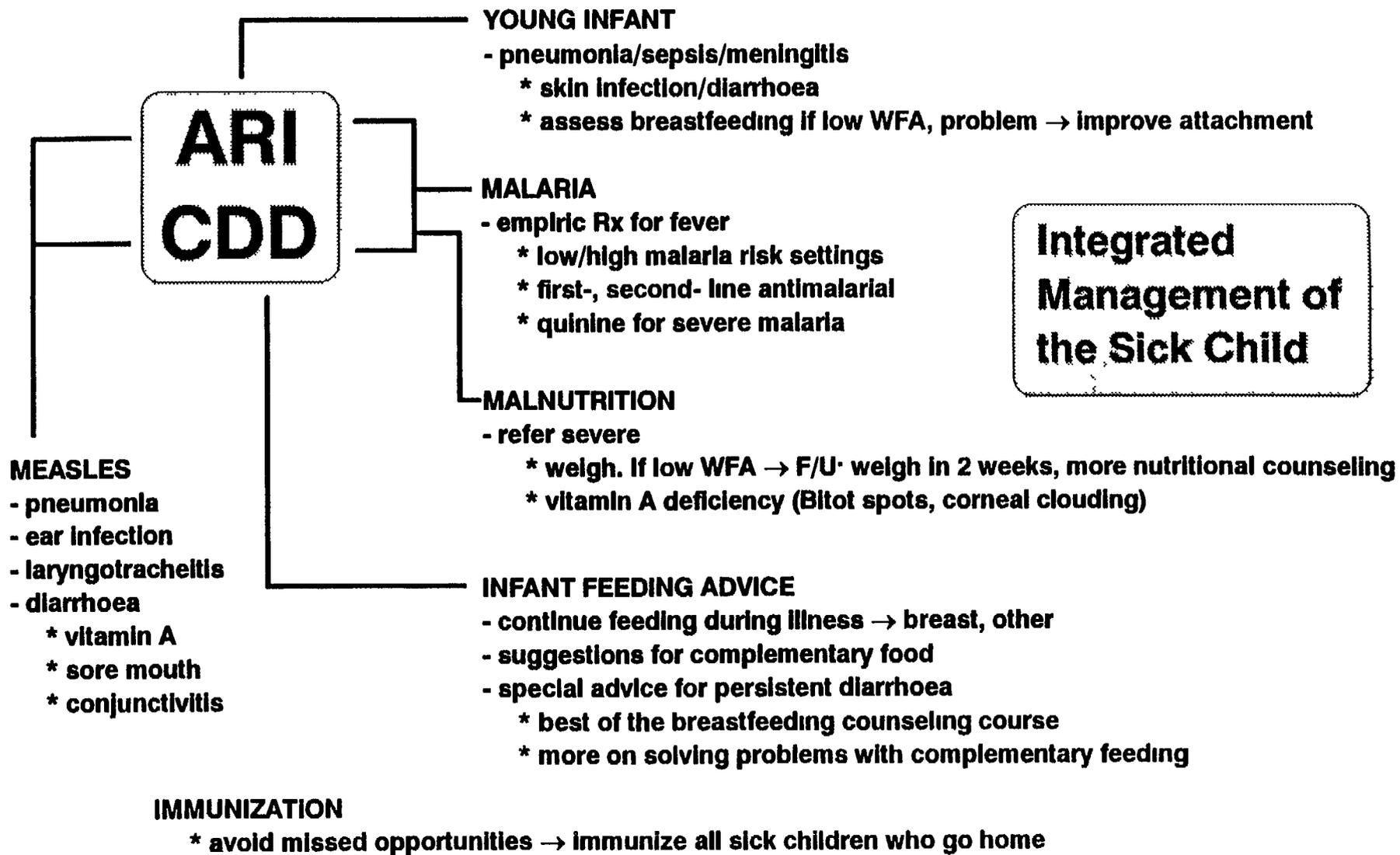
Abnormally sleepy or difficult to wake:
Cerebral malaria
Meningitis
Severe dehydration
Severe hypoxic pneumonia

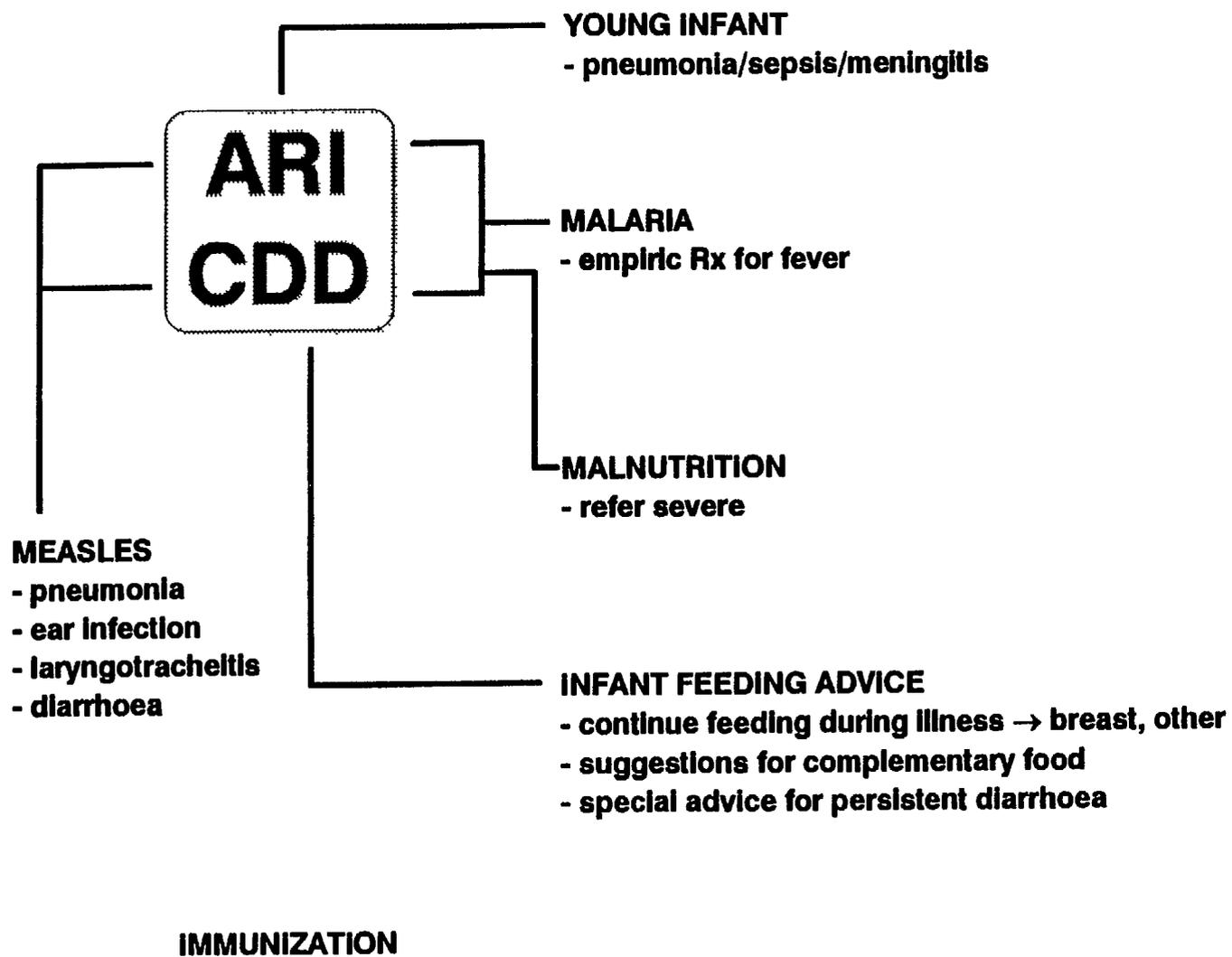
**Severe malnutrition
confuses diagnosis of:**
- pneumonia
- severe dehydration

