

Community Drug Management for Childhood Illness

Assessment Manual

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ACRONYMS

AED	Academy for Educational Development
ARI	acute respiratory infection
C-DMCI	Community Drug Management for Childhood Illness
CQ	chloroquine
EDL	essential drugs list
IMCI	Integrated Management of Childhood Illness
IRB	institutional review board
MOH	Ministry of Health
MSH	Management Sciences for Health
NGO	nongovernmental organization
NMW	national minimum wage
ORS	oral rehydration solution
RPM Plus	Rational Pharmaceutical Management Plus [Program]
SSS	sugar-salt solution
STG	standard treatment guideline
WHO	World Health Organization
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development

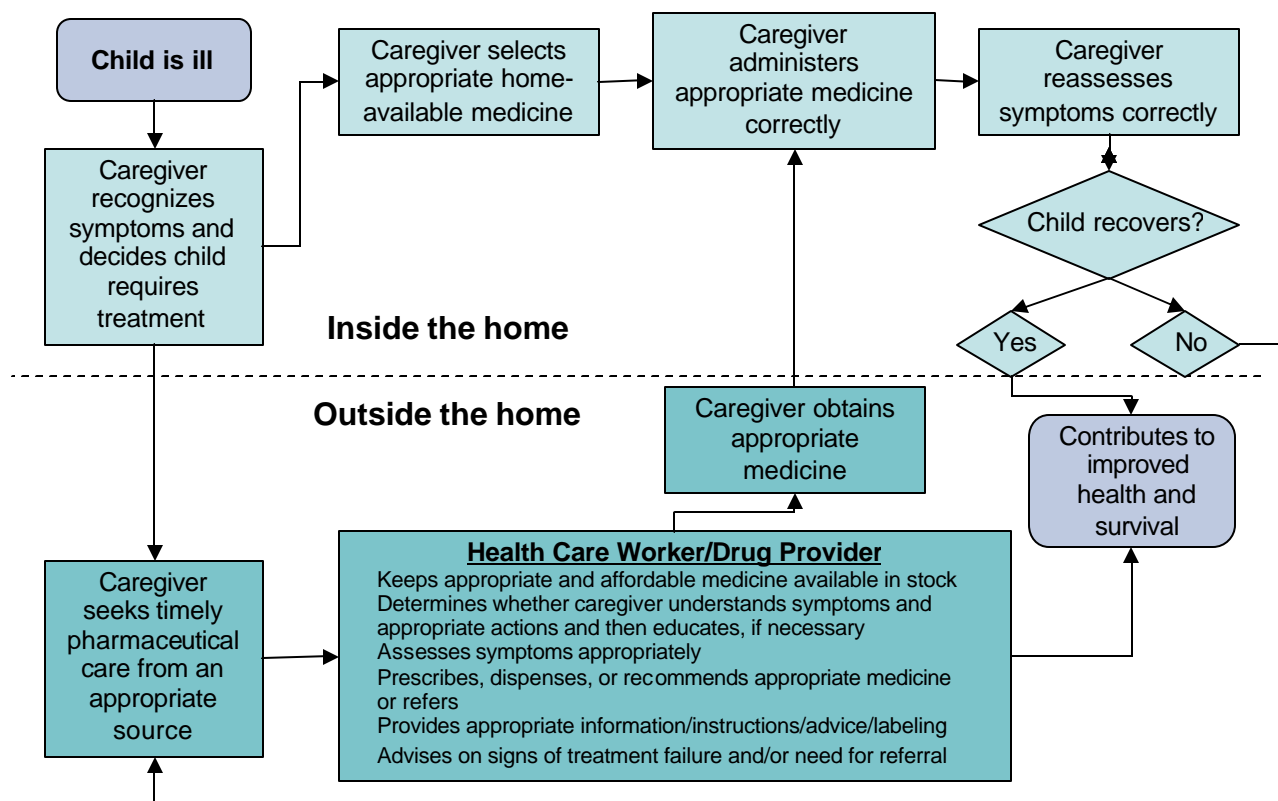
CHAPTER 1. INTRODUCTION AND OBJECTIVES

Both availability and rational use of pharmaceutical products are critical to successful implementation of the Integrated Management of Childhood Illness (IMCI) strategy of the World Health Organization (WHO) and the United Nations Children’s Fund (UNICEF). The IMCI health promotion strategy addresses the leading causes of global mortality among children under five years old: malaria, diarrhea, acute respiratory infection (ARI), measles, and malnutrition. Most cases of malaria, pneumonia, and diarrhea are treated at home rather than in public health facilities. Thus, efforts to reduce mortality and morbidity must focus on ensuring that correct treatment is available at the community level and that families seek, obtain, and appropriately use necessary medicines. This is an important aspect of the third component of IMCI: community IMCI, which focuses on family and community practices. Yet, in most settings, little information exists to help district health officers, managers of nongovernmental programs, and other program planners design effective interventions for improving availability and use of medicines at the community level. The goal of assessing the availability and appropriate use of medicines at the community level is to provide district health officers and program managers with the information they need in order to make sound decisions about interventions for ensuring that appropriate medicines are available and properly used. Appropriate use of medicines may also help slow the development of antimicrobial resistance to medicines, thereby reducing the likelihood that medicines will become ineffective.

This manual provides guidance on how to assess community drug management for childhood illness (C-DMCI). In the chapters that follow, you will learn how to prepare for, administer, analyze, and interpret data from *problem identification surveys of households* and *providers*—the first step in ensuring that interventions target the right audience (i.e., caregivers and/or providers/drug vendors) and address the most critical problem areas.

Introduction

Many factors influence whether medicines are available and used appropriately, and ultimately, whether young children recover from potentially life-threatening illnesses. The diagram in Figure 1 details the framework for the availability and appropriate use of medicines for childhood illnesses at the community level.



Source. Adapted from Basics Pathway to Survival.

Figure 1. Framework for appropriate community drug management for childhood illness

As a conceptual model, the framework is a simplistic representation of highly complex processes. It is not intended to comprehensively depict household decision-making processes or pharmaceutical management at health facilities. Indeed, every element within the framework will be influenced to varying degrees by a wide range of external factors (such as national drug policies, health systems management, infrastructure, social norms, and cultural conceptions of illness). The framework attempts to depict the critical interaction between caregivers of young children and health care workers/drug providers. Both caregivers and drug providers have important roles in recognizing and appropriately treating children with symptoms of malaria, pneumonia, or diarrhea. First, the framework distinguishes events that take place inside the home from those that take place outside the home, because the two will be influenced by different factors. Second, the framework depicts an interactive process between the caregiver and the health care worker/drug provider, where their joint effort contributes to better health. Finally, the framework shows the potentially repetitive, or cyclical, nature of this interaction if the child does not recover with the first medicines administered.

From the perspective of a program manager, the framework provides an organized inventory of potential “problem areas.” When any one of the conditions is not met, children may fail to recover, unnecessary resources are used, and drug resistance may develop. Therefore, program

managers need to be able to identify these problem areas, so that scarce resources may be used to direct effective interventions at those elements of the framework that require strengthening. This C-DMCI assessment is a *problem identification tool* that provides program managers with information on which aspects of the framework require intervention by identifying certain behaviors or situations linked to factors that should be explored (a phase which this tool does not undertake). Getting this information is the critical first step in determining and implementing effective interventions. A separate guide is being developed to help program managers select and develop effective interventions for improving availability and use of medicines at community level based on the information from the C-DMCI assessment.

Objectives

The principal objective of the C-DMCI assessment is identifying problem areas within the framework—specifically, assessing any problems in the following areas of responsibility—

Caregiver

1. Recognizes symptoms and decides child requires treatment
2. Selects appropriate medicine available in the home
3. Seeks timely pharmaceutical care from an appropriate source
4. Obtains appropriate medicine
5. Administers appropriate medicine correctly
6. Reassesses symptoms correctly

Health care worker/drug provider

7. Keeps appropriate and affordable medicine available in stock
8. Determines whether caregiver understands symptoms and appropriate actions and then educates, if necessary
9. Assesses symptoms appropriately
10. Prescribes, dispenses, or recommends appropriate medicine or refers
11. Provides appropriate information/instructions/advice/labeling
12. Advises on signs of treatment failure and/or need for referral

And finally, the C-DMCI assessment will—

13. Identify additional information required to design and implement effective interventions

Two elements of the framework shown in Figure 1 are not covered by the C-DMCI assessment: 8, the health care worker/drug provider's determination whether the caregiver understands symptoms and appropriate actions, and 12, the health care worker/drug provider's advice on the signs of treatment failure and/or need for referral.

Features of the C-DMCI Assessment

The C-DMCI assessment is a means of obtaining quantitative, population-based, district-level information on what is occurring at the community level with regard to availability and appropriate use of medicines. This assessment is designed to yield information on the relative magnitude of problems within the framework. The survey measures the extent of behavior within a group, identifying frequencies with which variables of interest occur, without the need for power or significance testing. The tool has been developed so that program managers will know whether there is a problem in a specific element of the framework (e.g., in timeliness of action). Although this tool will not be able to distinguish whether, for example, 41 or 46 percent of children with fever received appropriate medicines, it will help you determine whether an adequate proportion of children with fever receive the appropriate medicine. Some of the main features and assumptions of the C-DMCI tool are described below.

- The C-DMCI assessment is intended to provide a cross-sectional analysis of the current availability and use of medicines at the community level.
- The assessment has two components: a *household survey* of caregivers of young children who have recently experienced symptoms of illnesses addressed by IMCI and a *provider survey* administered in formal providers/drug outlets (e.g., in health facilities) and informal providers/drug outlets (e.g., among market vendors and in general stores).
- The assessment is conducted in one district (or multiples of one district) to describe the situation in that district without comparing areas within the district (adaptation of the assessment to compare several areas is covered in Annex 1).
- The assessment focuses on the major causes of child mortality, and in particular, malaria, diarrhea, and pneumonia. Annex 1 describes how to adapt the assessment to focus on malaria. Annexes 5–8 provide the instruments adapted for adult and child malaria.
- Although the assessment is not designed to be a monitoring or evaluation tool as such, relevant indicators and corresponding survey questions could be used to develop a monitoring tool or an evaluation tool. For these tools to be useful, your intervention would need to target changes in those specific indicators.
- Computers will be used to analyze the data (although no custom software is currently provided).
- Local schoolteachers or other non-health staff can be trained as data collectors.

Audience

This manual is intended primarily for district-level program managers working on child survival and pharmaceutical management issues. It is anticipated that they will commission and oversee the assessment, which will be conducted by an experienced assessment coordinator. Because this manual is aimed at readers who are familiar with the topics of child survival and pharmaceutical

management and who have some experience conducting field research and training data collectors, certain topics and details are not included. For example, the authors provide information on how to sample the assessment population but do not discuss theoretical principles of sampling. As another example, although the document contains suggestions of what techniques (e.g., role-plays) might be used in training data collectors, individuals providing training are assumed to have experience in their use.

Organization of the Manual

This manual is organized into eight chapters. Chapter 1 introduces the assessment objectives and Chapter 2 leads the reader through the steps necessary to prepare for fieldwork, with the exception of sampling, which is discussed separately in Chapter 3. An overview of how to train field supervisors, data collectors, and data analysts is contained in Chapter 4. Chapter 5 details how to perform and supervise data collection, and how to prepare data for analysis. Data analysis and generation of indicators are covered in Chapter 6. Chapter 7 presents information on how to interpret findings and report results so that program managers can identify the most important problem areas in availability and use of medicines for childhood illnesses. Chapter 8 provides the reader with guidance on how to prioritize the problem areas that have been identified. Finally, at the end of the manual, a series of annexes contain the data collection instruments, as well as a range of other information (such as sample training schedules and blank evaluation standard forms) and guidance on adapting the tools to other situations, including the adaptation of the survey instruments to focus on malaria.

CHAPTER 2. PREPARATION

Introduction

The C-DMCI assessment consists of two concurrent surveys, one of households and another of providers/drug outlets. Caregivers of children under five with a recent illness are interviewed in their homes, and health providers and other people who dispense medicines are interviewed at their place of work. A team of data collectors, field supervisors, and an assessment coordinator uses questionnaires to collect information. (The questionnaires for both of these surveys are found in the annexes.) The household survey uses a cluster sampling approach described in Chapter 3. In order to finalize the questionnaires, you will need to develop a medicine reference list, a tracer list, and a standard treatment guideline (STG) table. This chapter explains these and other steps needed to prepare for the assessment.

You will need to make a number of technical decisions and logistical arrangements before you begin training and fieldwork. The individuals who must be involved in these decisions and tasks will vary, depending on the context. This chapter highlights the key decisions and actions that must occur prior to training and fieldwork. It does not cover detailed logistical activities (e.g., recruiting staff). A list of preparatory steps follows. Depending on your circumstances, you may wish to alter their order, ensuring that you complete all tasks in a logical sequence.

1. Engage stakeholders
2. Prepare a budget
3. Assemble assessment team
4. Decide when to collect data
5. Develop medicine reference list, tracer list, and STG table
6. Adapt questionnaires to local context
7. Decide how to translate questionnaires
8. Adapt indicators to local context and develop indicator evaluation standards
9. Determine sample
10. Address ethical issues, including obtaining consent
11. Prepare identification materials
12. Schedule data collection

The following discussion covers all steps except step 9 (determine sample), which is addressed in the next chapter. You may already know the steps required to set up a district-level survey. However, because this chapter contains information on steps unique to this assessment and vital for its success, we urge you to read it thoroughly, paying particular attention to steps 5, 6, and 8.

Step 1. Engage Stakeholders

Early in the C-DMCI assessment process, it is important to engage those district-level individuals who will use the results for program planning or resource allocation. Involve all parties working in district-level child health and pharmaceutical management, broadly speaking (e.g., those in primary care, medicine procurement). Since the results of this assessment will be

used to develop interventions that will be implemented in local communities, it is critical to involve some front-line health workers, drug providers, and community representatives. It is also important to engage local and international nongovernmental organizations (NGOs) working in the district. If you need their expertise and resources, or if assessment results may have implications beyond the district level, you will also want to involve people from the regional and central levels of the Ministry of Health (MOH) or major country donors (e.g., WHO, UNICEF, USAID). How you work with these different groups of people will vary from place to place, but you should orient them to the purpose of the assessment, provide an opportunity for the various stakeholders to have input to the assessment process, and, most important, discuss the many ways that this information can be used.

Engaging the appropriate people early helps lay the foundation for the dialogue necessary for developing and implementing solutions to the problems you identify through the assessment. Such involvement also helps ensure that questionnaires and sampling procedures are adapted (as needed) to the local context and increases the likelihood that results will be meaningful to those with decision-making authority. Not only can such participation motivate staff to seek and implement effective solutions to the problems the assessment detects, but it also helps ensure that site selection (e.g., villages or hamlets) is representative and that the survey instruments contain appropriate local terminology.

Step 2. Prepare a Budget

Develop an assessment budget. The basic line items are personnel costs (e.g., salaries, per diems, incentives); transport costs (e.g., car hire and gas); supplies (e.g., paper, clipboards, pens, envelopes for questionnaires, identification badges); photocopying (questionnaires, screening sheets, other materials); and communications (e.g., phone calls). However, the exact content and resulting figures are context-specific.

Step 3. Assemble an Assessment Team

Your assessment's success depends largely on assembling a good team. For one district, you will need an assessment coordinator, field supervisors, data collectors, and data analysts.¹

Additionally, it may be useful to have an administrative assistant for performing organizational tasks, issuing per diems, photocopying, and the like. A discussion of team members' main tasks follows.²

Assessment Coordinator

Although the principal duties of the coordinator may vary, he or she is responsible for the entire assessment and must ensure that all key tasks are accomplished. One critical task is developing

¹ For increased stakeholder engagement, we strongly suggest that local health staff, such as district health management team members, serve as field supervisors. We also recommend that you recruit data analysts from among staff managing health information systems or processing data at the district (or, if necessary, regional) level.

² For more information on staff tasks and qualifications, see Annexes 4A–D, which contain the terms of reference for Senegal C-DMCI staff.

the medicine reference list, tracer list, and STG table (Step 5). Other tasks include, but are not limited to, ensuring translation of the tool into the national language (see Step 7), obtaining information for constructing sampling frames, revising the tool and sampling approach as needed, and acquiring approvals and permission for the assessment from relevant sources. The coordinator will also brief supervisors and train data collectors, oversee pretesting, ensure quality control of data, and manage budgets and contracts. The coordinator should demonstrate strong interpersonal and research skills, attention to detail, and decisiveness in solving problems.

Field Supervisors

The field supervisor, who reports to the coordinator, plans and manages the daily data-collection activities and supervises data collectors, reviewing and coding the questionnaires. In circumstances where all teams cannot meet at the end of a day's data collection, the field supervisor, rather than the coordinator, makes many of the daily decisions. The field supervisor works with the coordinator to obtain village/community-level consent for data collection at that site and meets with local leaders on the day of data collection. Thus, strong "people skills" are important. The field supervisor should participate in pretesting the tool and in training data collectors, and should accompany the team during each day in the field to ensure quality control.

In one district, we recommend two supervisors for the household survey and one supervisor for the provider/drug outlet surveys. But you may need to increase or decrease the number, depending on the size of your data collection teams, the way you want to disperse them for fieldwork, distances between data collection points, and allotted time for fieldwork.

Data Collectors

So that the responses from caregivers and informal providers are not biased by the presence of health workers, the C-DMCI assessment is designed to permit individuals who have little or no previous survey experience and are not health workers,³ such as schoolteachers, to perform data collection. You will need to decide whether your situation warrants applying additional selection criteria.⁴ Most critical is for all data collectors to demonstrate strong people skills and mastery of the questionnaire and respondent selection procedures. Annex 4E contains a sample checklist for interviewing prospective data collectors and ensuring that they meet key criteria.

After participating in training and tool finalization, data collectors are tasked with interviewing respondents and properly filling out the questionnaires. They must identify households and providers/drug outlets, select respondents according to established procedures, conduct interviews accurately, and record responses correctly and legibly.

We recommend a team of 12 data collectors, 8 for the household survey and 4 for the provider/drug outlet survey, but this allocation may vary depending on the specific situation of the district, geographic access, number of local languages, and how you organize data collection. You may opt for a larger or smaller team and divide the data collectors differently.

³ We recommend that you do not use health workers as data collectors, as doing so can bias results.

⁴ For example, in some contexts, it may be preferable to have female rather than male household interviewers, because it may be awkward or difficult for male interviewers to gain access to respondents.

Data Analysts

The job of the data analyst is to enter data on a computer and calculate the household and provider/drug outlet indicators, as described in Chapter 6.⁵ The data analyst may create the database used for data entry⁶ as well as work with the coordinator on presenting results (e.g., using tables, charts, and graphs). We recommend two data analysts: one to enter and analyze the household data and the other to do the same for the provider/drug outlet data. The data analyst should be detail-oriented, familiar with data entry, and comfortable calculating indicators and processing data.⁷ The data analyst is trained by and reports to the assessment coordinator. The coordinator orients the analysts in the information obtained from the questionnaires and how to calculate the indicators.

Administrative Assistant

You will need administrative assistance during the assessment. The administrative assistant reports to and works closely with the coordinator to make all necessary logistical and operational arrangements. Exact tasks will vary but could include paying per diem (if required), arranging lodging (if needed), securing/hiring transport, obtaining supplies, arranging for training facilities, photocopying, ensuring that all staff have letters or identification cards from the appropriate authority, tracking expenditures, and responding to emergent needs.

Step 4. Decide When to Collect Data

In deciding when to collect data, consider your main interests and the district's seasonal disease patterns. Carry out IMCI surveys when incidence of malaria, diarrhea, or respiratory illness is highest. If you are most concerned with malaria, conduct the assessment when malaria incidence peaks (i.e., during or near the end of rainy season).

Step 5. Develop Medicine Reference List, Tracer List, and Standard Treatment Guideline Table

In order to conduct the assessment and analyze the results, you will need to compile various lists and support materials.

Medicine Reference List

You will need to create a reference list of the key recommended medicines for treating the illnesses under investigation. This list will be used to adapt the questionnaires to your local

⁵ If it is not possible to enter and analyze data using a computer, the data analyst will perform manual tabulations (see Chapter 6 and Annex 1).

⁶ If your team does not have the expertise needed to create the database, we recommend you seek assistance from MOH staff at the regional or central levels, from consultants, or from local/international NGOs or universities.

⁷ In some situations, it may be appropriate to use separate data entry operators and data analysts, each having specific roles and functions.

context (see below), to indicate which medicines are “appropriate,” and to classify the medicines as first-, second-, or third-line.

Use official national guidelines, such as the national IMCI guide or the standard treatment guidelines to develop the list. The list should contain all the medicines recommended for treating the childhood conditions under the assessment *according to the IMCI guidelines, national essential medicines list, or other national guidelines for child health if IMCI is not being implemented*. If no medicine is recommended, do not include one in your list, even if it is commonly used. Unless your assessment focuses only on select IMCI illnesses (e.g., diarrhea), include all recommended medicines for treating acute respiratory infections, pneumonia, diarrhea, and malaria.

To make the medicine reference list—

1. Classify the medicines listed into two groups for each illness: first-line recommendations in one group and second- or third-line recommendations in the second group. For example, for pneumonia, identify the first-line recommended antibiotic(s) and then add the recommended second/third-line antibiotics.
2. Label each medicine on the list as an antibiotic, antimalarial, and so on, and for each medicine mentioned in the list, be sure to include both syrup and tablet forms.

An example of a medicine reference list is shown in Table 1.

Table 1. Example of a Medicine Reference List

Generic Medicine Name	Type of Medicine
Antimalarials	
Chloroquine syrup	1st line
Chloroquine tabs	1st line
Sulfadoxine-pyrimethamine tabs	2nd line
Quinine injection	3rd line/severe cases
Antibiotics	
Co-trimoxazole tabs (pneumonia and bloody diarrhea)	1st line
Co-trimoxazole syrup (pneumonia and bloody diarrhea)	1st line
Amoxicillin syrup (pneumonia)	2nd line
Amoxicillin caps (pneumonia)	2nd line
Oral Rehydration Solution (diarrhea)	1st line

Tracer List

This survey is built around a tracer list that includes both essential (recommended) and “inappropriate” (nonrecommended) medicines for treating childhood illnesses. The tracer list uses the medicine reference list as a base, but contains additional information. The coordinator preparing the tracer list needs to have knowledge of chemical entities and brand names.

The tracer list should contain the following—

- Key essential medicines recommended for treating malaria, pneumonia, and diarrhea and contained in the reference list
- One or more commonly used antidiarrheals or other inappropriate medicines that children in your area commonly take or other appropriate medicines that a district may want to study (bearing in mind that providers/drug outlets do not only sell medicines for children)

Follow these steps to create a tracer list—

1. Start with the medicine reference list as a base.
2. Add the names of one or two antidiarrheals or other inappropriate medicines that children commonly take. You can find this out by talking to local physicians, nurses, pharmacists, and other health professionals.
3. If the total number of medicines listed in steps 1 and 2 is greater than 15, reduce the number according to the priorities of the assessment.
4. Add the most common brand names for each medicine to the list because not all respondents will know or recognize the generic⁸ names. Do the following to determine the common brand names—
 - a. Use therapeutic reference books marketed in your area, such as *Vademecum* or *Monthly Index of Medical Specialties* (MIMS) to look up the generic medicines on the tracer list. For each medicine, write down two or three other names by which it is known or sold in the country.
 - b. The coordinator should interview local providers from outside the sample sites to identify brand names for the medicines on the list. Using the generic medicine list created above, interview one or two physicians and nurses from local health facilities and one or two pharmacists or trained pharmacy assistants from local chemists/drugstores to inquire about common names for each medicine. Do not go to drug shops, kiosks, or similar outlets with untrained staff. At each facility, write down all the other names for each medicine. After the interviews, compare the brand names given. For each medicine, choose the two or three names that were most commonly mentioned to include on your final list. Check that the

⁸ A generic medicine is the chemical equivalent of a medicine that has an expired patent.

popular national brands are not different from the brands available in the assessment area by talking to local doctors, nurses, and pharmacists, particularly in the private sector.

You now have all the necessary information to create a tracer list following the example provided in Table 2.

Table 2. Example of a Tracer List

Generic Name of Medicine	Commonly Used Brand Names of Medicines	Type of Medicine
1. Chloroquine syrup	Nivaquine	1st-line antimalarial
2. Chloroquine tabs	Nivaquine	1st-line antimalarial
3. Sulfadoxine-pyrimethamine tabs	Fansidar/Maloxine	2nd-line antimalarial
4. Amoxicillin syrup	Clamoxyl/Hiconcil	2nd-line antibiotic
5. Amoxicillin caps	Clamoxyl/Hiconcil	2nd-line antibiotic
6. Co-trimoxazole tabs	Bactrim/Cotrim/Cotrex	1st-line antibiotic
7. Co-trimoxazole syrup	Bactrim/Cotrim/Cotrex	1st-line antibiotic
8. ORS		1st line
9. Loperamide capsules	Imodium	antidiarrheal
10. Actapulgitte sachet		antidiarrheal
11. Quinine injection	Quinimax	3rd-line/severe cases antimalarial

After creating the tracer list, you should ask MOH staff engaged in pharmaceutical management, child health, or IMCI as well as several practicing pediatricians and pharmacists to review it for completeness.

Standard Treatment Guideline Table

In order to calculate several household and provider indicators, you will need a table containing the frequencies and durations of medicines used in the standard treatments for all target illnesses. For each illness (e.g., malaria), the assessment coordinator should prepare a table containing the key STG medicine and its recommended dose, frequency, and duration for treating a two-year-old child according to the national guidelines. It is possible to give a range for the dose (e.g., the third day of chloroquine syrup could be 5.0 ml–7.5 ml). (See also Chapter 5.) An example of such a table appears in Annex 3E.

Step 6. Adapt Questionnaires to Local Context

You will need to adapt the household and provider/drug outlet questionnaires to the local context before doing any pretesting or training. The following is a list of actions that are likely to be needed, although other changes may also be required for your context.

Household Survey Questionnaire

- Decide which symptoms to include in question 3 of the survey. This decision should be based on the intent of your survey (e.g., IMCI, malaria, diarrhea) and on the indicators you have chosen, and should be in accordance with national guidelines. Do not include symptoms that respondents are unlikely to identify or that are not reasonably specific to the illnesses of interest.⁹
- Ensure that your response categories contain the types of facilities, drug outlets, and providers found in your district (questions 7, 10, 13, 16, 19, 27A–F, 29A–F).
- Revise the response categories in question 25, if needed (although we recommend that you retain the first three response categories).
- Insert the local term people use for the medicines referred to in questions 35–44.

Provider/Drug Outlet Questionnaire

- Select the relevant categories of providers/drug outlets for your setting. The provider/drug outlet survey contains five categories, but you may decide that one is not relevant or another is needed for your context. For example, in settings where a high proportion of health facilities are private, you may wish to subdivide “health facilities” into “public” and “private” health facilities. Remember that any time you add a category, you must sample 20 providers/drug outlets from that category (see Chapter 3).
- Determine the types of providers/drug outlets that belong in each category. For example, in some settings, community health workers may be government workers, whereas others may work for an NGO.
- Adapt the responses in question 2 (training levels) to your context.
- If necessary, add locally recognized or relevant symptoms to the response categories for questions 3, 5, 7, 8, 10, and 12.
- Ensure that the names of the medicines on the tracer list are entered into the grid for questions 17 and 18 on availability and affordability of medicines in the area.

Step 7. Decide How to Translate Questionnaires

If English is not the principal language in your assessment area, you will need to translate your adapted tool into the national language. If an outside translator is used, it is important to check

⁹ For example, you will need to select the symptom(s) that indicate severe respiratory illness. In a field test in Senegal, we chose “fast breathing,” although we knew that not all cases of fast breathing are pneumonia. We opted for “fast breathing” because this symptom is consistent with national guidelines and because other symptoms would capture too few or too many “severe respiratory illness” cases. For example, “chest in-drawing”—a good indicator of severe respiratory illness—is too difficult for community members to identify, and “difficulty breathing” occurs when a mild cold includes a stuffy nose.

the translation with the team of supervisors and to double check the meaning of the questions by back translating to ensure the meaning remains consistent. Use this national-language version to train your team. Frequently, because the national language is not spoken in rural communities, questionnaires may need to be translated into the local language in advance of training. This step may be desirable where the local language is commonly written and read, but it is less successful where the local language is principally oral, or where the dialect differs from that of the translator. A questionnaire written in the local language may not be appropriate in districts where multiple languages are spoken. We recommend that you do *not* translate the questionnaire into the local language(s) before briefing your supervisors and training your data collectors. Rather, we urge you to *include oral translation of the questionnaire in the training of your supervisors and data collectors*. This way, your whole team can agree on exactly how each question and response should be phrased in a manner most consistent with local custom. Since *all* data collectors need to administer interviews consistently, you will need to ensure that everyone uses the agreed upon phrasing and terminology. (See also Chapter 4.)

Be careful when selecting terms for specific symptoms, such as “fever/hot body” or “fast breathing,” in both the national and local languages. For example, there may be several terms for “fast breathing,” not all of which correspond to symptoms of pneumonia. (Some may actually be closer to “wheezing” or “difficulty breathing.”) You should review any available research about local illness perceptions and classifications when deciding on symptom translation.

Step 8. Adapt Indicators to Local Context and Develop Indicator Evaluation Standards

Indicator Adaptation

You will need to review all the indicators and adapt some of them to your context. Specifically, you must decide what constitutes “appropriate choice” of medicine for each condition under assessment and create definitions for such things as “appropriate source of pharmaceutical care” and “appropriate use” of certain medicines. For example, in countries that promote home management of fever, “appropriate action” may be to treat the fever at home, whereas in countries that do not promote home management of fever, the appropriate action may be to seek pharmaceutical care outside the home.

Evaluation Standards

After completing these adaptations and before commencing fieldwork, your coordinator should meet with appropriate health officials and technical experts to decide how indicators will be evaluated. For example, if 70 percent of your sample reportedly gave an antimalarial on the same day their child’s fever started, is that “good,” “fair,” or “poor”? Be sure to involve relevant stakeholders in determining the cutoffs since these evaluation standards form the base for problem prioritization later on. (See Chapter 8.) Chapter 7 contains more detail on how to develop evaluation standards.

Step 9. Determine Sample (see Chapter 3)

Step 10. Address Ethical Issues, Including Obtaining Informed Consent

In some settings, you may need to submit a proposal for your assessment to an ethics committee or institutional review board (IRB). Determine what information is required and how long the process may take, so you can plan accordingly. Regardless of whether you need such approval, you must ensure that communities and individuals provide informed consent for their participation and that you have a plan for addressing ethical issues that arise in the field.

Informed Consent

Before fieldwork starts, obtain consent from the village and community leaders where the assessment will occur. Be sure to include information about the purpose of your assessment (e.g., to find out how people treat their sick children), how you will select respondents, when you will be back for data collection, how the information will be used, any benefits or drawbacks to the community, and explain there will be no repercussions for nonparticipation. You will need to select the most appropriate people (e.g., supervisors, coordinator, other officials) to perform this task given your situation. When returning for data collection, the field supervisor should briefly meet with the same leaders, as custom dictates, to explain how the team wishes to proceed and to thank them.

Before interviewing a respondent, data collectors must obtain informed consent, according to national or international standards. We do not recommend asking respondents to sign or make their mark on documents they cannot read or comprehend. So, in areas of low literacy, we recommend the widely accepted practice of obtaining verbal consent and having the data collector sign in the respondent's stead.

You also should develop an explicit plan for handling ethical issues that arise in the field. For example, team members need guidance on what to do if they encounter a severely ill child or observe administration of an inappropriate medicine. You cannot anticipate every eventuality, but you need to develop general guidelines that field supervisors can use to decide what to do. Remember that team members should understand how to approach difficult ethical situations, but they should not act as health workers.

Step 11. Prepare Identification Materials

Before any training or data collection occurs, each team member may need an identification badge and/or letter from the appropriate authority, explaining who they are and what their purpose is for visiting the community.

Step 12. Schedule Data Collection

Because you need to use information from a particular site's household surveys to inform your selection of providers/drug outlets from the same site, *it is important that you leave a time gap between start of data collection for the household survey and that of the provider/drug outlet*

survey. We recommend a time gap of at least one day.¹⁰ The following sample assessment schedule was for a team of 11 data collectors per district—

- 1 week preparation
- 4 days supervisor training and pretesting
- 3 days preparation of survey sites and questionnaire finalization
- 4 days data collector training
- 2 weeks data collection
- 2 days data analyst training (during data collection phase)
- 2–3 weeks data analysis

Adapt this schedule to your context, taking into consideration the geographic accessibility of the data collection sites and the size and configuration of your teams.

¹⁰ In some cases, you may be able to collect data from household and provider/drug outlet respondents in one day per location, but you *must* still administer the household survey first and use the results to select your provider/drug outlet respondents.

CHAPTER 3. SAMPLING

Introduction

This chapter provides information on how to sample when conducting the assessment at district level. This chapter describes the sampling approach for conducting a descriptive survey within one district. Information on how to adapt the sampling approach to a regional or national-level survey appears in Annex 1. Annex 1 also describes how to adapt the sampling to conduct a comparative survey in order to compare areas within a district.¹¹ Throughout this section, examples are given from a field test in Senegal to illustrate how sites and neighborhoods (in urban areas) and villages/hamlets (in rural areas) were selected, and how outlets and household respondents were chosen.

Overview

The C-DMCI assessment tool uses cluster sampling¹² to select the main sampling units and applies principles of random selection for choosing households and providers/drug outlets. Each step in the sampling process is described and explained in the text that follows.

Step 1. Define Community Types

First, categorize the types of communities/sampling units in your district—these could be villages in rural areas, neighborhoods in urban areas, or census tracts. To facilitate sampling, you will need to list all of these units in your district. It is important that each unit have a minimum of 250 households in rural areas and 500 households in urban areas to ensure an adequate number of respondents. If there are less than these numbers of households in the unit, group them such that each has at least 250 households. Population distribution data are often available from the national census bureau, a district office, or the MOH. If no population statistics are available for the assessment area, you will need to group and select communities by a different method. One method is described in the Annex 1.

Step 2. Know Your Target Sample Size

Household Survey

The minimum sample size for the household survey is 300 households in which a child meets the selection criteria (see Step 5, Household Survey, number 3, in this chapter). These 300 households will be selected from within 20 clusters, and 15 households in each cluster. WHO and UNICEF recommend that at least 30 sample sites (clusters) be used with 7 households in each cluster for an immunization prevalence survey. Because it is often logistically difficult and

¹¹ In a descriptive study, results are representative of the district, but you may not be able to draw comparisons among communities (e.g., urban and rural) within your district. In a comparative survey, you can do so, but the overall results may not be representative of the population in the district.

¹² Where an entire population is divided into groups (or clusters), a cluster sample is a random sample of these groups. All observations in the selected clusters are included in the sample.

expensive to survey 30 clusters, we recommend a sample of 20 sites with 15 households in each site.¹³

Procedures for selecting households and respondents within households are explained later in this chapter. The sample design of 20 clusters of 15 respondents, for a total of 300 respondents, was chosen because it would be feasible from a logistics and budget perspective and would be likely to yield reasonably precise estimates, ± 10 percent or less at a prevalence of 50 percent (for a given sample size, confidence limits are always widest at 50 percent, so this worst-case scenario is used to estimate the effect of different sample designs). The most important factor that was considered was the effect of using a cluster sample. For more information about design effects and a discussion of the implications for other sample designs, see Annex 1.

Table 3 shows the number of households to be sampled for each cluster and the district total.
Provider/Drug Outlet Survey

The target sample for the provider/drug outlet survey is 40 completed questionnaires from each outlet type studied. For reliable estimates, 20 outlets should be the absolute minimum sample for any type of outlet. The providers of medicines in a community can be divided into five basic outlet types—

1. Health facilities (e.g., government, private, or mission hospitals, health centers, or dispensaries)
2. Licensed retail medicine sales outlets (e.g., pharmacies, chemists, or drug shops)
3. Other retail outlets selling medicines (e.g., boutiques, general stores, kiosks)
4. Licensed individual dispensing medicines (e.g., community health agents, community health huts)
5. Other individual dispensing medicines (e.g., traditional healer, street or market vendors)

Some districts (and communities) will have all outlet types, but others may not. In your sampling plan, you should include all known categories of providers/drug outlets, whether or not you believe that many people obtain their medicines from them. Aim to have an average of two completed questionnaires from each outlet type per cluster. Since some clusters may not have two outlets of a given type in the district, you should plan to sample three, if three or more are present in the other clusters, to ensure sufficient numbers. Procedures for selecting providers/drug outlets are explained later in this chapter (Step 5, Provider/Drug Outlet Survey). Table 3 indicates the intended sample of 40 outlets of each type in the district, an average of 2 per cluster.

¹³ See Annex 1 for a discussion of design effects and alternative sample designs.