Measles [pneumonia
ear infection
laryngotracheitis
diarrhoea

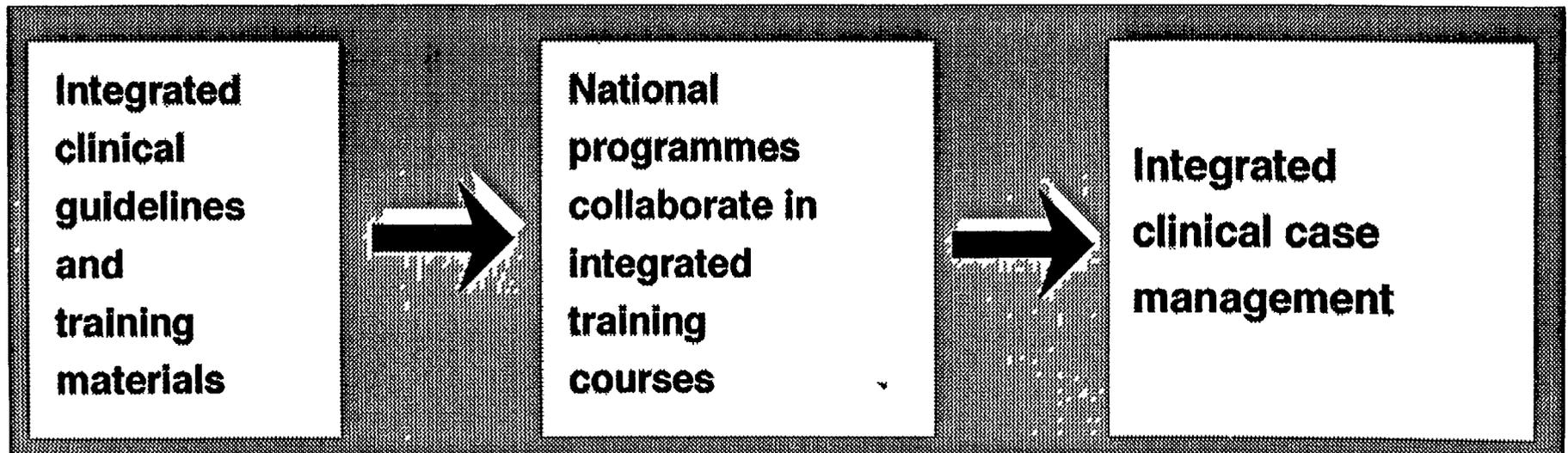
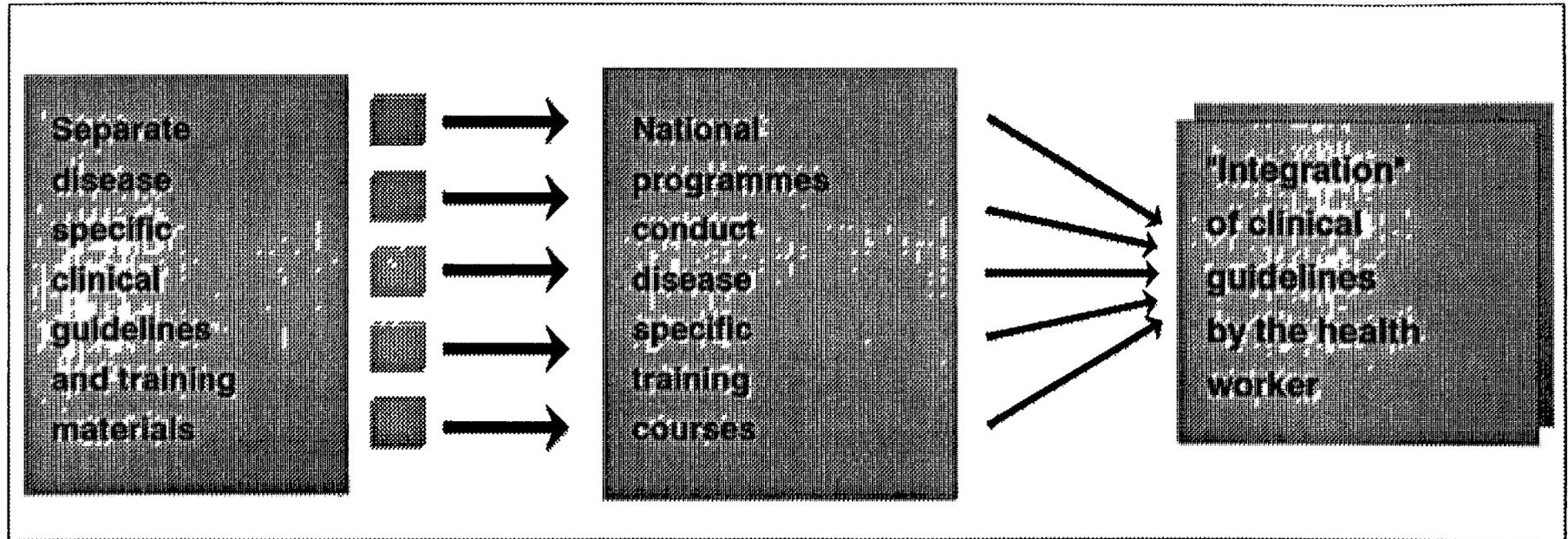
YOUNG INFANT

[Pneumonia/sepsis/meningitis
Most illness





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

144

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

Sick child essential drugs: First level facility

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

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

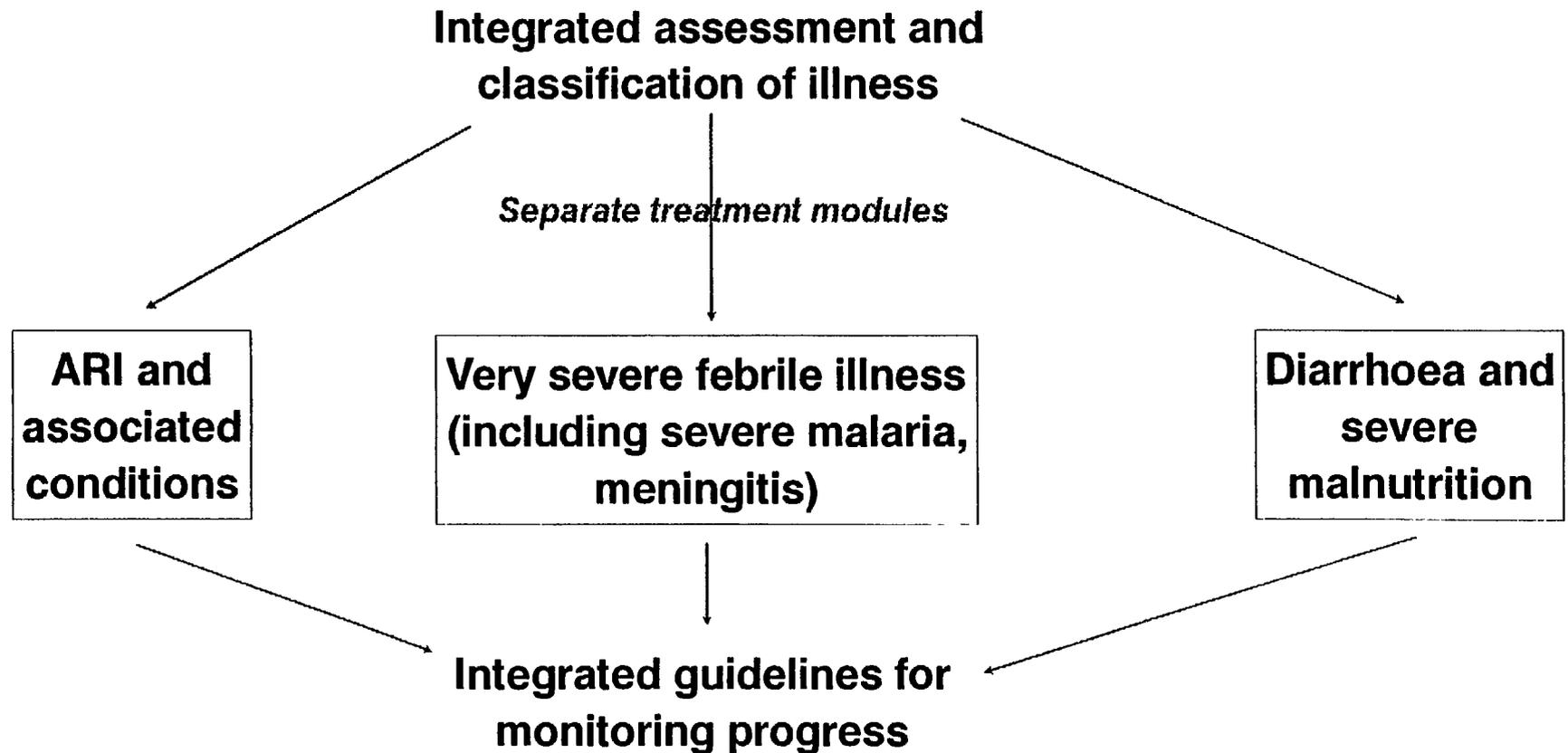
WHO/UNICEF Training Course for First-Level Facility Health Workers

4 other sets of materials in development

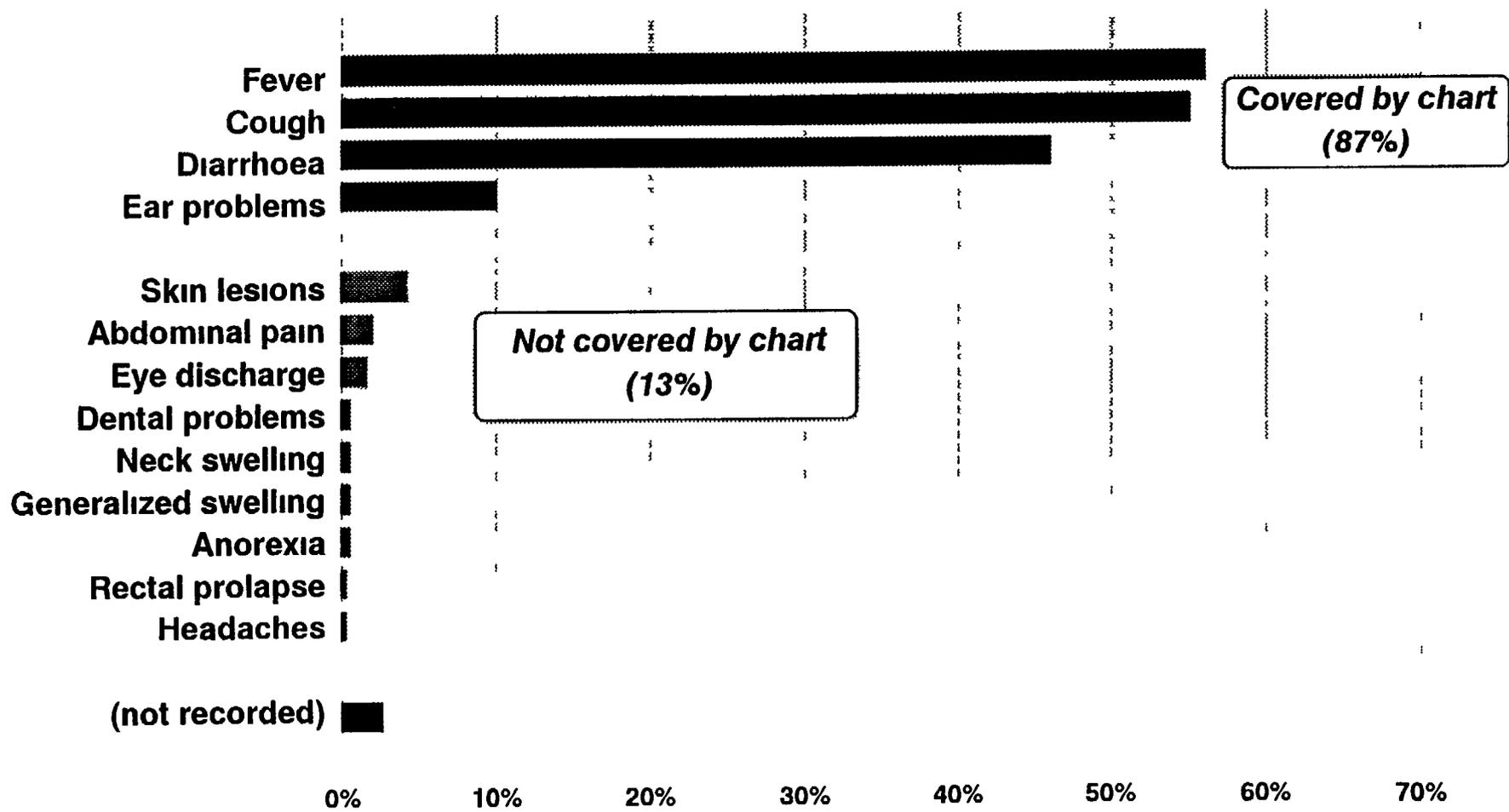
- ▶ **Monitoring and improving health worker performance**
- ▶ **Management of drug supplies at health facilities**
- ▶ **Interventions for family behaviour change, particularly related to careseeking and home case management**
- ▶ **Inpatient case management training course**

Integrated management of childhood illness

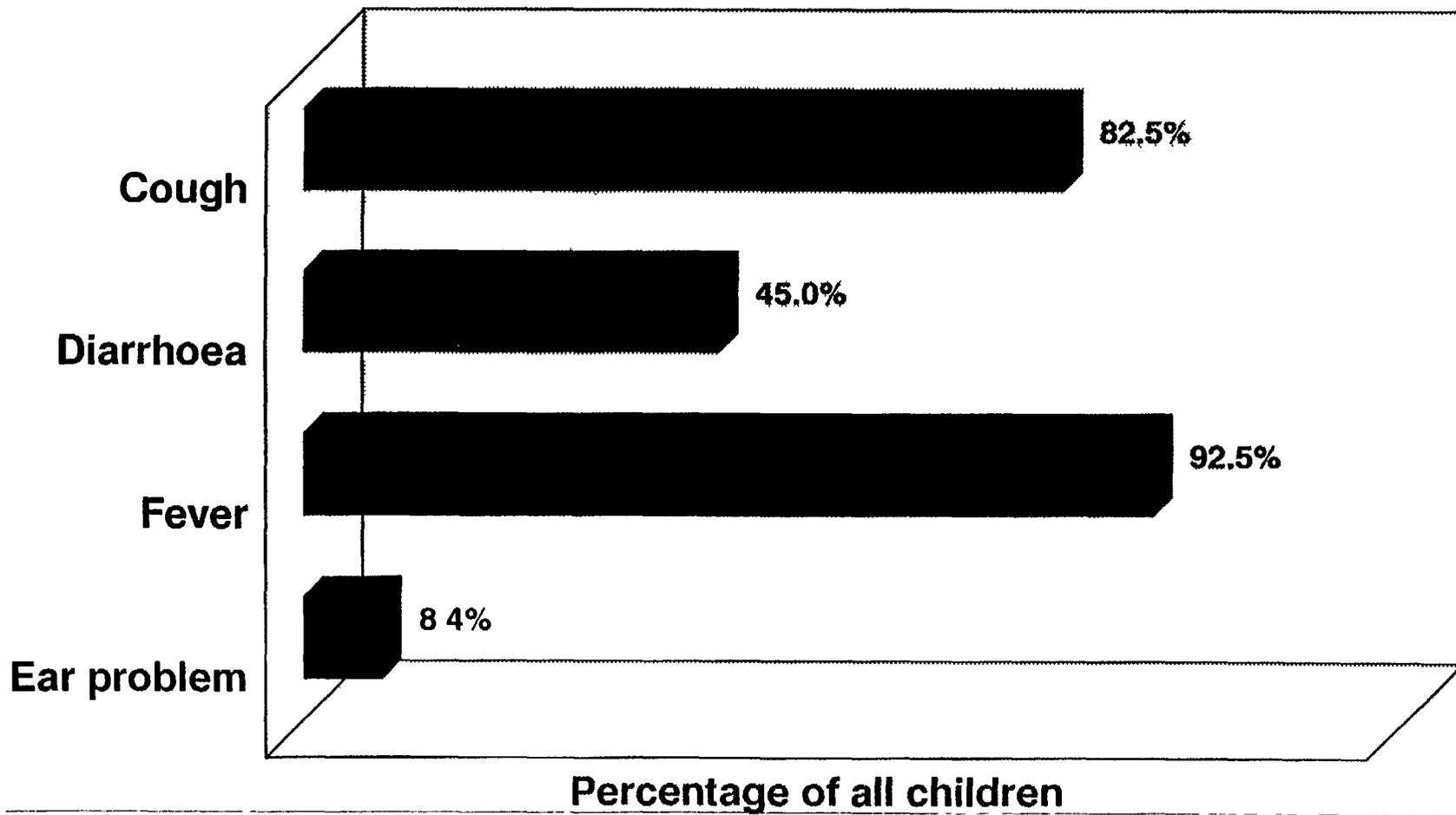
Training materials for management of *inpatients*