Table 3. Cluster Sites and Corresponding Number of Household and Drug Outlet Surveys

	Household	Health Facility	Licensed Drug Outlet	Other Retail Outlets	Authorized Medicine Distributors	Other Persons
Each cluster	15	2	2	2	2	2
District total	300	40	40	40	40	40

Step 3. Determine the Distribution of Your Sample Sites

The 20 clusters in the survey should be distributed according to the proportion of the population living in each type of community. In the example in Table 4, data from a recent census indicate that 64 percent of the population lives in urban areas and 34 percent lives in rural areas in the district to be surveyed. Thus, out of 20 clusters, 13 urban (60 percent of 20) and 7 rural sample sites (40 percent of 20) are needed.

Table 4. Distribution of Clusters Proportionally to Population Distribution

District	Percentage Population Urban	Percentage Population Rural	Number of Urban Clusters	Number of Rural Clusters	Total Number of Clusters
District X	64%	36%	13	7	20

Step 4. Select Sample Sites

After you have decided on the number of clusters you will select from each type of community (e.g., rural and urban), you need to choose the actual sites for your sample. A site refers to a separate geographic location, with each site corresponding to one cluster. In selecting data collection sites, it is imperative to sample *randomly*, so that each potential site has an equal possibility of being selected. You will need to figure out the best way to do this based on the information available to you. One procedure is to—

1. Cut pieces of paper into equal sizes.
2. Write down each possible site for each type of cluster of a district from the list you obtained in Step 1 above.
3. Put the pieces of paper in a bowl, shake the bowl, close your eyes, and pick out one piece of paper.
4. On a separate piece of paper, write the name you pulled out of the bowl.
5. Put the piece of paper back in the bowl. Continue picking pieces of paper until you have reached the number of sites you need to sample in each community. If you pick the same piece of paper, just put it back in and pick another until you get 20 different clusters.

6. Repeat for each district if doing the assessment in more than one district.

An example of a table of sites selected in a district in Senegal can be found in Annex 4H.

Insufficient Sample Sites

In some cases, you may find that fewer than 20 communities exist in the geographic area you want to sample. If the overall population is very small, you may want to enlarge the geographic scope of the survey. If the populations of the sampling units are large, such as towns and cities, use a smaller unit, such as neighborhoods.

Inaccessible Sample Sites

Sometimes sample sites are impossible to reach because of poor roads or political instability. In these situations, you may replace the sample site with another site that has similar characteristics (i.e., replace one urban town with another). It is important that the replacement site is chosen randomly and not simply by convenience—otherwise the results may be biased. Additionally, the assessment report should note the sites that were skipped because the results may not be able to be generalized to sites with issues of accessibility or political instability.

Step 5. Choose Households and Providers/Drug Outlets

Household Survey

1. *Assign sites to data collector teams:* The first step in carrying out the basic site survey is to group data collectors into teams. Assign each team an appropriate number of the 20 sites to be included in the survey. Once fieldwork starts, each team will conduct the survey in its assigned site(s) (i.e., village(s), neighborhood(s)). It is useful to have one team working in urban areas and another team in rural areas.
2. *Choose households:* Once data collectors reach a site, they will *randomly* choose the 15 households to interview. We suggest the following approach—
 - **Urban settings:** Divide the team in two, with one subset beginning its search for eligible respondents at the periphery of the neighborhood and the other subset beginning at a central location.¹⁴ Each data collector should spin a pen and head in the direction of the pen. No two data collectors should travel in the same direction. Each data collector should skip eight houses in urban areas and four houses in rural areas.
 - **Rural settings:** Divide the team among the villages and hamlets you have selected, according to the population distribution described above in Step 5. Begin searching for eligible households in the same manner as for urban settings, skipping the predetermined number of houses.

¹⁴ It is not advisable to have the whole team start at a central location, as this will bias your sample toward those who may have greater access to services and medicines and who may have characteristics and behaviors different from individuals living at a village periphery.

3. *Choose respondents:* At each household, the data collector should ask the questions on the screening sheet (Annex 2B) to determine if the household has an eligible respondent. The criteria are—
- Household must have a child living there who has not yet reached his/her fifth birthday.
 - Child must have had at least one of the following symptoms in the last two weeks: cough, fast breathing, fever/hot body, convulsions/fits, or diarrhea.
 - Child is healthy on the day of the visit.
 - Child was not sick for more than four weeks/one month.

If more than one child in the household meets these criteria, the data collector should conduct the interview using the *youngest* child as the reference child. The primary caregiver of the child should respond to the interview questions. If absolutely necessary, it is acceptable to obtain factual information from someone else in the household, but the primary caregiver of the reference child should answer all questions about knowledge and perception.

If no child is eligible, the data collector should continue to the next household *without skipping houses* until he/she identifies an eligible respondent, completing a screening form for each household attempted. After an eligible respondent has completed a survey, the data collector should continue selecting households by moving in the same direction he/she did before and skipping the predetermined number of houses as described in 2 above. No two members of the same household (or compound) should ever be interviewed.

In some settings, apartment buildings and compounds are commonly found in urban and rural areas, respectively. Methods for locating households and respondents in apartment buildings and compounds are described in the following box.

Selecting Household-Level Respondents from within Compounds or Apartment Buildings

Compounds: If multiple households are grouped into compounds, an interviewer must first find out whether individual dwellings are all part of the same household. A household is made up of people who live together in the same dwelling unit and have the same eating arrangements (e.g., eat from the same pot). If there are different households within the compound, instruct interviewers to go to one end of the compound, spin a pen or pencil, and interview the first dwelling that the pen or pencil points to. If there is no eligible respondent, the interviewer should walk to the next dwelling in the same direction. Once an interview is complete, interviewers should go to the next eighth dwelling (or to the next fourth dwelling in rural areas) and attempt to find a respondent. Continue this process until every eighth dwelling has been surveyed.

Apartment Buildings: If an “eligible” household is an apartment building (or a block of flats), each apartment within the building should be considered a household. To choose apartments to be interviewed at random, an interviewer can do the following: (1) count the number of floors the apartment building has; (2) write down each floor number on small pieces of paper; (3) randomly choose one piece of paper; and (4) interview the first apartment to the right of the stairs (or elevator) on that floor. If there is no eligible respondent, try the next apartment on the right. Once an interview is complete, have interviewers go to the next eighth apartment and attempt to find a respondent (Note: the interviewer will count each “next eighth apartment” by starting on a certain floor of the apartment building, going down (or up) to the next floor, and continuing the count from the right of the stairway/elevator). Continue this process until every floor and every eighth apartment in the building has been surveyed. An example of how to survey an apartment building is shown in Figure 2.

Floor 6	→		→		→	Interview 5	→		→
Floor 5		→		→	Interview 6	→		→	
Floor 4	→		→	Interview 7	→		→		→
Floor 3 START	Interview 1	→		→		→		→	Interview 2
Floor 2	→		→		→		→	Interview 3	
Floor 1		→		→		→	Interview 4		→

Figure 2. Example of sampling an apartment building

Note: The random start chosen was 3. The interviewer started on the third floor and went to every eligible eighth apartment on that floor. After completing the interviews on the third floor, the interviewer went down to the second floor, and continued counting apartments where he/she had left off from the third floor to find eligible apartments. The interviewer continued this process on the first floor, then the sixth, fifth, and fourth floors. All apartments had eligible respondents.

Provider/Drug Outlet Survey

1. *Make lists of all possible providers/drug outlets to include in the survey:* The survey team should list all possible providers/drug outlets in or near the assessment sites for each outlet type that is to be included in the survey. Preliminary lists of licensed outlets in the sample sites can be made from district-level government and trade sources (e.g., pharmacists' association, wholesalers) before the survey fieldwork.
2. *Add information from the household survey to the lists:* The household and provider/drug outlet surveys should be timed so that data collection in outlets for a given site occurs at least one day after that site was visited by the household survey team. When household data collectors return to base, the field supervisors should add to the outlet lists for that site all providers/drug outlets mentioned by respondents in the household survey. The assessment coordinator should establish inclusion criteria before the survey. For example, in Senegal, outlets were not listed if they were more than 20 kilometers from the assessment site and only one person had mentioned going there.
3. *Supplement the outlet list at each site by asking for information from community members:* After arriving in a neighborhood or village to collect data, the team should ask local informants, "Where do people from here buy medicines?" If they mention nearby outlets that are not already on the list for that type, add these before selecting the sample.
4. *Select two providers/drug outlets of each type from the lists:* If only one outlet of a given type is listed, then this outlet should be included in the sample. Visit each outlet selected to complete the survey. If the outlet has closed, if no one is available, then randomly select another outlet of that type as a substitute.
5. *Assess progress at the midpoint of data collection:* When you have visited half of your assessment sites, tally the total number of completed questionnaires for each type of provider/drug outlet category and estimate the total you will reach for the whole survey. If you estimate that you will not have at least 20 completed questionnaires for each type of outlet by the end of the survey, you have three choices:
 - a. Complete data collection without changing anything, but recognize that there will be outlet types without an adequate number of outlets for analysis. Choose this approach if you plan to direct interventions toward only the most commonly used provider/drug outlet types. In this case, you may not need information on outlets used by only a small percentage of the population.
 - b. Combine categories that are unlikely to have 20 completed questionnaires at the end into a new category that will have at least this number. Do so only if categories are similar (e.g., "retail outlets selling medicine" and "other persons selling medicine" in your analysis). The rationale for this approach is that by combining "similar" categories, you do not lose information.

- c. In remaining clusters, add extra outlets to the sample in order to reach at least 20 per category. You may need to choose them from areas outside your survey clusters, but within the same district. This approach may be used in cases when you anticipate you will be just a few outlets short of the desired 20 by the end of data collection. The rationale for using this tactic is to ensure more reliable information.
6. *Chose a respondent in each outlet*: You should attempt to interview the person most capable of responding to the survey. In some instances, the person responsible for treatment decisions may be different from the one who knows the medicine inventory. In such cases, you would interview both individuals for different parts of the survey. Remember that these outlets and respondents must be different from those interviewed to prepare the tracer list described in Chapter 2.

Adapting the Sample Approach to Your Setting

Steps 1 through 5 above provide a basic approach to sampling, but you will need to determine how to adapt the principles discussed here to your setting. Generally speaking, you will sample appropriately as long as you remember to—

- Select sites and households so that the number of individuals interviewed in a specific setting (e.g., rural areas) is proportional to the size of the population that lives in that setting, and
- Choose the sites, drug outlets, and households using some random method.

CHAPTER 4. TRAINING OF FIELD SUPERVISORS, DATA COLLECTORS, AND DATA ANALYSTS

Introduction

There are many ways in which to organize training of field supervisors, data collectors, and data analysts. For the discussion that follows, it is assumed that individuals conducting the training sessions are experienced in leading similar training sessions for large-scale quantitative surveys, are comfortable using participatory learning techniques (such as role-playing), and will adapt the information to suit their needs. Therefore, the information shared here focuses on the practicalities of conducting training sessions that will provide trainees with the information and skills needed. The objective is to ensure timely and accurate data collection and to perform analyses correctly.

This chapter provides guidance for training and some specific suggestions for the training of different team members. For readers wishing to see a sample training plan and schedule (including a list of covered topics and activities), we refer you to the training plan used in Senegal, found in Annex 4G. The following box provides some general guidelines for conducting the training.

General Guidelines for Training Field Supervisors and Data Collectors

1. Provide a general background orientation to the entire group of field supervisors and data collectors.
2. After the background orientation, conduct two separate training sessions: one for field supervisors and one for data collectors.
3. For each training session, divide each group into two teams; one team will focus on the household survey and the other team on the provider/drug outlet survey.
4. Train more data collectors than you will ultimately use, and select those who perform best during training to participate in the survey.¹⁵
5. Incorporate the pretesting of the household and provider/drug outlet surveys in both urban and rural settings into the field supervisor training, including practice in locating households, in locating drug outlets, and in selecting appropriate respondents, as well as experience in administering the two questionnaires. (More details regarding content of and approach to the pretesting are included below.)
6. For both field supervisors and data collectors, include hands-on field practice of all aspects of the household and provider/drug outlet surveys, including finding respondents, using informed consent procedures, interviewing, and filling out the forms.
7. Include techniques for managing difficult respondents or situations such as refusals, answering questions about the use of the data, and responding to requests for medicines or medical treatment. The training should include some role-playing with difficult respondents or situations. Some of the techniques might include taking time to answer detailed questions, listening to complaints that may not be related to drug issues, and returning to interview at another time. The plan for dealing with very sick children and other ethical issues should also be reviewed.
8. Provide opportunities to discuss any difficulties or problems encountered and to propose solutions to them.
9. Provide field supervisors and data collectors with a briefing packet that includes—¹⁶
 - a. The rationale for conducting the assessment and an explanation of how data will be used for decision making
 - b. A short overview of childhood illnesses and community IMCI
 - c. Background on the principal elements of the availability and appropriate use of medicines at the community level (including an explanation of the framework)
 - d. Basic information on the essential medicines likely to be encountered in this assessment, including practice with their identification and recording (this element is particularly important for individuals involved in the provider/drug outlet survey)
 - e. Description of the roles and responsibilities of all team members
 - f. The training/data collection schedule

¹⁵ It is important that all trainees know *in advance* that not everyone who is trained will be selected for the assessment and that their performance during training will determine their participation as data collectors.

¹⁶ A sample trainee briefer for household interviewers, as used in Senegal, maybe found in Annex 4F.

Field Supervisor Training

Field supervisor training should be held approximately two weeks before the start of data collector training to allow ample time after supervisor training is completed for the trainees to obtain permission for the fieldwork from all the sites selected for inclusion in the survey, to prepare the training site, to finalize recruitment of data collectors, and to provide adequate time for any necessary revisions to the sampling approach or data collection tools.¹⁷

A pretest of the household and provider/drug outlet questionnaires is essential prior to conducting fieldwork and it is strongly recommended that this pretest occur as part of the supervisor training. Doing so will allow supervisors to master how to find respondents, how to administer the questionnaire, and how to conduct quality-control checks. It also allows field supervisors to better anticipate the problems that their data collectors may encounter and to strategize solutions.

The pretest should be conducted in each type of setting (e.g., urban and rural) in which you will conduct the assessment, so as to ensure that the range of sampling scenarios and respondent types likely to be encountered in the survey are encountered in the pretest. Some general guidelines for conducting a pretest are—

- Ideally the pretest should be a complete “dry run” of the overall process including finding households and selecting respondents.
- Administer each questionnaire, including the screeners, to at least 10 people.
- Use the questionnaire that has been translated into the national language and translate into the local language during the pretest, if necessary.
- Administer each questionnaire as if it were the final and “real” version—do not interrupt the respondent or explain questions.
- Take notes about any questions that are confusing to respondents, responses that do not fit into any category, translation problems, or any other concern with any part of the process and questionnaires.
- After the pretest is complete, meet together to discuss all concerns.
- The assessment coordinator must make the final modifications so that all questionnaires are identical; changes should be clearly communicated to field supervisors.

Allocate approximately four to five days to train the field supervisors. The first two days of training should be dedicated to helping field supervisors understand the purpose and content of the assessment and to role-playing how to administer the questionnaire, including locating respondents. Pretesting should begin on the third day and continue until the field practice has been conducted in each of the setting types included in the survey (e.g., urban and rural). A final

¹⁷ Assessment coordinators will need to determine how much time is needed for site selection and other preparation and adjust the timing of their field supervisor training accordingly.

day should be allocated for discussing revisions to the sampling and respondent selection approach and questionnaires and ensuring that supervisors understand their duties with regard to survey preparation, training, and data collection.

Ensure field supervisors discuss the following topics—

- How to obtain village/community-level consent for the assessment to be conducted at that site
- What information to share (and not to share) with village and community leaders regarding the purpose of the assessment, the population of interest, and the likely date of arrival of data collectors at any given site
- What their roles and responsibilities are during the training of data collectors
- How to manage the team
- How to prepare for each day of fieldwork (including how to obtain any needed information on providers/drug outlets from the household survey for use in the provider/drug outlet survey)
- How to review and correct completed questionnaires
- How to organize and secure the completed questionnaires

Data Collector Training

The data collector training should be held after all modifications have been made to the questionnaires. The training should take about four or five days. The training should be very similar to the training of field supervisors except that the pretest will have already been completed. During the training, data collectors should develop a detailed understanding of the household and provider/drug outlet respondent selection process and the questionnaires. As mentioned in Chapter 2, data collectors may be local schoolteachers or other educated community members. The training must recognize their expert knowledge of local communities and use interactive training methods to build skills.

During the data collector training a consensus must be reached for the translation of the questionnaires from the national language into local language(s). This translation is not written on the questionnaire, but agreed on and used verbally. When the respondent is not comfortable in the national language, the questionnaires are administered in the local language but *recorded* in the national language on the form.

The data collectors should be divided into two groups, one for the household survey and one for the provider/drug outlet survey. Several factors should be considered when assigning data collectors to a group. The most important factor will be the acceptability of the data collector to the respondent (e.g., female data collectors may be preferred for the household survey). Other

factors should include language skills (some respondents may be more comfortable with the local language than the national language), data collectors' own preferences, and familiarity with medicines. Similar to the field supervisor training, the data collectors should practice required skills such as actual interviewing, completing the questionnaires, and finding respondents.

Data Analyst Training

The data analyst training should take one or two days. Hold the data analyst training after you have finished at least two days of data collection from both households and providers/drug outlets so that the analysts can practice by using completed questionnaires. See Annex 1 if you are planning to manually tabulate the data.

1. Provide data analysts with—
 - a. The rationale for conducting the assessment and an explanation of how data will be used for decision making
 - b. Background on the principal elements of the availability and appropriate use of medicines at the community level (including an explanation of the framework)
 - c. Basic information on the medicines likely to be encountered in this assessment, including practice with their identification and recording (this element is particularly important for individuals involved in the provider/drug outlet survey)
2. Explain what the analyst's job is (i.e., to generate indicators for decision making).
3. It may be necessary to show data-entry clerks how to enter the data in the computer and to provide data-entry supervisors with information on how to conduct quality control of data (e.g., by doing double entry of 10 percent of the questionnaires and ensuring corrections are made as needed).
4. Practice entering data with the completed questionnaires.
5. Discuss methods for quality control and finalize this plan. It may include doing double entry of 10 percent of the questionnaires and ensuring corrections are made as needed.
6. Run the necessary cross-tabulations in preparation for calculating the indicators.
7. Explain how to calculate the different types of indicators.
8. Give analysts an opportunity to practice generating each type of indicator required. That is, ensure that analysts know how to perform all the various types of calculations asked of them.
9. Review completed calculations with the analysts and discuss any issues that arose in attempting the calculations or questions that the analysts may have.

CHAPTER 5. DATA COLLECTION AND MANAGEMENT

Introduction

This chapter provides the reader with information on how to structure and schedule the data collection and gives basic guidelines regarding quality control during fieldwork. It also contains information on how to manage and prepare the data so that indicators can be generated accurately and easily.

Team Composition

This assessment is designed so that data collection in one district where urban and rural populations will be surveyed can be completed in two weeks using a team of 11 or 12 data collectors, divided as follows—¹⁸

Table 5. Sample Distribution of 11–12 Person Team among Survey Types by Area

Urban Household Data Collectors	Rural Household Data Collectors	Urban Provider/ Drug Outlet Data Collectors	Rural Provider/ Drug Outlet Data Collectors
3–4 ^a	4	2	2

^a Because travel times and distances between respondents in urban settings are often minimal, it may be possible for fewer people to collect more data in urban settings compared to rural ones.

As stated in Chapter 4, you should assign data collectors to conduct either the household survey or the provider/drug survey. For the purpose of data collection, we suggest that household and provider/drug outlet data collectors be further subdivided into those who cover rural areas and those who cover urban settings, because the process of locating and selecting respondents may differ between urban and rural settings and it is best for data collectors to become comfortable with the peculiarities of their context.

There are other important distinctions between urban and rural areas, such as literacy rates, language preferences, and degree of trust. These factors should be considered when constructing teams, because it is helpful to assign data collectors with particular skills to the setting in which his or her skills are most needed. For example, in some contexts, it may be more difficult to gain trust among urban respondents, so it may be advisable to assign data collectors who are best able to put people at ease to urban areas. You may need to assign the individuals most fluent in the local languages to the rural sites. Lastly, from a logistical standpoint, one team cannot be in both urban and rural sites at the same time.

¹⁸ In settings where more site types (e.g., urban and rural) will be surveyed, additional interviewers will be needed to complete data collection in two weeks. Alternatively, the time for data collection can be extended. The time needed will depend on each setting according to factors such as geographic accessibility and distances to be traveled. Each assessment will need to plan its own schedule.

Quality Control during Data Collection

One field supervisor should be assigned to each team of data collectors (i.e., one for the urban household data collection team, one for the urban provider/drug outlet data collection team, etc.) such that the ratio is not less than one supervisor for four data collectors. This supervisor should accompany the data collectors to the field each day, assisting them in locating respondents according to the established rules, correcting errors in sampling approaches or interviewing techniques as needed, and ensuring the questionnaire is administered appropriately and all answers are recorded correctly. Supervisors should observe at least one interview for each data collector every day. For weaker data collectors, supervisors should try to observe more interviews and provide feedback to strengthen the data collector's skills. When a data collector has begun an interview, supervisors should not interrupt the interview but should provide feedback to the data collector immediately after the interview.

Before returning from the field every day, the supervisor reviews each questionnaire for completeness, accuracy, and legibility. As long as the interviewers are still in the data collection site, they can be sent back to their respondents for clarifications, if necessary.

All responses should be easy to read and it is the field supervisor's responsibility to ensure that they are legible. For any question for which there is no response, the field supervisor should—

- Confirm that the question should not have a response, because the question should be skipped, based on *skip* instructions. If that is the case, the field supervisor marks an “S” (for skip) next to the column of the questionnaire containing all the response categories for that question.
- If there is no answer, and the question should have been answered (not skipped), the field supervisor marks an “M” (for missing) next to the column of the questionnaire containing all the response categories for that question.

At the end of each day of data collection, the household survey supervisors must communicate with those working on the provider/drug outlet team so that the latter group can plan its data collection appropriately.

Upon returning to a central location, it is also useful to get initial feedback from all data collectors and then break into separate debriefing sessions for household and provider/drug outlet data collectors. The purpose is to discuss any problems or issues that may have arisen with regard to locating or selecting respondents and conducting the interviews.

Preparing Data for Analysis

A critical step in preparing the household data for analysis involves reviewing the names of all medicines recorded or mentioned in the household survey. Every medicine mentioned should be entered in the computer before a complete list is printed out. The assessment coordinator or someone else with a pharmaceutical background and knowledge of drugs in the local context should prepare the list. Each medicine mentioned on this list should be coded according to the

following groups: (1) an antimalarial (distinguish among first-line, second-line, and other antimalarials); (2) an antibiotic (distinguish among first-line, second-line, and other antibiotics for bloody diarrhea and also among first-line, second-line, and other antibiotics for pneumonia); (3) oral rehydration solution (ORS); or (4) antidiarrheals.

The analysis of the provider survey requires some preparation by the assessment coordinator. The coordinator needs to decide how to group the different types of outlets for analysis, depending on the numbers that were obtained in the sample and the kind of information sought. If fewer than 20 outlets were sampled in any type, you should consider combining outlets of a similar type. For example, “shops” may need to be combined with “market vendors” to make just one category: “unlicensed vendors.” Remember that the results of the provider survey will be stratified by the type of outlet.

Finally, certain provider indicators require the following additional preparation—

- For coding medicines: The medicines reported in questions 4, 6, 9, and 11 as well as 13–16 (see questionnaire in Annex 3B) need to be coded by the supervisor or coordinator before analysis. The medicines are coded according to whether they are antibiotic (AB), antimalarial (AM), antidiarrheal (AD), or injection (INJ).
- For indicators of knowledge of recommended treatment: As described in Chapter 2, Step 5, for each condition surveyed, the assessment coordinator must specify the key STG drug and its dose frequency, and duration for treating a sick two-year-old child. It is possible to give a range for the dose (e.g., the third day of chloroquine syrup could be 5.0 ml–7.5 ml). A table such as the one shown in Annex 3E should be prepared by the coordinator to provide the data analysts with information on medicine choice, dosage, and duration. The table should be completed to show all medicines and combinations of forms of treatment. The treatments for malaria are given as an example in this table.
- For indicators of drug availability and stock movement: The tracer list of medicines should be available to data analysts so that they can classify the medicines available according to preferred use as first-line, second-line, or other.
- For indicators of treatment cost: For each condition, the assessment coordinator must specify the key medicines recommended (up to two for each indicator) and their dose, frequency, and duration. From this information, a treatment quantity and cost can be calculated. Treatment costs must be calculated separately for syrups and pills/tablets because their costs are usually very different. The information for the last two columns of the table in Annex 3E should be completed to provide the analysts with information on cost of a course of the standard treatment with each of the medicines and forms on the standard treatment guidelines.

CHAPTER 6. CONDUCTING THE DATA ANALYSIS

Introduction

This chapter helps you conduct the data analysis by explaining how the indicators (see Annex 2A for household indicator list and Annex 3A for provider indicator list) are calculated. Because the household and provider questionnaires are formatted differently, we have divided this chapter into two sections to more easily discuss the instructions for data analysis. For your convenience, we have used the following format for each group of indicators to be calculated¹⁹—

1. Purpose of the indicator(s)
2. Prerequisites for calculating the indicator(s)
3. Formula used to calculate the indicator(s)
4. Examples of findings generated from the indicator

The *purpose* explains the information the indicator should yield for its practical application. The *prerequisites* include information regarding key data that must be used in the calculation and/or key decisions that need to be made before this indicator can be calculated. The prerequisites may also include the sources of information used to generate this indicator. For example, a number of the indicators refer to the “appropriate” source or “appropriate” medicine. In order to calculate those particular indicators, therefore, a decision needs to be made, based on the policy of a given country/district, as to what the “appropriate” choice is. This topic was addressed in Chapter 2.

The *calculation* shows in **boldface** what data are to be used in the numerator and what data in the denominator. The horizontal line between the numerator and the denominator indicates “division”: the data above the line are to be divided by the data below the line. For those indicators measured in percentages, the results should be multiplied by 100, as indicated by the × **100** found to the right of each formula.

Finally, the *example* provides a model of how findings should be written for each indicator (one example is provided for all the indicators in the group). In many of the groups, the numbers in the finding should total 100 percent (e.g., household questionnaire groups 1 and 2), but not in all cases (e.g., household questionnaire group 3). For those that should total 100 percent, it is a good idea to double check the addition of the different responses, and, if they do not total 100 percent, ensure all the possible responses have been included. For example, the number of respondents who say “don’t know” can be quite large, which might account for discrepancies.

If you use the data you have collected, you should be able to calculate each indicator by following the formulas provided below for the household and provider/drug outlet surveys. Afterward, you should be able to develop a written finding for each indicator, following the examples. After you have written findings, you will find suggestions for how to interpret your findings and report the results described in Chapter 7.

¹⁹ This manual suggests that data be analyzed by computer. If, for some reason, you will not be doing computer data analysis, the data tabulation forms in Annexes 2D and 3C should help you tabulate data manually, in conjunction with the formulas in this chapter.

Calculating the Household Indicators

The household indicators are divided into 20 different groups (covering a total of 55 indicators), with those that are calculated similarly grouped together. You will notice that some groups consist of only one indicator if that indicator is calculated differently from any other. The indicator numbers/letters (from the indicator list in Annex 2A) are listed after the group name. You will note that three types of indicators are included. *Primary indicators* provide information crucial to identifying problems and shaping interventions. *Secondary indicators* provide additional information that can be useful when combined with other information, including primary indicators. *Descriptive indicators* (denoted by a letter, rather than a number) provide further information that describes who is interviewed or what is happening. Descriptive and secondary indicators are labeled as such. All other indicators are primary.

Annex 2D contains blank analysis tables to help you organize data results (and tabulate the results, if computer analysis is not being used) for each indicator. When a denominator specifies “Total sample,” you should use the total for that one district under analysis.

For the household indicators, any time the number of cases in the denominator is 30 or less, the indicator should not be calculated. A sample of such size is considered too low to be reliable.

Age of child (Indicator A; Descriptive; Q 1)

Purpose To determine the age distribution of the sample

Prerequisites None

Calculation
$$\frac{\text{Number of children in given age group}}{\text{Total sample}} \times 100$$

Example 22 percent of the children in the sample were aged from 0 to 1 year, 18 percent from 1 to 2 years, 21 percent from 2 to 3 years, 18 percent from 3 to 4 years, and 21 percent from 4 to 5 years.

Sex of child (Indicator B; Descriptive; Q 2)

Purpose To determine the sex distribution of the sample

Prerequisites None

Calculation
$$\frac{\text{Number of children of given sex}}{\text{Total sample}} \times 100$$

Example 51 percent of the children in the sample were male and 49 percent were female.

Incidence of symptoms (Indicator C; Descriptive; Q 3)

Purpose To determine the relative incidence of different symptoms among the total sample of children who were sick in the prior two weeks

Prerequisites To be included in the denominator, the children had to have had one of the symptoms, so this is not a statistic on the incidence of specific symptoms in the general population.

Calculation
$$\frac{\text{Number of children with given symptom}}{\text{Total sample}} \times 100$$

Example 65 percent of the children in the sample had fever/hot body, 10 percent had convulsions/fits, 15 percent had fast breathing, 50 percent had diarrhea with no blood, 10 percent had bloody diarrhea, and 40 percent had cough without fast breathing.

Seriousness of illness (Indicator D; Descriptive; Q 4)

Purpose To understand how respondents perceive the seriousness of their child's symptoms

Prerequisites None

Calculation
$$\frac{\text{Number of respondents who said illness was very (somewhat, not) serious}}{\text{Total sample}} \times 100$$

Example 40 percent of the respondents thought their child's illness was very serious, 40 percent thought it was somewhat serious, and 15 percent said it was not serious. 5 percent said they did not know.

Sought care outside home, by symptom (Indicators 1–4; Q 5, 8, 11, 15)

Purpose To measure the degree to which respondents took the appropriate action for children sick with a given symptom

Prerequisites Child must have the given symptom.
“Appropriate action” must be defined.

Calculation
$$\frac{\text{Number of respondents whose child had given symptom and who took appropriate action}}{\text{Number of respondents whose child had given symptom}} \times 100$$

Example 40 percent of respondents with a child with fever/hot body reportedly sought advice, treatment, or medicine outside the home.

Specific first source of care, by symptom (Indicators E–H; Descriptive; Q 7, 10, 13, 16)

Purpose To demonstrate where people go first to seek pharmaceutical care for children sick with a given symptom and to measure the relative importance of each source

Prerequisites Child must have the given symptom AND caregiver must have sought pharmaceutical care outside the home.

Calculation
$$\frac{\text{Number of respondents whose child had given symptom and who first sought care outside the home at given source}}{\text{Number of respondents whose child had given symptom and who sought care outside the home}} \times 100$$

Example 5 percent of respondents with a child with fever/hot body who sought pharmaceutical care outside the home did so first from a traditional healer, 10 percent from a government health post, 10 percent from a government health center or hospital, 10 percent from a private or mission health facility, 20 percent from pharmacy, 10 percent from a general shop, 10 percent from a market, 10 percent from a community health worker, 5 percent from other, and 10 percent did not know or did not remember.

Appropriate first source of treatment/medicine, by symptom (Indicators 5–8; Q 7, 10, 13, 16)

Purpose To measure the degree to which the first source of pharmaceutical care was appropriate for children sick with a given symptom

Prerequisites Child must have the given symptom AND caregiver must have sought pharmaceutical care outside the home.
The sources of pharmaceutical care considered to be appropriate must be defined before the analysis.

Calculation
$$\frac{\text{Number of respondents whose child had given symptom and who sought care outside the home at appropriate first source}}{\text{Number of respondents whose child had given symptom and who sought care outside the home}} \times 100$$

Example 40 percent of respondents with a child with fever/hot body who sought advice, treatment, or medicine outside the home did so first at an appropriate source, which was defined as a public health clinic, a private clinic, or a private pharmacy.

Timeliness of action (Indicators 9–12; Q 3, 6, 12, 22, 26, 28)

- Purpose* To measure the promptness with which sick children get the appropriate medicine/treatment for a given symptom
- Prerequisites* Child must have the given symptom and caregiver must take appropriate action for that symptom.
- Calculation*
$$\frac{\text{Number of respondents whose child had given symptom and who took appropriate action within recommended period of time}}{\text{Number of respondents whose child had given symptom and who took appropriate action for that symptom}} \times 100$$
- Example* 40 percent of respondents with a child with fever/hot body reported that their child took an antimalarial the same day or the next day after the fever/hot body started.

Awareness of first-line medicines/ORS (Indicators 13–16; Secondary; Q 35, 38, 41, 43)

- Purpose* To determine the degree to which people are aware of a particular medicine/treatment
- Prerequisites* None
- Calculation*
$$\frac{\text{Number of respondents who say they have heard of a particular medicine/treatment}}{\text{Total sample}} \times 100$$
- Example* 40 percent of respondents were aware of chloroquine (CQ), the first-line antimalarial.

Availability of medicines/ORS in home (Indicators 17–18; Q 37, 40)

- Purpose* To determine the availability in the home of certain medicines/treatments
- Prerequisites* None
- Calculation*
$$\frac{\text{Number of respondents who say they have a particular medicine/treatment at home}}{\text{Total sample}} \times 100$$
- Example* 20 percent of respondents said they had some ORS at home.

Availability of medicines/ORS in area (Indicators 19–22; Secondary; Q 36, 39, 42, 44)

Purpose To measure the extent to which respondents perceive certain first-line medicines/treatments to be available in the area where they live

Prerequisites None

Calculation
$$\frac{\text{Number of respondents who say they can always get a particular medicine/treatment in their area}}{\text{Total sample}} \times 100$$

Example 30 percent of all respondents said they can always get co-trimoxazole (the first-line antibiotic for both pneumonia and bloody diarrhea) in the area where they live.

Source of medicines (Indicators 23–25; Q 19, 26, 29)

Purpose To determine the relative source of specific types of medicines used

Prerequisites Calculated by type of medicines; all uses of each type of medicine (regardless of symptom) is the divisor. All medicines of a certain type (antimalarials, antibiotics) must be identified and preclassified.

Calculation
$$\frac{\text{Given source of medicine for given type of medicine}}{\text{Total uses of a given type of medicine/treatment}} \times 100$$

Example 40 percent of all antimalarials taken were already in the home, 20 percent were from pharmacies, 10 percent were from government health centers, etc.

Source of advice or prescription for medicines (Indicator I; Descriptive; Q 27)

Purpose To know the relative source of advice/prescription for any obtained medicine

Prerequisites Important to define what is considered a medicine (e.g., includes or excludes ORS)

Calculation
$$\frac{\text{Number of medicines taken by children in sample for which respondents cited specific source for advice/prescription}}{\text{Number of medicines taken by total sample}} \times 100$$

Example 15 percent of all medicines administered were obtained by respondents who decided to do so on their own, 28 percent were obtained based on the prescription/advice of a health facility worker, 22 percent based on advice from someone in a pharmacy, 9 percent from a vendor in general store/market/kiosk, 8 percent based on advice of a community health worker/traditional birth attendant (TBA), 10 percent on advice by a neighbor/friend/relative, and 6 percent by “other.” 2 percent of respondents did not know or remember what the source of advice/prescription was.

No medicine given (Indicator 26; Q 3, 26)

Purpose To determine how common it was to give no medicines to any children with fever/hot body, convulsions/fits, fast breathing, and/or bloody diarrhea

Prerequisites Child must have at least one of the given symptoms.

Calculation
$$\frac{\text{Number of respondents whose child had at least one of the given symptoms and took no medicine}}{\text{Number of respondents whose child had at least one of the given symptoms}} \times 100$$

Example 40 percent of respondents with a child with at least one of the following symptoms (fever/hot body, convulsions/fits, fast breathing, or bloody diarrhea) reported the child took no medicine.

Overall treatment by antibiotic and injection (Indicators 27–28; Q 23, 26)

Purpose To determine how common it was for children to get antibiotics and injections

Prerequisites None

Calculation
$$\frac{\text{Number of respondents who say their child received an antibiotic (injection)}}{\text{Total sample}} \times 100$$

Example 20 percent of all respondents reported their child received an antibiotic.

Nonmedical actions (Indicator J; Descriptive; Q 3, 25)

Purpose To determine how common it was for those who gave no medicines to children with fever/hot body, convulsions/fits, fast breathing, and/or bloody diarrhea to do nothing or to give other nonmedical treatments

Prerequisites Child must have at least one of the given symptoms and receive no medicine.