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



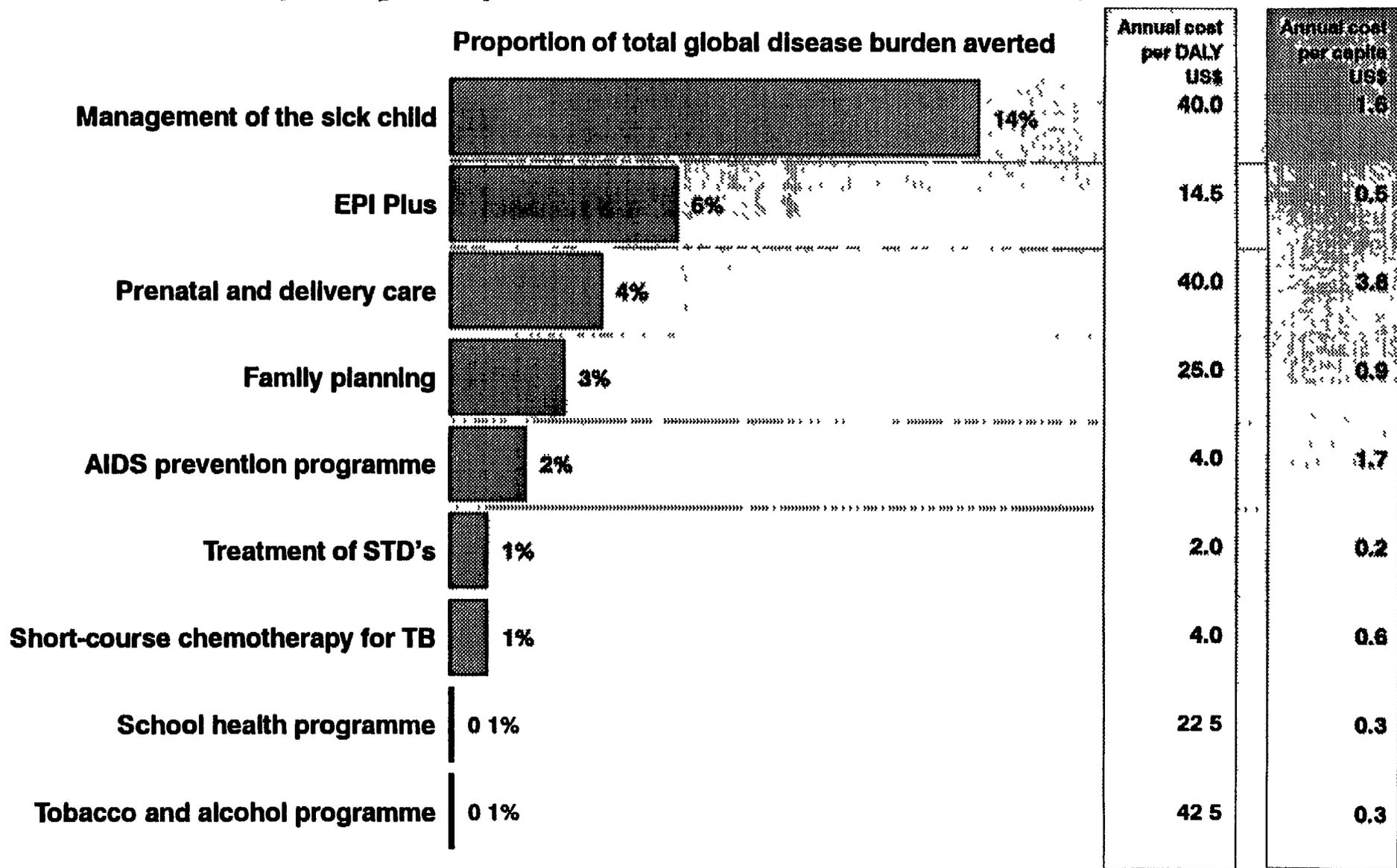
Main symptoms of 440 sick children MRC, Gambia



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% |

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



Source World Bank Development Report, Investing in Health, 1993

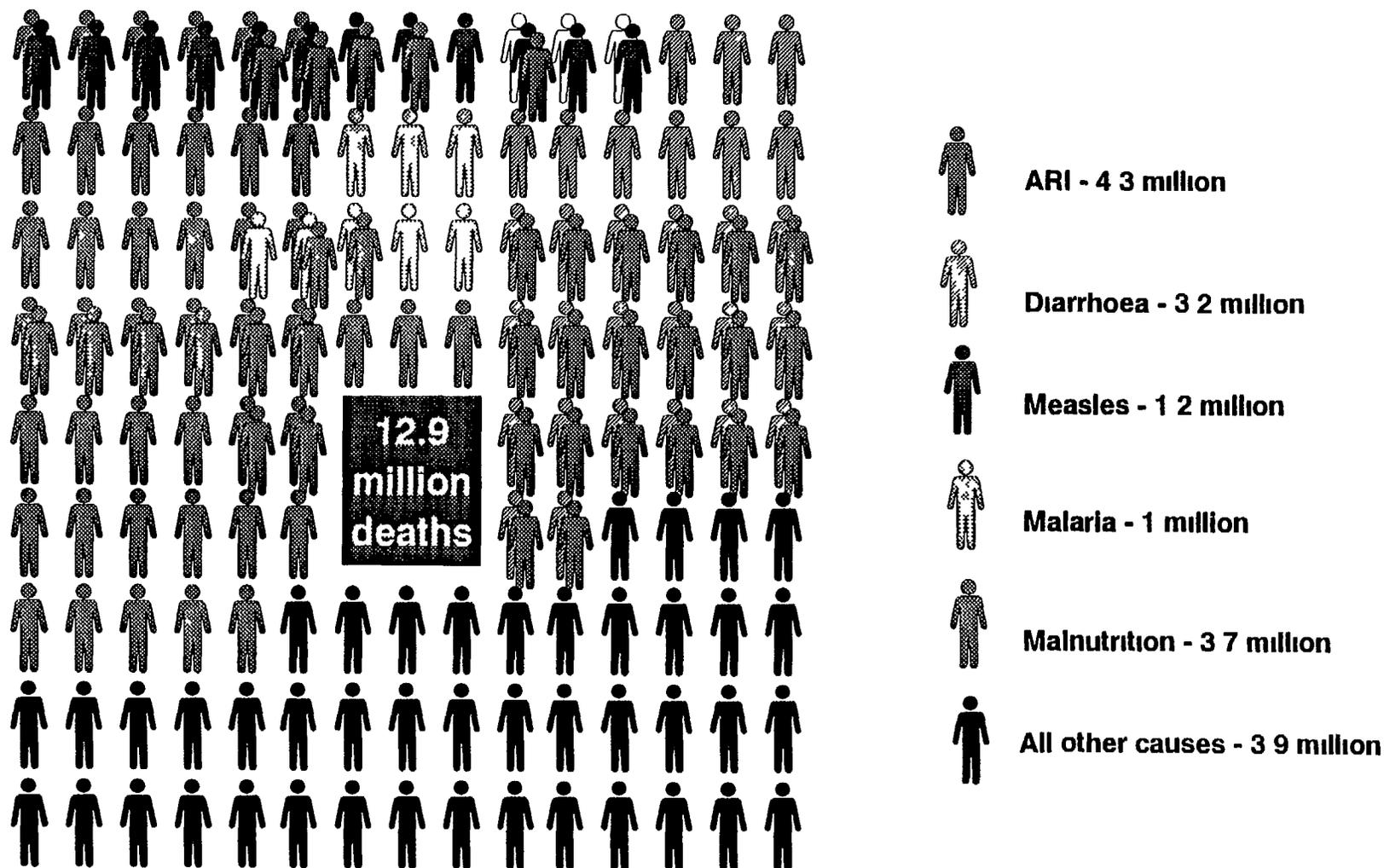
DALY = Disability-adjusted life year

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 |

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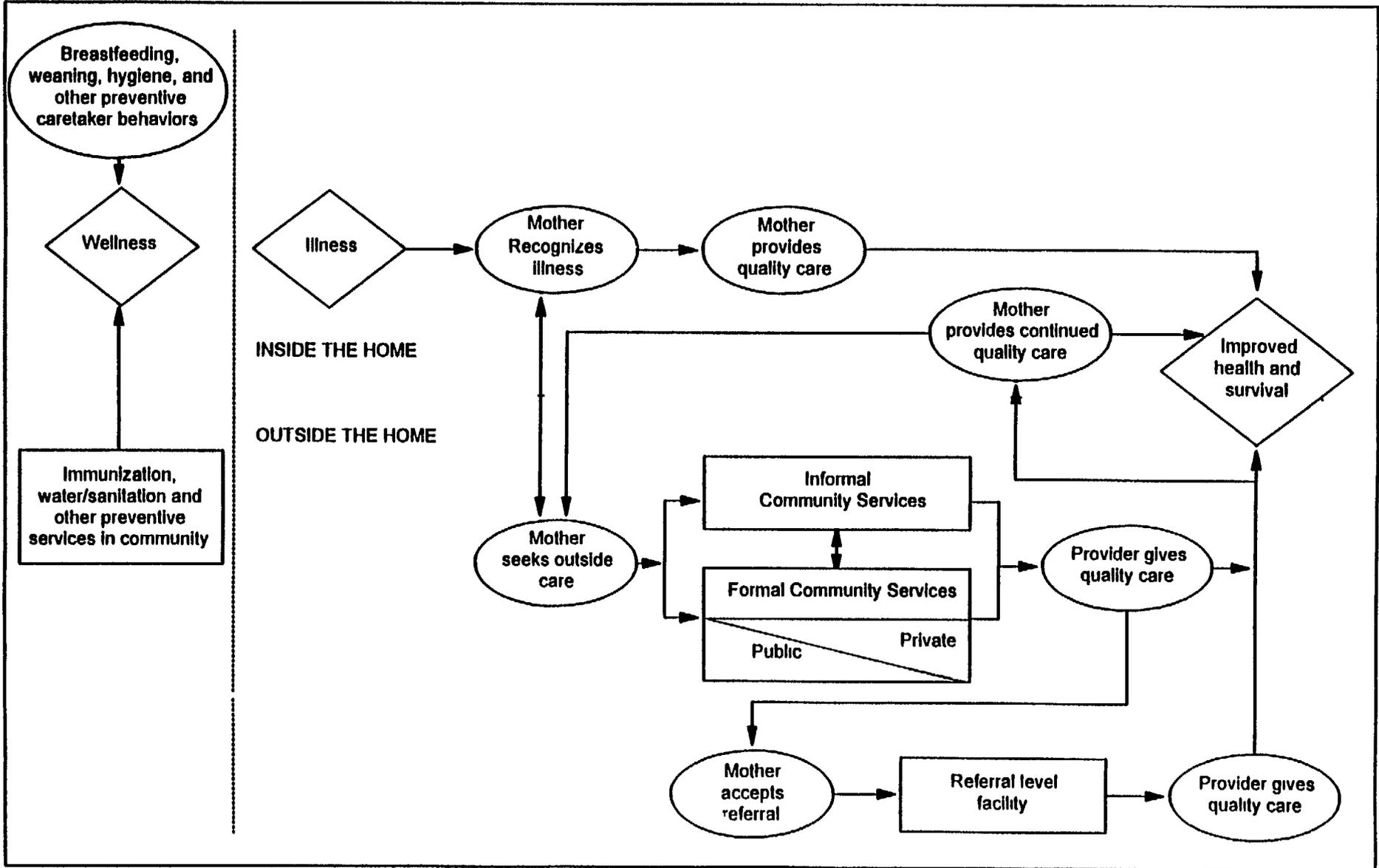
Almost three quarters of childhood deaths are associated with just 5 causes



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Pathway to Survival



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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 | |
| Total DALYs lost (millions) | 250 | | 268 | | 67 | | 75 | |
| Diseases and injuries | Rank | Percent | Rank | Percent | Rank | Percent | Rank | Percent |
| 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 |
| Ascariis | | 0.0 | | 0.0 | | 7.6 | | 7.1 |
| Trichurias | | 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 | 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

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 at 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.

☐ Training site requirements

The criteria for selecting the sites for clinical practice are described in the Course Directors 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 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.

☐ 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 hurriedly,

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- * 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

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| <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> | |

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| <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?

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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

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

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

2 7 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)?

2 8 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 _____

2 9 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 | | |

2 10 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

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 | <hr/> | Y | N | Don't know |
| 2 | <hr/> | 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 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.

01

**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 (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 1 Case management in health facilities of children with diarrhea (include any policies relating to dysentery or cholera) | National CDD program MCH | Y N DK | Y N DK | Public Private | Y N DK |
| 3 2 Home case management of diarrhea, including recommended home fluids and foods during and after diarrhea | National CDD 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 | 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 | 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 6 Malaria prevention and case management</p> | <p>Malaria program</p> | <p>Y N DK</p> | <p>Y N DK</p> | <p>Public Private</p> | <p>Y N DK</p> |
| <p>3 7 Nutrition management and advice for sick children (vitamin A supplementation ? Growth monitoring?)</p> | <p>Nutrition MCH</p> | <p>Y N DK</p> | <p>Y N DK</p> | <p>Public Private</p> | <p>Y N DK</p> |

| Questions and Possible Source of Information Regarding Policies Relevant to ICM | | | | | |
|---|--|----------------------------|--|--|-----------------------------|
| Questions | 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 |

| 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? |
| What is the national policy on (Summarize major policy items) | (Write or circle source used) | | | | |
| 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.

**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

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 D K | Y N D K | Y N D K | Y N D K |
| Chloramphenicol im | Y N D K | Y N D K | Y N D K | Y N D K |
| Chloroquine tablets | Y N D K | Y N D K | Y N D K | Y N D K |
| Cotrimoxazole pediatric/adult tablets | Y N D K | Y N D K | Y N D K | Y N D K |
| Erythromycin tablets | Y N D K | Y N D K | Y N D K | Y N D K |
| Gentamicin im | Y N D K | Y N D K | Y N D K | Y N D K |
| Naladixic acid tablets | Y N D K | Y N D K | Y N D K | Y N D K |

| 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 1m | 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 DK | 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 |

| 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 DK | Y N DK | Y N DK | Y N DK |

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 DK
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 | | | |

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- | | | | |
|----|--|---|---|
| 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 |

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| | | | |
|----|--|---|---|
| 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? | Y | N |
| | If yes, how many cases of in the last five days | | |
| | 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 |
| i | 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? Y N
 If yes, specify
- 14 Did the instructors provide feedback during practical sessions? Y N
- 15 During the training did you prepare plan of action? Y N
 If yes----> 16, if no----> 18)
- 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
- a general condition
 - b sunken eyes
 - c tears
 - d offer fluid to see thirst
 - e skin pinch
 - f other, specify
- 31 If the child has fever,
What do you ask about?
- a is the child vomiting
 - b other, specify
- What do you look for or do?
- c measure temperature
 - d look or feel for neck stiffness
 - e look for runny nose
 - f look for signs suggesting measles
 - g other, specify
- 32 What are the signs suggesting that a child has measles?
- a generalized rash
 - b cough, runny nose, or red eyes
- If the child has measles, what did you look for
- c sore mouth
 - d pus draining from the eye
 - e clouding of the cornea
 - f other, specify
- 33 In addition to the above, what else do you check all sick children for?
- a Immunization status
 - b Nutritional status malnutrition, anaemia
 - c Ear problem
 - d Other problems, specify
- 34 What do you look for, or do, when you check a child for malnutrition and anaemia?
- a visible severe wasting
 - b eyelid pallor
 - c clouding of cornea
 - d foamy patches
 - e edema of both feet
 - f weigh the child
 - g determine weigh for age
 - h 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 |

- 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

SICK CHILD AGE 2 MONTHS UP TO 5 YEARS



World Health Organization
Division of Diarrhoeal and
Acute Respiratory Disease Control



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

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

(Urgent pre-referral treatments are in bold print)

| | | |
|---|---|--|
| <ul style="list-style-type: none"> • Any general danger sign or • Chest indrawing or • Stridor in calm child | <p>SEVERE PNEUMONIA OR VERY SEVERE DISEASE</p> | <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 | <p>PNEUMONIA</p> | <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 |
| <p>No signs of pneumonia or very severe disease</p> | <p>NO PNEUMONIA COUGH OR COLD</p> | <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 |

Does the child have diarrhoea?

IF YES, ASK

For how long?
Is there blood in the stool?

LOOK AND FEEL

Look at the child's general condition
Is the child

Lethargic or unconscious?
Restless and irritable?

Look for sunken eyes

Offer the child fluid Is the child

Not able to drink or drinking poorly?
Drinking eagerly thirsty?