Calculation
$$\frac{\text{Number of respondents whose child had at least one of the given symptoms and took no medicine who did nothing, gave "tepid sponging," went to traditional healer, gave traditional teas/herbs, and other}}{\text{Number of respondents whose child had at least one of the given symptoms and took no medicine}} \times 100$$

Example 40 percent of respondents with a child with at least one of the following symptoms (fever/hot body, convulsions/fits, fast breathing, or bloody diarrhea) and reported the child took no medicine, did nothing/left it alone, 40 percent used

“tepid sponging,” 20 percent went to a traditional healer, 20 percent gave traditional teas/herbs, and 10 percent did something else.

Appropriate medicine is administered (Indicators 29–34; Q 3, 14, 17–18, 26)

Purpose To determine the extent to which the appropriate medicine(s) is taken for a given symptom

Prerequisites Child must have given symptom.
Appropriate medicine(s) for each symptom must be preidentified from reference list.

Calculation
$$\frac{\text{Number of respondents whose child had given symptom and took appropriate medicine(s)}}{\text{Number of respondents whose child had given symptom}} \times 100$$

Example 20 percent of respondents with a child with bloody diarrhea reported their child took both ORS and/or salt-sugar solution (SSS) AND co-trimoxazole, the first-line antibiotic for bloody diarrhea.

Inappropriate medicine is administered (Indicators 35–37; Q 3, 14, 26)

Purpose To determine the extent to which a specific inappropriate type of medicine is taken for a given symptom(s)

Prerequisites Child must have given symptom.
Inappropriate types of medicines are standard (e.g., antidiarrheals for diarrhea, antibiotics for cough without fast breathing, antibiotics for nonbloody diarrhea).

Calculation
$$\frac{\text{Number of respondents whose child had given symptom(s) and took inappropriate medicine(s)}}{\text{Number of respondents whose child had given symptom(s)}} \times 100$$

Example 20 percent of respondents with a child with diarrhea reported the child took some antidiarrheal.

Right duration regimen is followed (Indicators 38–43; Q 26, 31)

Purpose To determine the extent to which respondents give their children specific medicines for the right duration of time

Prerequisites Respondent must have given child first- or second-line antimalarials or antibiotics.

Calculation
$$\frac{\text{Number of cases in which respondent reports sick child took given medicine for correct (too long, too short) amount of time}}{\text{Total cases of a given medicine taken}} \times 100$$

Example 40 percent of children receiving CQ, the first-line antimalarial, took it for the correct number of days, 40 percent took it for too long, and 20 percent took it for too short a time.

Appropriate packaging/labeling of medicines (Indicators 44–45; Q 32–34)

Purpose To determine the extent to which medicines were packaged and labeled correctly

Prerequisites None

Calculation
$$\frac{\text{Number of medicines taken cited by respondent (or observed by data collector) to be have appropriate packaging}}{\text{Number of medicines taken by total sample}} \times 100$$

Example 40 percent of all medicines dispensed were in appropriate packaging.

Calculating the Provider Indicators

Data analysis for the provider survey involves calculating five characteristics of the sample and 59 indicators organized into five groups. The data should be grouped according to facility type before analysis, as described in the section Preparing Data for Analysis of Chapter 5. (See Annex 3C for the relevant tabulation forms to calculate these indicators if computer analysis is not possible.)

Characteristics of the Sample

The five sample characteristics provide general information about the outlets and respondents, including—

- a. the types of providers/drug outlets in the sample
- b. the ownership of the outlets (e.g., public, private, mission, other)
- c. the setting in which the outlets are located (rural vs. urban)
- d. the proximity of the outlets to a health facility
- e. the level of training of respondents

The following example shows the process for calculating Sample characteristic a. Type of provider/drug outlet. The same process would be used for calculating the other four sample characteristics.

Sample characteristic a. Type of provider/drug outlet

Purpose To provide general information about the outlets and respondents and to allow findings to be contrasted by specific characteristics

Prerequisite None, local observation

Calculation
$$\frac{\text{Number of outlets of a given type}}{\text{Total number of outlets in the survey}} \times 100$$

Example If 8 of the 40 outlets included in a survey were health facilities and 32 were drugstores, then 20 percent of the sample is health facilities and 80 percent is drugstores.

Primary and Secondary Indicators

The 59 indicators in the provider/drug outlet survey provide information on five different domains: (1) availability and affordability of appropriate medicine, (2) providers' understanding of symptoms and appropriate actions, (3) providers' knowledge of appropriate/recommended treatment for reported symptoms, (4) providers' prescribing or dispensing of appropriate medicines, and/or referral patterns, and (5) appropriateness of information/instructions, advice, labeling, and packaging.

The analysis should be done separately for each different type of provider/drug outlet (as measured in Sample characteristic a., described above).

Health Care Worker/Drug Provider Keeps Appropriate and Affordable Medicine Available in Stock

These indicators described the availability and affordability of appropriate medicines. They are divided into three subgroups: indicators of availability, indicators of treatment cost, and indicators of affordability of treatment.

Indicators of availability of appropriate medicines (Indicators 1–9; Q 17)

Purpose These indicators provide information on the current overall availability in outlets of tracer medicines that can be used in child health (both key IMCI medicines and undesirable ones).

Prerequisites Before analysis, each medicine on the tracer list must be coded as first-line medicine, second/third-line medicine, antidiarrheal, etc.

Calculation
$$\frac{\text{Number of outlets with specific medicines available in stock}}{\text{Total number of providers/drug outlets surveyed}} \times 100$$

Example 87 percent of the private retail pharmacies in the area have first-line antimalarial medicine for children currently in stock.

Indicators of cost of treatment (Indicators 10, 12, 14–16, 18, 20–22; Q 18)

Purpose To gather information on the average cost of treatment for common childhood illnesses

Prerequisites Define quantity required for the first- and second/third-line medicines for the recommended treatments in each category of childhood illness for a two-year-old child, according to the IMCI guidelines or STGs and the unit price of these medicines in each outlet surveyed.

Calculation
$$\frac{\text{Sum of costs from all providers for specific medicines recommended in STG for children}}{\text{Total number of providers/drug outlets surveyed}}$$

Example On average, the treatment cost for pneumonia in children using first-line antibiotic syrup is USD 5.48 per case when treated in nonpharmacy retail outlets.

Indicators of affordability of treatment (Indicators 11, 13, 17, 19, 23; Q 18)

Purpose To gather information on the average number of working days needed to pay for treatment of common childhood illnesses to give a sense of treatment affordability

Prerequisites The average cost for the first-line recommended treatments in each category of childhood illness for a two-year-old child and the national minimum wage per day (NMW) of the country

Calculation
$$\frac{\text{Average cost for the first-line antibiotic syrup recommended for pneumonia in children}}{\text{National minimum wage per day}}$$

Example On average, it would require 6.4 days' wages to pay for treatment of pneumonia in children using first-line antibiotic syrup when treated in a private health facility.

Health Care Worker/Drug Provider Assesses Symptoms Appropriately (Indicators 24–36; Q 4, 6–7, 9–12)

Purpose These indicators measure whether the provider understands the symptoms and appropriate actions or treatment for common childhood illnesses (non-pneumonia ARI, pneumonia, malaria, and diarrhea).

Prerequisites Survey supervisor must code the responses to the questions on treatment as an antibiotic, injection, antimalarial, or antidiarrheal.

Calculation
$$\frac{\text{Number of respondents mentioning a symptom or treatment}}{\text{Total number of respondents surveyed}} \times 100$$

Example 38 percent of respondents in private retail pharmacies mentioned an injection for the treatment of malaria in children.

Health Care Worker/Drug Provider Prescribes, Dispenses, or Recommends Appropriate Medicine or Refers: Knowledge of Appropriate Treatment (Indicators 37–43; Q 13–16)

Purpose These indicators measure respondents' knowledge of the recommended medicines and treatment duration in the STGs for management of childhood illnesses.

Prerequisites Survey supervisor must code the responses to the questions on treatment as an antibiotic, injection, antimalarial, or antidiarrheal and ascertain the appropriateness of each response according to IMCI guidelines before the analysis.

Calculation
$$\frac{\text{Number of respondents mentioning a specific medicine recommended on the STG for children with diarrhea, pneumonia, or malaria}}{\text{Total number of respondents surveyed}} \times 100$$

Example 62 percent of the respondents in health facilities, but only 11 percent in private pharmacies, know the first-line antibiotic recommended in the STG for pneumonia in children.

Health Care Worker/Drug Provider Prescribes, Dispenses, or Recommends Appropriate Medicine or Refers: Commonly Sold or Dispensed Medicines

These indicators are divided into two groups and provide information on the sales of medicines at the providers/drug outlets as well as the referral patterns of the providers.

Indicators of medicine sales (Indicators 44, 46, 48; Q 20–22)

Purpose To obtain information on the medicines most commonly used (sold or dispensed) for childhood illnesses

Prerequisites Master list containing the names and classification of all medicines mentioned as either first-line, second/third-line, or nonrecommended

Calculation
$$\frac{\text{Number of respondents mentioning a specific medicine as the most common for children}}{\text{Total number of respondents surveyed}} \times 100$$

Example 87 percent of health facilities, but only 22 percent of retail outlets, mentioned amoxicillin as the most commonly dispensed medicine for children with pneumonia.

Indicators of referral (Indicators 45, 47, 49, 50; Q 13–16, 20–22)

Purpose To obtain information on providers' likelihood to refer case of children with serious illnesses

Prerequisites All serious conditions in children, such as bloody diarrhea, pneumonia, or severe malaria, seen at an outlet other than a health facility should be referred.

Calculation
$$\frac{\text{Number of respondents in a category mentioning they usually refer sick children}}{\text{Total number of respondents surveyed}} \times 100$$

Example 80 percent of street vendors mentioned they would refer a child with pneumonia.

Health Care Workers/Drug Provider Provides Appropriate Information/Instructions/Advice/Labeling (Indicators 51–52; Q 23–24)

Purpose Based on dispensing practices reported by respondents, these indicators provide information about the overall quality of instruction/information given with dispensed medicines.

Prerequisites Established criteria should be developed about the content of correct labeling and information that should be given to customers.

Calculation
$$\frac{\text{Number of respondents mentioning that the criteria of correct labeling should be written on the label}}{\text{Total number of respondents surveyed}} \times 100$$

Example 68 percent of staff dispensing medicines in health facilities know the correct elements that should be written on a label.

Dispensing Practices (Indicators 53–59; Q 26–28, 30–33)

Purpose To provide information on the actual dispensing practices of some providers who were observed dispensing medicines during the interview

Prerequisites The provider must have dispensed medicines to real customers during the time the interview was being conducted.

Calculation
$$\frac{\text{Number of providers observed with a certain type of dispensing practice}}{\text{Total number of providers observed}} \times 100$$

Example 29 percent of staff dispensing medicines in nonpharmacy drug retail outlets mixed two or more different types of pills when dispensing tablets.

CHAPTER 7. IDENTIFYING AND PRESENTING PROBLEM AREAS

Introduction

By now, you will have completed the calculation of both the household and provider/drug outlet indicators. Both of these sources of information are critical for understanding the assessment and making programmatic decisions. This chapter provides guidance on organizing, presenting, and interpreting these data separately and then combining the two sources of data in order to identify problem areas. This combined perspective—from the levels of household and provider indicators—will underscore the more significant problems in availability and use of medicines in the community.

Organizing the Results for Presentation

Usually, an assessment gathers information on specific issues or domains. You will need to organize the results in ways that allow a direct analysis or interpretation of the findings for each area that was supposed to be covered in the assessment. The results need to follow the elements of the framework for a clear presentation and understanding.

Initially, the results for the household survey will need to be organized and presented separately from the provider survey. Then, in order to identify problems within the framework, you will need to refer to the findings from both surveys.

Establishing Relative Priority of Indicators and Evaluation Standards

Before beginning to interpret results, program managers and other stakeholders involved in planning and conducting the survey need to determine the relative importance of the indicators measured in the C-DMCI assessment and to establish standards against which numeric results will be evaluated. These rankings can be based on many factors: the purpose of the survey, which health problems have local priority, how much is already known about these health problems, the structure of the public and private health system, feasible options for interventions, and whether other interventions have previously targeted these problems.

Using the tables in Annexes 2E and 3D, decision makers should specify which indicators they believe will provide them with key information and classify those as having “primary” importance (or first priority for intervention). Indicators that are of lesser importance should be ranked as having “secondary” importance (or second priority for intervention). The primary indicators will be the ones to concentrate on when you decide on next steps following the survey. The tables in Annexes 2E and 3D contain initial suggestions for establishing priority for the household and provider/drug outlet indicators, respectively, but the team should adapt these rankings to the local situation in the assessment district.

In Chapter 2, the importance of setting evaluation standards was briefly mentioned. The evaluation standards establish, in advance, how decision makers will categorize the results of the

survey. The assessment team should examine the following three evaluation ranges listed for each indicator and modify the values to fit what they feel is appropriate for the current situation in the district—

- Good: a level of performance that is both desirable and feasible to reach, given personnel, financial resources, socioeconomic constraints in the community, and other barriers to ideal behavior
- Fair: a level of performance that is less than desirable but acceptable given current limitations in the health system and community
- Poor: a level of performance that is unacceptable and in urgent need of intervention

For example, although ideally 100 percent of children with fast breathing should receive the first-line antibiotic for pneumonia, achieving a performance level of 80 percent might be considered good given current system constraints in the district, 50–80 percent fair, and less than 50 percent poor and in urgent need of intervention.

Before beginning data collection, the assessment team and decision makers should work together to review and adapt the suggested evaluation standards for both the household and provider/drug outlet indicators in Annexes 2E and 3D. These standards may be drawn from country or district-level plans or from other documents in which IMCI-related goals may have been articulated. If no evaluation standards have been previously established, it is important to develop them by consensus for each indicator before attempting to interpret results.

Comparing Results to the Evaluation Standards

The next step in the analysis process is to transfer results from the household and provider/drug outlets surveys to the revised tables from Annexes 2E and 3D and to compare the results to the evaluation standards selected. The example in Table 6 contains some illustrative results for a selection of the provider/drug outlet indicators. You will notice that the values for some indicators that were rated as primary importance have been shaded. This technique is a way of visually calling attention to results for the first-priority indicators that fall into the fair (light shading) or poor (dark shading) categories.

For example, upon examining Indicator 24 in Table 6, “Percentage of respondents who mentioned an antibiotic for non-pneumonia ARI,” the results are rated as good for health facilities and other providers/drug outlets (16 percent and 22 percent compared to a cutoff point of 25 percent), but for pharmacies the results are only fair (47 percent compared to a cutoff of 50 percent), and for health posts the results are poor (78 percent compared to a cutoff of 50 percent).

Note that only the primary indicators are shaded and evaluated. If you have a secondary indicator of interest, you may use the same process to interpret it.

Table 7 shows similar illustrative results from one district and the suggested evaluation standards for nine household indicators. Looking at Table 7, we can see the results for Indicators 12 and 17

are poor, both 40 percent, with an evaluation standard of poor for anything under 50 percent. These household results are shaded darkest, whereas the results for Indicator 9 are fair and lightly shaded. Indicators 15 and 16 are fair and poor, respectively, but are not shaded because they are secondary indicators and considered less important. The results for the other indicators were considered good.

In summary, depending on the situation in the district, both the provider and household evaluation standards should be modified, but not made too stringent. Remember, although 100 percent is ideal, it is usually not feasible.

Synthesizing Results

After you have compared your indicators with their targets or ranges, you can start synthesizing results. Synthesizing data should bring out the key points or findings that lead to interventions. Depending on the objective of the assessment (for example, for a situation analysis), you will want to comment on almost all indicators. In such situations it often helps to make broad conclusions from your data. However, if you intend to identify specific problem areas for future intervention, you will want your synthesis to focus on any indicators that show undesirable values (those shaded in dark gray).

As can be seen in Table 6, the biggest gaps between evaluation standards and the provider results (i.e., the darkest gray boxes) were found in the failure to mention using an antibiotic for pneumonia (Indicator 26), especially at health facilities and pharmacies. Also, health posts tend to prescribe antibiotics inappropriately for non-pneumonia respiratory symptoms (Indicator 24). Finally, the results suggest a fairly low reported use of antimalarials for children with fever (Indicator 30) at health posts, and even lower use at other types of retail drug outlets.

For the household results presented in Table 7, prompt treatment of diarrhea is very low (Indicator 12), much lower than the promptness indicator for treating other symptoms. This finding is likely to be related to the fact that awareness of ORS is low (Indicator 16), and a low percentage of people had it in their homes (Indicator 17).

These examples highlight the importance of a comprehensive approach to data interpretation. Rather than hone in on individual indicators, you should collectively examine groups of related indicators to gain a better understanding of your findings.

**Table 6. Sample Results from the Provider/Drug Outlet Survey
Indicating Importance of Indicators and Achievement of Standards**

Indicators	Priority Level	Provider Type				Evaluation Standards
		Health Facilities N = 38	Pharmacies N = 32	Health Posts N = 30	Others N = 32	
Part I. Indicators of Reported Treatment Practices						
ARI (non-pneumonia)						
24. Percentage of respondents who mentioned an antibiotic for non-pneumonia ARI	1st	16%	47%	78%	22%	Good: Under 25% Fair: 25–50% Poor: Over 50%
Pneumonia						
26. Percentage of respondents who mentioned an antibiotic for pneumonia symptoms in children	1st	39%	6%	0%	0%	Should refer Good: Over 80% Fair: 60–80% Poor: Under 60%
28. Percentage of respondents who mentioned an injection for pneumonia in children	1st	2%	0%	0%	0%	Good: Under 10% Fair: 10–20% Poor: Over 20%
37. Percentage of respondents who know the recommended medicine for pneumonia in children	1st	18%	0%	3%	0%	Should refer Good: Over 80% Fair: 60–80% Poor: Under 60%
38. Percentage of respondents who know the correct treatment duration with the recommended medicine for pneumonia in children	2nd	7%	0%	0%	0%	Should refer Good: Over 80% Fair: 60–80% Poor: Under 60%
Malaria						
30. Percentage of respondents who mentioned an antimalarial for children with malaria symptoms	1st	92%	84%	73%	54%	Good: Over 80% Fair: 60–80% Poor: Under 60%

Table 7. Sample Results from the Household Survey

Indicators	Priority Level	Results	Evaluation Standards (should be adapted to the specific district situations)
Timeliness of Action			
9. Percentage of respondents whose child had fever/hot body who report that their child took an antimalarial medicine on the same day or the next day after the fever/hot body started	1st	60%	Good: Over 80% Fair: 50–79% Poor: Under 50%
10. Percentage of respondents whose child had convulsions/fits who sought advice, treatment, or medicine from a source outside the home on the same day the convulsions/fits started	1st	80%	Good: Over 80% Fair: 50–79% Poor: Under 50%
11. Percentage of respondents whose child had fast breathing who sought advice/treatment/or medicine from a source outside the home for fast breathing on the same day the fast breathing started	1st	80%	Good: Over 80% Fair: 50–79% Poor: Under 50%
12. Percentage of respondents whose child had diarrhea who report that the child was given more to drink than usual (including ORS and/or SSS) on the same day the diarrhea started	1st	40%	Good: Over 80% Fair: 50–79% Poor: Under 50%
Awareness of First-Line Medicines			
13. Percentage of respondents who have heard of the first-line antimalarial	2nd	80%	Good: Over 80% Fair: 50–79% Poor: Under 50%
14. Percentage of respondents who have heard of the first-line antibiotic for pneumonia	2nd	85%	Good: Over 80% Fair: 50–79% Poor: Under 50%
15. Percentage of respondents who have heard of the first-line antibiotic for bloody diarrhea	2nd	65%	Good: Over 80% Fair: 50–79% Poor: Under 50%
16. Percentage of respondents who have heard of ORS	2nd	45%	Good: Over 80% Fair: 50–79% Poor: Under 50%
Availability of Medicines			
17. Percentage of respondents who had ORS at home	1st	40%	Good: Over 80% Fair: 50–79% Poor: Under 50%

Identifying the Problem Areas within the Framework

After you have evaluated all indicators, you are ready to identify which areas of the framework have problems. Table 8 classifies the indicators from both the provider/drug outlet and household surveys according to the elements of the framework to which they relate.

Using the tables you compiled comparing the data to the evaluation standards, you can identify all the indicators that are fair or poor. These fair and poor indicators can now be grouped according to the corresponding elements of the framework. You may want to begin by looking only at the indicators that are first priority. Based on this grouping, you can identify key problem areas. For example, if you find that a number of indicators evaluated as poor for framework element 4, and mostly fair and good results for framework element 1, you might need to place greater attention on the issue of the correct administration of medicines.

If caregivers are not administering the medicines appropriately (household indicators 38–43), cross check to see if the medicines are appropriately labeled (household indicators 44–45). Also determine whether drug providers know what should be explained to caregivers and how to label medicines (drug outlet indicators 51–52). In other words, if a caregiver is not doing something appropriately, think about possible contributions to this problem by drug providers. Of course, drug providers are only one source of information and influence affecting caregivers' actions, and many other factors influence caregiver behavior. Some of these issues can be explored further by reviewing available data as described in Chapter 8.

Try to identify as specifically as possible where the problem areas are based not only on the indicators, but also on understanding the relationships among the indicators. It is possible that all elements of the framework will have fair and poor indicators. In that case, it will be important to prioritize which areas should be tackled first. The process of prioritization is discussed in Chapter 8.

Table 8. Indicators from the Household and Provider/Drug Outlet Surveys That Correspond to the Elements of the Framework

Framework Element	Household Survey		Provider Survey	
	Indicator Numbers	Question Numbers	Indicator Numbers	Question Numbers
1. Caregiver recognizes symptoms and decides child requires treatment	C, D	3, 4, 14	None	None
2. Caregiver seeks timely pharmaceutical care from an appropriate source				
Treatment-seeking behavior and source of treatment/medicine	E–H, 1–8	5, 7, 8, 10, 11, 13, 15, 16	None	None
Timeliness of action	9–12	3, 6, 12, 22, 26, 28	None	None
3. Caregiver obtains appropriate medicine				
Awareness of first-line medicines	13–16	35, 38, 41, 43	None	None
Availability of medicines	17–22	36, 37, 39, 40, 42, 44	None	None
Source of treatment/medicine	23–25, I	19, 26, 27, 29	None	None
Overall medicine treatment	26–28, J	3, 23, 25, 26	None	None
4. Caregiver administers appropriate medicine correctly				
First-line appropriate medicine is administered	29–34	3, 14, 17, 18, 26	None	None
Inappropriate medicine is administered	35–37	3, 14, 26	None	None
Right dose/duration regimen is followed	38–43	26, 31	None	None
5. Health care worker/drug provider				
Keeps appropriate and affordable medicine available in-stock: Availability and affordability of appropriate medicines	None	None	1–23	17, 18, STG ^a , NMW ^b
Determines whether caregiver understands symptoms and appropriate actions and then educates, if necessary	None	None	None	None
Assesses symptoms appropriately	None	None	24–36	4, 6, 7, 9–12, STG
Prescribes, dispenses, or recommends appropriate medicine or refers: Knowledge of appropriate treatment	None	None	37–43	13, 13a, 14, 14a, 15, 16, 16a, STG
Prescribes, dispenses, or recommends appropriate medicine or refers: Commonly sold or dispensed medicines	None	None	41, 46, 48	13, 14, 15, 16, 20, 21, 22, STG
Provides appropriate information/instructions/ advice/labeling	44, 45	32–34	51–59	23, 24, 26–28, 30–33
Advises on signs of treatment failure and/or need for referral	None	None	45, 47, 49–50	13–16

^a STG is Standard Treatment Guidelines.^b NMW is National Minimum Wage.

CHAPTER 8. NEXT STEPS

Introduction

The aim of the C-DMCI assessment is producing data to guide the selection of interventions that will improve availability and use of medicines at the community level. In Chapter 7, we discussed how to use your data to identify problem areas within the framework. You are now ready to prioritize the problem areas and decide what to do about them. You will need to conduct a workshop (or a series of workshops) with a variety of stakeholders to meet this objective. In this chapter, we discuss one approach that will facilitate problem prioritization and lead to the eventual implementation of selected interventions in the following stepwise fashion—

1. Review findings and list problem areas.
2. Identify problems for which underlying factors are not well-understood and require further investigation.
3. Prioritize the problem areas.
4. Determine the underlying factors contributing to the priority problems you identified.

This chapter provides detail on Steps 1–3 as well as some guidance on Step 4 here and in Table 9.²⁰

Step 1. Review Findings and List Problem Areas

Your first step in moving from assessment findings to selecting interventions is to review your assessment results and list the problem areas. One way of doing so is to invite all stakeholders to review the data as a group. As you did while planning the assessment, involve relevant individuals from the MOH, for example, staff from the drug regulatory, drug procurement, primary health care, and child health divisions.²¹ District and subdistrict level medical and nursing staff also should be part of this workshop to prioritize problem areas. It is essential to include front-line workers and community representatives who will provide valuable insight into the underlying factors contributing to the problems. Other integral stakeholders who should be present at the workshop include people with influence over decision-making processes that occur at the service delivery and community levels. It would be useful to engage international organizations, NGOs, and private sector representatives such as pharmacists working in the assessment area. In order to minimize distractions, we recommend a meeting venue off-site from most people's work sites. Allow sufficient time for the group to discuss all the information and decide and plan on next steps.

²⁰ Although some of the underlying factors of particular problem areas may be clearly understood by workshop participants (described in Step 2), the factors or determinants of other problems may not be readily understood during the workshop and will require further follow-up.

²¹ If your survey was conducted by district-level staff only, all these partners may not be relevant or appropriate.

Before the workshop, share with participants the results of your assessment (i.e., results for all indicators and identified problem areas).²² At the start of the workshop, *briefly* discuss the rationale for and methods of the assessment, then spend significant time reviewing the findings and identifying the steps within the framework containing indicators in the poor or fair ranges. To do so, the group should use the evaluation standards you developed before you collected the data (see Chapter 7). Therefore, we recommend that you provide each team with tables that compare indicator results to evaluation standards (similar to Tables 6 and 7). If your meeting is large, we suggest that you divide into groups of no more than five to seven individuals, each group focusing on different elements of the framework and tasked with listing the problem areas your assessment detected.

Step 2. Identify Problems for Which Underlying Factors Require Further Investigation

In order to proceed from a list of problem areas to problem prioritization, you need a sense of how difficult or easy it will be to change the identified problem. For that, you need to understand what is causing or contributing to the problem (i.e., the underlying factors or determinants). The effectiveness of an intervention depends largely on the extent to which it addresses the *relevant* factors or determinants of the problem, and these will vary across different settings. For example, there may be many reasons why caregivers do not give the appropriate antimalarial medicine when their child has symptoms of malaria. An intervention focused on increasing knowledge of the appropriate antimalarial medicine will not be successful if other factors such as availability, cost, or negative perceptions about the medicine are the main determinants of the problem in your assessment area. The C-DMCI tells you *what* is happening in relation to the availability and use of medicines at the community level, but it is not intended to give detailed information about *why* such things are happening.

The group should go through this problem list and decide how to find out what factors are causing or contributing to the problem. In order to decide how they will explore the problem further, the group may want to consider what some of the contributing or underlying factors might be. The purpose of this discussion is not to decide what the factors are, but to stimulate thinking about the possibilities and to allow the group to consider how to obtain accurate and context-specific information on the most salient determinants of the problems that your assessment detected.

Table 9 contains a brief list of some possible factors for various problem areas in the framework. For each problem area, the group should ask the following questions—

- What information could the assessment findings provide to explain the factors underlying this problem?
- What other sources might provide information on the factors contributing to this problem in our district?

²² You may decide to do this in separate workshops with different stakeholders to ensure that everyone understands the results.

- What additional data collection or next steps are needed to find out more about the contributing or underlying factors to this problem?

Table 9. Problem Areas and Possible Underlying Factors

Problem Area (Refer to Framework)	Examples of Possible Underlying Factors
Caregiver does not recognize symptoms and/or decides child does not need treatment	<ul style="list-style-type: none"> • Symptoms not considered serious • Symptom considered normal or indicative of non-biomedical illness
Caregiver does not seek treatment from appropriate source in timely manner	<ul style="list-style-type: none"> • Symptoms not considered serious • Treatment from “inappropriate” source preferred or delays treatment from appropriate source • Quality of care at appropriate source perceived as poor • Appropriate source perceived as too expensive or far • Lack of transportation
Caregiver does not administer appropriate home-available medicine ^a	<ul style="list-style-type: none"> • Appropriate home-available medicine not considered useful for treating symptoms • Cost/benefit of using up home-available medication seen as too great • No expectation/low expectation that home-available medicine(s) will work
Health care worker/drug provider does not have appropriate and affordable medicine in stock	<ul style="list-style-type: none"> • Medicines ordered based on previously consumed medicines and not on EDL or national formulary • No incentive for good procurement practices/poor supervision of procurement practices • Leakage of appropriate medicines to inappropriate sources • Desire to make maximum profit • Aggressive pharmaceutical promotion of expensive medicine
Health care worker/drug provider does not assess symptoms appropriately	<ul style="list-style-type: none"> • Poor knowledge of symptom association with biomedical illness • Poor knowledge of IMCI guidelines or lack of diagnostic equipment • Poor supervision • Inadequate training
Health care worker/drug provider does not prescribe, dispense, or recommend appropriate medicine	<ul style="list-style-type: none"> • Caregiver asks for “inappropriate” medicine/provider believes caregiver will demand “inappropriate” medicine • Appropriate medicine perceived as ineffective or too strong/fear of bad clinical outcome • Lack of knowledge of appropriate medicine/STGs • Inadequate training on appropriate prescribing practices • Desire to make maximum profit • Aggressive pharmaceutical promotion of “inappropriate” medicine/inadequate legislation regarding pharmaceutical promotion activities • Inadequate legislation or enforcement regarding prescribing practices • Appropriate medicine not available

Problem Area (Refer to Framework)	Examples of Possible Underlying Factors
Health care worker/drug provider does not provide appropriate information/instructions/advice/ or labeling	<ul style="list-style-type: none"> • Communicating about medications not part of standard practice among peers/not normative • Provider does not know correct dosing for treatment • Inadequate training on how to communicate effectively with caregiver • Provider/dispenser workload not conducive to effective communication with caregiver • Physical lay-out of clinic or dispensary not conducive to communication about medicines and dosing • Adequate packaging and labeling materials not available • Assumption that because caregiver does not ask questions, he/she understands what to do and does not ask caregiver to repeat back what he/she was told
Caregiver does not obtain appropriate medicine	<ul style="list-style-type: none"> • Cost of appropriate medicine too great • Appropriate medicine not available • Lack of understanding of what to do with medicine or its importance • Inappropriate medicine viewed as more effective or desirable (e.g., more desirable form, color, packaging) • Negative perception of effectiveness or side effects of appropriate medicine
Caregiver does not administer appropriate medicine correctly	<ul style="list-style-type: none"> • Child feels/looks better before treatment course is completed • Lack of knowledge or understanding of correct treatment regiment • Concern regarding strength or side effects of medicine • Cost of full course of medicine is too great • Peers administer medicine in same incorrect manner

^a This depends on the policy of the country on home management of certain conditions such as fever.

A table similar to the following Table 10 may be useful for organizing and recording the discussion.

Table 10. Determining Need for Additional Information on Underlying Factors

Problem Areas with Indicators That Are Fair or Poor		
Example #1 Poor use of appropriate medicine (ORS) for diarrhea		
A. Assessment Findings to Explore	B. Additional Sources of Information	C. Next Steps for Further Exploration (if needed)
<p>Provider data on:</p> <ul style="list-style-type: none"> • availability of ORS • knowledge of appropriate treatment for diarrhea • stated prescribing practices <p>Review the above findings by urban/rural splits and provider category.</p> <p>Household data on:</p> <ul style="list-style-type: none"> • awareness and perceived availability of ORS • perceived severity of diarrhea • administration of more fluids than usual <p>Review the above findings by urban/rural splits.</p>	<ul style="list-style-type: none"> • Research in your geographic study area (especially qualitative) on child survival; diarrhea; or infant feeding that was published in journals or conducted by NGOs, graduate students, etc. • Project reports from NGOs in your study area • Project reports or research conducted in study areas with similar characteristics (e.g., ethnicity, religion, urban/rural makeup, etc.) • Community leaders (e.g., village health committee members, women's group leaders, community health workers) 	<p>Depending upon the findings from columns A & B, a focused, in-depth review of the underlying factors or determinants of a problem might be necessary. The main questions might be:</p> <ol style="list-style-type: none"> 1. What is causing lack of ORS availability in provider/drug outlet category X? 2. Why is ORS not prescribed/dispensed even when available? 3. What factors differentiate those who prescribe/dispense from those who do not? 4. Why do caregivers not obtain/administer ORS even when it is available? 5. What factors differentiate caregivers who give ORS and those who do not?

Step 3. Prioritize Problem Areas

Your next task is to prioritize the problems. This task can be extremely challenging, because there may be many problem areas and limited resources. High priority should go to problem areas where—

- The resolution of the problem is likely to have a large public health impact (i.e., will improve child health and survival).
- Key advocates are willing and able to address the problem.
- The likely interventions to solve the problem are feasible (i.e., existing policies, protocols, and guidelines support the necessary interventions; human, financial, and physical resources for addressing the problem can be mobilized readily).

Ideally, you would work with your stakeholders to prioritize the problems after you have a satisfactory comprehension of the factors underlying them. However, this may not be possible or realistic. If you chose to have the group prioritize the problems before participants have such an understanding, it is important to be flexible about adjusting priorities once you have a firmer grasp of the factors contributing to your identified problems.

You may wish to use a ranking like the example shown in Table 11 to help stakeholders consider and weigh the positive benefit of addressing the problem, and the political will that exists for doing so. A ranking system also allows for discussion and recording of the critical assumptions the group is making. Table 11 is meant for illustrative purposes; the stakeholders may wish to develop their own ranking system. According to the ranking system shown in Table 11, each problem area with indicators rated fair or poor would be ranked according to the public health impact, the potential for key advocates to work on the problem, and the feasibility of solving the problem in terms of policy support and resources available. The highest score any problem area could receive would be 9 points (pts). For example, if the public health impact is high (2 pts); the key advocate(s) are available and willing to work on the problem (2 pts); there are existing policies, guidelines, or protocols (2 pts); and there are human, fiscal, and physical resources available to address the problem (3 pts), the total score is 9.

Table 11. Example of a Ranking System for Prioritizing Problem Areas

Public Health Impact Highest possible score = 2	Key Advocates Highest possible score = 2	Policy Support Highest possible score = 2	Available Resources Highest possible score = 3
(choose one) <ul style="list-style-type: none"> • High (2 pts) • Medium (1 pt) • Low (0 pt) 	(choose one) <ul style="list-style-type: none"> • Available and willing to work on the problem (2 pts) • Advocate(s) exist but not currently willing to work on the problem (1 pt) • None currently available (0 pt) 	(choose one) <ul style="list-style-type: none"> • Exists and is functional (2 pts) • Exists but is not functional (1 pt) • Does not exist (0 pt) 	(choose all that apply) <ul style="list-style-type: none"> • Human (1 pt) • Fiscal (1 pt) • Physical (1 pt) • None (0 pt)

Conclusion

When you have prioritized the problems, you are ready to move on to the next steps in intervention development, which are the subject of another guide currently in preparation. First, you will want to learn all you can about what is causing the problems that you have prioritized based on your assessment findings. Second, you will brainstorm about possible interventions to address the most important underlying factors contributing to your key problems. Third, you will prioritize from among the possible interventions. And fourth, you will develop a plan for their implementation.

The C-DMCI assessment is the first step in a process of ameliorating problems related to the availability and use of medicines at the community level. By conducting this assessment, you will have identified the problem areas specific to your local situation. This information serves as the basis for developing effective interventions to improve the outcomes of children who have symptoms of malaria, diarrhea, and pneumonia.

ANNEX 1. ADAPTING THE ASSESSMENT

Introduction

Programmatic needs and circumstances will vary from setting to setting and it will be important to understand how to adapt the assessment to suit this range of contexts and needs. Although it is not possible to anticipate every situation, this annex explores a few key issues related to adaptation. These are—

1. Changing the indicators
2. Changing the survey instruments

How to adapt the tool to the local IMCI context (e.g., how to know what medicines to focus on in the household and provider/drug outlet surveys)

3. Sampling
 - How to sample if you are able to spend more money/take more time in order to generate more-accurate population statistics
 - How to sample for a regional or national-level survey
 - How to sample for a comparative (rather than descriptive) survey
 - How to create sampling clusters when population distribution statistics are unavailable
4. Manual tabulation of data
 - How to prepare data for manual tabulation
 - How to perform manual tabulations to generate the indicators
5. How to switch the focus of the assessment from IMCI to malaria
 - Malaria-only indicators
 - Survey instruments for child and adult malaria
 - Respondent selection criteria for sampling
 - Sample tables for data analysis

1. Changing the Indicators

Generally speaking, the indicator lists (see Annexes 2A and 3A) should remain as is, because these indicators were developed to yield very specific and vital information. There are, however, a few exceptions, as follows.