- Pinch the skin of the abdomen
Does it go back

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 Give fluid for severe dehydration (Plan C) OR <i>If child also has another severe classification Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way Advise the mother to continue breastfeeding</i> 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) <i>If child also has a severe classification Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way Advise mother to continue breastfeeding</i> 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"> <i>Treat for 5 days with an oral antibiotic recommended for Shigella in your area</i> Follow up in 2 days |
|--------------------|------------------|--|

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

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Does the child have fever?

(by history or feels hot or temperature 37.5 C** or above)

| | | | | | | | | | | | | | |
|--|---|--|---|---|--|---|---|---|--|--|--|---------------------------------|---|
| <p>IF YES Decide Malaria Risk high or low</p> <p>THEN ASK</p> <p>For how long? If more than 7 days has fever been present every day?</p> <ul style="list-style-type: none"> Has the child had measles within the last 3 months? | <p>LOOK AND FEEL</p> <ul style="list-style-type: none"> Look or feel for stiff neck Look for runny nose <p>Look for signs of MEASLES</p> <p>Generalized rash and One of these cough runny nose or red eyes</p> | <p>Classify FEVER</p> | <p>High Malaria Risk</p> | | | | | | | | | | |
| | | | <p>HIGH MALARIA RISK</p> <table border="1"> <tr> <td>Any general danger sign or Stiff neck</td> <td>VERY SEVERE FEBRILE DISEASE</td> <td> <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 </td> </tr> <tr> <td>Fever (by history or feels hot or temperature 37.5 C or above)</td> <td>MALARIA</td> <td> <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 </td> </tr> </table> | | | 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 | 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 | | |
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| <p>If the child has measles now or within the last 3 months</p> <ul style="list-style-type: none"> Look for mouth ulcers Are they deep and extensive? Look for pus draining from the eye Look for clouding of the cornea | <p>Low Malaria Risk</p> | <p>LOW MALARIA RISK</p> <table border="1"> <tr> <td>Any general danger sign or Stiff neck</td> <td>VERY SEVERE FEBRILE DISEASE</td> <td> <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 </td> </tr> <tr> <td>NO runny nose and NO measles and NO other cause of fever</td> <td>MALARIA</td> <td> <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 </td> </tr> <tr> <td>Runny nose PRESENT or Measles PRESENT or • Other cause of fever PRESENT</td> <td>FEVER - MALARIA UNLIKELY</td> <td> <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 </td> </tr> </table> | | | 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 | 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 | 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 |
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| <p>If MEASLES now or within last 3 months Classify</p> | <p>SEVERE COMPLICATED MEASLES***</p> | <ul style="list-style-type: none"> Any general danger sign or Clouding of cornea or Deep or extensive mouth ulcers | | | <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 | | | | | | | | |
| | | <p>Pus draining from the eye or Mouth ulcers</p> | | | <p>MEASLES WITH EYE OR MOUTH COMPLICATIONS***</p> | <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 | | | | | | | |
| | | <p>Measles now or within the last 3 months</p> | | | <p>MEASLES</p> | <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 stndor 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 |

THEN CHECK FOR MALNUTRITION AND ANAEMIA

| | | | | |
|---|---|---|---|--|
| <p>LOOK AND FEEL</p> <p>Look for visible severe wasting</p> <p>Look for palmar pallor Is it</p> <p>Severe palmar pallor? Some palmar pallor?</p> <p>Look for oedema of both feet</p> <p>Determine weight for age</p> | <p>Classify NUTRITIONAL STATUS</p> | <ul style="list-style-type: none"> • Visible severe wasting or • Severe palmar pallor or • Oedema of both feet | <p>SEVERE MALNUTRITION OR SEVERE ANAEMIA</p> | <ul style="list-style-type: none"> ▶ Give Vitamin A ▶ Refer URGENTLY to hospital |
| | | <ul style="list-style-type: none"> • Some palmar pallor or • Very low weight for age | <p>ANAEMIA OR VERY LOW WEIGHT</p> | <ul style="list-style-type: none"> ▶ Assess the child's feeding and counsel the mother on feeding according to the FOOD box on the <i>COUNSEL THE MOTHER</i> 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 |
| | | <p>Not very low weight for age and no other signs of malnutrition</p> | <p>NO ANAEMIA AND NOT VERY LOW WEIGHT</p> | <ul style="list-style-type: none"> ▶ 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 <i>COUNSEL THE MOTHER</i> 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



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 | | | AMOXICILLIN ▶ 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 |
| 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 |
| 2 months up to 4 months (4 < 6 kg) | | 1/4 | | |
| 4 months up to 12 months (6 < 10 kg) | 1/2 | 1/2 | | |
| 12 months up to 5 years (10 - 19 kg) | 1 | 1 | | 1/4 |

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 Ferrous sulfate 200 mg + 250 mcg Folate (60 mg elemental iron) | IRON SYRUP 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 _____

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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

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** }

See **COUNSEL THE MOTHER** chart

3 **WHEN TO RETURN** }

► 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 20 ml/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

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

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



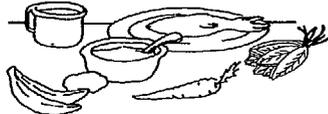
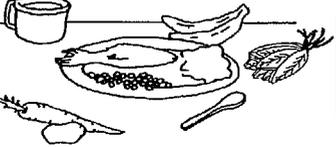
FOOD

▶ **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?

► Feeding Recommendations During Sickness and Health

| | | | | |
|---|---|--|---|--|
| <p>Up to 4 Months of Age</p>  <ul style="list-style-type: none"> • Breastfeed as often as the child wants, day and night at least 8 times in 24 hours • Do not give other foods or fluids | <p>4 Months up to 6 Months</p>  <ul style="list-style-type: none"> • 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 <p>add complementary foods (listed under 6 months up to 12 months)</p> <p>Give these foods 1 or 2 times per day after breastfeeding</p> | <p>6 Months up to 12 Months</p>  <ul style="list-style-type: none"> • Breastfeed as often as the child wants • Give adequate servings of _____ <p>3 times per day if breastfed, 5 times per day if not breastfed</p>  | <p>12 Months up to 2 Years</p>  <ul style="list-style-type: none"> • Breastfeed as often as the child wants • Give adequate servings of _____ <p>or family foods 5 times per day</p>  | <p>2 Years and Older</p>  <ul style="list-style-type: none"> • 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

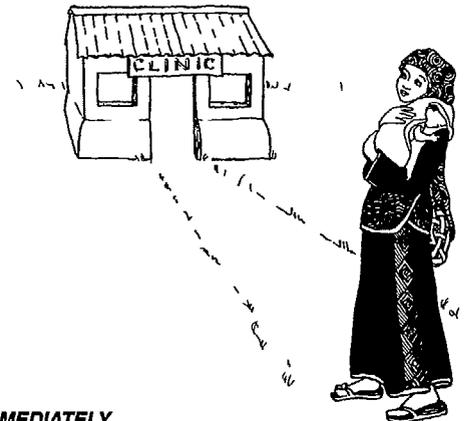
FOLLOW UP VISIT

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 |

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▶ ***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



ASSESS, CLASSIFY AND TREAT THE SICK YOUNG INFANT AGE 1 WEEK UP TO 2 MONTHS

ASSESS

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

CLASSIFY

USE ALL BOXES THAT MATCH INFANT'S SYMPTOMS AND PROBLEMS TO CLASSIFY THE ILLNESS

IDENTIFY TREATMENT

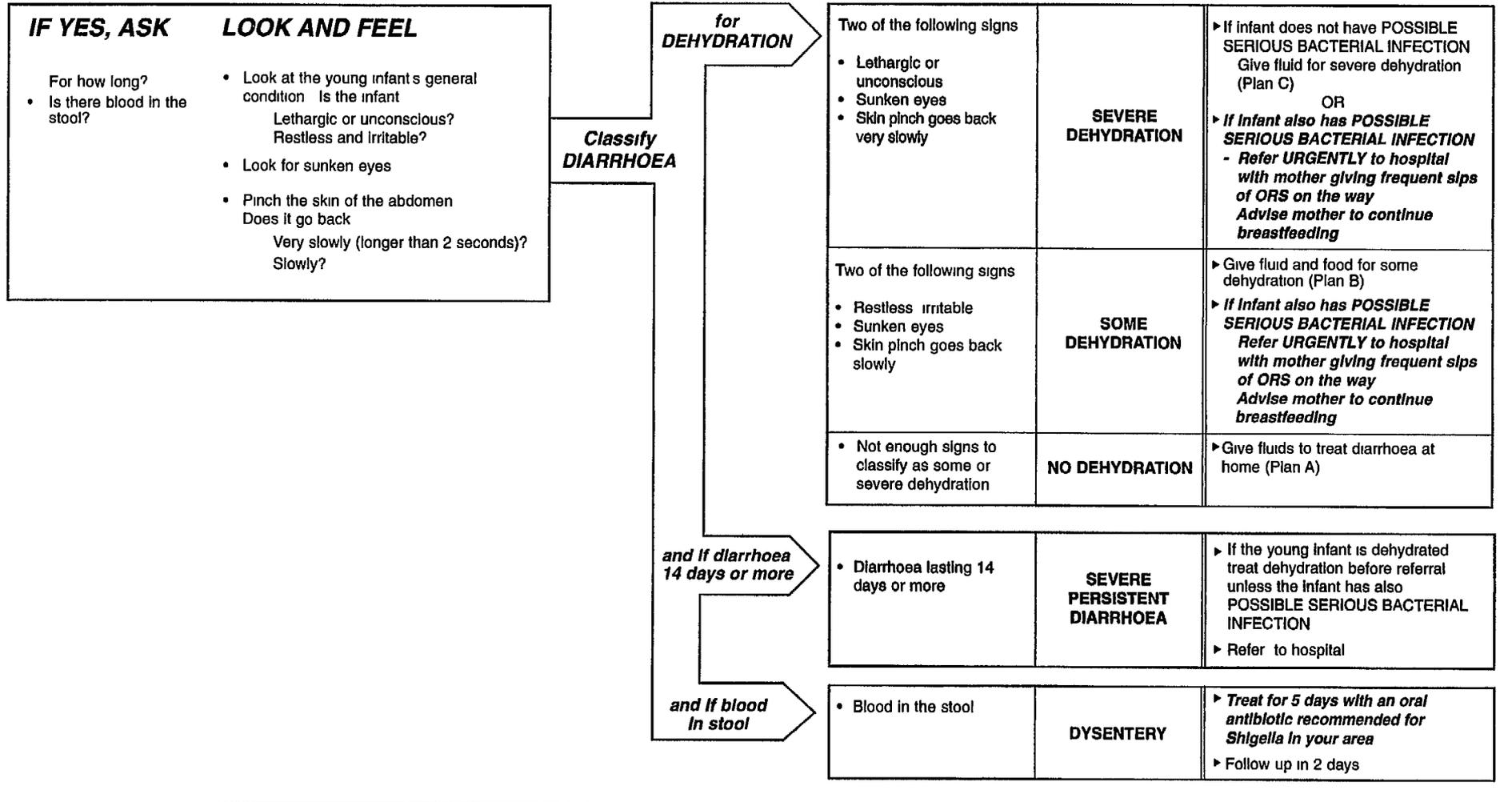
| CHECK FOR POSSIBLE BACTERIAL INFECTION | | SIGNS | CLASSIFY AS | TREATMENT* (Urgent pre-referral treatments are in bold print) |
|---|---|--|--|---|
| <p>ASK</p> <ul style="list-style-type: none"> • Has the infant had convulsions? | <p>LOOK, LISTEN, FEEL</p> <ul style="list-style-type: none"> • Count 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? | <p><i>Classify ALL YOUNG INFANTS</i></p> | <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"> • 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 |

YOUNG INFANT MUST BE CALM

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THEN ASK:

Does the young infant have diarrhoea?



*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><i>Classify FEEDING</i></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 style="text-align: center;">AND</p> <p style="text-align: center;">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 • 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 • If not breastfeeding at all • 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> <p>Is the infant able to attach? <i>no attachment at all not well attached good attachment</i></p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>TO CHECK ATTACHMENT LOOK FOR</p> <ul style="list-style-type: none"> Chin touching breast Mouth wide open Lower lip turned outward More areola visible above than below the mouth <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> • Clear a blocked nose if it interferes with breastfeeding • 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

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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

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? 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 • Is the infant able to attach? To check attachment look for <ul style="list-style-type: none"> 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 style="text-align: center;"><i>no attachment at all not well attached good attachment</i></p> • Is the infant suckling effectively (that is slow deep sucks sometimes pausing)? <i>not suckling at all not suckling effectively suckling effectively</i> • Look for ulcers or white patches in the mouth (thrush) | |
| <p>CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS Circle immunizations needed today</p> <p style="text-align: center;"> <input type="checkbox"/> BCG <input type="checkbox"/> DPT 1 <input type="checkbox"/> DPT 2 <input type="checkbox"/> OPV 0 <input type="checkbox"/> OPV 1 <input type="checkbox"/> OPV 2 </p> | <p>Return for next immunization on _____</p> <p style="text-align: center;">(Date)</p> |

ASSESS OTHER PROBLEMS

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? ___

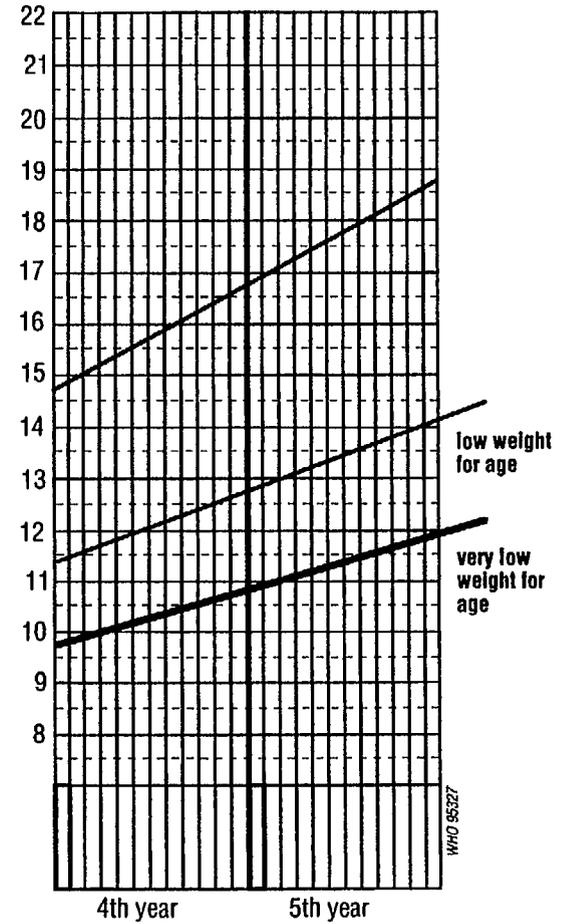
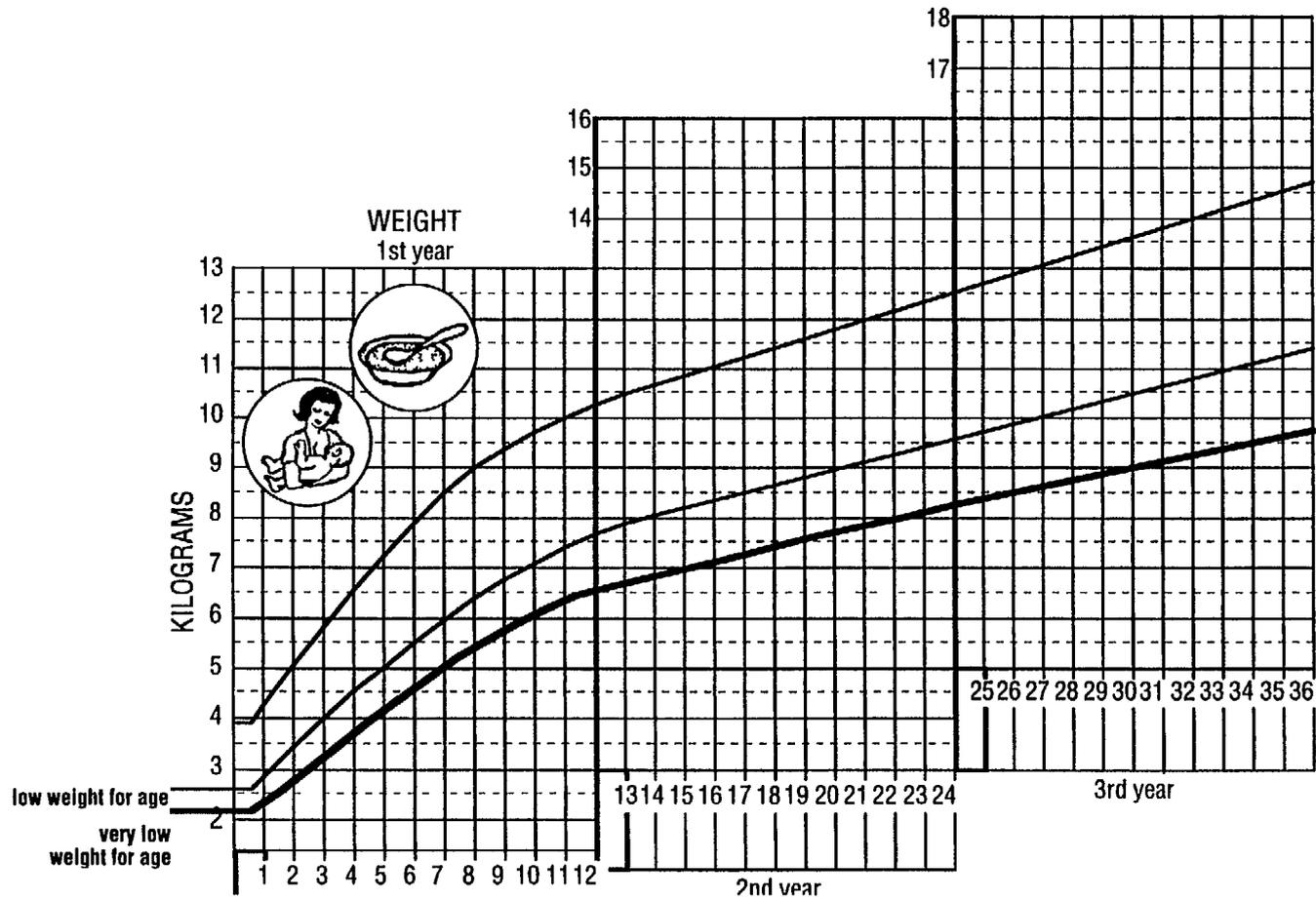
ASSESS (Circle all signs present)