Household-Level Indicators

- **Descriptive indicators E–I and Indicators 5–8 and 23–25** require that sources of care/medicines be categorized. The problem identification tool (see Annex 2C) lists the following categories: traditional healer, government health post, government health center or hospital (for Indicator 25, the latter two categories are combined as “government health facility”), private or mission health facility, pharmacy/drugstore, general shop/store, market, community health worker/traditional birth attendant (TBA), and other. Additional categories may need to be added to your survey. For example, some villages in Senegal have “health huts,” where community health workers are authorized to dispense medicines. Accordingly, health huts were added to community health worker/TBA as a source.

The names included here may not adequately capture what you find in your context. For example, the term “general shop/store” is not commonly used in Senegal, but “boutique” has the equivalent meaning, so boutique was substituted for general shop/store in that context.

- **Indicators 9 and 13–45** generally require that medicines be accurately identified, which means that the list of medicines mentioned in the household survey described in Chapter 5 will need to be prepared and that the commonly used names of the appropriate drugs must be inserted in the indicators. For example, the first-line drug for malaria in Senegal is chloroquine, but people know this medicine by the generic name, chloroquine, and also by the brand-name Nivaquine. Therefore, Indicator 13 became “Percentage of respondents who had heard of chloroquine or Nivaquine.” Indicator 30 requires preidentifying the appropriate antimalarial to be taken for convulsions/fits. As another example, calculating Indicators 23–25, 27, and 35–43, which deal with any medicine of a certain type (such as an antibiotic), requires that a list of all medicines of each type be prepared and coded for each question.
- **Indicators 5–8** require that you determine what constitutes an “appropriate source” of care for convulsions/fits, fast breathing, fever/hot body, and bloody diarrhea. In some settings, community members may be encouraged to take any child with convulsions or fits directly to a hospital. In other contexts, the standard may be to take a child first to a health post or health center. You can use the response categories in the questions to help classify which are appropriate and which are not.
- **Indicators 18 and 5** may need to be adapted, depending on whether the country promotes home management of fever. If not, then Indicator 18 (percentage with first-line antimalarial in the home) is not relevant, but Indicator 5 (percentage with fever/hot body seeking advice/treatment/medicine outside the home at appropriate first source) is. If the country promotes only home management of fever, then Indicator 18 is relevant, but Indicator 5 is not, since the first source sought should be “home/self.” If the country promotes both home

management and care seeking for fever, then Indicator 18 is relevant and Indicator 5 should be changed by adding “treated at home or” before “sought advice.”

Provider/Drug Outlet–Level Indicators

- **Sample characteristic and all provider/drug outlet indicators:** Data for the provider/drug outlet indicators will usually be organized and analyzed in the following categories (see Chapter 3): health facilities, licensed retail drug sales outlets, other retail outlets selling drugs, licensed individuals dispensing drugs, and other individuals dispensing drugs. In some districts, a sufficient number of providers within a certain category will exist to permit creation of separate subcategories for analysis (e.g., public health facilities vs. private health facilities, or pharmacies vs. second-tier drug shops). On the other hand, too few (i.e., < 20) providers may be surveyed in some categories to permit reliable analyses.

After considering what types of drug outlets and providers are available in the study district, the categories listed in the provider questionnaire for type of drug outlet may need to be modified prior to data collection. During analysis, if less than 20 outlets were surveyed in any of the target types, that category should be dropped or combined with another or findings for those indicators may be unreliable.

- **Indicators 1–23:** The indicators of availability and affordability of appropriate medicines are all based on identification of recommended first- and second/third-line medicines for treating common children’s illnesses according to local treatment guidelines. Some of these indicators examine syrups separately from pills or tablets. The final set of indicators in this group will depend on several factors: the level of detail in local treatment norms, whether second/third-line treatments are identified, whether syrups are commonly used, and whether malaria is a problem in the local setting. For example, if syrups are not used or if no second/third-line therapies are identified for a certain condition, then the corresponding indicators would need to be dropped.
- **Indicators 25, 29, and 33:** Questions 3, 5, 7, 8, 10, and 11 use a list of symptoms common in sick children to gather information about providers’ knowledge about the differentiating symptoms of these conditions. These symptom checklists form the basis for Indicators 25, 29, and 33. If other symptoms besides those listed in these indicators are used in local guidelines, then the corresponding indicators would need to be changed.
- **Indicators 29–32, 39–40, and 46–47:** If malaria is not a problem that occurs in the local setting, Questions 8–10, 14, and 21, and Indicators 29–32, 39–40, and 46–47 should be dropped.

2. Changing the Survey Instruments

This section describes how to adapt the tool to the local IMCI context.

Household Questionnaire (Annex 2C)

- Adaptations made to the indicators typically need to be reflected in the questionnaire. For example, if the first-line antimalarial drug is sulfadoxine-pyrimethamine, but it is known to respondents as “Fansidar” and “Maloxine,” then you will want to ensure that any question that asks respondents for the first-line antimalarial contains all the names by which the first-line antimalarial is commonly known. Using this situation as an example, Question 35 would be changed from “Have you ever heard of a medicine called (name/names for first-line antimalarial)?” to “Have you ever heard of a medicine called Fansidar or Maloxine?”

As another example, if you have altered your “source of drug” response categories in the indicators to reflect the local context (e.g., “general shop/store” has become “boutique”), then this change must be made in the response categories to the appropriate questions in the survey instrument.

- Adapt the symptoms to IMCI guidelines in the country.

Provider Questionnaire (Annex 3B)

Several sections will need to be adapted to the local IMCI context before the Provider Questionnaire is used in the field. These include the following—

- The categories used to identify type of drug outlet and the terms used to distinguish levels of training in clinical care or pharmacy (Question 2) should be made consistent with those expected in the survey district.
- The list of symptoms used in Questions 3, 5, 7, 8, 10, and 11 should be adapted to the terms used in the local IMCI guidelines and modified to include any locally important terms or differentiating symptoms.
- The tracer list of generic drug categories and common brand names used in the section on Availability and Affordability of Common Medicines (Questions 17–18) needs to be developed, as described in Chapter 2, and entered on the questionnaire.
- The response categories listed for Questions 23–24 need to reflect local standards for what should be written on a package label and what should be explained to customers before dispensing, respectively. The standard used to calculate Indicators 51 and 52, which are based upon these responses, should be specified in advance of the survey.
- The response categories listed in Questions 27, 30, and 31 should be checked to be certain that any significant local variations in packaging or labeling are included. These responses are used in calculating Indicators 54–56 related to the observed use of incorrect packages or labels.

3. Sampling

How to Sample If You Want to Generate More-Accurate Population Statistics

The purpose of this assessment is to determine where problems exist, rather than to generate very precise population estimates. However, if you have additional financial resources and time, you may wish to gain a bit more precision and accuracy than is possible with the current design.²³ Since households or providers/drug outlets within a cluster are more similar to one another than they are to households or providers/drug outlets in another cluster, you can increase the precision of estimates from the survey by sampling a larger number of clusters and at the same time selecting fewer households from within each cluster (e.g., by increasing the number of clusters from 20 to 30 and decreasing the number of respondents per cluster from 15 to 10). At present, little is known about design effects for the indicators measured in the household survey; as of the writing of this first version of the manual, we have data only for the survey carried out in Senegal in 2002.

The Senegal household survey design was 20 clusters of 30 respondents each in a total of two districts. In practice, the number of respondents per cluster ranged from 24 to 30, and averaged 27 overall, with a total of 541 respondents. For indicators about malaria estimated from the survey, design effects ranged from 1.04 to 4.36, as shown on Table 1-1.

Table 1-1. Design Effects for Malaria Indicators from the Senegal Household Survey

Base: Children with Fever	ROH	Design Effect	Estimate and 95% CI
Took any antibiotic	~0	1.04	89.8 ± 2.6
Had an injection	0.01	1.21	6.5 ± 2.3
Sought advice outside the home and went to an appropriate source	0.01	1.17	48.1 ± 4.6
Took no medicines	0.03	1.71	6.7 ± 2.8
Sought advice outside the home	0.04	2.06	90.6 ± 3.5
Had the first-line antimalarial at home	0.12	4.07	25.1 ± 7.4
Took chloroquine	0.12	4.21	56.4 ± 8.6
Took an antimalarial the day the fever started or the next day	0.13	4.35	44.0 ± 8.7

For example, for taking an antimalarial on the same day the fever started or the next day, the point estimate of the indicator was 44 percent. For this indicator, the intraclass correlation coefficient (also called roh, for rate of homogeneity) was 0.13 and the design effect (also called DEFF) was 4.35, indicating a moderate amount of clustering (that is, respondents in a cluster behaved similarly, so that the percentage of respondents in each cluster who did this tended to be either high or low, not around 44 percent).

²³ We strongly urge survey planners to carefully weigh the costs and benefits of increasing the number of clusters. In most instances, the 20 clusters/15 respondents per cluster approach will be sufficient for determining where the problems are within the framework of community drug management.

With this design effect, the cluster sample size of 541 is equivalent to a simple random sample of $541/4.35$ or 124 people. Where this makes a difference is in the size of the confidence limits around the point estimate. If our total sample of 541 were a simple random sample, the 95 percent confidence limits around the point estimate would be ± 4.2 percent, so we would estimate that 39.8 to 48.2 percent of children received an antimalarial on the day their fever began or the next day. However, for this cluster sample the 95 percent confidence limits are ± 8.7 percent, so our estimate is really from 35.2 percent to 52.7 percent. The confidence limits for the cluster sample will be larger than those for the simple random sample by a factor of the square root of the design effect (called DEFT). In this example, the square root of 4.35 is 2.086, and 8.7 is 2.086×4.2 .

The intraclass correlation coefficient (ρ) is stable, whereas the design effect is strongly affected by cluster size. The relationship between the design effect and the intraclass correlation coefficient is $DEFF = 1 + \rho(n - 1)$, where n is the average number of respondents per cluster. Using this equation, we can calculate that with a ρ of .13, an average cluster size of 15 will give a design effect of roughly 2.8. So a cluster sample of 20 clusters of 15 respondents will be equivalent to a simple random sample of $300/2.8$, or about 106. The confidence limits for the cluster sample will be 1.67 times larger than those for the simple random sample (1.67 is the square root of 2.8).²⁴

We can use these simple equations for DEFF and DEFT to examine the effect of increasing the number of people per cluster or the number of clusters. With the same ρ , the four following cluster sample designs (each of which involves 300 respondents) are equivalent to simple random samples ranging in size from 86 to 197 and will have 95 percent confidence limits around a point estimate of 50 percent ranging from ± 7 percent to ± 10.6 percent.

Table 1-2. Effects of Increasing the Number of People per Cluster or the Number of Clusters

Number of Clusters	Cluster Size	Design Effect	Equivalent Simple Random Sample Size	Confidence Limits Relative to Those of a Simple Random Sample	95% Confidence Limits at 50%
20	15	2.82	106	1.68	$\pm 9.5\%$
30	10	2.17	138	1.47	$\pm 8.3\%$
60	5	1.52	197	1.23	$\pm 7.0\%$
15	20	3.47	86	1.86	$\pm 10.6\%$

Clearly, having more clusters of smaller size will yield larger equivalent samples—and narrower confidence limits, that is, more precise estimates. Thus, a design with 30 clusters of 10 respondents each is preferable to one with 20 clusters of 15 respondents. From the point of view

²⁴ Confidence limits around a point estimate of 50 percent in a simple random sample can be calculated as the square root of $(pq/n-1)$, where both p and q are .5 and n is the denominator of the point estimate.

of study precision, the best design of the four examples in Table 1-2 is 60 clusters of 5 respondents each. However, it is more expensive to go to more clusters than to go to additional respondents within a cluster. The design suggested in this manual—20 clusters of 15 respondents—is a compromise between cost and efficiency.

Even using the worst-case roh (.13) estimated from the Senegal data, confidence limits less than ± 10 percent would be obtained for all but the last sample design (15 clusters of 20 each). Table 1-3 shows the effect of different sample designs for the median roh estimated from the Senegal data (.04); in every case the confidence limits are less than or equal to 7.5 percent.

Table 1-3. Effects of Different Sample Designs for the Median roh Estimated from the Senegal Data

Number of Clusters	Cluster Size	Design Effect	Equivalent Simple Random Sample Size	Confidence Limits Relative to Those of a Simple Random Sample	95% Confidence Limits at 50%
20	15	1.56	192	1.25	$\pm 7.1\%$
30	10	1.36	221	1.17	$\pm 6.6\%$
60	5	1.16	259	1.08	$\pm 6.1\%$
15	20	1.76	170	1.33	$\pm 7.5\%$

One final note: the same logic applies to the provider/drug outlet survey as to the household survey. However, when the providers/drug outlets represent a large proportion (p) of the total number of outlets, roh is reduced by a factor of $1-p$. For example, suppose the drug outlet survey design is one interview completed in each of two facilities per cluster (a total of 40 facilities). If the 40 facilities where providers are interviewed are drawn from a total pool of 60 facilities, they represent two-thirds of all facilities of that type, so p is 0.66. In this case a roh of 0.06 would be reduced to $0.06 \times (1 - .66)$ or 0.02, and the confidence limits around a point estimate of 50 percent would be ± 15.8 percent, about the same as if the facilities were randomly sampled from the total pool (a simple random sample of 40 facilities would yield confidence limits of ± 15.7 percent around a point estimate of 50 percent).²⁵

How to Sample for a Regional or National-Level Survey

The simplest approach to sampling for a regional or national-level survey is to build a sample that represents the larger area (e.g., a country) from a set of samples of smaller areas that make up that larger one (e.g., districts). In other words, you will want to carry out as many district-level surveys as are needed to represent the region or the country. For example, for a national survey, you may want to conduct a district-level survey in the capital region and then in at least four other districts. This structure would mean 300 households in each district for a total of 1,500 households sampled.

²⁵ L. Kish, *Survey Sampling* (New York: John Wiley and Sons, 1965).

The process of selecting households and providers/drug outlets for a regional or national survey is identical with the process used in a district survey.²⁶

How to Sample for a Comparative (Rather than Descriptive) Survey

In conducting a descriptive survey, a common way to select the districts that will be sampled in a national or regional-level assessment is to choose districts with probability proportional to the estimated population in each district. However, in some circumstances, you might want to compare one set of districts (or regions) with another. In that case, you would simply do what is required to select your districts for a descriptive survey, but you would need to do this twice, once for each district or region.

How to Create Sampling Clusters When Population Distribution Statistics Are Unavailable

Get a map of the geographic area you want to survey. Place 100 numbered dots, equidistant from one another, around the edge of the map. Cut up paper into 100 small pieces and number each piece from 1 to 100. Place all pieces into a bowl, choose a pair of numbers at random, and draw a line between them. Put the pieces of paper back in the pot and choose another pair of numbers and draw a line between them. Continue this process until you have drawn about 50 lines. You will see that the lines drawn on the map create different spaces. Now, number the spaces formed by the lines and choose 30 (or 20) spaces at random. These are your sampling clusters.²⁷

4. Manual Tabulation of Data

If there are no computer capabilities in a district where an assessment is carried out, and in the absence of a customized software package, manual tabulation may be used to calculate the indicators.

a. How to prepare data for manual tabulation

- Clean data by going through all questionnaires and making sure each question has at least one answer.
- Code write-in responses.
- Household Survey: For those questions related to source of care, add any response categories with more than 30 responses to the relevant analysis tables in Annex 2D.

²⁶ No matter what the scope of the survey, you should always sample at least two providers/drug outlets of each type to be included in the survey.

²⁷ H.R. Bernard, *Research Methods in Anthropology: Qualitative and Quantitative Approaches* (Walnut Creek, CA: AltaMira Press, 1995).

- Household Survey: Code the actual medicines and types of medicines (antibiotic, etc.) based on answers to Question 26 of the questionnaire; write these in on the same page.
- Provider Survey: Using the medicines tracer list, code the answers to Questions 4, 6, 9, 11, 13–16, and 19–22 as first- or second-line antibiotic, first- or second-line antimalarial, ORS, or antidiarrheals.

b. How to perform manual tabulations to generate the indicators

- It will be necessary to add instructions and formulas to the analysis tables in Annex 2D (for the Household Survey) and Annex 3C (for the Provider/Drug Outlet Survey) so that persons entering the data understand how to calculate the indicators by hand. The appropriate formulas for each indicator are listed in Chapter 6.

For example, to transform Table 1-4 (from the analysis tables, Annex 2D) into Table 1-5, you would add a top row identifying each column, a column on the left identifying each row, and columns to the right of each of the last two columns. Then in each relevant cell in the two new right columns, you would add the formula for calculating the percentages (based on the row letters and column numbers). It is also important that instructions such as those in the box above Table 1-5 be added to help the person tabulating the data.

Table 1-4. Analysis Table for Indicator 9

Indicator 9: Percentage of respondents whose child had fever/hot body and received an antimalarial on same day fever/hot body started or next day (among those whose child had fever and used antimalarial) (Q 3, 26, 28)

Response Category	Response Count	Percentage	Combined Percentage
Same day		%	%
Next day		%	
Two days after the fever/hot body started		%	
Three or more days after the fever/hot body started		%	
Don't know		%	
Total		%	
Missing			

Table 1-5. Analysis Table for Indicator 9, with Additions for Hand Tabulation

TO DO:						
1. Make a pile of all the questionnaires where the child had fever/hot body AND used chloroquine						
2. For each questionnaire in the pile, check the question about when they received the first-line antimalarial. Count the number for each response and put this number in the space in Column C next to that response.						
3. Following the formulas in Column D, calculate the percentages and enter in Column C. Make sure the total in cell 6D adds to 100 percent.						
4. Also, please follow calculation instructions to the right of Column D to calculate “combined percentage” for Column E.						

Percentage of respondents whose child had fever and received first-line antimalarial (chloroquine) on same day as fever onset or next day after illness started (among those whose child had fever and used chloroquine)

A	B	C	D		E	
Row	Response Category	Response Count	Formula	Percentage	Formula	Combined Percentage
1	Same day		$(1C/6C) \times 100$	%	$(1C+2C)/6C \times 100$	%
2	Next day		$(2C/6C) \times 100$	%		
3	Two days after the illness started		$(3C/6C) \times 100$	%		
4	Three or more days after the illness started		$(4C/6C) \times 100$	%		
5	Don't know		$(5C/6C) \times 100$	%		
6	Total			%		
7	Missing					

5. How to Switch the Focus of the Assessment from IMCI to Child and/or Adult Malaria

One of the three goals of Roll Back Malaria is that by 2005 “at least 60 percent of those suffering from malaria should be able to access and use correct, affordable, and appropriate treatment within 24 hours of the onset of symptoms.” To guide and monitor progress toward this goal, there is an increasing interest in understanding treatment seeking and medicine use for malaria/febrile illness. For this purpose, the problem identification tool can easily be adapted to focus only on malaria. Annexes 5–8 contain generic malaria-only indicators, screening forms, instruments, and data analysis guides. Because in some areas malaria is an important disease among adults as well as children, a complete set of generic tools for adults is provided along with the complete set of generic tools for children. These generic tools will need to be further adapted to reflect local programmatic needs and circumstances, such as the recommended first- and second-line drugs. Below are summaries of how the generic malaria-only tools differ from the standard tools and what issues you should consider in making the final adaptations of them.

Indicators (Annexes 5A, 6A, 7A, 8A)

Both the provider- and the household-level generic malaria-only indicators include the subset of the IMCI indicators that relate specifically to malaria. The list of malaria-only indicators for adults and the list for children are identical, except that the list for children in the provider survey includes two additional indicators related to syrup formulations of antimalarials.

The same issues discussed in Section 1 of this annex for local adaptation of the IMCI tools are relevant for local adaptation of the malaria-only tools: for example, for household-level Indicators 11–12, you need to determine what is considered an “appropriate source” of drugs. For Indicator 5 you need to determine what the recommended first-line medicines are, and whether people identify each by more than one name; the indicator should include all of the names that people use.

Because the focus is simply malaria, you might also consider making use of second-line medicines a primary indicator. This will have implications for data analysis.

If the recommended first-line treatment for malaria is combination therapy, then for both the provider- and household-level indicators, you will need to consider how people identify it. For example, if it is available in a named combination (for example, Mefloquine and Artesunate, packed together as “Meflonate”), then provider Indicator 3 would be “Percentage of respondents mentioning Meflonate or both Mefloquine and Artesunate for children with malaria symptoms.” Similarly, provider-level Indicator 5 would be “Percentage of respondents who know that Meflonate or a combination of Mefloquine and Artesunate is the recommended treatment for children with malaria/for malaria in adults”; Indicator 6 would be “Percentage of respondents who know the correct treatment duration for each component of the recommended combination of drugs for malaria in children/adults”; and Indicator 7 would be “Percentage of outlets with Meflonate or both Mefloquine and Artesunate in stock.” If the treatment is not available in a named combination, then Indicators 3, 5, and 7 would be “Percentage of respondents mentioning a combination of both Mefloquine and Artesunate for children with malaria symptoms”; “Percentage of respondents who know that a combination of Mefloquine and Artesunate is the recommended medicine for children with malaria/for malaria in adults”; and “Percentage of outlets with both Mefloquine and Artesunate in stock.”

The household-level indicators will also change. For example, household-level Indicator 3 will become “Percentage of respondents who have heard of Meflonate or a combination of Mefloquine and Artesunate as treatment for malaria”; Indicator 5 will become “Percentage of respondents who have Meflonate or both Mefloquine and Artesunate at home”; Indicator 7 will become “Percentage of respondents who say they can always get Meflonate or both Mefloquine and Artesunate in the area where they live”; and Indicator 14 will be “Percentage of respondents whose child had fever/hot body and took Meflonate or both Mefloquine and Artesunate.”

When combination therapy is the recommended treatment, Indicator 20 becomes “Percentage of correct first-line combinations where both medicines were taken for the correct amount of time.”

You might also want to include an additional indicator of knowledge of recommended treatment for both households and providers: “Percentage of respondents/of outlets who know that more

than one medicine must be given to children/adults with malaria.” If you decide to do this, you will need to add some questions.

Survey Instruments for Childhood and Adult Malaria

The generic malaria-only household questionnaires in Annexes 5C and 7C and the provider questionnaires in Annexes 6B and 8B include the questions about fever/hot body and convulsions/fits from the child health questionnaire. The malaria-only household survey questionnaires for children and adults are identical, except that for children the questions are addressed to the/an adult who takes care of the child, while adults are asked about what they did. In addition, at the end of the adult questionnaire, women who answer it are asked whether they are pregnant, in case additional analysis is wanted. The medicines included in the tracer list for the malaria-only provider questionnaires would differ depending on whether the focus is treatment of adults, children, or both.

The main changes that you might make in the generic household malaria questionnaires focus on combination therapy.

Use of Combination Therapy

If the recommended first- or second-line antimalarial is combination therapy, then how you frame questions about it will be affected by whether the drugs are usually packaged together as a named combination or not. If they are, and people report that name in response to Question 14A, then that name can be substituted in Questions 15 through 20. However, it is likely that some providers will give out loose tablets. In that case, if people know the names of the tablets and report them as separate medicines, you can determine during the analysis what percentage of children (or adults) with malaria has used combination therapy and what percentage has used it correctly.

Knowledge about Combination Therapy

If you want to add a question to determine whether people know that a combination of two different drugs must be given to children/adults who have malaria, it should be asked in the last section of the household questionnaire. How you frame the question will be affected by whether the drugs are usually packaged together as a named combination or not. If they are, then you should ask Question 24 substituting the name of the combination. Then, if they know the named combination, ask Questions 25 and 26 as written. Then ask another question (call it 26A): “Does [*name of the combination*] include one, two, or more than two kinds of drug?”

Then, whether or not the respondent has heard of that combination, ask questions similar to 24–26 about each of the antimalarials that are the components of the combination. Finally, ask if that component is sufficient to treat malaria by itself or if it must be taken together with another drug.

A copy of this suggested adaptation is included in both Annexes 5E and 7E.

Respondent Selection Criteria for Child and Adult Malaria Sampling

The screening criteria for the malaria-only household questionnaires for both adults and children focus on two symptoms only: fever/hot body and convulsions/fits. (These can be found in Annexes 5B and 7B.)

One decision that you will need to make is whether to ask questions about the treatment of children or adults who are still sick at the time of the survey. If you don't have trouble finding people who have recently been ill but have recovered, it is better to exclude those who are still sick; otherwise, the information you collect may be incomplete, because people frequently try different treatments as an illness progresses. Thus, if you ask questions about the treatment of someone who has been ill for only a day, you will miss finding out what they do on the third day of illness.

In circumstances when you want to find out about treatment of both adults and children, it will be easiest to think about getting two separate samples—one of adults and one of children—from the same cluster. Logistically, what may work best is to have two sets of interviewers, one for adults and one for children. If one set finds an eligible respondent for the other set—for example, an interviewer who is screening for children who recently had fever/hot body or convulsions/fits is told that no child in the house had hot body but that one of the adults did—then they can tell the respondents that another interviewer might visit them to ask questions about that person. (See Annexes 5B and 7B for malaria screening forms.)

Tables for Data Analysis for Household and Provider Surveys

In Annexes 5D and 7D, you will find the sample tables for analysis of malaria-only data. For most of the malaria-only indicators, the tabulation is the same as for the generic child-health indicators. The main difference is with the indicators that refer to combination therapy.

ANNEX 2A. CHILD HEALTH HOUSEHOLD INDICATORS

#	Indicator	Level ²⁸	Question #
Characteristics of sample			
A	Age of children in sample (percentage of children who are 0–less than 1 year, 1 year–less than 2 years, 2 years–less than 3 years, 3 years–less than 4 years, 4 years–less than 5 years)	Descriptive	1
B	Percentage of children in sample who are male/female	Descriptive	2
Caregiver recognizes symptoms and decides child requires treatment			
C	Percentage of respondents whose child had fever/hot body, convulsions/fits, fast breathing, diarrhea (not bloody), bloody diarrhea, and cough without fast breathing	Descriptive	3, 14
D	Percentage of respondents who thought that their child's illness was very serious/somewhat serious/not serious	Descriptive	4
Caregiver seeks timely care from an appropriate source			
<i>Treatment-seeking behavior and source of treatment/medicine</i>			
1	Percentage of respondents who sought care outside the home when their child had fever/hot body	Primary	8
2	Percentage of respondents who sought care outside the home when their child had convulsions/fits	Primary	11
3	Percentage of respondents who sought care outside the home when their child had fast breathing	Primary	5
4	Percentage of respondents who sought care outside the home when their child had bloody diarrhea	Primary	15
E	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with fever/hot body)	Descriptive	10
F	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with convulsions/fits)	Descriptive	13
G	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with fast breathing)	Descriptive	7
H	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with bloody diarrhea)	Descriptive	16
5	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with fever/hot body) ²⁹	Primary	10

²⁸ Primary indicators provide information crucial to identifying problems and shaping interventions. Secondary indicators provide additional information that can be useful when combined with other information, including primary indicators. Descriptive indicators provide further information that describes who is interviewed and/or what is happening.

²⁹ This indicator should be calculated in countries that do *not* have a strategy of promoting home management of fever (i.e., stocking in the home and using appropriately an appropriate antimalarial).

#	Indicator	Level ²⁸	Question #
6	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with convulsions/fits)	Primary	13
7	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with fast breathing)	Primary	7
8	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with bloody diarrhea)	Primary	16
<i>Timeliness of action</i>			
9	Percentage of respondents whose child had fever/hot body who report that their child took an antimalarial on the same day or the next day after the fever/hot body started	Primary	3, 26, 28
10	Percentage of respondents whose child had convulsions/fits who sought care from a source outside the home on the same day the convulsions/fits started	Primary	12
11	Percentage of respondents whose child had fast breathing who sought care from a source outside the home on the same day the fast breathing started	Primary	6
12	Percentage of respondents whose child had diarrhea who report that the child was given more to drink than usual (including ORS and/or SSS and/or breast milk) on the same day that the diarrhea started	Primary	22
Caregiver obtains appropriate medicine			
<i>Awareness of first-line medicines</i>			
13	Percentage of respondents who have heard of the first-line antimalarial	Secondary	35
14	Percentage of respondents who have heard of the first-line antibiotic for pneumonia	Secondary	41
15	Percentage of respondents who have heard of the first-line antibiotic for bloody diarrhea	Secondary	43
16	Percentage of respondents who have heard of ORS	Secondary	38
<i>Availability of medicines</i>			
17	Percentage of respondents who had ORS at home	Primary	40
18	Percentage of respondents who had the first-line antimalarial at home ³⁰	Primary	37
19	Percentage of respondents who say they can always get the first-line antimalarial in the area where they live	Secondary	36
20	Percentage of respondents who say they can always get the first-line antibiotic for pneumonia in the area where they live	Secondary	42
21	Percentage of respondents who say they can always get the first-line antibiotic for bloody diarrhea in the area where they live	Secondary	44
22	Percentage of respondents who say they can always get ORS in the area where they live	Secondary	39

³⁰ This indicator should be calculated in countries that have a strategy of promoting home management of fever (i.e., stocking in the home and using appropriately an appropriate antimalarial).

#	Indicator	Level ²⁸	Question #
	Source of treatment/medicine		
23	Percentage of all antimalarials that were already in the home or that were obtained from X source (among antimalarials used)	Primary	26, 29
24	Percentage of all antibiotics that were already in the home or that were obtained from X source (among antibiotics used)	Primary	26, 29
25	Percentage of ORS treatments that were already in the home or that were obtained from X source (among ORS treatments used)	Primary	19 (26, 29)
I	Percentage of medicines obtained on the advice of the following: self, health worker in facility, pharmacist/person in pharmacy or drugstore, vendor in general store/market/kiosk, community health worker/TBA, neighbor/friend/relative, other	Descriptive	27
	Overall medicine treatment		
26	Percentage of respondents whose child received no medicine (among children with fever/hot body, convulsions/fits, fast breathing, and bloody diarrhea)	Primary	3, 26
27	Percentage of respondents whose child received any antibiotic	Primary	26
28	Percentage of respondents whose child received an injection	Primary	23
J	Percentage of respondents who did nothing, gave "tepid sponging," went to traditional healer, gave traditional teas/herbs, and other (among respondents with children with fever/hot body, convulsion/fits, fast breathing, and bloody diarrhea who received no medicine)	Descriptive	3, 25
	Caregiver administers appropriate medicine correctly		
	First-line appropriate medicine is administered		
29	Percentage of respondents whose child had fever/hot body and took first-line antimalarial	Primary	3, 26
30	Percentage of respondents whose child had convulsions/fits and fever and took the appropriate antimalarial	Primary	3, 26
31	Percentage of respondents whose child had fast breathing and took first-line antibiotic for pneumonia	Primary	3, 26
32	Percentage of respondents whose child had diarrhea and took ORS or SSS	Primary	17, 18, (3, 26)
33	Percentage of respondents whose child had bloody diarrhea and took first-line antibiotic for bloody diarrhea	Primary	14, 26
34	Percentage of respondents whose child had bloody diarrhea and took ORS or SSS and first-line antibiotic for bloody diarrhea	Primary	14, 17, 18, 26
	Inappropriate medicine is administered		
35	Percentage of respondents whose child had diarrhea who took any antidiarrheal	Primary	3, 26
36	Percentage of respondents whose child had diarrhea (not bloody) and took any antibiotic	Primary	14, 26
37	Percentage of respondents whose child had cough and no fast breathing and took any antibiotic	Primary	3, 26

#	Indicator	Level ²⁸	Question #
	<i>Right dose/duration regimen is followed</i>		
38	Percentage of first-line antimalarials that were taken for too short, too long, and the correct amount of time	Primary	26, 31
39	Percentage of second-line antimalarials that were taken for too short, too long, and the correct amount of time	Primary	26, 31
40	Percentage of first-line antibiotics for pneumonia that were taken for too short, too long, and the correct amount of time	Primary	26, 31
41	Percentage of second-line antibiotics for pneumonia that were taken for too short, too long, and the correct amount of time	Primary	26, 31
42	Percentage of first-line antibiotics for bloody diarrhea that were taken for too short, too long, and the correct amount of time	Primary	26, 31
43	Percentage of second-line antibiotics for bloody diarrhea that were taken for too short, too long, and the correct amount of time	Primary	26, 31
	Health care worker/drug provider		
	<i>Provides appropriate information/instruction/advice/labeling</i>		
44	Percentage of medicines dispensed in appropriate packaging (i.e., sealed plastic package or original manufacturer's package and one type of medicine per package)	Primary	32, 33
45	Percentage of medicines that were appropriately labeled with all of the following: name of medicine, dose, frequency, and duration	Primary	34

ANNEX 2B. CHILD HEALTH HOUSEHOLD SCREENER

Site name: _____

Site type: Urban ___ Periurban ___ Rural ___

Name of supervisor: _____

Name of interviewer: _____

Date of interview: ___/___/___
 Day Month Year

Language of interview: Language 1___ Language 2___ Language 3___ Language 4___

READ OUT: My name is _____. I am from an organization called [name of organization], concerned with improving child health. To develop programs to improve health, I am talking to people about what they do when their children get ill. May I ask you a few questions? **IF "NO," END INTERVIEW AND THANK RESPONDENT.**

Are there any children who have not yet reached their fifth birthday living in this household?
 No **[END INTERVIEW AND THANK RESPONDENT]**
 Yes



Did this child/those children have any of the following in the last two weeks?
 Cough
 Fast breathing
 Fever/hot body
 Convulsions/fits
 Diarrhea

IF NO CHILD HAD ANY OF THE ABOVE, END INTERVIEW AND THANK RESPONDENT. OTHERWISE, CONTINUE

ASK IF THE PERSON YOU ARE SPEAKING TO IS THE PRIMARY PERSON WHO CARED FOR THAT CHILD/THOSE CHILDREN DURING THE ILLNESS. IF NOT, ASK TO SPEAK TO THE PRIMARY PERSON WHO CARED FOR THE CHILD/CHILDREN DURING THE ILLNESS.

IF THE PERSON YOU WILL INTERVIEW IS DIFFERENT FROM THE PERSON YOU TALKED TO EARLIER, INTRODUCE YOURSELF AGAIN AND CONFIRM THE ABOVE CRITERIA.

COLLECT FIRST NAME OF EACH CHILD, THEN ASK ALL OTHER QUESTIONS IN GRID FOR FIRST CHILD, THEN NEXT CHILD, ETC.

Please give me the first names of all of the children under five who had cough, fast breathing, fever/hot body, convulsions/fits, or diarrhea in the last two weeks.	How old is (NAME) ?	Is (NAME) a boy or a girl?	Is (NAME) now healthy?	Was (NAME) ill for more than four weeks, that is, more than one month?
Child 1				
(FILL IN NAME)	[] years [][] months	<input type="checkbox"/> Boy <input type="checkbox"/> Girl	<input type="checkbox"/> Yes <input type="checkbox"/> No DOES NOT MEET CRITERIA; SKIP TO NEXT CHILD	<input type="checkbox"/> Yes DOES NOT MEET CRITERIA <input type="checkbox"/> No MEETS CRITERIA
Child 2				
(FILL IN NAME)	[] years [][] months	<input type="checkbox"/> Boy <input type="checkbox"/> Girl	<input type="checkbox"/> Yes <input type="checkbox"/> No DOES NOT MEET CRITERIA; SKIP TO NEXT CHILD	<input type="checkbox"/> Yes DOES NOT MEET CRITERIA <input type="checkbox"/> No MEETS CRITERIA
Child 3				
(FILL IN NAME)	[] years [][] months	<input type="checkbox"/> Boy <input type="checkbox"/> Girl	<input type="checkbox"/> Yes <input type="checkbox"/> No DOES NOT MEET CRITERIA; SKIP TO NEXT CHILD	<input type="checkbox"/> Yes DOES NOT MEET CRITERIA <input type="checkbox"/> No MEETS CRITERIA
Child 4				
(FILL IN NAME)	[] years [][] months	<input type="checkbox"/> Boy <input type="checkbox"/> Girl	<input type="checkbox"/> Yes <input type="checkbox"/> No DOES NOT MEET CRITERIA; SEE BOX BELOW	<input type="checkbox"/> Yes DOES NOT MEET CRITERIA <input type="checkbox"/> No MEETS CRITERIA

IF NONE OF THE CHILDREN MEET THE CRITERIA FOR INTERVIEW, END THE INTERVIEW.

AMONG THE CHILDREN WHO MEET THE CRITERIA FOR INTERVIEW, CHOOSE THE YOUNGEST CHILD.

[IF TWINS MEET THE CRITERIA FOR INTERVIEW, ASK “WHO IS THE YOUNGER?” CHOOSE THE YOUNGER TWIN.]

SAY: “All of the information you give me will be kept private. Will you agree to speak with me for about 15 or 20 minutes?”

INTERVIEWER SIGN HERE IF PERSON AGREES TO PARTICIPATE _____

Say: “Let us talk now only about (name of youngest child or younger twin).”