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> <ul style="list-style-type: none"> • For how long? ___ Days • Count the breaths in one minute _____ breaths per minute Fast breathing? • Look for chest indrawing • Look and listen for stridor | |
| <p>DOES THE CHILD HAVE DIARRHOEA? Yes ___ No ___</p> <ul style="list-style-type: none"> • For how long? ___ Days • Is there blood in the stool? • Look at the child's general condition Is the child Lethargic or unconscious? Restless and irritable? • Look for sunken eyes • Offer the child fluid Is the child Not able to drink or drinking poorly? Drinking eagerly thirsty? • Pinch the skin of the abdomen Does it go back Very slowly (longer than 2 seconds)? Slowly? | |
| <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> <ul style="list-style-type: none"> • For how long? ___ Days • If more than 7 days has fever been present every day? • Has child had measles within the last 3 months? • 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 | |
| <p>If the child has measles now or within the last 3 months</p> <ul style="list-style-type: none"> • Look for mouth ulcers If Yes are they deep and extensive? • Look for pus draining from the eye • Look for clouding of the cornea | |
| <p>DOES THE CHILD HAVE AN EAR PROBLEM? Yes ___ No ___</p> <ul style="list-style-type: none"> • Is there ear pain? • Is there ear discharge? If Yes for how long? ___ Days • Look for pus draining from the ear • Feel for tender swelling behind the ear | |
| <p>THEN CHECK FOR MALNUTRITION AND ANAEMIA</p> <ul style="list-style-type: none"> • Look for visible severe wasting • Look for palmar pallor Severe palmar pallor? Some palmar pallor? • Look for oedema of both feet • Determine weight for age Very Low ___ Not Very Low ___ | |
| <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> <ul style="list-style-type: none"> • Do you breastfeed your child? Yes ___ No ___ If Yes how many times in 24 hours? ___ times Do you breastfeed during the night? Yes ___ No ___ • Does the child take any other food or fluids? Yes ___ No ___ If Yes what food or fluids? _____ How many times per day? ___ times 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? Yes ___ No ___ If Yes how? _____ | <p>Feeding Problems</p> |

ASSESS OTHER PROBLEMS

WEIGHT FOR AGE CHART



MANAGEMENT OF CHILDHOOD ILLNESS

ADAPTATION GUIDE

A guide to identifying necessary adaptations of clinical policies and guidelines and to adapting the charts and modules for the WHO/UNICEF course

Part 1

- A Deciding what Adaptations are Needed and Identifying Appropriate Adaptations
- B Technical Basis for Adapting Clinical Guidelines, Feeding Recommendations, and Local Terms

July 1996
Working Draft Version 2 For Limited Distribution Only
World Health Organization
- Division of Child Health and Development

This document is one of three which comprise this draft *Adaptation Guide*

- Part 1** **Section A** Deciding What Adaptations are Needed and Identifying Appropriate Adaptations
 Section B Technical Basis for Adapting Clinical Guidelines, Feeding Recommendations and Local Terms
- Part 2** **Study Protocols**
 Section C Protocol for Identifying Local Terms
 Section D Protocol for Adapting the Feeding Recommendations
 Section E Protocol for Designing and Pre-testing an Adapted Mother's Card
- Part 3** **Producing the Adapted Materials**
 Section F Procedures for Adapting the Charts and Modules
 Section G Recording Form and Module Changes Required for Specific Chart Adaptations

This is a working draft. Sections B and G are incomplete. Additional sections and an updated version will be provided to consultants and national staff involved in adaptation.

Please provide comments and further input to WHO/CHD Geneva Switzerland

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Interview form C 1 Information from caretakers

Annex C 2 Guide for Validation of Terms with Caretakers

Recording form C 2 Validation of Terms with Caretakers

Tabulation Form C 2 Comparison of Terms

Annex C 3 Sample local terms

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|--|

Introduction adaptation of the food box, "Counsel the mother about feeding problems" box and the module Counsel the Mother

Step D1 Identify data needs and sources of informations

Step D2 Develop draft feeding recommendations

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Step D4 Revise the recommendations

Step D5 Discuss the recommendations with local experts

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and, if necessary, all of the facilitator guides and the *Course Director Guide*

| | | |
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|--|

Detailed lists of changes required for each guideline change (other than fill-in-the blank) and revised classification tables and other chartboxes

- G 1** Add management of acute convulsions
- G 2** Delete low malaria risk, so that the risk of malaria is always considered to be high
- G 3** Add a category for no malaria risk and add questions to assess travel to malarious areas
- G 4** Delete cotrimoxazole as recommended treatment for a child classified as having both PNEUMONIA and MALARIA, so the child will receive an antibiotic for PNEUMONIA and an antimalarial for MALARIA
- G 5** Add case management of relapsing fever
- G 6** Add other antimicrobial options
 - G6 1 Oral antibiotic for pneumonia and ear infection substitute a first-line oral antibiotic other than cotrimoxazole
 - G6 2 Oral antibiotic for pneumonia and ear infection add an additional second-line antibiotic
 - G6 3 Oral antibiotic for *Shigella* add a second-line antibiotic which is not currently on the chart (example shown is ciprofloxacin)
 - G6 4 Intramuscular antibiotic change the pre-referral antibiotic or add an alternative to chloramphenicol
 - G6 5 Oral antimalarial substitute a first-line oral antimalarial other than chloroquine
 - G6 6 Oral antimalarial add an additional second-line oral antimalarial (example shown is sulfalene-pyrimethamine)
- G 7** Add instructions not to give iron if a child has sickle cell anaemia

- G 8** Add vitamin A syrup as a possible formulation
- G 9** Add vitamin A supplementation for all children
- G10** Add an exercise on charting
- G11** Add management of wheezing
 - G11 1 Including both treatment of wheezing and change in the classification of SEVERE PNEUMONIA if a child with wheezing and chest indrawing responds well to rapid-active bronchodilators
 - G11 2 Treatment of wheezing only
 - G11 3 Wheezing management taught as follow-on training, after the course (to be added later)
- G12** Add multivitamins in the outpatient management of persistent diarrhoea
- G13** Corrections in the generic materials which always need to be made (in development- please request up-to-date version from WHO CHD)
- Appendix G-1 Print-outs of diskette files files of major text additions and adapted recording forms for specific adaptations