ANNEX 2C. CHILD HEALTH HOUSEHOLD QUESTIONNAIRE

<p>1. RECORD AGE OF CHILD YOU HAVE SELECTED TO INTERVIEW</p>	<p><input type="checkbox"/> 0–less than 1 year <input type="checkbox"/> 1 year–less than 2 years <input type="checkbox"/> 2 years–less than 3 years <input type="checkbox"/> 3 years–less than 4 years <input type="checkbox"/> 4 years–less than 5 years</p>
<p>2. RECORD SEX OF CHILD YOU HAVE SELECTED TO INTERVIEW</p>	<p><input type="checkbox"/> Male <input type="checkbox"/> Female</p>
<p>3. Just to be sure, please tell me which of the following symptoms (NAME) had in the last two weeks. READ RESPONSES OUT LOUD. TICK ALL THAT APPLY.</p>	<p><input type="checkbox"/> Cough <input type="checkbox"/> Fast breathing <input type="checkbox"/> Fever/hot body <input type="checkbox"/> Convulsions/fits <input type="checkbox"/> Diarrhea</p>
<p>4. Did you think the illness that (NAME) had this time was very serious, somewhat serious, or not serious? TICK ONE. DO NOT READ “DON’T KNOW.”</p>	<p><input type="checkbox"/> Very serious <input type="checkbox"/> Somewhat serious <input type="checkbox"/> Not serious <input type="checkbox"/> (<i>Don’t know</i>)</p>
<p>BOX 1 INSTRUCTIONS COMPLETE BOX 1 IF YOU MARKED <u>FAST BREATHING</u> IN Q. 3. IF YOU DID NOT MARK <u>FAST BREATHING</u>, GO TO BOX 2 INSTRUCTIONS.</p>	
<p>5. Let’s talk about (NAME’S) fast breathing. When (NAME) had fast breathing, what did you do? I will read you a list. Listen to the whole list before you respond. READ RESPONSES OUT LOUD. DO NOT READ “DON’T KNOW.”</p>	<p><input type="checkbox"/> You left it alone/watched until it got better. SKIP TO BOX 2 INSTRUCTIONS <input type="checkbox"/> You treated it at home without going anywhere for advice, treatment, or medicine. SKIP TO BOX 2 INSTRUCTIONS <input type="checkbox"/> You treated it at home and you went somewhere for advice, treatment, or medicine. <input type="checkbox"/> You only sought advice, treatment, or medicine outside the home. <input type="checkbox"/> (<i>Don’t know/don’t recall</i>) SKIP TO BOX 2 INSTRUCTIONS</p>
<p>6. How long after the fast breathing started did you first seek advice, treatment, or medicine outside the home? READ RESPONSES OUT LOUD. DO NOT READ “DON’T KNOW.”</p>	<p><input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the fast breathing started <input type="checkbox"/> Three or more days after the fast breathing started <input type="checkbox"/> (<i>Don’t know</i>)</p>

<p>7. Where, outside the home, did you <i>first</i> seek advice, treatment, or medicine for (NAME'S) fast breathing? I'm going to read you a list. READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ONE.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health post <input type="checkbox"/> Government health center or hospital <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Other (specify)_____ <input type="checkbox"/> (<i>Don't know</i>)
<p>BOX 2 INSTRUCTIONS COMPLETE BOX 2 IF YOU MARKED FEVER/HOT BODY IN Q. 3 IF YOU DID NOT MARK FEVER/HOT BODY, GO TO BOX 3 INSTRUCTIONS</p>	
<p>8. Let's talk about (NAME'S) fever/hot body. When (NAME) had fever/hot body, what did you do? I will read you a list. Listen to the whole list before you respond. READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW."</p>	<ul style="list-style-type: none"> <input type="checkbox"/> You left it alone/watched until it got better. SKIP TO BOX 3 INSTRUCTIONS <input type="checkbox"/> You treated it at home without going anywhere for advice, treatment, or medicine. SKIP TO BOX 3 INSTRUCTIONS <input type="checkbox"/> You treated it at home and you went somewhere for advice, treatment, or medicine. <input type="checkbox"/> You only sought advice, treatment, or medicine outside the home. <input type="checkbox"/> (<i>Don't know/don't recall</i>) SKIP TO BOX 3 INSTRUCTIONS
<p>9. How long after the fever/hot body started did you first seek advice, treatment, or medicine outside the home? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW."</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the fever/hot body started <input type="checkbox"/> Three or more days after the fever/hot body started <input type="checkbox"/> (<i>Don't know</i>)
<p>10. Where, outside the home, did you <i>first</i> seek advice, treatment, or medicine for (NAME'S) fever/hot body? I'm going to read you a list. READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ONE.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health post <input type="checkbox"/> Government health center or hospital <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Other (specify)_____ <input type="checkbox"/> (<i>Don't know</i>)

BOX 3 INSTRUCTIONS COMPLETE BOX 3 IF YOU MARKED <u>CONVULSIONS/FITS</u> IN Q. 3. IF YOU DID NOT MARK <u>CONVULSIONS/FITS</u>, GO TO BOX 4 INSTRUCTIONS.	
<p>11. Let's talk about (NAME'S) convulsions/fits. When (NAME) had convulsions/fits, what did you do? I will read you a list. Listen to the whole list before you respond. READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW."</p>	<p><input type="checkbox"/> You left it alone/watched until it got better. SKIP TO BOX 4 INSTRUCTIONS</p> <p><input type="checkbox"/> You treated it at home without going anywhere for advice, treatment, or medicine. SKIP TO BOX 4 INSTRUCTIONS</p> <p><input type="checkbox"/> You treated it at home and you went somewhere for advice, treatment, or medicine.</p> <p><input type="checkbox"/> You only sought advice, treatment, or medicine outside the home.</p> <p><input type="checkbox"/> <i>(Don't know/don't recall)</i> SKIP TO BOX 4 INSTRUCTIONS</p>
<p>12. How long after the convulsions/fits started did you first seek advice, treatment, or medicine outside the home? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW."</p>	<p><input type="checkbox"/> Same day</p> <p><input type="checkbox"/> Next day</p> <p><input type="checkbox"/> Two days after the convulsions/fits started</p> <p><input type="checkbox"/> Three or more days after the convulsions/fits started</p> <p><input type="checkbox"/> <i>(Don't know)</i></p>
<p>13. Where, outside the home, did you <i>first</i> seek advice, treatment, or medicine for (NAME'S) convulsions/fits? I'm going to read you a list. READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ONE.</p>	<p><input type="checkbox"/> Traditional healer</p> <p><input type="checkbox"/> Government health post</p> <p><input type="checkbox"/> Government health center or hospital</p> <p><input type="checkbox"/> Private or mission health facility</p> <p><input type="checkbox"/> Pharmacy/drugstore</p> <p><input type="checkbox"/> General shop/store</p> <p><input type="checkbox"/> Market</p> <p><input type="checkbox"/> Community health worker/TBA</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> <i>(Don't know)</i></p>
BOX 4 INSTRUCTIONS COMPLETE BOX 4 IF YOU MARKED <u>DIARRHEA</u> IN Q. 3. IF YOU DID NOT MARK <u>DIARRHEA</u>, GO TO Q. 23.	
<p>14. Let's talk about (NAME'S) diarrhea. Did you notice any blood in (NAME'S) diarrhea?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No SKIP TO Q. 17</p> <p><input type="checkbox"/> Don't know SKIP TO Q. 17</p>
<p>15. Let's talk about (NAME'S) bloody diarrhea. When (NAME) had bloody diarrhea, what did you do? I will read you a list. Listen to the whole list before you respond. READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW."</p>	<p><input type="checkbox"/> You left it alone/watched until it got better. SKIP TO Q. 17</p> <p><input type="checkbox"/> You treated it at home without going anywhere for advice, treatment, or medicine. SKIP TO Q. 17</p> <p><input type="checkbox"/> You treated it at home and you went somewhere for advice, treatment, or medicine.</p> <p><input type="checkbox"/> You only sought advice, treatment, or medicine outside the home.</p> <p><input type="checkbox"/> <i>(Don't know/don't recall)</i> SKIP TO Q. 17</p>

<p>16. Where, outside the home, did you <i>first</i> seek advice, treatment, or medicine for (NAME'S) bloody diarrhea? I'm going to read you a list. READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ONE.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health post <input type="checkbox"/> Government health center or hospital <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> (<i>Don't know</i>)
<p>17. Did (NAME) take a home-made sugar-salt water solution that you prepared yourself when he/she had diarrhea?</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> (<i>Don't know</i>)
<p>18. Did (NAME) take a fluid made from a special packet called Oral Rehydration Solution or ORS when he/she had diarrhea?</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO Q. 21 <input type="checkbox"/> Don't know SKIP TO Q. 21
<p>19. Where did you get the ORS packets? I'm going to read you a list. READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ONE.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Was already in the house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> (<i>Don't know</i>) SKIP TO Q. 21
<p>20. What was the name of the place where you (originally) got the packets of ORS?</p>	<p>Name of place: _____</p> <ul style="list-style-type: none"> <input type="checkbox"/> (<i>Don't know</i>)
<p>21. Including any ORS and sugar-salt water solution (and breast milk) was (NAME) given the same amount to drink during the diarrhea as before the diarrhea, more than usual to drink during the diarrhea, or less than usual to drink during the diarrhea?</p>	<ul style="list-style-type: none"> <input type="checkbox"/> More to drink <input type="checkbox"/> About the same amount to drink SKIP TO Q. 23 <input type="checkbox"/> Less to drink SKIP TO Q. 23 <input type="checkbox"/> (<i>Don't know</i>) SKIP TO Q. 23
<p>22. How long after the diarrhea started was (NAME) given more to drink than usual? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ONE</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the diarrhea started <input type="checkbox"/> Three or more days after the diarrhea started <input type="checkbox"/> (<i>Don't know</i>)

SAY: Now we're going to talk about medicines.	
23. During (NAME'S) illness, did he/she receive any injections?	<input type="checkbox"/> Yes <input type="checkbox"/> No
24. During (NAME'S) illness, did he/she take any Western or modern medicine?	<input type="checkbox"/> Yes SKIP TO Q. 26 <input type="checkbox"/> No <input type="checkbox"/> <i>(Don't know)</i> SKIP TO Q. 26
25. What, if anything, did you do to care for (NAME) during his/her illness? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.	<input type="checkbox"/> Nothing/left it alone <input type="checkbox"/> Patting or wiping the child's skin with a wet or damp cloth or other material <input type="checkbox"/> Went to traditional healer <input type="checkbox"/> Gave traditional teas or herbs <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i>

IF ANSWERED Q. 25, GO TO Q. 35.

<p>26A. Can you tell me the names or show me the medicines or packaging from the medicines that (NAME) took during his/her illness? PROBE ONCE, "ANYTHING ELSE?"</p> <p>WRITE DOWN IN THE LEFT-HAND COLUMN BELOW THE NAMES OF MEDICINES AS THEY ARE WRITTEN ON THE MEDICINE OR PACKAGING OR AS THEY ARE TOLD TO YOU. IF YOU CANNOT TELL THE NAME OF A PARTICULAR MEDICINE, CHECK "DON'T KNOW" IN THE APPROPRIATE BOX. IF YOU CANNOT OBTAIN THE NAME OF ANY MEDICINE, TICK "UNABLE TO OBTAIN NAME OF ANY MEDICINE."</p> <p>FOR ALL MEDICINES OR PACKAGING THAT WERE SHOWN TO YOU, TICK "SHOWN" IN THE RIGHT-HAND COLUMN BELOW. IF A PARTICULAR MEDICINE WAS NOT SHOWN TO YOU, LEAVE THE CORRESPONDING "SHOWN" BOX BLANK.</p>	<p>26B. Were there any other medicines that (NAME) took during his/her illness?</p>	<p>26C. How many medicines whose names you cannot recall or that you no longer have, did (NAME) take during his/her illness?</p>
<p><input type="checkbox"/> Name of medicine 1 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 2 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 3 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 4 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 5 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 6 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Unable to obtain name of any medicine SKIP TO Q. 35</p>	<p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No DO NOT READ Q. 26C. FOLLOW INSTRUCTIONS BELOW.</p> <p><input type="checkbox"/> Don't know DO NOT READ Q. 26C. FOLLOW INSTRUCTIONS BELOW.</p>
<p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 3</p> <p><input type="checkbox"/> 4</p> <p><input type="checkbox"/> 5</p> <p><input type="checkbox"/> 6</p> <p><input type="checkbox"/> More than six</p> <p><input type="checkbox"/> Don't know</p>		
<p>IF NO MEDICINES WERE SHOWN OR MENTIONED IN Q. 26A, GO TO Q. 35.</p>		

Annex 2C. Child Health Household Questionnaire

COLLECT THE FOLLOWING INFORMATION FOR ALL MEDICINES THAT WERE NAMED IN Q. 26A. DO NOT COLLECT INFORMATION FOR MEDICINES WHOSE NAMES YOU DO NOT HAVE. ASK QUESTIONS 27A THROUGH 34A FOR THE FIRST MEDICINE. WHEN YOU HAVE FINISHED ASKING ABOUT ONE MEDICINE, ASK QUESTIONS 27B THROUGH 34B FOR THE NEXT ONE, AND SO ON, UNTIL ALL QUESTIONS HAVE BEEN ASKED FOR ALL MEDICINES.

SAY: Let's talk about _____ [WRITE DOWN (BELOW) THE NUMBER AND NAME OF MEDICINE FROM Q. 26A], the first medicine you showed me/mentioned, the _____ (POINT TO PACKET, MENTION NAME of first medicine or description of first medicine).

MEDICINE NUMBER: _____ **MEDICINE NAME:** _____

<p>27A. Who prescribed or advised that (NAME) take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>28A. How long after the illness started did (NAME) first take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>29A. Where did you get (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>30A. What was the name of the place where you (originally) got (NAME OF MEDICINE)/this medicine?</p>	<p>31A. For how many days did (NAME) take (NAME OF MEDICINE)/this medicine?</p>
<p><input type="checkbox"/> No one or you decided yourself <input type="checkbox"/> Health worker in facility <input type="checkbox"/> Pharmacy/person in pharmacy/drugstore <input type="checkbox"/> Person in general shop/store/market/kiosk <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Friend/neighbor/relative <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> (Don't know) (DO NOT READ)</p>	<p><input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the illness started <input type="checkbox"/> Three or more days after the illness started <input type="checkbox"/> (Don't know) (DO NOT READ)</p>	<p><input type="checkbox"/> Was already in house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> CHW/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> (Don't know) (DO NOT READ) SKIP TO Q. 31A</p>	<p>Place: _____ _____ _____ <input type="checkbox"/> Don't know</p>	<p>[] [] days <input type="checkbox"/> Don't know</p>
<p>32A. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?</p>		<p>33A. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK:</p> <p>Was (NAME OF MEDICINE)/this medicine in a package by itself or were other medicines included in the same package?</p>		<p>34A. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.</p>
<p><input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 34A <input type="checkbox"/> Loose tablets/capsules in sealed plastic package <input type="checkbox"/> Some other way SKIP TO Q. 34A <input type="checkbox"/> Don't know SKIP TO Q. 34A</p>		<p><input type="checkbox"/> Packaged by itself <input type="checkbox"/> With other medicines <input type="checkbox"/> Don't know</p>		<p><input type="checkbox"/> The medicine's name <input type="checkbox"/> The dose or how much to take each time the medicine is taken <input type="checkbox"/> The number of times each day to take the medicine <input type="checkbox"/> The number of days to take the medicine <input type="checkbox"/> (Don't know)</p>

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
27B. Who prescribed or advised that (NAME) take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	28B. How long after the illness started did (NAME) first take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	29B. Where did you get (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	30B. What was the name of the place where you (originally) got (NAME OF MEDICINE) /this medicine?	31B. For how many days did (NAME) take (NAME OF MEDICINE) /this medicine?
<input type="checkbox"/> No one or you decided yourself <input type="checkbox"/> Health worker in facility <input type="checkbox"/> Pharmacy/person in pharmacy/drugstore <input type="checkbox"/> Person in general shop/store/market/kiosk <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Friend/neighbor/relative <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the illness started <input type="checkbox"/> Three or more days after the illness started <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Was already in house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> CHW/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ) SKIP TO Q. 31B	Place: _____ _____ <input type="checkbox"/> Don't know	[__ __] days <input type="checkbox"/> Don't know
32B. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?		33B. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK: Was (NAME OF MEDICINE) /this medicine in a package by itself or were other medicines included in the same package?		34B. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.
<input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 34B <input type="checkbox"/> Loose tablets/capsules in sealed plastic package <input type="checkbox"/> Some other way SKIP TO Q. 34B <input type="checkbox"/> Don't know SKIP TO Q. 34B		<input type="checkbox"/> Packaged by itself <input type="checkbox"/> With other medicines <input type="checkbox"/> Don't know		<input type="checkbox"/> The medicine's name <input type="checkbox"/> The dose or how much to take each time the medicine is taken <input type="checkbox"/> The number of times each day to take the medicine <input type="checkbox"/> The number of days to take the medicine <input type="checkbox"/> <i>(Don't know)</i>

Annex 2C. Child Health Household Questionnaire

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
27C. Who prescribed or advised that (NAME) take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	28C. How long after the illness started did (NAME) first take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	29C. Where did you get (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	30C. What was the name of the place where you (originally) got (NAME OF MEDICINE) /this medicine?	31C. For how many days did (NAME) take (NAME OF MEDICINE) /this medicine?
<input type="checkbox"/> No one or you decided yourself <input type="checkbox"/> Health worker in facility <input type="checkbox"/> Pharmacy/person in pharmacy/drugstore <input type="checkbox"/> Person in general shop/store/market/kiosk <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Friend/neighbor/relative <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the illness started <input type="checkbox"/> Three or more days after the illness started <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Was already in house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> CHW/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ) SKIP TO Q. 31C	Place: _____ _____ _____ <input type="checkbox"/> Don't know	[] [] days <input type="checkbox"/> Don't know
32C. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?		33C. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK: Was (NAME OF MEDICINE) /this medicine in a package by itself or were other medicines included in the same package?		34C. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.
<input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 34C <input type="checkbox"/> Loose tablets/capsules in sealed plastic package <input type="checkbox"/> Some other way SKIP TO Q. 34C <input type="checkbox"/> Don't know SKIP TO Q. 34C		<input type="checkbox"/> Packaged by itself <input type="checkbox"/> With other medicines <input type="checkbox"/> Don't know		<input type="checkbox"/> The medicine's name <input type="checkbox"/> The dose or how much to take each time the medicine is taken <input type="checkbox"/> The number of times each day to take the medicine <input type="checkbox"/> The number of days to take the medicine <input type="checkbox"/> <i>(Don't know)</i>

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
27D. Who prescribed or advised that (NAME) take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	28D. How long after the illness started did (NAME) first take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	29D. Where did you get (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	30D. What was the name of the place where you (originally) got (NAME OF MEDICINE) /this medicine?	31D. For how many days did (NAME) take (NAME OF MEDICINE) /this medicine?
<input type="checkbox"/> No one or you decided yourself <input type="checkbox"/> Health worker in facility <input type="checkbox"/> Pharmacy/person in pharmacy/drugstore <input type="checkbox"/> Person in general shop/store/market/kiosk <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Friend/neighbor/relative <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the illness started <input type="checkbox"/> Three or more days after the illness started <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Was already in house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> CHW/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ) SKIP TO Q. 31D	Place: _____ _____ _____ <input type="checkbox"/> Don't know	[] [] days <input type="checkbox"/> Don't know
32D. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?		33D. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK: Was (NAME OF MEDICINE) /this medicine in a package by itself or were other medicines included in the same package?		34D. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.
<input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 34D <input type="checkbox"/> Loose tablets/capsules in sealed plastic package <input type="checkbox"/> Some other way SKIP TO Q. 34D <input type="checkbox"/> Don't know SKIP TO Q. 34D		<input type="checkbox"/> Packaged by itself <input type="checkbox"/> With other medicines <input type="checkbox"/> Don't know		<input type="checkbox"/> The medicine's name <input type="checkbox"/> The dose or how much to take each time the medicine is taken <input type="checkbox"/> The number of times each day to take the medicine <input type="checkbox"/> The number of days to take the medicine <input type="checkbox"/> <i>(Don't know)</i>

Annex 2C. Child Health Household Questionnaire

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
27E. Who prescribed or advised that (NAME) take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	28E. How long after the illness started did (NAME) first take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	29E. Where did you get (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	30E. What was the name of the place where you (originally) got (NAME OF MEDICINE) /this medicine?	31E. For how many days did (NAME) take (NAME OF MEDICINE) /this medicine?
<input type="checkbox"/> No one or you decided yourself <input type="checkbox"/> Health worker in facility <input type="checkbox"/> Pharmacy/person in pharmacy/drugstore <input type="checkbox"/> Person in general shop/store/market/kiosk <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Friend/neighbor/relative <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the illness started <input type="checkbox"/> Three or more days after the illness started <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Was already in house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> CHW/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ) SKIP TO Q. 31E	Place: _____ _____ <input type="checkbox"/> Don't know	[] [] days <input type="checkbox"/> Don't know
32E. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?		33E. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK: Was (NAME OF MEDICINE) /this medicine in a package by itself or were other medicines included in the same package?		34E. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.
<input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 34E <input type="checkbox"/> Loose tablets/capsules in sealed plastic package <input type="checkbox"/> Some other way SKIP TO Q. 34E <input type="checkbox"/> Don't know SKIP TO Q. 34E		<input type="checkbox"/> Packaged by itself <input type="checkbox"/> With other medicines <input type="checkbox"/> Don't know		<input type="checkbox"/> The medicine's name <input type="checkbox"/> The dose or how much to take each time the medicine is taken <input type="checkbox"/> The number of times each day to take the medicine <input type="checkbox"/> The number of days to take the medicine <input type="checkbox"/> <i>(Don't know)</i>

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
27F. Who prescribed or advised that (NAME) take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	28F. How long after the illness started did (NAME) first take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	29F. Where did you get (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	30F. What was the name of the place where you (originally) got (NAME OF MEDICINE) /this medicine?	31F. For how many days did (NAME) take (NAME OF MEDICINE) /this medicine?
<input type="checkbox"/> No one or you decided yourself <input type="checkbox"/> Health worker in facility <input type="checkbox"/> Pharmacy/person in pharmacy/drugstore <input type="checkbox"/> Person in general shop/store/market/kiosk <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Friend/neighbor/relative <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the illness started <input type="checkbox"/> Three or more days after the illness started <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Was already in house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> CHW/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ) SKIP TO Q. 31 F	Place: _____ _____ <input type="checkbox"/> Don't know	[] [] days <input type="checkbox"/> Don't know
32F. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?		33F. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK: Was (NAME OF MEDICINE) /this medicine in a package by itself or were other medicines included in the same package?		34F. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.
<input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 34F <input type="checkbox"/> Loose tablets/capsules in sealed plastic package <input type="checkbox"/> Some other way SKIP TO Q. 34F <input type="checkbox"/> Don't know SKIP TO Q. 34F		<input type="checkbox"/> Packaged by itself <input type="checkbox"/> With other medicines <input type="checkbox"/> Don't know		<input type="checkbox"/> The medicine's name <input type="checkbox"/> The dose or how much to take each time the medicine is taken <input type="checkbox"/> The number of times each day to take the medicine <input type="checkbox"/> The number of days to take the medicine <input type="checkbox"/> <i>(Don't know)</i>

SAY: Now, I am finished asking about (CHILD'S NAME) illness or medicines taken and I have just a few more questions.

35. Have you ever heard of a medicine called (NAME/NAMES FOR FIRST-LINE ANTIMALARIAL) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO Q. 38 <input type="checkbox"/> Don't know SKIP TO Q. 38
36. Can you always get (NAME/NAMES OF FIRST-LINE ANTIMALARIAL) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
37. Do you have any (NAME/NAMES OF FIRST-LINE ANTIMALARIAL) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
38. Have you ever heard of packets of ORS/name/names for ORS?	<input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO Q. 41 <input type="checkbox"/> Don't know SKIP TO Q. 41
39. Can you always get packets of ORS/name/names for ORS, sometimes get them, or never get them in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
40. Do you have any packets of ORS/name/names for ORS at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
41. Have you ever heard of a medicine called (NAME/NAMES FOR FIRST-LINE ANTIBIOTIC FOR PNEUMONIA) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO Q. 43 <input type="checkbox"/> Don't know SKIP TO Q. 43
42. Can you always get (NAME/NAMES FOR FIRST-LINE ANTIBIOTIC FOR PNEUMONIA) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
43. Have you ever heard of a medicine called (NAME/NAMES OF FIRST-LINE ANTIBIOTIC FOR BLOODY DIARRHEA IF DIFFERENT FROM FIRST-LINE ANTIBIOTIC FOR PNEUMONIA) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No END INTERVIEW <input type="checkbox"/> Don't know END INTERVIEW
44. Can you always get (NAME/NAMES OF FIRST-LINE ANTIBIOTIC FOR BLOODY DIARRHEA IF DIFFERENT FROM FIRST-LINE ANTIOTBIOTIC FOR PNEUMONIA) , sometimes get it, or never get if in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know

SAY: We are finished with our discussion. Thank you for talking with me. I learned a lot from talking with you and the information you gave me is very helpful. Do you have any questions for me?

End time of interview: ____/____/____

ANNEX 2D. CHILD HEALTH HOUSEHOLD ANALYSIS TABLES

Characteristics of Sample

Indicator A. Age of children in sample (percentage of children who are 0–less than 1 year, 1 year–less than 2 years, 2 years–less than 3 years, 3 years–less than 4 years, 4 years–less than 5 years) (Q1)

Response Category	Response Count	Percentage
0–less than 1 year		%
1 year–less than 2 years		%
2 years–less than 3 years		%
3 years–less than 4 years		%
4 years–less than 5 years		%
Total		%
<i>Missing</i>		

Indicator B. Percentage of children in sample who are male/female (Q2)

Response Category	Response Count	Percentage
Male		%
Female		%
Total		%
<i>Missing</i>		

Caregiver Recognizes Symptoms and Decides Child Requires Treatment

Indicator C. Percentage of respondents whose child had fever/hot body, convulsions/fits, fast breathing, diarrhea (not bloody), bloody diarrhea, and cough without fast breathing (Q3, 14)

Response Category	Response Count	Percentage
Fever/hot body		%
Convulsions/fits		%
Fast breathing		%
Diarrhea (not bloody)		%
Bloody diarrhea		%
Cough without fast breathing		%
Total		%
<i>Missing</i>		

Indicator D. Percentage of respondents who thought their child’s illness was very serious, somewhat serious, not serious (Q4)

Response Category	Response Count	Percentage
Very serious		%
Somewhat serious		%
Not serious		%
Don't know		%
Total		%
<i>Missing</i>		

Caregiver Seeks Timely Care from an Appropriate Source

Indicator 1. Percentage of respondents who sought care outside the home when their child had fever/hot body (Q8)

Response Category	Response Count	Percentage	Combined Percentage
Left it alone/watched		%	
Treated at home		%	
Treated at home and went somewhere for advice, treatment, or medicine		%	%
Only sought advice, treatment, care outside the home		%	
Don't know		%	
Total		%	
<i>Missing</i>			

Indicator 2. Percentage of respondents who sought care outside the home when their child had convulsions/fits (Q11)

Response Category	Response Count	Percentage	Combined Percentage
Left it alone/watched		%	
Treated at home		%	
Treated at home and went somewhere for advice, treatment, or medicine		%	%
Only sought advice, treatment, care outside the home		%	
Don't know		%	
Total		%	
<i>Missing</i>			

Indicator 3. Percentage of respondents who sought care outside the home when their child had fast breathing (Q5)

Response Category	Response Count	Percentage	Combined Percentage
Left it alone/watched		%	
Treated at home		%	
Treated at home and went somewhere for advice, treatment, or medicine		%	%
Only sought advice, treatment, care outside the home		%	
Don't know		%	
Total		%	
<i>Missing</i>			

Indicator 4. Percentage of respondents who sought care outside the home when their child had bloody diarrhea (Q15)

Response Category	Response Count	Percentage	Combined Percentage
Left it alone/watched		%	
Treated at home		%	
Treated at home and went somewhere for advice, treatment, or medicine		%	%
Only sought advice, treatment, care outside the home		%	
Don't know		%	
Total		%	
<i>Missing</i>			

Indicator E. Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with fever/hot body) (Q10)

Response Category	Response Count	Percentage
Traditional healer		%
Government health post		%
Government health center or hospital		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator F. Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with convulsions/fits) (Q13)

Response Category	Response Count	Percentage
Traditional healer		%
Government health post		%
Government health center or hospital		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator G. Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with fast breathing) (Q7)

Response Category	Response Count	Percentage
Traditional healer		%
Government health post		%
Government health center or hospital		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator H. Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with bloody diarrhea) (Q16)

Response Category	Response Count	Percentage
Traditional healer		%
Government health post		%
Government health center or hospital		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 5. Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with fever/hot body) (Q10)³¹

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 6. Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with convulsions/fits) (Q13)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 7. Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with fast breathing) (Q7)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

³¹ This indicator should be calculated in countries that do *not* have a strategy of promoting home management of fever (i.e., stocking in the home and appropriately using an appropriate antimalarial).

Indicator 8. Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with bloody diarrhea) (Q16)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 9. Percentage of respondents whose child had fever/hot body who report that their child took an antimalarial on the same day or the next day after the fever/hot body started (Q3, 26, 28)

Response Category	Response Count	Percentage	Combined Percentage
Same day		%	%
Next day		%	
Two days after the fever/hot body started		%	
Three or more days after the fever/hot body started		%	
Don't know		%	
Total		%	
<i>Missing</i>			

Indicator 10. Percentage of respondents whose child had convulsions/fits who sought care from a source outside the home on the same day the convulsions/fits started (Q12)

Response Category	Response Count	Percentage
Same day		%
Next day		%
Two days after the convulsions/fits started		%
Three or more days after the convulsions/fits body started		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 11. Percentage of respondents whose child had fast breathing who sought care from a source outside the home on the same day the fast breathing started (Q6)

Response Category	Response Count	Percentage
Same day		%
Next day		%
Two days after the fast breathing started		%
Three or more days after the fast breathing started		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 12. Percentage of respondents whose child had diarrhea who report that the child was given more to drink than usual (including ORS and/or SSS and/or breast milk) on the same day that the diarrhea started (Q22)

Response Category	Response Count	Percentage
Same day		%
Next day		%
Two days after the diarrhea started		%
Three or more days after the diarrhea started		%
Don't know		%
Total		%
<i>Missing</i>		

Caregiver Obtains Appropriate Medicine

Indicator 13. Percentage of respondents who have heard of first-line antimalarial (Q35)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 14. Percentage of respondents who have heard of first-line antibiotic for pneumonia (Q41)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 15. Percentage of respondents who have heard of first-line antibiotic for bloody diarrhea (Q43)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 16. Percentage of respondents who have heard of ORS (Q38)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 17. Percentage of respondents who had ORS at home (Q40)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total from Indicator 16		%

Note: Use TOTAL from Indicator 16 as base; do NOT add up those in rows above.

Indicator 18. Percentage of respondents who had first-line antimalarial at home³² (Q37)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total from Indicator 13		%

Note: Use TOTAL from Indicator 13 as base; do NOT add up those in rows above.

Indicator 19. Percentage of respondents who say they can always get first-line antimalarial in the area where they live (Q36)

Response Category	Response Count	Percentage
Always		%
Sometimes		%
Never		%
Don't know		%
Total from Indicator 13		%

Note: Use TOTAL from Indicator 13 as base; do NOT add up those in rows above.

Indicator 20. Percentage of respondents who say they can always get first-line antibiotic for pneumonia in the area where they live (Q42)

Response Category	Response Count	Percentage
Always		%
Sometimes		%
Never		%
Don't know		%
Total from Indicator 14		%
<i>Missing</i>		

Note: Use TOTAL from Indicator 14 as base; do NOT add up those in rows above.

³² This indicator should be calculated in countries which have a strategy of promoting home management of fever (i.e., stocking in the home and appropriately using an appropriate antimalarial).

Indicator 21. Percentage of respondents who say they can always get first-line antibiotic for bloody diarrhea in the area where they live (Q44)

Response Category	Response Count	Percentage
Always		%
Sometimes		%
Never		%
Don't know		%
Total from Indicator 15		%

Note: Use TOTAL from Indicator 15 as base; do NOT add up those in rows above.

Indicator 22. Percentage of respondents who say they can always get ORS in the area where they live (Q39)

Response Category	Response Count	Percentage
Always		%
Sometimes		%
Never		%
Don't know		%
Total from Indicator 16		%
Missing		

Note: Use TOTAL from Indicator 16 as base; do NOT add up those in rows above.

Indicator 23. Percentage of all antimalarials that were already in the home or were obtained from X source (among all antimalarials used) (Q26, 29)

Response Category	Response Count	Percentage
Already in home		%
Traditional healer		%
Government health facility		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
Missing		

Indicator 24. Percentage of all antibiotics that were already in the home or were obtained from X source (among all antibiotics used) (Q26, 29)

Response Category	Response Count	Percentage
Already in home		%
Traditional healer		%
Government health facility		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

**Indicator 25. Percentage of all ORS treatments that were already in the home or were obtained from X source (among all ORS treatments used Q19)
(Also if ORS is given at Q26, check Q29)**

Response Category	Response Count	Percentage
Already in home		%
Traditional healer		%
Government health facility		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator I. Percentage of medicines obtained on the advice of the following: self, health worker in facility, pharmacist/person in pharmacy or drugstore, vendor in general store/market/kiosk, community health worker/TBA, neighbor/friend/relative, other (Q27)

Response Category	Response Count	Percentage
Self/no one		%
Health worker in facility		%
Pharmacist/person in pharmacy/drugstore/shop		%
Person in general store/market/kiosk		%
Community health worker/TBA		%
Friend/neighbor/relative		%
Other 1 _____		%
Other 2 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 26. Percentage of respondents whose child received no medicine (among children with fever/hot body, convulsions/fits, fast breathing, and bloody diarrhea) (Q3, 26)

Response Category	Response Count	Percentage
Yes, received NO medicines		%
No, received some medicine(s)		%
Total		%
<i>Missing</i>		

Indicator 27. Percentage of respondents whose child received any antibiotic (among entire sample) (Q26)

Response Category	Response Count	Percentage
Yes		%
No		%
Total sample		%
<i>Missing</i>		

Indicator 28. Percentage of respondents whose child received an injection (among entire sample) (Q23)

Response Category	Response Count	Percentage
Yes		%
No		%
Total sample		%
<i>Missing</i>		

Indicator J. Percentage of respondents who did nothing, gave “tepid sponging,” went to traditional healer, gave traditional teas/herbs, and other (among respondents with children with fever/hot body, convulsion/fits, fast breathing, and bloody diarrhea who received no medicine) (Q 3, 25)

Response Category	Response Count	Percentage
Nothing/left it alone		%
Patting or wiping the child’s skin with a wet or damp cloth or other material		%
Went to traditional healer		%
Gave traditional teas or herbs		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don’t know		%
Total		%
<i>Missing</i>		

Caregiver Administers Appropriate Medicine Correctly

Indicator 29. Percentage of respondents whose child had fever/hot body and took first-line antimalarial (Q3, 26)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Indicator 30. Percentage of respondents whose child had convulsions/fits and fever and took appropriate antimalarial (Q3, 26)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Indicator 31. Percentage of respondents whose child had fast breathing and took first-line antibiotic for pneumonia (Q3, 26)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Indicator 32. Percentage of respondents whose child had diarrhea and took ORS or SSS (Q17, 18) (Also if ORS is given at Q26, check Q3)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 33. Percentage of respondents whose child had bloody diarrhea and took first-line antibiotic for bloody diarrhea (Q14, 26)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Indicator 34. Percentage of respondents whose child had bloody diarrhea and took ORS and/or SSS and first-line antibiotic for bloody diarrhea (Q14, 17, 18, 26)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 35. Percentage of respondents whose child had diarrhea and took any antidiarrheal (Q3, 26)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Indicator 36. Percentage of respondents whose child had diarrhea (not bloody) and took any antibiotic (Q14, 26)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Indicator 37. Percentage of respondents whose child had cough and no fast breathing and took any antibiotic (Q3, 26)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Indicator 38. Percentage of first-line antimalarials that were taken for too short, too long, and correct amount of time (Q26, 31)

Response Category	Response Count	Percentage
Correct		%
Too short		%
Too long		%
Total		%
<i>Missing</i>		

Note: Base is total cases where first-line antimalarial was taken.

Indicator 39. Percentage of second-line antimalarials that were taken for too short, too long, and correct amount of time (Q26, 31)

Response Category	Response Count	Percentage
Correct		%
Too short		%
Too long		%
Total		%
<i>Missing</i>		

Note: Base is total cases where second-line antimalarial was taken.

Indicator 40. Percentage of first-line antibiotics for pneumonia that were taken for too short, too long, and correct amount of time (Q26, 31)

Response Category	Response Count	Percentage
Correct		%
Too short		%
Too long		%
Total		%
<i>Missing</i>		

Note: Base is total cases where first-line antibiotic for pneumonia was taken.

Indicator 41. Percentage of second-line antibiotics for pneumonia that were taken for too short, too long, and correct amount of time (Q26, 31)

Response Category	Response Count	Percentage
Correct		%
Too short		%
Too long		%
Total		%
<i>Missing</i>		

Note: Base is total cases where second-line antibiotic for pneumonia was taken.

Indicator 42. Percentage of first-line antibiotics for bloody diarrhea that were taken for too short, too long, and correct amount of time (Q26, 31)

Response Category	Response Count	Percentage
Correct		%
Too short		%
Too long		%
Total		%
<i>Missing</i>		

Note: Base is total cases where first-line antibiotic for bloody diarrhea was taken.

Indicator 43. Percentage of second-line antibiotics for bloody diarrhea that were taken for too short, too long, and correct amount of time (Q26, 31)

Response Category	Response Count	Percentage
Correct		%
Too short		%
Too long		%
Total		%
<i>Missing</i>		

Note: Base is total cases where second-line antibiotic for bloody diarrhea was taken.

Health Care Worker/Drug Provider

Indicator 44. Percentage of medicines dispensed in appropriate packaging (i.e., sealed plastic package or original manufacturer's package with one type of medicine per pack) (Q32, 33)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Note: Base is all medicines .

Indicator 45. Percentage of medicines that were appropriately labeled with all of the following: name of medicine, dose, frequency, and duration (Q34)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Note: Base is all medicines .

ANNEX 2E. CHILD HEALTH HOUSEHOLD EVALUATION STANDARDS

#	Indicator	Results for District X N =	Evaluation Standards (should be adapted to the specific district situations)
Characteristics of sample			
A	Age of children in sample (percentage of children who are 0–less than 1 year, 1 year–less than 2 years, 2 years–less than 3 years, 3 years–less than 4 years, 4 years–less than 5 years)		NA ³³
B	Percentage of children in sample who are male/female		NA
Caregiver recognizes symptoms and decides child requires treatment			
C	Percentage of respondents whose child had fever/hot body, convulsions/fits, fast breathing, diarrhea (not bloody), bloody diarrhea, and cough without fast breathing		NA
D	Percentage of respondents who thought that their child's illness was very serious/somewhat serious/not serious		NA
Caregiver seeks timely care from an appropriate source			
	<i>Treatment-seeking behavior and source of treatment/medicine</i>		
1	Percentage of respondents who sought care outside the home when their child had fever/hot body		Good: Over 80% Fair: 50–79% Poor: Under 50% (the standard will vary depending on the STG regarding fever management at home)
2	Percentage of respondents who sought care outside the home when their child had convulsions/fits		Good: Over 80% Fair: 50–79% Poor: Under 50%
3	Percentage of respondents who sought care outside the home when their child had fast breathing		Good: Over 80% Fair: 50–79% Poor: Under 50%
4	Percentage of respondents who sought care outside the home when their child had bloody diarrhea		Good: Over 80% Fair: 50–79% Poor: Under 50%
E	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with fever/hot body)		NA
F	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with convulsions/fits)		NA
G	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with fast breathing)		NA

³³ NA = Not applicable.

#	Indicator	Results for District X N =	Evaluation Standards (should be adapted to the specific district situations)
H	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with bloody diarrhea)		NA
5	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with fever/hot body) ³⁴		Good: Over 80% Fair: 50–79% Poor: Under 50%
6	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with convulsions/fits)		Good: Over 80% Fair: 50–79% Poor: Under 50%
7	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with fast breathing)		Good: Over 80% Fair: 50–79% Poor: Under 50%
8	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with bloody diarrhea)		Good: Over 80% Fair: 50–79% Poor: Under 50%
	<i>Timeliness of action</i>		
9	Percentage of respondents whose child had fever/hot body who report that their child took an antimalarial on the same day or the next day after the fever/hot body started		Good: Over 80% Fair: 50–79% Poor: Under 50%
10	Percentage of respondents whose child had convulsions/fits who sought care from a source outside the home on the same day the convulsions/fits started		Good: Over 80% Fair: 50–79% Poor: Under 50%
11	Percentage of respondents whose child had fast breathing who sought care from a source outside the home for fast breathing on the same day the fast breathing started		Good: Over 80% Fair: 50–79% Poor: Under 50%
12	Percentage of respondents whose child had diarrhea who report that the child was given more to drink than usual (including ORS and/or SSS and/or breast milk) on the same day that the diarrhea started		Good: Over 80% Fair: 50–79% Poor: Under 50%
Caregiver obtains appropriate medicine			
	<i>Awareness of first-line medicines</i>		
13	Percentage of respondents who have heard of the first-line antimalarial		Good: Over 80% Fair: 50–79% Poor: Under 50%
14	Percentage of respondents who have heard of the first-line antibiotic for pneumonia		Good: Over 80% Fair: 50–79% Poor: Under 50%
15	Percentage of respondents who have heard of the first-line antibiotic for bloody diarrhea		Good: Over 80% Fair: 50–79% Poor: Under 50%
16	Percentage of respondents who have heard of ORS		Good: Over 80% Fair: 50–79% Poor: Under 50%

³⁴ This indicator should be calculated in countries that do *not* have a strategy of promoting home management of fever (i.e., stocking in the home and appropriately using an appropriate antimalarial).

#	Indicator	Results for District X N =	Evaluation Standards (should be adapted to the specific district situations)
	Availability of medicines		
17	Percentage of respondents who had ORS at home		Good: Over 80% Fair: 50–79% Poor: Under 50%
18	Percentage of respondents who had the first-line antimalarial at home ³⁵		Good: Over 80% Fair: 50–79% Poor: Under 50%
19	Percentage of respondents who say they can always get the first-line antimalarial in the area where they live		Good: Over 80% Fair: 50–79% Poor: Under 50%
20	Percentage of respondents who say they can always get the first-line antibiotic for pneumonia in the area where they live		Good: Over 80% Fair: 50–79% Poor: Under 50%
21	Percentage of respondents who say they can always get the first-line antibiotic for bloody diarrhea in the area where they live		Good: Over 80% Fair: 50–79% Poor: Under 50%
22	Percentage of respondents who say they can always get ORS in the area where they live		Good: Over 80% Fair: 50–79% Poor: Under 50%
	Source of treatment/medicine		
23	Percentage of all antimalarials that were already in the home or were obtained from X source (among antimalarials used)		NA
24	Percentage of all antibiotics that were already in the home or were obtained from X source (among antibiotics used)		NA
25	Percentage of ORS treatments that were already in the home or were obtained from X source (among ORS treatments used)		NA
1	Percentage of medicines obtained on the advice of the following: self, health worker in facility, pharmacist/person in pharmacy or drugstore, vendor in general store/market/kiosk, community health worker/TBA, neighbor/friend/relative, other		NA
	Overall medicine treatment		
26	Percentage of respondents whose child received no medicine (among children with fever/hot body, convulsions/fits, fast breathing, and bloody diarrhea)		Good: Under 10% Fair: 10–15% Poor: Over 50%
27	Percentage of respondents whose child received any antibiotic		NA
28	Percentage of respondents whose child received an injection		NA

³⁵ This indicator should be calculated in countries which have a strategy of promoting home management of fever (i.e., stocking in the home and appropriately using an appropriate antimalarial).

#	Indicator	Results for District X N =	Evaluation Standards (should be adapted to the specific district situations)
J	Percentage of respondents who did nothing, gave “tepid sponging,” went to traditional healer, gave traditional teas/herbs, and other (among respondents with children with fever/hot body, convulsion/fits, fast breathing, and bloody diarrhea who received no medicine)		NA
Caregiver administers appropriate medicine correctly			
	<i>First-line appropriate medicine is administered</i>		
29	Percentage of respondents whose child had fever/hot body and took first-line antimalarial		Good: Over 80% Fair: 50–79% Poor: Under 50%
30	Percentage of respondents whose child had convulsions/fits and fever and took the appropriate antimalarial		Good: Over 80% Fair: 50–79% Poor: Under 50%
31	Percentage of respondents whose child had fast breathing and took first-line antibiotic for pneumonia		Good: Over 80% Fair: 50–79% Poor: Under 50%
32	Percentage of respondents whose child had diarrhea and took ORS or SSS		Good: Over 80% Fair: 50–79% Poor: Under 50%
33	Percentage of respondents whose child had bloody diarrhea and took first-line antibiotic for bloody diarrhea		Good: Over 80% Fair: 50–79% Poor: Under 50%
34	Percentage of respondents whose child had bloody diarrhea and took ORS or SSS and first-line antibiotic for bloody diarrhea		Good: Over 70% Fair: 40–69% Poor: Under 40%
	<i>Inappropriate medicine is administered</i>		
35	Percentage of respondents whose child had diarrhea who took any antidiarrheal		Good: Under 25% Fair: 25–50% Poor: Over 50%
36	Percentage of respondents whose child had diarrhea (not bloody) and took any antibiotic		Good: Under 25% Fair: 25–50% Poor: Over 50%
37	Percentage of respondents whose child had cough and no fast breathing and took any antibiotic		Good: Under 25% Fair: 25–50% Poor: Over 50%
	<i>Right dose/duration regimen is followed</i>		
38	Percentage of first-line antimalarials that were taken for too short, too long, or correct amount of time		Correct amount of time: Good: Over 80% Fair: 50–79% Poor: Under 50%
39	Percentage of second-line antimalarials that were taken for too short, too long, and correct amount of time		Correct amount of time: Good: Over 80% Fair: 50–79% Poor: Under 50%

#	Indicator	Results for District X N =	Evaluation Standards (should be adapted to the specific district situations)
40	Percentage of first-line antibiotics for pneumonia that were taken for too short, too long, and correct amount of time		Correct amount of time: Good: Over 80% Fair: 50–79% Poor: Under 50%
41	Percentage of second-line antibiotics for pneumonia that were taken for too short, too long, and correct amount of time		Correct amount of time: Good: Over 80% Fair: 50–79% Poor: Under 50%
42	Percentage of first-line antibiotics for bloody diarrhea that were taken for too short, too long, and correct amount of time		Correct amount of time: Good: Over 80% Fair: 50–79% Poor: Under 50%
43	Percentage of second-line antibiotics for bloody diarrhea that were taken for too short, too long, and correct amount of time		Correct amount of time: Good: Over 80% Fair: 50–79% Poor: Under 50%
Health care worker/drug provider			
	<i>Provides appropriate information/instruction/advice/labeling</i>		
44	Percentage of medicines dispensed in appropriate packaging (i.e., sealed plastic package or original manufacturer's package with one type of medicine per pack)		Good: Over 80% Fair: 50–79% Poor: Under 50%
45	Percentage of medicines that were appropriately labeled with all of the following: name of medicine, dose, frequency, and duration		Good: Over 70% Fair: 40–69% Poor: Under 40%

ANNEX 3A. CHILD HEALTH PROVIDER INDICATORS

#	Indicator	Level	Sources
Characteristics of sample			
a	Type of drug outlets	Descriptive	Local observation
b	Ownership of drug outlet (public/private/mission/other)	Descriptive	Local observation
c	Outlet setting/location (urban/rural)	Descriptive	Local observation
d	Distance/walking time from nearest health facility	Descriptive	Q 1
e	Training of respondent	Descriptive	Q 2
Health care worker/drug provider keeps appropriate and affordable medicine available in stock (first-line, second/third-line medicines to be defined based on local STGs)			
Availability of appropriate medicines			
1	Percentage of outlets with a recommended specific first-line medicine in stock	Primary	Q 17 and STG
2	Percentage of outlets with all recommended first-line medicines in stock	Secondary	Q 17 and STG
3	Percentage of outlets with a specific second- or third-line medicine in stock	Secondary	Q 17 and STG
4	Percentage of outlets with specific antidiarrheal available	Secondary	Q 17
5	Percentage of outlets with specific first-line antibiotic tablets for pneumonia but not syrup currently available in stock	Secondary	Q 17 and STG
6	Percentage of outlets with specific first-line antimalarial tablets but not syrup currently available in stock	Secondary	Q 17 and STG
7	Percentage of outlets that have second- or third-line medicines for pneumonia in children but not the first-line medicines	Secondary	Q 17 and STG
8	Percentage of outlets with antidiarrheal but not ORS available in stock	Secondary	Q 17
9	Percentage of outlets that have second- or third-line medicines for malaria in children but not the first-line medicines	Secondary	Q 17 and STG
Affordability of appropriate medicines			
10	Average cost [and range] for first-line antibiotic in form of syrup recommended in the treatment of pneumonia in a two-year-old child	Secondary	Q 18 and STG
11	Average number of working days needed to pay for treatment of pneumonia in a two-year-old child using first-line antibiotic syrup	Secondary	I 10 and NMW ³⁶
12	Average cost [and range] for first-line antibiotic in form of tablets or pills recommended in the treatment of pneumonia in a two-year-old child	Secondary	Q 18 and STG
13	Average number of working days needed to pay for treatment of pneumonia in a two-year-old child using first-line antibiotic tablets or pills	Secondary	I 12 and NMW

³⁶ NMW = National Minimum Wage

#	Indicator	Level	Sources
14	Average cost [and range] for second-line antibiotic in form of syrup recommended in the treatment of pneumonia in a two-year-old child	Secondary	Q 18 and STG
15	Average cost [and range] for second-line antibiotic in form of tablets or pills recommended in the treatment of pneumonia in a two-year-old child	Secondary	Q 18 and STG
16	Average cost [and range] for first-line antimalarial in form of syrup recommended in the treatment of malaria in a two-year-old child (<i>if syrup is available</i>)	Secondary	Q 18 and STG
17	Average number of working days needed to pay for treatment of malaria in a two-year-old child using first-line antimalarial syrup	Secondary	I 16 and NMW
18	Average cost [and range] for first-line antimalarial in form of tablets recommended in the treatment of malaria in a two-year-old child	Secondary	Q 18 and STG
19	Average number of working days needed to pay for treatment of malaria in a two-year-old child using first-line antimalarial tablets	Secondary	I 18 and NMW
20	Average cost [and range] for second-line antimalarial in form of syrup recommended in the treatment of malaria in a two-year-old child (<i>if syrup is available</i>)	Secondary	Q 18 and STG
21	Average cost [and range] for second-line antimalarial in form of tablets recommended in the treatment of malaria in a two-year-old child	Secondary	Q 18 and STG
22	Average cost [and range] for ORS in the treatment of diarrhea in a two-year-old child	Secondary	Q 18 and STG
23	Average number of working days needed to pay for ORS to treat diarrhea in a two-year-old child	Secondary	I 22 and NMW
	Health care worker/drug provider assesses symptoms appropriately		
	ARI (non-pneumonia) in children		
24	Percentage of respondents who mentioned an antibiotic for non-pneumonia ARI	Primary	Q 4
	Pneumonia in children		
25	Percentage of respondents not mentioning fast breathing, or chest in-drawing as key symptoms for differentiating pneumonia from a cold	Primary	Q 7
26	Percentage of respondents who mentioned an antibiotic for pneumonia symptoms in children	Primary	Q 6
27	Percentage of respondents mentioning the first-line antibiotic for pneumonia in children	Secondary	Q 6 and STG
28	Percentage of respondents who mentioned an injection for pneumonia in children	Primary	Q 6
	Malaria in children		
29	Percentage of respondents who do not mention fever with convulsion or fits as key symptoms for differentiating severe malaria	Primary	Q 10
30	Percentage of respondents who mentioned an antimalarial for children with malaria symptoms	Primary	Q 9
31	Percentage of respondents mentioning the first-line antimalarial for children with malaria symptoms	Secondary	Q 9 and STG
32	Percentage of respondents who mentioned an injection for malaria symptoms in children	Primary	Q 9

#	Indicator	Level	Sources
	<i>Diarrhea in children</i>		
33	Percentage of respondents who did not mention blood in stool as key symptom for differentiating diarrhea that would respond to antibiotics	Primary	Q 12
34	Percentage of respondents not mentioning ORS for children with symptoms of diarrhea	Primary	Q 11 and STG
35	Percentage of respondents who mentioned an antidiarrheal medicine for children with diarrhea	Primary	Q 11
36	Percentage of respondents who mentioned an antibiotic for children with nonbloody diarrhea	Primary	Q 11
	Health care worker/drug provider prescribes, dispenses, or recommends appropriate medicine or refers: Knowledge of appropriate treatment of reported symptoms		
37	Percentage of respondents who know the recommended medicine for pneumonia in children	Primary	Q 13 and STG
38	Percentage of respondents who know the correct treatment duration with the recommended medicine for pneumonia in children	Primary	Q 13a and STG
39	Percentage of respondents who know the recommended medicine for malaria in children	Primary	Q 14 and STG
40	Percentage of respondents who know the correct treatment duration with the recommended medicine for malaria in children	Primary	Q 14a and STG
41	Percentage of respondents who know the recommended medicine on the STG for nonbloody diarrhea in children	Primary	Q 15 and STG
42	Percentage of respondents who know the recommended medicine for bloody diarrhea in children	Primary	Q 16 and STG
43	Percentage of respondents who know the correct treatment duration with the recommended medicine for bloody diarrhea in children	Primary	Q 16a and STG
	Health care worker/drug provider prescribes, dispenses, or recommends appropriate medicine or refers: Commonly sold or dispensed medicines		
44	Percentage of respondents who do not mention the first-line medicine in the STG as the most commonly sold or dispensed for pneumonia in children	Primary	Q 20 and STG
45	Percentage of respondents who mentioned they would refer children with symptoms of pneumonia	Primary	Q 13
46	Percentage of respondents who do not mention the first-line medicine in the STG as the most commonly sold or dispensed for malaria in children	Primary	Q 21 and STG
47	Percentage of respondents who mentioned they would refer children with symptoms of malaria	Secondary	Q 14
48	Percentage of respondents who do not mention ORS as the most commonly sold or dispensed for nonbloody diarrhea in children	Primary	Q 22 and STG
49	Percentage of respondents who mentioned they would refer children with nonbloody diarrhea	Primary	Q 15
50	Percentage of respondents who mentioned they would refer children with bloody diarrhea	Primary	Q 16

#	Indicator	Level	Sources
	Health care worker/drug provider provides appropriate information/ instructions/advice/labeling		
51	Percentage of respondents who know the correct elements of appropriate labeling	Primary	Q 23
52	Percentage of respondents who know what should be explained about medicines by dispensers	Primary	Q 24
53	Percentage of providers who dispensed medicines (pills/tablets and/or syrup) outside of manufacturers' original packaging	Primary	Q 26
54	Percentage of providers who dispensed loose tablets in incorrect packaging	Primary	Q 27
55	Percentage of providers who mixed different types of pills in the same container	Primary	Q 28
56	Percentage of providers who dispensed syrup in incorrect packaging	Primary	Q 30
57	Percentage of providers who dispensed labeled medicines	Secondary	Q 31
58	Percentage of providers who gave verbal instruction when dispensing medicines	Secondary	Q 32
59	Percentage of providers who confirmed customers' understanding of how to take dispensed medicines	Secondary	Q 33

ANNEX 3B. CHILD HEALTH PROVIDER QUESTIONNAIRE

Say aloud: **My name is _____ . I am working for an organization that is trying to develop ways to improve child health. I am talking to people who dispense medicines about how they treat or give advice for sick children. Neither your name nor the name of your facility/shop will be written on this form nor released to any authorities. May I ask you a few questions?**

If Yes: Do you, yourself, regularly dispense or sell medicines to patients or customers?

If Yes: Fill out the information below, then start the interview with Q 1.

*If No, say: **Is there someone here today who regularly sees patients or customers?***

*If Yes, say: **May I please talk to that person?** Start interview again with new respondent.*

*If No, say: **Thank you, I will come back another time.** End interview.*

General Information

Country:	Town/Village:	Outlet Code:
Name of Interviewer:	Date of Interview: ____ / ____ / ____ Day Month Year	Language of Interview:
Setting/location: <input type="checkbox"/> Urban <input type="checkbox"/> Periurban <input type="checkbox"/> Rural		
Ownership of facility: <input type="checkbox"/> Government <input type="checkbox"/> Private <input type="checkbox"/> Mission <input type="checkbox"/> Other		
Start time of interview: ____ / ____ Hour Minute		End time of interview: ____ / ____ Hour Minute
Type of drug outlet: <i>(Check the type that best describes the outlet)</i>		<input type="checkbox"/> Health facility (government, private or mission hospital, health center, or dispensary) <input type="checkbox"/> Licensed retail drug outlet (pharmacy) <input type="checkbox"/> Other retail outlet (general store, kiosk, variety store) <input type="checkbox"/> Authorized individual dispensing drugs (community paramedic, midwife, CHW, etc.) <input type="checkbox"/> Other individual dispensing drugs (traditional healer, unlicensed practitioner, street vendor)
<i>If not a health facility, ask:</i> 1. How far from here is the nearest health facility? <i>(Listen to response and check one.)</i>		<input type="checkbox"/> Under 1 km (or less than 15 minutes walking) <input type="checkbox"/> Between 1 and 5 km (up to one hour walking) <input type="checkbox"/> More than 5 km (more than one hour walking) <input type="checkbox"/> Don't know
2. What kind of training in clinical care or pharmacy do you have? <i>(Do not read. Listen to response and check all that apply.)</i>		<input type="checkbox"/> Pharmacist <input type="checkbox"/> Pharmacy technician or some pharmacy training <input type="checkbox"/> Medical doctor <input type="checkbox"/> Paramedic, physician assistant <input type="checkbox"/> Nurse, nurse assistant <input type="checkbox"/> Medical assistant, medical technologist, lab technician, or other health-related training <input type="checkbox"/> None

Understanding of Symptoms and Appropriate Actions

<p>Say: <i>I would like to ask you some questions about different kinds of childhood illnesses you may attend to here.</i></p>			
<p>Non-Pneumonia ARI</p>			
<p>3. Can you tell me the symptoms you might find in a two year-old child who is suffering from a common cold? (Do not read. Listen to responses and check all that apply.)</p>			
<input type="checkbox"/> Cough <input type="checkbox"/> Blocked or runny nose <input type="checkbox"/> Fever (hot body) <input type="checkbox"/> Sore throat <input type="checkbox"/> Itchy eyes	<input type="checkbox"/> Chest in-drawing <input type="checkbox"/> Fast/difficulty breathing <input type="checkbox"/> Frequent/runny stools <input type="checkbox"/> Blood in stool <input type="checkbox"/> Thirst	<input type="checkbox"/> Sweating <input type="checkbox"/> Vomiting <input type="checkbox"/> Fever with convulsion or fits <input type="checkbox"/> Earache <input type="checkbox"/> Headache	<input type="checkbox"/> Child is lethargic <input type="checkbox"/> Child cannot sleep <input type="checkbox"/> Child refuses to eat <input type="checkbox"/> Don't know <input type="checkbox"/> Other _____
<p>4. What is the most effective medicine to treat a child who has a cough and a runny nose? (Do not read. Listen and write down the response.)</p>		<p>_____</p> <input type="checkbox"/> I don't know	
<p>Pneumonia</p>			
<p>5. Can you tell me the symptoms you might find in a two-year-old child suffering from pneumonia? (Do not read. Listen to responses and check all that apply.)</p>			
<input type="checkbox"/> Cough <input type="checkbox"/> Blocked or runny nose <input type="checkbox"/> Fever (hot body) <input type="checkbox"/> Sore throat <input type="checkbox"/> Itchy eyes	<input type="checkbox"/> Chest in-drawing <input type="checkbox"/> Fast/difficulty breathing <input type="checkbox"/> Frequent/runny stools <input type="checkbox"/> Blood in stool <input type="checkbox"/> Thirst	<input type="checkbox"/> Sweating <input type="checkbox"/> Vomiting <input type="checkbox"/> Fever with convulsion or fits <input type="checkbox"/> Earache <input type="checkbox"/> Headache	<input type="checkbox"/> Child is lethargic <input type="checkbox"/> Child cannot sleep <input type="checkbox"/> Child refuses to eat <input type="checkbox"/> Don't know <input type="checkbox"/> Other _____
<p>6. What is the most effective medicine to treat a child with pneumonia? (Do not read. Listen and write down the response.)</p>		<p>_____</p> <input type="checkbox"/> I don't know	
<p>7. What would you say are the key symptoms for telling a case of childhood pneumonia from a common cold? (Do not read. Listen to responses and check all that apply.)</p>			
<input type="checkbox"/> Cough <input type="checkbox"/> Blocked or runny nose <input type="checkbox"/> Fever (hot body) <input type="checkbox"/> Sore throat <input type="checkbox"/> Itchy eyes	<input type="checkbox"/> Chest in-drawing <input type="checkbox"/> Fast/difficulty breathing <input type="checkbox"/> Frequent/runny stools <input type="checkbox"/> Blood in stool <input type="checkbox"/> Thirst	<input type="checkbox"/> Sweating <input type="checkbox"/> Vomiting <input type="checkbox"/> Fever with convulsion or fits <input type="checkbox"/> Earache <input type="checkbox"/> Headache	<input type="checkbox"/> Child is lethargic <input type="checkbox"/> Child cannot sleep <input type="checkbox"/> Child refuses to eat <input type="checkbox"/> Don't know <input type="checkbox"/> Other _____
<p>Malaria</p>			
<p>8. Can you tell me the symptoms you might find in a two-year-old child suffering from mild malaria? (Do not read. Listen to responses and check all that apply.)</p>			
<input type="checkbox"/> Cough <input type="checkbox"/> Blocked or runny nose <input type="checkbox"/> Fever (hot body) <input type="checkbox"/> Sore throat <input type="checkbox"/> Itchy eyes	<input type="checkbox"/> Chest in-drawing <input type="checkbox"/> Fast/difficulty breathing <input type="checkbox"/> Frequent/runny stools <input type="checkbox"/> Blood in stool <input type="checkbox"/> Thirst	<input type="checkbox"/> Sweating <input type="checkbox"/> Vomiting <input type="checkbox"/> Fever with convulsion or fits <input type="checkbox"/> Earache <input type="checkbox"/> Headache	<input type="checkbox"/> Child is lethargic <input type="checkbox"/> Child cannot sleep <input type="checkbox"/> Child refuses to eat <input type="checkbox"/> Don't know <input type="checkbox"/> Other _____
<p>9. What is the most effective medicine to treat a child with mild malaria? (Do not read. Listen and write down the response.)</p>		<p>_____</p> <input type="checkbox"/> I don't know	

10. What would you say are the key symptoms for telling a case of mild malaria from a case of severe malaria in children? <i>(Do not read. Listen to responses and check all that apply.)</i>			
<input type="checkbox"/> Cough <input type="checkbox"/> Blocked or runny nose <input type="checkbox"/> Fever (hot body) <input type="checkbox"/> Sore throat <input type="checkbox"/> Itchy eyes	<input type="checkbox"/> Chest in-drawing <input type="checkbox"/> Fast/difficulty breathing <input type="checkbox"/> Frequent/runny stools <input type="checkbox"/> Blood in stool <input type="checkbox"/> Thirst	<input type="checkbox"/> Sweating <input type="checkbox"/> Vomiting <input type="checkbox"/> Fever with convulsion or fits <input type="checkbox"/> Earache <input type="checkbox"/> Headache	<input type="checkbox"/> Child is lethargic <input type="checkbox"/> Child cannot sleep <input type="checkbox"/> Child refuses to eat <input type="checkbox"/> Don't know <input type="checkbox"/> Other _____
Diarrhea			
11. What is the most effective medicine to treat a child with nonbloody diarrhea? <i>(Do not read. Listen and write down the response.)</i>		_____ <input type="checkbox"/> I don't know	
12. Can you tell me the key symptoms for a child with diarrhea that may need antibiotics? <i>(Do not read. Listen to responses and check all that apply.)</i>			
<input type="checkbox"/> Cough <input type="checkbox"/> Blocked or runny nose <input type="checkbox"/> Fever (hot body) <input type="checkbox"/> Sore throat <input type="checkbox"/> Itchy eyes	<input type="checkbox"/> Chest in-drawing <input type="checkbox"/> Fast/difficulty breathing <input type="checkbox"/> Frequent/runny stools <input type="checkbox"/> Blood in stool <input type="checkbox"/> Thirst	<input type="checkbox"/> Sweating <input type="checkbox"/> Vomiting <input type="checkbox"/> Fever with convulsion or fits <input type="checkbox"/> Earache <input type="checkbox"/> Headache	<input type="checkbox"/> Child is lethargic <input type="checkbox"/> Child cannot sleep <input type="checkbox"/> Child refuses to eat <input type="checkbox"/> Don't know <input type="checkbox"/> Other _____

Knowledge of Appropriate Treatment of Reported Symptoms

13. Can you tell me which medicine is recommended on the national treatment guidelines for a two-year-old child suffering from pneumonia? <i>(Listen to response and write down the answer, than ask Q 13a. If the person answered "I don't know" or "I usually refer them," move to Q 14.)</i> 13a. For how long should this medicine be taken? →	Medicine name: _____ <input type="checkbox"/> I don't know <input type="checkbox"/> I usually refer them Duration: _____
14. Do you know which medicine is recommended on the national treatment guidelines for a two-year-old child with malaria? <i>(Listen to response and write down the answer, than ask Q 14a. If the person answered "I don't know" or "I usually refer them," move to Q 15.)</i> 14a. For how long should this medicine be taken? →	Medicine name: _____ <input type="checkbox"/> I don't know <input type="checkbox"/> I usually refer them Duration: _____
15. Do you know which medicine is recommended on the national treatment guidelines for a two-year-old child with nonbloody diarrhea? <i>(Listen to response and write down the answer, than ask Q 15a. If the person answered "I don't know" or "I usually refer them," move to Q 16.)</i> 15a. For how long should this medicine be taken? →	Medicine name: _____ <input type="checkbox"/> I don't know <input type="checkbox"/> I usually refer them Duration: _____
16. Do you know which medicine is recommended on the national treatment guidelines for a two-year-old child with bloody diarrhea? <i>(Listen to response and write down the answer, than ask Q 16a. If the person answered "I don't know" or "I usually refer them," go to next section.)</i> 16a. For how long should this medicine be taken? →	Medicine name: _____ <input type="checkbox"/> I don't know <input type="checkbox"/> I usually refer them Duration: _____

Say: Sometimes you may recommend medicines for certain conditions, but many times people buy medicines on others' recommendations, or for other reasons. We are interested in what medicines people generally get here, whether or not you would recommend them.

<p>19. Would you please show me the medicine that most people may buy or receive for a child with a cold?</p> <p><i>Write the name of the medicine on the line at the right. If the person does not have the medicine in stock, ask:</i></p> <p>What is the name of that medicine?</p>	<p>Medicine name _____</p> <p>Form _____</p> <p><input type="checkbox"/> Don't know or don't recall</p> <p>Generic name: _____</p> <p><i>To be completed by the supervisor</i></p>
<p>20. Would you please show me the medicine that most people may buy or receive for a child with pneumonia?</p> <p><i>Write the name of the medicine on the line at the right. If the person does not have the medicine in stock, ask:</i></p> <p>What is the name of that medicine?</p>	<p>Medicine name _____</p> <p>Form _____</p> <p><input type="checkbox"/> Don't know or don't recall</p> <p>Generic name: _____</p> <p><i>To be completed by the supervisor</i></p>
<p>21. Would you please show me the medicine that most people may buy or receive for a child with malaria?</p> <p><i>Write the name of the medicine on the line at the right. If the person does not have the medicine in stock, ask:</i></p> <p>What is the name of that medicine?</p>	<p>Medicine name _____</p> <p>Form _____</p> <p><input type="checkbox"/> Don't know or don't recall</p> <p>Generic name: _____</p> <p><i>To be completed by the supervisor</i></p>
<p>22. Would you please show me the medicine that most people may buy or receive for a child with nonbloody diarrhea?</p> <p><i>Write the name of the medicine on the line at the right. If the person does not have the medicine in stock, ask:</i></p> <p>What is the name of that medicine?</p>	<p>Medicine name _____</p> <p>Form _____</p> <p><input type="checkbox"/> Don't know or don't recall</p> <p>Generic name: _____</p> <p><i>To be completed by the supervisor</i></p>

Prescribing, Dispensing, Recommendation of Appropriate Medicines or Referrals

Appropriate Information/Instructions/Advice/Labeling

<p>23. What should be written on the package label of a medicine as it is dispensed?</p> <p><i>(Do not read. Listen and check all that apply.)</i></p>	<p><input type="checkbox"/> Patient name</p> <p><input type="checkbox"/> Medicine name</p> <p><input type="checkbox"/> How to take</p> <p><input type="checkbox"/> Duration</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> Don't know</p>
<p>24. What things about the medicine should be explained to a customer as it is dispensed?</p> <p><i>(Do not read. Listen and check all that apply.)</i></p>	<p><input type="checkbox"/> Medicine name</p> <p><input type="checkbox"/> What it treats</p> <p><input type="checkbox"/> When and how to take</p> <p><input type="checkbox"/> Side effects</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> Don't know</p>

Say: That was my last question. Thank you very much for your participation. End interview.

Return to the front page and record the time that the interview ended, then complete the last page of the questionnaire on quality of dispensing.

Observed Dispensing Practices

Packaging and Advice on Signs of Treatment Failure and/or Need for Referral

<p><i>If any customers came to buy medicine during the interview, recall how the medicines were dispensed to those customers and complete this section.</i></p>	
<p>25. Medicines were dispensed to one or more customers during the interview.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p><i>If yes, complete the following section on dispensing practice.</i></p>	
<p>26. Tablets were dispensed outside of manufacturers' original packaging.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>27. If yes, what kind of packaging was used to dispense those tablets or pills? <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Small bottle with cap <input type="checkbox"/> Plastic package (mini-grips) <input type="checkbox"/> Sealable envelope <input type="checkbox"/> Folded paper envelope <input type="checkbox"/> Other <i>(specify)</i> _____</p>
<p>28. Several types of tablets were dispensed in the same package.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>29. Syrups were dispensed outside of manufacturers' packaging.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>30. If yes, what kind of packaging was used to dispense the syrups? <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Small airtight bottle (with cap) <input type="checkbox"/> Small bottle without cap <input type="checkbox"/> Other <i>(specify)</i> _____</p>
<p>31. Packages contained the following types of labeling. <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Printed manufacturer's label <input type="checkbox"/> Printed label produced in outlet <input type="checkbox"/> Information written on label by the dispenser <input type="checkbox"/> No labeling</p>
<p>32. Dispenser gave customer verbal instruction on how to take the medicine.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>33. Dispenser asked customer to repeat verbal instruction about how to take the medicine.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>

ANNEX 3C. CHILD HEALTH PROVIDER ANALYSIS TABLES

Descriptive Characteristics

Characteristic a. Distribution of types of drug outlets included in the survey

A	B	C	D
Type of outlet	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
Health facility (government, private or mission hospital, health center, or dispensary)			
Licensed retail drug outlet (pharmacy, chemist, or drug shop)			
Other retail outlet (general store, kiosk, variety store)			
Licensed individual dispensing drugs (doctor/nurse, community paramedic, midwife, CHW, etc.)			
Other individual dispensing drugs (traditional healer, unlicensed practitioner, street vendor)			
Total number of outlets [®]			

Characteristic b. Ownership of facility

A	B	C	D
Ownership of facility	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
Public			
Private			
Mission			
Total number of outlets [®]			

Characteristic c. Setting/location of outlets

A	B	C	D
Setting/Location	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
Urban			
Periurban			
Rural			
Total number of outlets →			

Characteristic d. Proximity to health facility

A	B	C	D
Distance from nearest health facility	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
This is a health facility			
Under 1 km (15 minutes walking)			
Between 1 and 5 km (up to one hour walking)			
More than 5 km (more than one hour walking)			
Don't know			
Total number of outlets ®			

Characteristic e. Level of training of respondents

A	B	C	D
Ownership of facility	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
Pharmacist			
Pharmacy technician or para-pharmacist			
Medical doctor			
Paramedic, physician assistant			
Nurse, nurse assistant			
Medical assistant, medical technologist, etc.			
None			
Total number of outlets ®			

Indicators 3–4. Percentage of outlets with specific second/third-line medicines or specific antidiarrheal in stock (Q 17)

A	B	C	D	E	F	G
Survey #	Medicine 1: _____	Medicine 2: _____	Medicine 3: _____	Medicine 4: _____	Medicine 5: _____	Antidiarrheal _____
Total # of providers: _____						
Total # of checks per column ®						
Percentage (see formula)	I _{3a} :	I _{3b} :	I _{3c} :	I _{3d} :	I _{3e} :	I ₄ :

Note: For each specific medicine under investigation, insert the relevant name on top of columns B to G.

Indicators 5–9. Availability of medicines for child health in stock (Q 17)

A	B	C	D	E	F
Survey #	Has first-line antibiotic tablets for pneumonia but not syrup	Has first-line antimalarial tablets but not syrup	Has second/third-line medicines for pneumonia but not first-line	Has antidiarrheal but not ORS in stock	Has second- or third-line medicines for malaria but not first-line
Total # of providers: _____					
Total # of checks per column ®					
Percentage (see formula)	I ₅ :	I ₆ :	I ₇ :	I ₈ :	I ₉ :

Indicators 12 and 13. Treatment costs for pneumonia in children with first-line antibiotic tablets or pills

Standard pneumonia treatment with first-line tablet for a two-year-old child =					
First-line tablet for pneumonia on STG: _____					
A	B	C	D	E	F
Survey #	Package price	Package size	Price per unit	Total treatment cost	National Minimum Wage per day (NMW)
					NMW = _____
Total # of providers: _____			Total cost ®		
			Minimum	I ₁₂ :	Avg. number of working days to pay for treatment ®
			Maximum	I ₁₂ :	
			Average cost	I ₁₂ :	
					I ₁₃ :

Indicator 14. Average cost for second-line antibiotic syrup recommended for pneumonia in two-year-old child

<i>Standard pneumonia treatment with second-line antibiotic syrup for a two-year-old child =</i>				
<i>Second-line antibiotic syrup for pneumonia on STG: _____</i>				
A	B	C	D	E
Survey #	Package price	Package size	Price per unit	Total treatment cost
Total # of providers: _____			Total cost ®	
			Minimum	I ₁₄ :
			Maximum	I ₁₄ :
			Average cost	I ₁₄ :

Indicator 15. Average cost for second-line antibiotic tablets or pills recommended for pneumonia in two-year-old child

<i>Standard pneumonia treatment with second-line antibiotic tablet or pill for a two-year-old child =</i>				
<i>Second-line antibiotic tablet or pill for pneumonia on STG: _____</i>				
A	B	C	D	E
Survey #	Package price	Package size	Price per unit	Total treatment cost
Total # of providers: _____			Total cost ®	
			Minimum	I₁₅:
			Maximum	I₁₅:
			Average cost	I₁₅:

Indicators 16 and 17. Treatment costs for malaria in children with first-line antimalarial syrup (from Q 18 and STG and NMW)

Standard malaria treatment with first-line antimalarial syrup for a two-year-old child =						
First-line antimalarial syrup on STG: _____						
A	B	C	D	E		F
Survey #	Package price	Package size	Price per unit	Total treatment cost		National Minimum Wage per day (NMW)
						NMW = _____
Total # of providers: _____			Total cost ®			
			Minimum	I ₁₆ :	Avg. number of working days to pay for treatment ®	I ₁₇ :
			Maximum	I ₁₆ :		
			Average cost	I ₁₆ :		

Indicators 18 and 19. Treatment costs for malaria in children with first-line antimalarial tablets

Standard malaria treatment with first-line antimalarial tablets for a two-year-old child =							
First-line antimalarial tablet on STG: _____							
A	B	C	D	E		F	
Survey #	Package price	Package size	Price per unit	Total treatment cost			National Minimum Wage per day (NMW)
							NMW = _____
Total # of providers: _____			Total cost ®				
			Minimum	I ₁₈ :	Avg. number of working days to pay for treatment ®	I ₁₉ :	
			Maximum	I ₁₈ :			
			Average cost	I ₁₈ :			

Indicator 20. Average cost for second-line antimalarial syrup recommended for malaria in children

<i>Standard malaria treatment with second-line antimalarial syrup for a two-year-old child =</i>				
<i>Second-line antimalarial syrup on STG: _____</i>				
A	B	C	D	E
Survey #	Package price	Package size	Price per unit	Total treatment cost
Total # of providers: _____			Total cost ®	
			Minimum	I ₂₀ :
			Maximum	I ₂₀ :
			Average cost	I ₂₀ :

Indicator 21. Average cost for second-line antimalarial tablets recommended for malaria in children

<i>Standard malaria treatment with second-line antimalarial tablets for a two-year-old child =</i>				
<i>Second-line antimalarial tablet on STG: _____</i>				
A	B	C	D	E
Survey #	Package price	Package size	Price per unit	Total treatment cost
Total # of providers: _____			Total cost ®	
			Minimum	I ₂₁ :
			Maximum	I ₂₁ :
			Average cost	I ₂₁ :

**Indicators 22 and 23. Treatment costs for diarrhea in children with ORS
(from Q 18 and STG and NMW)**

Standard treatment for watery diarrhea in a two-year-old child with ORS =						
A	B	C	D	E		F
Survey #	Package price	Package size	Price per unit	Total treatment cost		National Minimum Wage per day (NMW)
						NMW = _____
Total # of providers: _____			Total cost ®			
			Minimum	I ₂₂ :	Avg. number of working days to pay for treatment ®	I ₂₃ :
			Maximum	I ₂₂ :		
			Average cost	I ₂₂ :		

Understanding of Symptoms and Appropriate Treatment

Provider Understands Symptoms Correctly

The following three tabulation forms can be used to calculate *Indicators 24–36*, which provide information on whether providers understand symptoms of childhood illness correctly.

Indicators 24–28. Percentage of providers who understand symptoms and take appropriate actions for ARI non-pneumonia and pneumonia

A	B	D	E	F	G
	ARI (non-pneumonia)	Pneumonia in children			
Survey #	Q4 Mentioned antibiotic Y/N	Q7 Did not mention key symptoms (fast breathing or chest in-drawing) Y/N	Q6 Mentioned antibiotic Y/N	Q6 Mentioned first-line antibiotic Y/N	Q6 Mentioned injection Y/N
Total # of providers: _____					
Total # of checks per column ®					
Percentage (see formula)	I₂₄:	I₂₅:	I₂₆:	I₂₇:	I₂₈:

Indicators 29–32. Percentage of providers who understand symptoms and take appropriate actions for malaria

A	B	C	D	F
	Malaria			
Survey #	Q10 Did not mention key symptoms (fever with fits or convulsion) Y/N	Q9 Mentioned antimalarial Y/N	Q9 Mentioned first-line antimalarial Y/N	Q9 Mentioned injection Y/N
Total # of providers: _____				
Total # of checks per column ®				
Percentage (see formula)	I₂₉:	I₃₀:	I₃₁:	I₃₂:

Indicators 33–36. Percentage of providers who understand symptoms and appropriate actions for diarrhea

A	B	C	D	F
	Diarrhea			
Survey #	Q12 Did not mention blood in stool for severe diarrhea Y/N	Q11 Did not mention ORS for diarrhea Y/N	Q11 Mentioned antidiarrheal Y/N	Q11 Mentioned antibiotic Y/N
Total # of providers: _____				
Total # of checks per column →				
Percentage (see formula)	I₃₃:	I₃₄:	I₃₅:	I₃₆:

Provider Knows Appropriate Treatment

The following tabulation form can be used to calculate *Indicators 37–43, which inform on the providers’ knowledge of appropriate treatments.*

Indicators 37–43. Percentage of providers who know recommended treatments

A	B	C	D	E	F	G	H
	Pneumonia		Malaria		Nonbloody diarrhea	Bloody diarrhea	
Survey #	Q13 Know recommended medicine	Q13a Know treatment duration	Q14 Know recommended medicine	Q14a Know treatment duration	Q15 Know recommended medicine	Q16 Know recommended medicine	Q16a Know treatment duration
Total # of outlets							
Total # of checks per column →							
Percentage (see formula) ®	I₃₇:	I₃₈:	I₃₉:	I₄₀:	I₄₁:	I₄₂:	I₄₃:

Prescribing, Dispensing of Appropriate Medicines, and Referral Patterns

The following tabulation form can be used to calculate *Indicators 44–50*, which inform about how providers prescribe, dispense, and recommend appropriate medicines or refer sick children.

Indicators 44–50. Percentage of respondents who mention first-line medicines or refer

A	B	C	D	E	F	G	H
	Pneumonia		Malaria		Nonbloody diarrhea		Bloody diarrhea
Survey #	Q20 Did not mention first-line medicine	Q13 Would refer	Q21 Did not mention first-line medicine	Q14 Would refer	Q22 Did not mention ORS	Q15 Would refer	Q16 Would refer
Total # of outlets _____							
Total # of checks per column →							
Percentage (see formula) ®	I₄₄:	I₄₅:	I₄₆:	I₄₇:	I₄₈:	I₄₉:	I₅₀:

Appropriateness of Information, Instructions, Advice, and Labeling

The following table models can be used to calculate *Indicators 51–59*, which measure the appropriateness of information, instructions, advice, and labeling at the drug outlets.

Indicator 51. Percentage of respondents who know the correct elements of appropriate labeling (Q 23)

A	B	C	D	E	F	G
Survey #	Patient name	Medicine name	How to take	Duration	Don't know or other	Included all items in label (columns B to E)
Total # of outlets _____						
Percentage (see formula) ®						I ₅₁ :

Indicator 52. Percentage of respondents who know what should be explained when dispensing medicines (Q 24)

A	B	C	D	E	F	G
Survey #	Medicine name	What it treats	When and how to take	Side effects	Don't know or other	Instruction included all items (columns B to E)
Total # of outlets _____						
Percentage (see formula) ®						I ₅₂ :

Packaging

The following tabulation form can be used to calculate *Indicators 53–59, which measure quality of dispensing* for the respondents who were observed dispensing medicine during the interview. Note that the total number of outlets used in this table refers **only** to the number of providers who were observed, not to the overall number of drug outlets in the survey.

Indicators 53–59. Quality of packaging, labeling, dispensing, and verbal instruction

A	B	C	D	E	F	G	H
Survey #	Q26 Dispensed medicine outside of original packaging	Q27 Dispensed loose tablets in incorrect packaging	Q28 Mixed different pills in same container	Q30 Dispensed syrup in incorrect packaging	Q31 Dispensed labeled medicine	Q32 Gave verbal instructions	Q33 Had customer repeat verbal instruction
Total # of outlets							
Total # of checks per column ®							
Percentage (see formula) ®	I₅₃:	I₅₄:	I₅₅:	I₅₆:	I₅₇:	I₅₈:	I₅₉:

ANNEX 3D. CHILD HEALTH PROVIDER EVALUATION STANDARDS

Indicators		Priority Level	Provider Characteristics				Evaluation Standards
			_____	_____	_____	_____	
			n = _____	n = _____	n = _____	n = _____	
Availability of appropriate medicines							
1	Percentage of outlets with a recommended specific first-line medicine in stock	Primary					Good: Over 80% Fair: 60–79% Poor: Under 60%
2	Percentage of outlets with all recommended first-line medicines in stock	Secondary					Good: Over 75% Fair: 50–75% Poor: Under 50%
3	Percentage of outlets with a specific second/third line medicine in stock	Secondary					
							Good: Over 75% Fair: 50–75% Poor: Under 50%
4	Percentage of outlets with specific antidiarrheal available	Secondary					Good: Under 20% Fair: 20–40% Poor: Over 40%
5	Percentage of outlets with specific first-line antibiotic tablets for pneumonia in children but not syrup currently available in stock	Secondary					

Indicators	Priority Level	Provider Characteristics				Evaluation Standards	
		_____	_____	_____	_____		
		n = _____	n = _____	n = _____	n = _____		
6	Percentage of outlets with specific first-line antimalarial tablets but not syrup currently available in stock	Secondary					Good: Under 20% Fair: 20–40% Poor: Over 40%
7	Percentage of outlets that have second- or third-line medicines for pneumonia in children but not the first-line medicines	Secondary					
8	Percentage of outlets with antidiarrheal but not ORS available in stock	Secondary					
9	Percentage of outlets that have second- or third-line medicines for malaria in children but not the first-line	Secondary					
Affordability of appropriate medicines							
10	Average cost [and range] for first-line antibiotic in form of syrup recommended in the treatment of pneumonia in a two-year-old child	Secondary					No particular standards. Interpretation depends on local economy.
11	Average number of working days needed to pay for treatment of pneumonia in a two-year-old using first-line antibiotic syrup	Secondary					
12	Average cost [and range] for first-line antibiotic in form of tablets or pills recommended in the treatment of pneumonia in a two-year-old child	Secondary					
13	Average number of working days needed to pay for treatment of pneumonia in a two-year-old child using first-line antibiotic tablets or pills	Secondary					
14	Average cost [and range] for second-line antibiotic in form of syrup recommended in the treatment of pneumonia in a two-year-old child	Secondary					
15	Average cost [and range] for second-line antibiotic in form of tablets or pills recommended in the treatment of pneumonia in a two-year-old child	Secondary					

Annex 3D. Child Health Provider Evaluation Standards

Indicators	Priority Level	Provider Characteristics				Evaluation Standards	
		_____	_____	_____	_____		
		n = _____	n = _____	n = _____	n = _____		
16	Average cost [and range] for first-line antimalarial in form of syrup recommended in the treatment of malaria in a two-year-old child <i>(if syrup is available)</i>	Secondary					No particular standards. Interpretation depends on local economy.
17	Average number of working days needed to pay for treatment of malaria in a two-year-old child using first-line antimalarial syrup	Secondary					
18	Average cost [and range] for first-line antimalarial in form of tablets recommended in the treatment of malaria in a two-year-old child	Secondary					
19	Average number of working days needed to pay for treatment of malaria in a two-year-old using first-line antimalarial tablets	Secondary					
20	Average cost [and range] for second-line antimalarial in form of syrup recommended in the treatment of malaria in a two-year-old child <i>(if syrup is available)</i>	Secondary					
21	Average cost [and range] for second-line antimalarial in form of tablets recommended in the treatment of malaria in a two-year-old child	Secondary					
22	Average cost [and range] for ORS in the treatment of diarrhea in a two-year-old child	Secondary					
23	Average number of working days needed to pay for ORS to treat diarrhea in a two-year-old child	Secondary					
Provider's understanding of symptoms and appropriate actions							
ARI (non-pneumonia) in children							
24	Percentage of respondents who report they would recommend an antibiotic for non-pneumonia ARI	Primary					Good: Under 25% Fair: 25%–50% Poor: Over 50%

Indicators	Priority Level	Provider Characteristics				Evaluation Standards	
		n = _____	n = _____	n = _____	n = _____		
<i>Pneumonia in children</i>							
25	Percentage of respondents not mentioning fast breathing or chest in-drawing as key symptoms for differentiating pneumonia from a cold	Primary					Good: Under 20% Fair: 20–40% Poor: Over 40%
26	Percentage of respondents who mentioned an antibiotic for treating pneumonia symptoms in children	Primary					Good: Over 80% Fair: 60–80% Poor: Under 60%
27	Percentage of respondents who mentioned the first-line antibiotic for treating pneumonia in children	Secondary					
28	Percentage of respondents who mentioned an injection for treating pneumonia in children	Primary					Good: Under 10% Fair: 10–20% Poor: Over 20%
<i>Malaria in children</i>							
29	Percentage of respondents who do not mention fever with convulsion or fits as key symptoms for differentiating severe malaria	Primary					Good: Under 20% Fair: 20–40% Poor: Over 40%
30	Percentage of respondents who mentioned an antimalarial for children with malaria symptoms	Primary					Good: Over 80% Fair: 60–80% Poor: Under 60%
31	Percentage of respondents who mentioned the first-line antimalarial for children with malaria symptoms	Secondary					
32	Percentage of respondents who mentioned an injection for malaria symptoms in children	Primary					Good: Under 10% Fair: 10–20% Poor: Over 20%

Annex 3D. Child Health Provider Evaluation Standards

Indicators	Priority Level	Provider Characteristics				Evaluation Standards	
		_____	_____	_____	_____		
<i>Diarrhea in children</i>							
33	Percentage of respondents who did not mention blood in stool as key symptoms for differentiating diarrhea that would respond to antibiotics	Primary					Good: Under 20% Fair: 20–40% Poor: Over 40%
34	Percentage of respondents who did not mention ORS for children with symptoms of diarrhea	Primary					Good: Under 10% Fair: 10–20% Poor: Over 20%
35	Percentage of respondents who mentioned an antidiarrheal medicine for children with diarrhea	Primary					Good: Under 20% Fair: 20–40% Poor: Over 40% Needs exploration
36	Percentage of respondents who mentioned an antibiotic for children with nonbloody diarrhea	Primary					
Knowledge of appropriate treatment of reported symptoms							
37	Percentage of respondents who know the recommended medicine for pneumonia in children	Primary					Good: Over 85% Fair: 65–84% Poor: Under 65 %
38	Percentage of respondents who know the correct treatment duration with the recommended medicine for pneumonia in children	Primary					
39	Percentage of respondents who know the recommended medicine for malaria in children	Primary					
40	Percentage of respondents who know the correct treatment duration with the recommended medicine for malaria in children	Primary					
41	Percentage of respondents who know the recommended medicine on the STG for nonbloody diarrhea in children	Primary					Good: Over 90% Fair: 70–90% Poor: Under 70%

Indicators	Priority Level	Provider Characteristics				Evaluation Standards	
		_____	_____	_____	_____		
		n = _____	n = _____	n = _____	n = _____		
42	Percentage of respondents who know the recommended medicine for bloody diarrhea in children	Primary					Good: Over 85% Fair: 65–84% Poor: Under 65 %
43	Percentage of respondents who know the correct treatment duration with the recommended medicine for bloody diarrhea in children	Primary					
Prescribing, dispensing/recommendation of appropriate medicines, or referral patterns							
44	Percentage of respondents who do not mention the first-line medicine as the most commonly sold or dispensed for pneumonia in children	Primary					Good: Under 10% Fair: 10–20% Poor: Over 20%
45	Percentage of respondents who mentioned they would refer children with symptoms of pneumonia	Primary					Health posts, CHWs, retail outlets and traditional healers should refer
46	Percentage of respondents who do not mention the first-line medicine as the most commonly sold or dispensed for malaria in children	Primary					Good: Under 10% Fair: 10–20% Poor: Over 20%
47	Percentage of respondents who mentioned they would refer children with symptoms of malaria	Primary					Health posts, CHWs, retail outlets and traditional healers should refer
48	Percentage of respondents who do not mention ORS as the most commonly sold or dispensed for nonbloody diarrhea in children	Primary					Good: Under 10% Fair: 10–20% Poor: Over 20%
49	Percentage of respondents who mentioned they would refer children with nonbloody diarrhea	Primary					
50	Percentage of respondents who mentioned they would refer children with bloody diarrhea	Primary					Health posts, CHWs, retail outlets and traditional healers should refer

Annex 3D. Child Health Provider Evaluation Standards

Indicators	Priority Level	Provider Characteristics				Evaluation Standards	
		n = _____	n = _____	n = _____	n = _____		
Appropriateness of information/instructions/advice/labeling							
51	Percentage of respondents who know the correct elements of appropriate labeling	Primary					Good: Over 80% Fair: 60–80% Poor: Under 60%
52	Percentage of respondents who know what should be explained about medicines by dispensers	Primary					
Packaging							
53	Percentage of providers who dispensed medicines (pills/tablets and/or syrup) outside of manufacturers' original packaging	Primary					General information Good: Under 10% Fair: 10–20% Poor: Over 20%
54	Percentage of providers who dispensed loose tablets in incorrect packaging	Primary					
55	Percentage of providers who mixed different types of pills in the same container	Primary					
56	Percentage of providers who dispensed syrup in incorrect packaging	Primary					
57	Percentage of providers who dispensed labeled medicines	Secondary					Good: Over 80% Fair: 60–80% Poor: Under 60%
58	Percentage of providers who gave verbal instruction when dispensing medicines	Secondary					
59	Percentage of providers who confirmed customers' understanding of how to take dispensed medicines	Secondary					

ANNEX 3E. TREATMENT DOSE CALCULATION OF STG DRUGS

Drugs from the Standard Treatment Guidelines

Calculation of quantity required for treatment dose for a child of 2 years and 12 kg

Pathology	Drugs	Forms	Doses			Frequency	Duration	Amount Required for Total Treatment	Total Treatment Cost
Malaria	<i>Example</i> Nivaquine or Chloroquine first-line antimalarial	Syrup 50 mg/5ml	1st day 3 teaspoons or 15ml	2nd day 3 teaspoons or 15ml	3rd day 1½ teaspoons or 7.5ml (5–10ml)	1	3	40ml	USD 2
		Tablet 100mg	1 ½	1 ½	½	1	3	3½	USD 0.80
		Tablet 150mg	1	1	½	1	3	2½	USD 0.95
	Fansidar or Maloxine second-line antimalarial	Tablet 500/25mg	1			1	1	1	USD 3
ARI Non-Pneumonia									
ARI Pneumonia									
Nonbloody Diarrhea									
Bloody Diarrhea									

ANNEX 4A. ASSESSMENT COORDINATOR TERMS OF REFERENCE

CHILD HEALTH/SURVEY RESEARCH IN SENEGAL ASSESSMENT COORDINATOR

Background

The effective case management of malaria and other childhood illness at the community level requires people to seek, obtain, and appropriately use appropriate treatment. Because much treatment seeking occurs in the community, effective home management is critical. In most settings, little information exists to help district health officers and other program planners design effective interventions to improve appropriate drug management and use at the community level and possibly slow the emergence of drug resistance.

RPM Plus partners (Management Sciences for Health, Harvard, Academy for Educational Development) have developed questionnaires for investigating case management of malaria in children, as well as other childhood illnesses. One questionnaire is for use at the household level and the other is for use with drug sellers and health care providers.

The questionnaires will provide enough basic information so that district-level health officers and program planners can identify significant problem areas in community drug management and use for childhood illnesses.

Using these questionnaires (childhood illness household questionnaire, childhood illness drug seller/provider questionnaire), the RPM Plus Program will conduct a survey in two districts in Senegal. The research, to be implemented with assistance from the BASICS Child Survival Project, has two purposes: (1) provide valid data that can be used to develop interventions, and (2) provide the RPM Plus team with information on how the survey and its implementation can be improved in the future. Work for this survey/field test will occur between mid-June and mid-October 2002. The actual survey will be implemented between mid-August and the end of August 2002. Final data analysis and intervention planning will occur in September and October 2002.

This scope of work describes the assessment coordinator who will assist the RPM Plus Program in all aspects of preparing for and conducting the training of trainers, pretest, and the survey/field test.

Tasks

The assessment coordinator will report to the survey director (based in Washington, D.C.) and, during fieldwork, to the survey manager. He/she will work closely with the RPM Plus team and local project staff to conduct the following specific tasks—

1. Conduct necessary logistics in preparation for conducting the drug use/management surveys in two districts in Senegal. Logistics include, but are not limited to—
 - Obtaining background information and documents related to conducting drug use/management surveys in Senegal
 - Setting up meetings with stakeholders for RPM Plus team members and participating in meetings
 - Recruiting interviewers
 - Assisting in securing field supervisors/trainers
 - Assisting in securing data tabulators
 - Obtaining population density statistics for survey districts
 - Constructing the tracer list of medicines for the provider survey
 - Arranging transportation, travel, and training logistics, including securing a training site; disbursing interviewers' and field supervisors'/trainers' per diem and lodging; photocopying of instruments and training documents; obtaining needed training materials; obtaining country and district approvals, as needed; ensuring that supervisors/trainers obtain permission to collect data in all sites in each district; and doing any other necessary preparation at field sites
2. Assist in conducting the training of interviewers.
3. Assist survey manager in supervision of trainers/supervisors.
4. Assist in data collection, including observing individual interviews conducted in local language and evaluating interviewers, study instruments, and individual instrument questions. Verify/report on quality of work to RPM Plus staff.
5. Participate in daily debriefing sessions in which field test is critically evaluated, and contribute to solving problems.
6. Manage budget and report on budget to RPM Plus staff.
7. Manage contracts pertinent to conducting the survey research.
8. Ensure data tabulation process and participate in data analysis.
9. Communicate regularly with RPM Plus team.
10. Other tasks as directed by RPM Plus staff.

The assessment coordinator **must**—

1. Demonstrate strong organizational skills and attention to detail.

2. Have significant experience coordinating research or other projects requiring mobilization of large groups and logistics management.
3. Have background in maternal and child health and/or child health drugs.
4. Be fluent in French (written and spoken) and Wolof (spoken).
5. Have experience in managing budgets.
6. Have experience working with USAID activities and budget processes.
7. Have experience working with expatriate staff.
8. Know the structure of the Ministry of Health at central and district levels.
9. Be knowledgeable about maternal and child health issues and/or drug use and management.
10. Know (or be able to identify) and set up meetings with the key central stakeholders in malaria and child health/IMCI as well as district-level stakeholders.
11. Have a collaborative, problem-solving approach to work and be comfortable identifying and sharing information with colleagues about things that are not going according to plan.
12. Be easily accessible by e-mail and/or fax and telephone.

It is **desirable** that the assessment coordinator understand data analysis.

Deliverables

1. Background information/documents relating to project obtained.
2. Meetings with key stakeholders set up and held.
3. Contracts pertinent to conducting the survey research completed.
4. Drug tracer list completed.
5. Logistics for training of interviewers in all sites finalized.
6. Training of interviewers conducted.
7. Field implementation of tools (including analysis phase) conducted and feedback concerning tools and interviewers provided to research director and/or survey manager.
8. Accounting system set up, expenses tracked, and expenses reported to research director and/or survey manager.

9. One to two-page report summarizing and describing actual work performed completed.

Location of Work

The consultant will perform this work in Dakar and districts where survey will be conducted.

Number of Days and Duration

The total number of days required for achieving the above tasks is up to 65 workdays. The duration of performance is June 17, 2002, to September 13, 2002.

ANNEX 4B. FIELD SUPERVISOR TERMS OF REFERENCE

CHILD HEALTH/SURVEY RESEARCH IN SENEGAL FIELD SUPERVISOR

Background

The effective case management of malaria and other childhood illness at the community level requires people to seek, obtain, and appropriately use appropriate treatment. Because much treatment seeking occurs in the community, effective home management is critical. In most settings, little information exists to help district health officers and other program planners design effective interventions to improve appropriate drug management and use at the community level and possibly slow the emergence of drug resistance.

RPM Plus partners (Management Sciences for Health, Harvard, Academy for Educational Development) have developed questionnaires for investigating case management of malaria in children, as well as other childhood illnesses. One questionnaire is for use at the household level and the other is for use with drug sellers and health care providers.

The questionnaires will provide enough basic information so that district-level health officers and program planners can identify significant problem areas in community drug management and use for childhood illnesses.

Using these questionnaires (childhood illness household questionnaire, childhood illness drug seller/provider questionnaire), the RPM Plus Program will conduct a survey in two districts in Senegal. The research, to be implemented with assistance from the BASICS Child Survival Project, has two purposes: (1) provide valid data that can be used to develop interventions, and (2) provide the RPM Plus team with information on how the survey and its implementation can be improved in the future. Work for this survey/field test will occur between mid-June and mid-October 2002. The actual survey will be implemented between mid-August and the end of August 2002. Final data analysis and intervention planning will occur in September and October 2002.

This scope of work is for a field supervisor to assist the RPM Plus Program in preparing and conducting the field interviewer trainings as well as conducting and evaluating the survey/field test of the tools.

Tasks

The field supervisor/trainer will report to the research coordinator and will work closely with RPM Plus team members to conduct the following specific tasks—

1. Participate in the training-of-trainers workshop, pretesting of data collection tools, and decisions about how to translate the tools into Wolof.

2. Assist in sample site selection.
3. Conduct necessary preparations for the training of interviewers, including—
 - Obtaining approvals from up to 20 local survey sites within one district to conduct surveys (will require travel to reach sites)
 - Confirming availability of survey interviewers and securing additional interviewers if needed
 - Confirming local terminology for certain survey questions, as needed
 - Preparing materials for training of interviewers as instructed during training-of-trainers workshop
 - Other tasks as instructed by the RPM Plus team or research coordinator
4. Conduct the training of interviewers (may involve travel and 3–5-night stay).
5. Oversee the scheduling and assignment of interviews to interviewers.
6. Make arrangements for transport to and from survey sites daily.
7. Implement quality control tasks such as (but not limited to)—
 - Supervision of interviewers: accompanying interviewers during some of the interviews to validate their work and to offer suggestions for improvement
 - Field editing of questionnaires: examining all questionnaires after each day of data collection to make sure every question has been filled in correctly and to ensure interviewers correct all errors, as well as to provide feedback to the interviewers on their performance
 - Reviewing with interviewers sampling approaches and interviewee selection to ensure procedures were correctly followed and make any necessary corrections
8. Participate in daily debriefing sessions in which field test is critically evaluated and contribute to solving problems.
9. Write the time, effort, and expense reports for the interviewing staff. Supervise data tabulators and data entry.
10. Communicate regularly with survey manager and research coordinator.
11. Other tasks as directed by survey manager and research coordinator.

The field supervisor/trainer **must**—

1. Be from district/region where survey is taking place.
2. Understand local protocols and procedures necessary to get permission to conduct work in sites within the district.

3. Have experience in quantitative research/conducting survey interviews.
4. Have experience in training and overseeing interviewer staff.
5. Have experience in data quality control and supervising data entry.
6. Demonstrate strong organizational skills and attention to detail.
7. Be fluent in French (spoken and written) and Wolof (spoken).
8. Have experience working with expatriate staff.
9. Be easily accessible by e-mail and/or fax and telephone.
10. Be knowledgeable about maternal and child health issues and/or drug use and management.

It is **desirable** that the field supervisor/trainer—

1. Have a democratic style—willingness to listen to the interviewers and learn about the results of the fieldwork.
2. Have a collaborative, problem-solving approach to work and be comfortable identifying and sharing information with colleagues about things that are not going according to plan.

Deliverables

1. Participation in training-of-trainers workshop and pretest completed.
2. Preparations for training of interviewers in all sites completed.
3. Permission for data collection in all study sites obtained.
4. Training of interviewers conducted.
5. Survey interviews completed. Survey interviews checked/corrected, as needed.
6. Data entry tabulation forms completed.
7. Time, effort, and expense reports for interview staff completed.
8. One-to-two-page report summarizing and describing actual work submitted.

Location of Work

The consultant will perform this work in Dakar and the survey research sites.

Number of Days and Duration

The total number of days required for achieving the above tasks is 33 workdays. The duration of performance is July 1, 2001, to September 10, 2002.

ANNEX 4C. DATA COLLECTOR TERMS OF REFERENCE

CHILD HEALTH/SURVEY RESEARCH IN SENEGAL DATA COLLECTORS

Background

The effective case management of malaria and other childhood illness at the community level requires people to seek, obtain, and appropriately use appropriate treatment. Because much treatment seeking occurs in the community, effective home management is critical. In most settings, little information exists to help district health officers and other program planners design effective interventions to improve appropriate drug management and use at the community level and possibly slow the emergence of drug resistance.

RPM Plus partners (Management Sciences for Health, Harvard, Academy for Educational Development) have developed questionnaires for investigating case management of malaria in children, as well as other childhood illnesses. One questionnaire is for use at the household level and the other is for use with drug sellers and health care providers.

The questionnaires will provide enough basic information so that district-level health officers and program planners can identify significant problem areas in community drug management and use for childhood illnesses.

Using these questionnaires (childhood illness household questionnaire, childhood illness drug seller/provider questionnaire), the RPM Plus Program will conduct a survey in two districts in Senegal. The research, to be implemented with assistance from the BASICS Child Survival Project, has two purposes: (1) provide valid data that can be used to develop interventions, and (2) provide the RPM Plus team with information on how the survey and its implementation can be improved in the future. Work for this survey/field test will occur between mid-June and mid-October 2002. The actual survey will be implemented between mid-August and the end of August 2002. Final data analysis and intervention planning will occur in September and October 2002.

These terms of reference outline the tasks and requirements for the quantitative data collectors for the child health research. The data collectors will report to the research coordinator and field supervisors/trainers.

Tasks

The data collectors will conduct the following specific tasks—

- Participate in data collection training and pretesting of questionnaires from August 12–15, 2002. (This task will be conducted in one of the two districts selected for this survey. Data collectors from the second district will need to travel to and lodge at the training site. Lodging, if needed, and per diem will be provided. This task may require availability into the evening.)
- Collect and record data in various sites from approximately August 16–30, 2002. (This task may require weekend work, early morning and possibly evening work. A 6–7-day workweek may be required. Data collectors will be expected to lodge at their residence and to report to work at a central location, such as a hotel, in the district capital for daily departures to field sites.)
- Provide completed questionnaires to field supervisors at the end of each day of data collection.
- Review completion of each questionnaire with field supervisor and make required corrections, as directed by field supervisor or other RPM Plus employees.
- Participate in daily debriefing sessions with field supervisor and other RPM Plus employees.
- Participate in final debriefing session in Dakar (to be held on or about August 31, 2002).

The data collectors **must**—

1. Be a schoolteacher or other non-health professional with little or no prior experience conducting surveys.
2. Be fluent in French (both written and spoken) and Wolof (spoken).
3. Have excellent reading skills in French.
4. Be available to work full-time August 12–31, 2002.
5. Be adaptable and flexible with respect to working hours (i.e., be able to work early mornings, evenings and weekends, as required, 6–7-day workweek).
6. Be able to travel outside of home district for approximately 5 days over the training period (August 11–15, 2002).
7. Have strong interpersonal skills.
8. Have a collaborative, problem-solving approach to work and be comfortable identifying and sharing information with colleagues about things that are not going according to plan.
9. Demonstrate strong attention to details.

It is **desirable** that the data collectors—

1. Be secondary school teachers.
2. Be able to deal with difficult or frustrating situations.
3. Be able to read Wolof.

Deliverables

1. Participation in data collection training and pretesting completed (by August 15, 2002).
2. Allotted interviews/questionnaires completed (daily during fieldwork).
3. Corrections made to completed questionnaires as requested by field supervisor or other RPM Plus staff (daily during fieldwork)
4. Participation in daily debriefing sessions completed (daily during fieldwork).
5. Participation in a final debriefing session in Dakar completed, as requested (on or about August 31, 2002).

Other Specifics

Please note that ALL recruited data collectors will participate in the training and pre-testing (i.e., activities from August 12–15, 2002). However, NOT ALL participants in the training will be retained for data collection. Nonetheless, for recruited data collectors to participate in the training, they must meet the criteria listed above.

Location of Work

This work will be performed in two districts in Senegal (districts still to be determined).

Number of Days and Duration

The total number of days required for achieving the above tasks is up to 20 days (6–7-day workweek permitted during fieldwork). The duration of performance is August 12–31, 2002.

ANNEX 4D. DATA ANALYST TERMS OF REFERENCE

CHILD HEALTH/SURVEY RESEARCH IN SENEGAL DATA ANALYSTS

Background

The effective case management of malaria and other childhood illness at the community level requires people to seek, obtain, and appropriately use appropriate treatment. Because much treatment seeking occurs in the community, the Integrated Management of Childhood Illness (IMCI) strategy emphasizes effective home management. In most settings, little information exists to help district health officers and other program planners design effective interventions to improve appropriate drug management and use at the community level and possibly slow the emergence of drug resistance.

RPM Plus partners (Management Sciences for Health, Harvard, Academy for Educational Development) have developed questionnaires for investigating case management of malaria in children, as well as other childhood illnesses. One questionnaire is for use at the household level and the other is for use with drug sellers and health care providers.

The questionnaires will provide enough basic information so that district-level health officers and program planners can identify significant problem areas in community drug management and use for childhood illnesses.

Using these questionnaires (childhood illness household questionnaire, childhood illness drug seller/provider questionnaire), the RPM Plus Program will conduct a survey in two districts in Senegal. The research, to be implemented with assistance from the BASICS Child Survival Project, has two purposes: (1) provide valid data that can be used to develop interventions, and (2) provide the RPM Plus team with information on how the survey and its implementation can be improved in the future. Work for this survey/field test will occur between mid-June and mid-October 2002. The actual survey will be implemented between mid-August and the end of August 2002. The final data analysis and intervention planning will occur in September and October 2002.

The purpose of these Terms of Reference is to outline the tasks and requirements for the quantitative data analysts for the child health research. The data analysts will report to the research coordinator and field supervisor/trainers.

Tasks

The data analysts will conduct the following specific tasks—

1. Participate in training on data tabulation/analysis for the survey. (The date for training has not been finalized but is likely to occur sometime between August 30 and September

16, 2002.) This task may require travel to a second district for one data analyst and if so, lodging (if needed) and per diem will be provided.

2. Enter/transfer survey data to data tabulation forms, as instructed in the analysis manual and tabulation forms.
3. Tabulate data and calculate indicators.
4. Fill in data tables.
5. Fill in indicator tables.
6. Participate in data analysis work sessions with RPM Plus staff during the first week in October 2002 to prepare results for presentation at a dissemination workshop.
7. Make written notes of any difficulties or errors encountered when using the analysis manual.
8. Present critical feedback on the data compilation, tabulation, indicator creation process, and analysis manual during debriefing sessions with RPM Plus staff (during the first week in October). (This task may require travel to Dakar or to a second district. Lodging, if needed, and per diem will be provided.)
9. Other tasks as directed by research coordinator or other RPM Plus staff.

The data analysts **must**—

1. Be in a job position within the District Health Management Team in which data management and analysis is required.
2. Have experience with quantitative research.
3. Have experience managing and analyzing quantitative survey data.
4. Be willing to conduct manual tabulations of all data. (Results **must** be calculated manually, as instructed in the analysis manual and tabulation forms, even if the analyst chooses also to use a computer.)
5. Demonstrate strong attention to detail.
6. Have excellent reading skills in French.
7. Have a collaborative, problem-solving approach to work and be comfortable identifying and sharing information with colleagues about things that are not going according to plan.
8. Be accessible by e-mail and/or fax and telephone.

It is **desirable** that the data analysts—

1. Be willing to work on weekends or in the evenings.
2. Have background in maternal and child health.

Deliverables

1. Data tabulation forms completed and sent to research coordinator (by October 11, 2002).
2. Written feedback to field supervisors/trainers and research coordinator provided regarding use of analysis manual, data tabulation forms, and calculation of indicators (by October 11, 2002).
3. Participation in debriefing with RPM Plus staff on use of analysis manual and tabulation/calculation forms completed (by October 11, 2002).
4. Data tables created and copies sent to research coordinator (by October 11, 2002).
5. Indicator tables created and copies sent to research coordinator (by October 11, 2002).

Location of Work

The data analysts will perform this work in one of two districts in Senegal (districts still to be determined). Some travel to and work in the other district and/or Dakar may also be required.

Number of days and Duration

The total number of days required for achieving the above tasks is up to 15 workdays per analyst. The duration of performance is about August 30–October 11, 2002.

ANNEX 4E. DATA COLLECTOR QUALIFICATIONS LIST

Field Test of Household and Provider Community Drug Management Tool

Interviewer Qualification Checklist

Site	
Name of Applicant	
Applicant's Address and Phone Number, if Available	
Name of Evaluator	

(Evaluator: Explain to the applicant that you are screening people to be data collectors for a survey on child health and community drug use and management for childhood illnesses.)

	Requirement	Yes	No	Comments
1.	Schoolteacher or other non-health professional <i>(Evaluator: If interviewer is a schoolteacher, ask if he/she is a primary or secondary school teacher. If he/she is "other," ask for his/her profession.)</i>			[Indicate whether secondary or primary school teacher. If "other health professional," specify profession.]
2.	High level of motivation for the job <i>(Evaluator: Ask applicant why he/she wants to do the job.)</i>			
3.	Resident of one of two districts where survey is taking place			
4.	Excellent French reading, speaking, and comprehension skills <i>[Evaluator: Reading ability assessment: Speaking in French, show applicant a short paragraph written in French. (You may choose text. Show all applicants the same text.) Ask the applicant to read the paragraph out loud.</i> <i>Speaking and comprehension assessment: Ask the applicant two or three open-ended questions (where yes/no answers will not work) about the text content (ask same questions to all applicants).]</i>			

	Requirement	Yes	No	Comments
5.	<p>Excellent Wolof speaking and comprehension skills and good Wolof reading ability</p> <p><i>[Evaluator:</i> Wolof speaking/comprehension assessment: Speaking in Wolof, show the applicant another paragraph written in French. Still speaking in Wolof, ask the applicant two or three open-ended questions (where yes/no answers will not work) about the text content (ask same questions to all applicants). Ask the applicant to answer in Wolof.</p> <p>Wolof reading ability assessment: Show applicant short paragraph written in Wolof. Ask respondent to read paragraph out loud.]</p>			
6.	<p>Ability to follow instructions (<i>Evaluator:</i> Provide the attached section of the instrument to the applicant that has instructions and skip patterns on it. Ask applicant to role-play with you being the respondent and the applicant being the interviewer. See if applicant is able to follow the directions provided on the instrument.)</p>			
7.	<p>Strong interpersonal skills (<i>Evaluator:</i> Note what you can based on your perception. Make use of the comments column at the right if necessary.)</p>			
8.	<p>Ability to deal with frustrating or difficult situations (<i>Evaluator:</i> Ask applicant how he/she would manage a situation in the field where it may take longer than expected to complete number of interviews assigned to the interviewer.)</p>			
9.	<p>Little or no research experience (<i>Evaluator:</i> Ask if applicant has had any prior research experience. Ask him/her to explain and insert in comments column at the right.)</p>			
10.	<p>Nonjudgmental (<i>Evaluator:</i> Note what you can based on your perception. Make use of the comments column at the right if necessary.)</p>			
11.	<p>Neat, pleasant, professional appearance</p>			
12.	<p>Age 20 or older</p>			

Annex 4E. Data Collector Qualifications List

	Requirement	Yes	No	Comments
13.	Available for training and data collection days; flexible regarding hours [<i>Evaluator:</i> Ask applicant whether he/she is able/willing to arrive at central location in district capital by 7:30 a.m. if required, to work until 7:30 p.m. if required, and to work on weekends (6–7-day workweek possible).]			
14.	Responsible work history (<i>Evaluator:</i> Ask applicant to provide at least one professional reference with phone number in district where interviewer will be working.)			
15.	Accuracy/strong attention to details (<i>Evaluator:</i> Ask professional reference about how accurate applicant was in his/her past work; whether person paid attention to details.)			

Was this candidate selected for training? Yes: _____ No: _____

ANNEX 4F. TRAINER BRIEFER: BACKGROUND INFORMATION
RATIONAL PHARMACEUTICAL MANAGEMENT PLUS PROGRAM
SURVEY ON COMMUNITY DRUG
MANAGEMENT FOR CHILDHOOD ILLNESS IN SENEGAL
AUGUST–SEPTEMBER 2002

BACKGROUND INFORMATION ON SURVEY AND SURVEY TOPIC

Background on the Survey Topic Area

Malaria, diarrhea, and respiratory infections (pneumonia) are leading killers of children under five in Africa. However, effective treatments for each of these illnesses are available. Timely and appropriate treatment can make the difference between life and death. Recognizing the importance of identifying and treating sick children early at the household and community levels, most countries have implemented specific strategies for managing childhood illnesses in the home, as well as in health facilities. The aim of this approach is to prevent the deterioration of cases and reduce mortality. Since most cases of malaria and other illnesses are treated in the home and community, and not in health facilities, efforts must focus on ensuring that correct treatment is available near the home and that families seek, obtain, and appropriately use essential drugs, whether from public or private sources. Moreover, with drug resistance emerging as a growing problem, there is increased attention to understanding how communities and providers use and manage drugs. This information, together with information on how caregivers treat illnesses, is critical for the development of interventions designed to reduce death and severe consequences of illness in children and possibly slow the development of drug resistance.

Purpose of Activity

In most settings, little information exists to help district health officers and other program planners design effective interventions to improve appropriate drug management and use and possibly slow the emergence of drug resistance. We are undertaking this research activity to develop and field-test a method of assessing the drug management and use for the treatment of acute respiratory infections (ARI), diarrhea, and malaria in children under five. In Senegal, the purpose is also to provide the Ministry of Health and BASICS with information they can use to determine where there are problems in community drug use and management. This information is intended to assist in program planning.

The groups implementing this research for the Ministry of Health and the BASICS project are the Management Sciences for Health (MSH) Rational Pharmaceutical Management Plus (RPM Plus) Program, and its partners, the Academy for Educational Development (AED) and Harvard University.

Below is additional information on malaria, diarrhea, and respiratory infection in young children, as well as on drug management.

Malaria

Q: Why is malaria such a serious illness?

A: Malaria kills at least 1 million people each year—about 3,000 a day. Nearly 500 million people suffer from acute malaria each year—the majority of victims are children. Forty percent of the world is at risk of malaria, but 9 out of 10 cases occur in Africa south of the Sahara.

Q: Who is most at risk of malaria?

A: Pregnant women and children under five years are at most risk because they are not as able to fight infections and illness as other people are.

Q: What are the consequences of malaria for children?

A:

- Death (in Africa, the disease kills one child in 20 before the age of five).
- Illness—when children get malaria, they become more susceptible to other illnesses and also to malnutrition.
- Lost income to families.

Q: Are there any effective treatments for malaria?

A: Malaria can be effectively treated, if the right drugs are used and if they are taken correctly. Not all drugs are effective against malaria. Also, some drugs that are given for malaria are not as effective as they used to be.

In most cases, malaria can be effectively treated by taking an appropriate drug. In Senegal, chloroquine is still used. In some other countries, drugs like sulfadoxine-pyrimethamine (SP), or Fansidar, are used because chloroquine is no longer effective.

Q: What can caregivers do in the home to treat malaria?

A: When a child has malaria, early recognition and prompt and appropriate action are essential. These can make the difference between life and death. For that reason, parents and other caregivers need to be able to recognize the symptoms of malaria, understand how to care for their sick children (including what drugs to give them and how to give these drugs), and understand when they need to seek care. Simple malaria—where there is fever, but no convulsions or fits—can often be treated in the community, if the correct drugs are given in the correct manner and for the correct amount of time. But complicated malaria—where the child is convulsing—should always be treated in a health facility, because it is a sign that the child is very sick and needs special care.

Q: Are there effective ways to prevent malaria in children?

A: Yes. One effective way to prevent malaria is to sleep under a mosquito net that has been treated with an insecticide solution. These insecticide-treated nets (ITNs) kill mosquitoes. People who sleep under them are less likely to get malaria than are people who do not sleep under ITNs. People who sleep under ITNs are also less likely to get malaria than are people who sleep under untreated mosquito nets.

Q: What is this research going to tell us about malaria in young children?

A: In this research project, we will learn where people go for advice, treatment, or medicine for symptoms of malaria. We will also find out what medicines people give their children to treat the symptoms of malaria. In addition, we will learn whether they give these medicines correctly or incorrectly, and we will understand a little bit about some of the barriers to getting appropriate medicines. We will also learn whether people take their children to the health facility when signs of convulsions or fits appear. The research will also inform us whether providers stock the appropriate medicines for treating malaria in young children, how much these medicines cost, and whether providers are giving and prescribing the correct medicines in the correct way. The results will be used to help improve the management of malaria in the community, including improving access to and correct use of medicines, and reducing inappropriate use of medicines.

Diarrhea

Q: Why is diarrhea a potentially serious illness in children?

A: Each year, more than 2 million children in developing countries die from diarrheal disease, making it the second most important killer of children under five worldwide. On average, children below three years of age in developing countries experience three episodes of diarrhea each year

Q: What causes death from diarrhea?

A: When children get diarrhea, they lose water and salts (i.e., they get dehydrated). When children get diarrhea many times or have diarrhea that lasts a long time, they can also become malnourished. Most deaths from diarrhea are not caused by the diarrhea itself but by the fluid and nutritional losses caused by the diarrhea. Dehydration can almost always be prevented or treated. If diarrhea were treated correctly, up to 90 percent of deaths in children from this illness could be prevented.

Q: What can caregivers do to treat diarrhea?

A:

- The most important thing that a caregiver can do when a child has diarrhea is to make sure that child takes in extra fluids. Most diarrhea can be effectively treated by giving extra fluids (including breast milk if the child is still of an age where s/he is breast-feeding). It is important to give extra fluids as soon as the diarrhea starts, because dehydration can happen very quickly. It is also important to continue feeding the child.
- It is also recommended that children drink oral rehydration solution (ORS) when they have diarrhea. This treatment is especially critical when children show signs of dehydration.
- When children have bloody diarrhea, it is a sign that they may have illnesses like dysentery. In this case, it is recommended that children take an antibiotic, in addition to taking extra fluids and ORS.

Q: Shouldn't all cases of diarrhea be treated with an antibiotic?

A: No. The only times that diarrhea should be treated with an antibiotic is when there is blood in the stools and sometimes when the diarrhea has lasted more than 10 days. Using antibiotics when they are not necessary can lead to drug resistance (i.e., the drug becomes ineffective against an illness).

Q: Shouldn't diarrhea be treated with something that stops the loose stools?

A: No. If one gives a medicine (antidiarrheal) to stop the diarrhea, this will bring on constipation. The bacteria or virus responsible for the diarrhea would therefore stay longer in the intestine, provoking serious complications.

Q: What is this research project going to tell us about diarrhea?

A: In this research project, we will find out where people go for advice, treatment, or medicine for diarrhea. We will also find out what medicines people use to treat diarrhea, if they give their children more fluids, and if they use ORS. The research will also tell us whether providers stock ORS and appropriate antibiotics for treating bloody diarrhea. We will also learn how much these medicines cost and whether providers are giving and prescribing the correct medicines in the correct way. The results will be used to help improve the management of diarrhea in the community, including increasing fluid intake and ORS use; improving access to and correct use of medicines, when needed; and reducing incorrect use of medicines.

Respiratory Infections

Q: Why are respiratory infections a potentially serious illness in children?

A: Approximately one-third of the deaths for children under the age of five are caused by acute respiratory infections, mainly pneumonia. Respiratory infections account for 30–50 percent of visits by children to health facilities and 20–40 percent of hospitalization of children.

Q: Are all respiratory infections dangerous?

A: No. There are two kinds of respiratory infections—dangerous and not dangerous. When a child just has a cough or has a simple cough and fever, it is usually not dangerous. But when a child has pneumonia, it can be very serious. Pneumonia is characterized by fast breathing and/or chest in-drawing.

Q: What can caregivers do to treat respiratory infections?

A: In most cases, pneumonia can be effectively treated with antibiotics. The problem is that children die very quickly from the infection and need urgent treatment. If caregivers can be on the lookout for the early signs of pneumonia (chest in-drawing and fast breathing), then they can respond faster, taking the child to the health center for rapid treatment. A rapid response with the correct drugs, administered in the correct manner for the correct number of days, can mean the difference between life and death for a young child.

Q: Shouldn't all respiratory infections be treated with an antibiotic?

A: No. In general, it is not necessary or advisable to treat a simple cough with an antibiotic, because doing so can lead to drug resistance.

Q: What will this research tell us about respiratory infections?

A: In this research project, we will find out where people go for advice, treatment, or medicine for signs of respiratory infection—including simple coughs and pneumonia. We will also find out what medicines people use to treat coughs and what they use to treat fast breathing. This study will also help us understand whether providers have the right medicines for treating respiratory infections, whether they give and prescribe the correct medicines, and how much these drugs cost. The results will be used to help improve the management of respiratory infection in the community, improving access to and correct use of medicines, when needed, and reducing incorrect use of medicines.

Drug Management

Q: What do we mean by “appropriate drug management”?

A: Appropriate drug management at the community level means that—

- Caregivers recognize the illness promptly and seek appropriate treatment in a timely fashion.
- The right medicines are available and affordable.
- Providers and drug sellers prescribe and/or dispense/sell the correct medicine for the illness.
- Providers and drug sellers prescribe and/or dispense/sell the correct dose of the medicine.
- Providers and drug sellers do not prescribe and/or dispense/sell medicines when they are not needed.
- Providers and drug sellers give caregivers the correct information about how much of the medicine to take (dosage), how often the medicine should be taken (frequency), and for how long (duration).
- Caregivers give the correct medicine to the child in the correct manner (correct dose, frequency, and duration).

Q: Why is appropriate drug management important?

A: Appropriate drug management is important because it saves lives and can possibly slow the development of drug resistance. All of the elements listed above together constitute appropriate drug management, so it is easy to see why, when one element is missing, inappropriate treatment and inappropriate use of medicines can occur.

Q: What will we learn from this research?

A: This research will investigate all of the elements of drug management previously listed. Thus, we will learn in which elements there are problems. For example, we may find out that the correct medicine is not prescribed/dispensed/sold for a particular illness. Or, we may find out that caregivers do not administer particular medicines in the correct manner. This information will enable the Ministry of Health and BASICS to plan specific interventions for addressing these problem areas and so improve drug management at the community level.

Materials Needed for This Study

- Questionnaires
- Green card with medicine shapes
- Clip board
- Pencil
- Pencil sharpener
- Eraser
- Bag

General Instructions about the Questionnaire

- When interviewing in French, the interviewer should read all questions out loud exactly as they appear on the questionnaire, without paraphrasing.
- When interviewing in Wolof, the interviewer should read all questions out loud exactly as discussed during training, without paraphrasing.
- All words that are to be read to the respondent are in normal print.
- All instructions to the interviewer are in **BOLD CAPITAL LETTERS**.
- Interviewers should always read the instructions.
- Often, the instructions tell the interviewer to read the possible responses to the survey question out loud.
- Sometimes the questions are open-ended and the interviewer will need to listen to the respondent's answer and decide which listed responses best fit what the respondent says and mark that response.

Cover Sheet of Questionnaire

Purpose

- Determine whether or not there is an eligible respondent living in the household and, if so, obtain informed consent from the respondent. Informed consent means that the respondent understands that his/her participation is voluntary. It also means that the respondent understands what the study is about, what the benefits or drawbacks of participating will be, for how long he or she is expected to talk with you, and what is going to happen to the information he or she gives you.
- Record basic information about the place where the interview occurred, who conducted the interview, the language of the interview, and how long the interview took.

Eligibility Criteria

To be considered for participation in this survey, the respondent **must** meet the following criteria—

1. There **must** be a child under five years of age (i.e., who has not yet reached his/her fifth birthday) living in the household.
2. At least one of the children under five years of age living in the household **must** have been ill in the previous two weeks. The child must now be in good health.
3. The child had at least one of the these symptoms during the last two weeks—
 - Cough
 - Difficulty/fast breathing
 - Fever/hot body
 - Convulsions
 - Diarrhea
4. The child was not sick for more than four weeks/one month.
5. The respondent took care of the child during the illness.

ANNEX 4G. TRAINING SCHEDULE FOR DATA COLLECTORS

Day 1—Tuesday, August 27

Time	Trainees Involved	Location	Activity	Persons Responsible
8:30–8:45	All data collectors	Main room	Contract discussion	Ndoye
8:45–9:15	All data collectors	Main room	Welcome/icebreaker Why we are here Overview of training and schedule	Nancy Nancy Nancy
9:15–10:00	All data collectors	Main room	Overview of important topic areas: <ul style="list-style-type: none"> • Malaria • ARI • Diarrhea • Drug management/use issues and why understanding them is important 	Nancy and Jane
10:00 –10:30	All data collectors	Main room	Overview of research project <ul style="list-style-type: none"> • General • Household • Provider/drug seller Purpose of field test/country application Role of data collectors	Nancy and Jane
10:30–10:45			Break	
10:45–11:45	All data collectors	Main room	Introduction to doing a survey Interviewing techniques Recording techniques	Nancy
11:45–13:30	Household data collectors	Separate room	Introduction to household data collection tools and procedures <ul style="list-style-type: none"> • Overview of purpose of instrument, type of information collected, from whom, and how • Detailed review of each question and responses (French/Wolof) 	Nancy and HH supervisors

Time	Trainees Involved	Location	Activity	Persons Responsible
11:45–13:30	Provider/drug outlet data collectors	Separate room	Introduction to provider/drug seller data collection tools and procedures <ul style="list-style-type: none"> • Overview of purpose of instrument, type of information collected, from whom, and how • Detailed review of each question and responses (French/Wolof) 	Jane, Ndoye, and provider supervisors
13:30–14:30	Everyone		Lunch	
14:30–16:30	Household data collectors	Separate room	Ongoing introduction to household data collection tools and procedures <ul style="list-style-type: none"> • Detailed review of each question and responses (continued) • Role-plays/practice with questionnaire administration (including recording) (French) 	Nancy and HH supervisors
14:30–16:30	Provider/ drug outlet data collectors	Separate room	Ongoing introduction to provider data collection tools and procedures <ul style="list-style-type: none"> • Detailed review of each question and responses (continued) • Role-plays/practice with questionnaire administration (including recording) (French) 	Jane, Ndoye, and provider supervisors
16:30–17:00	All data collectors	Main room	Discuss any questions/issues from afternoon Review of next day's activities Homework assignment: <ul style="list-style-type: none"> • Review and practice Wolof version of questionnaire 	Nancy and team
17:00			End Session	

Day 2—Wednesday, August 28

Time	Trainees Involved	Location	Activity	Persons Responsible
9:00–9:30	All data collectors	Main room	Discussion of homework and any issues/problems/questions Review of day's activities	Nancy and team
9:30–10:30	Household data collectors	Main room	Role plays with Wolof version of questionnaire (including recording)	Nancy and HH supervisors
9:30–10:30	Provider/drug outlet data collectors	Separate room	Role plays with Wolof version of questionnaire (including recording)	Jane, Ndoye, and provider supervisors
10:30–10:45			Break	
10:45–12:15	Household data collectors	Main room	Role plays with Wolof version of questionnaire (including recording) continues Questionnaire verification	Nancy and HH supervisors
10:45–12:15	Provider/drug outlet data collectors	Separate room	Role plays with Wolof version of questionnaire (including recording) continues Questionnaire verification	Jane, Ndoye, and provider supervisors
12:15–13:00	All data collectors	Main room	Discussion of village entry/facility entry/shop entry— protocols, dress, difficult situations, reacting to respondents, etc.	Nancy and team
13:00–13:30	All data collectors	Main room	Discussion of how sampling of the two surveys are linked	Ndoye
13:30–14:30			Lunch	
14:30–15:15	Household data collectors	Main room	Review of how to find/select respondents (urban setting and household level)	Household supervisors
14:30–15:15	Provider/drug outlet data collectors	Separate room	Review of how to find/select respondents (urban setting and facility/outlet level)	Ndoye and provider supervisors
15:15–16:00	All data collectors	Main room	Discuss any questions/issues from afternoon Preparation for next day's fieldwork Homework assignment: review questionnaire and practice if possible	Nancy and team
16:00			End Session (for data collectors)	
16:00 –17:00	Supervisors		Preparations for fieldwork	Ndoye

Day 3—Thursday, August 29

Time	Trainees Involved	Location	Activity	Persons Responsible
8:30–8:45	All data collectors	Main room	Organization for urban fieldwork	Ndoye
8:45–13:30	All data collectors	Urban field site	Practice in the field	Ndoye and team
13:30–14:30			Lunch	
14:30–15:15	All data collectors	Main room	General debriefing on fieldwork	Ndoye
15:15–16:45	Household data collectors	Main room	Detailed debriefing on fieldwork and issues/problems/questions arising from field practice, including any needed changes to sampling or questionnaire Questionnaire verification/cover sheet coding Discussion of finding households in rural setting	Nancy and HH supervisors
15:15–16:45	Provider/drug outlet data collectors	Separate room	Detailed debriefing on fieldwork and issues/problems/questions arising from field practice, including any needed changes to sampling or questionnaire Questionnaire verification Discussion of finding providers/drug outlets in rural setting	Jane, Ndoye, and provider supervisors
16:45–17:00	All data collectors	Main room	Wrap-up and preparation for next day's fieldwork	Ndoye and supervisors
17:00			End Session (for data collectors)	
17:00–17:45	Supervisors		Preparations for fieldwork	Ndoye

Day 4—Friday, August 30

Time	Trainees Involved	Location	Activity	Persons Responsible
8:30–8:45	All data collectors	Main room	Organization for rural fieldwork	Ndoye
8:45–13:30	All data collectors	Rural field site	Practice in the field	Ndoye and team
13:30–14:30			Lunch	
14:30–15:00	All data collectors	Main room	General debriefing on field work	Ndoye
15:00–16:00	Household data collectors	Main room	Detailed debriefing on fieldwork and issues/problems/questions arising from field practice, including any needed changes to sampling or questionnaire Questionnaire verification/cover sheet coding	Nancy and HH supervisors
15:00–16:00	Provider / drug outlet data collectors	Separate room	Detailed debriefing on fieldwork and issues/problems/questions arising from field practice, including any needed changes to sampling or questionnaire Questionnaire verification	Jane, Ndoye, and provider supervisors
16:00–17:00	All data collectors	Main room	Discussion of data collection schedule and logistics <ul style="list-style-type: none"> • Overview of next 2 weeks of data collection, including logistics • Overview of first day of data collection, including logistics Homework assignment: review and practice instruments and sampling	Ndoye and supervisors
17:00			End Session (for data collectors)	
17:00–18:00	Supervisors		Prepare for data collection	Ndoye

ANNEX 4H. DISTRIBUTION OF SITES, THIÈS DISTRICT

Thiès District

n. site	District/Ward	Parish/ Rural Community	Quarters/Villages	Hamlets
Urban				
1	Thiès	Thiès	Thialy	
2			Wango	
3			HLM Thialy (Cite Ohlm)	
4			Cite Lamy (Ndioung)	
5			HLM 10eme (Cite Ohlm)	
6			Silmang	
7			Nguinthe	
8			Takhikao	
9			Camp GMI (ex-tropical)	
10			Keur Sampathe	
11			Mbour 1	
12			Som	
13		Pout	Pout centre ville	
Rural				
14	Notto	Notto	Tueb dal/ Notto et K Diatta (15)	
15	Notto	Notto	Mandangri Ouolof K N'diol Dieng (9)	Mboufoudji de Mbousnakh Gotte (6)
16	Notto	Tassette	Nguinthe Ouolof Nguinthe Toucouleur (Nguinthe Peule) Nguinthe Serere Dieling (7)	Nguinthe Keur Youga Keur Yoro de Nguinthe Serere Khayegui de Guinthe Serere Keur Ndiara Sene Keur Bala Keur Assane Wele Dieling Serere (8)
17	Keur Moussa	Diender Guedji	Bayakh (15)	

n. site	District/Ward	Parish/ Rural Community	Quarters/Villages	Hamlets
18	Keur Moussa	Diender Guedji	Thieudeme Mbidieum Lebou Wakhal (6) Mbidieum Ouolof	Projet Maitrisards (9)
19	Keur Moussa	Keur Moussa	Keur Moussa /Ndoyen Peul (15)	
20	Keur Moussa		Keur Yakham (15)	

ANNEX 5A. CHILD MALARIA HOUSEHOLD INDICATORS

#	Indicator	Level	Question #
Characteristics of sample			
A	Age of children in sample (percentage of children who are 0–less than 1 year, 1 year–less than 2 years, 2 years–less than 3 years, 3 years–less than 4 years, 4 years–less than 5 years)	Descriptive	1
B	Percentage of children in sample who are male/female	Descriptive	2
Caregiver recognizes symptoms and decides child requires treatment			
C	Percentage of respondents whose child had fever/hot body and convulsions/fits	Descriptive	3
D	Percentage of respondents who thought that their child's illness was very serious/somewhat serious/not serious	Descriptive	4
Caregiver seeks timely care from an appropriate source			
Treatment-seeking behavior and source of treatment/medicine			
1	Percentage of respondents who sought care outside the home when their child had fever/hot body	Primary	5
2	Percentage of respondents who sought care outside the home when their child had convulsions/fits	Primary	8
E	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with fever/hot body)	Descriptive	7
F	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with convulsions/fits)	Descriptive	10
3	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with fever/hot body) ³⁷	Primary	7
4	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with convulsions/fits)	Primary	10
Timeliness of action			
5	Percentage of respondents whose child had fever/hot body who report that their child took an antimalarial on the same day or the next day after the fever/hot body started	Primary	3, 14, 16
6	Percentage of respondents whose child had convulsions/fits who sought care from a source outside the home on the same day the convulsions/fits started	Primary	9

³⁷ This indicator should be calculated in countries that do *not* have a strategy of promoting home management of fever (i.e., stocking in the home and using appropriately an appropriate antimalarial).

#	Indicator	Level	Question #
	Caregiver obtains appropriate medicine		
	<i>Awareness of first-line medicines</i>		
7	Percentage of respondents who have heard of the first-line antimalarial	Secondary	23
8	Percentage of respondents who have heard of the second-line antimalarial	Secondary	26
	<i>Availability of medicines</i>		
9	Percentage of respondents who had the first-line antimalarial at home ³⁸	Primary	25
10	Percentage of respondents who had the second-line antimalarial at home	Primary	28
11	Percentage of respondents who say they can always get the first-line antimalarial in the area where they live	Secondary	24
12	Percentage of respondents who say they can always get the second-line antimalarial in the area where they live	Secondary	27
	<i>Source of treatment/medicine</i>		
13	Percentage of all antimalarials that were already in the home or that were obtained from X source (among antimalarials used)	Primary	14, 17
G	Percentage of medicines obtained on the advice of the following: self, health worker in facility, pharmacist/person in pharmacy or drugstore, vendor in general store/market/kiosk, community health worker/TBA, neighbor/friend/relative, other	Descriptive	15
	<i>Overall medicine treatment</i>		
14	Percentage of respondents whose child received no medicine (among children with fever/hot body and convulsions/fits)	Primary	3, 14
15	Percentage of respondents whose child received any antibiotic	Primary	14
16	Percentage of respondents whose child received an injection	Primary	11
H	Percentage of respondents who did nothing, gave "tepid sponging," went to traditional healer, gave traditional teas/herbs, and other (among respondents with children with fever/hot body and convulsion/fits who received no medicine)	Descriptive	3, 13
	Caregiver administers appropriate medicine correctly		
	<i>First-line appropriate medicine is administered</i>		
17	Percentage of respondents whose child had fever/hot body and took first-line antimalarial	Primary	3, 14
18	Percentage of respondents whose child had convulsions/fits and fever and took the appropriate antimalarial	Primary	3, 14

³⁸ This indicator should be calculated in countries that have a strategy of promoting home management of fever (i.e., stocking in the home and using appropriately an appropriate antimalarial).

#	Indicator	Level	Question #
	<i>Right dose/duration regimen is followed</i>		
19	Percentage of first-line antimalarials that were taken for too short, too long, and the correct amount of time	Primary	14, 19
20	Percentage of second-line antimalarials that were taken for too short, too long, and the correct amount of time	Primary	14, 19
	Health care worker/drug provider		
	<i>Provides appropriate information/instruction/advice/labeling</i>		
21	Percentage of medicines dispensed in appropriate packaging (i.e., sealed plastic package or original manufacturer's package and one type of medicine per package)	Primary	20, 21
22	Percentage of medicines that were appropriately labeled with all of the following: name of medicine, dose, frequency, and duration	Primary	22

ANNEX 5B. CHILD MALARIA HOUSEHOLD SCREENER

Site name: _____

Site type: Urban ___ Periurban ___ Rural ___

Name of supervisor: _____

Name of interviewer: _____

Date of interview: ___/___/___
 Day Month Year

Language of interview: Language 1___ Language 2___ Language 3___ Language 4___

READ OUT: My name is _____. I am from an organization called ___ [name of organization], concerned with improving child health. To develop programs to improve health, I am talking to people about what they do when their children get ill. May I ask you a few questions? **IF "NO," END INTERVIEW AND THANK RESPONDENT.**

Are there any children who have not yet reached their fifth birthday living in this household?
 No **[END INTERVIEW AND THANK RESPONDENT]**
 Yes



Did this child/those children have any of the following in the last two weeks?
 Fever/hot body
 Convulsions/fits

IF NO CHILD HAD ANY OF THE ABOVE, END INTERVIEW AND THANK RESPONDENT. OTHERWISE, CONTINUE

ASK IF THE PERSON YOU ARE SPEAKING TO IS THE PRIMARY PERSON WHO CARED FOR THAT CHILD/THOSE CHILDREN DURING THE ILLNESS. IF NOT, ASK TO SPEAK TO THE PRIMARY PERSON WHO CARED FOR THE CHILD/CHILDREN DURING THE ILLNESS.

IF THE PERSON YOU WILL INTERVIEW IS DIFFERENT FROM THE PERSON YOU TALKED TO EARLIER, INTRODUCE YOURSELF AGAIN AND CONFIRM THE ABOVE CRITERIA.

COLLECT FIRST NAME OF EACH CHILD, THEN ASK ALL OTHER QUESTIONS IN GRID FOR FIRST CHILD, THEN NEXT CHILD, ETC.

Please give me the first names of all of the children under five who had fever/hot body or convulsions/fits in the last two weeks.	How old is (NAME) ?	Is (NAME) a boy or a girl?	Is (NAME) now healthy?	Was (NAME) ill for more than four weeks, that is, more than one month?
Child 1				
(FILL IN NAME)	[] years [][] months	<input type="checkbox"/> Boy <input type="checkbox"/> Girl	<input type="checkbox"/> Yes <input type="checkbox"/> No DOES NOT MEET CRITERIA; SKIP TO NEXT CHILD	<input type="checkbox"/> Yes DOES NOT MEET CRITERIA <input type="checkbox"/> No MEETS CRITERIA
Child 2				
(FILL IN NAME)	[] years [][] months	<input type="checkbox"/> Boy <input type="checkbox"/> Girl	<input type="checkbox"/> Yes <input type="checkbox"/> No DOES NOT MEET CRITERIA; SKIP TO NEXT CHILD	<input type="checkbox"/> Yes DOES NOT MEET CRITERIA <input type="checkbox"/> No MEETS CRITERIA
Child 3				
(FILL IN NAME)	[] years [][] months	<input type="checkbox"/> Boy <input type="checkbox"/> Girl	<input type="checkbox"/> Yes <input type="checkbox"/> No DOES NOT MEET CRITERIA; SKIP TO NEXT CHILD	<input type="checkbox"/> Yes DOES NOT MEET CRITERIA <input type="checkbox"/> No MEETS CRITERIA
Child 4				
(FILL IN NAME)	[] years [][] months	<input type="checkbox"/> Boy <input type="checkbox"/> Girl	<input type="checkbox"/> Yes <input type="checkbox"/> No DOES NOT MEET CRITERIA; SEE BOX BELOW	<input type="checkbox"/> Yes DOES NOT MEET CRITERIA <input type="checkbox"/> No MEETS CRITERIA

IF NONE OF THE CHILDREN MEET THE CRITERIA FOR INTERVIEW, END THE INTERVIEW.

AMONG THE CHILDREN WHO MEET THE CRITERIA FOR INTERVIEW, CHOOSE THE YOUNGEST CHILD.

[IF TWINS MEET THE CRITERIA FOR INTERVIEW, ASK “WHO IS THE YOUNGER?” CHOOSE THE YOUNGER TWIN.]

SAY: “All of the information you give me will be kept private. Will you agree to speak with me for about 15 or 20 minutes?”

INTERVIEWER SIGN HERE IF PERSON AGREES TO PARTICIPATE _____

Say: “Let us talk now only about ____ (name of youngest child or younger twin)

ANNEX 5C. CHILD MALARIA HOUSEHOLD QUESTIONNAIRE

<p>1. RECORD AGE OF CHILD YOU HAVE SELECTED TO INTERVIEW</p>	<p><input type="checkbox"/> 0–less than 1 year <input type="checkbox"/> 1 year–less than 2 years <input type="checkbox"/> 2 years–less than 3 years <input type="checkbox"/> 3 years–less than 4 years <input type="checkbox"/> 4 years–less than 5 years</p>
<p>2. RECORD SEX OF CHILD YOU HAVE SELECTED TO INTERVIEW</p>	<p><input type="checkbox"/> Male <input type="checkbox"/> Female</p>
<p>3. Just to be sure, please tell me which of the following symptoms (NAME) had in the last two weeks. READ RESPONSES OUT LOUD. TICK ALL THAT APPLY.</p>	<p><input type="checkbox"/> Fever/hot body <input type="checkbox"/> Convulsions/fits</p>
<p>4. Did you think the illness that (NAME) had this time was very serious, somewhat serious, or not serious? TICK ONE. DO NOT READ “DON’T KNOW.”</p>	<p><input type="checkbox"/> Very serious <input type="checkbox"/> Somewhat serious <input type="checkbox"/> Not serious <input type="checkbox"/> (<i>Don’t know</i>)</p>
<p>BOX 1 INSTRUCTIONS COMPLETE BOX 1 IF YOU MARKED <u>FEVER/HOT BODY</u> IN Q. 3 IF YOU DID NOT MARK <u>FEVER/HOT BODY</u>, GO TO BOX 2 INSTRUCTIONS</p>	
<p>5. Let’s talk about (NAME’S) fever/hot body. When (NAME) had fever/hot body, what did you do? I will read you a list. Listen to the whole list before you respond. READ RESPONSES OUT LOUD. DO NOT READ “DON’T KNOW.”</p>	<p><input type="checkbox"/> You left it alone/watched until it got better. SKIP TO BOX 2 INSTRUCTIONS <input type="checkbox"/> You treated it at home without going anywhere for advice, treatment, or medicine. SKIP TO BOX 2 INSTRUCTIONS <input type="checkbox"/> You treated it at home and you went somewhere for advice, treatment, or medicine. <input type="checkbox"/> You only sought advice, treatment, or medicine outside the home. <input type="checkbox"/> (<i>Don’t know/don’t recall</i>) SKIP TO BOX 2 INSTRUCTIONS</p>
<p>6. How long after the fever/hot body started did you first seek advice, treatment, or medicine outside the home? READ RESPONSES OUT LOUD. DO NOT READ “DON’T KNOW.”</p>	<p><input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the fever/hot body started <input type="checkbox"/> Three or more days after the fever/hot body started <input type="checkbox"/> (<i>Don’t know</i>)</p>
<p>7. Where, outside the home, did you first seek advice, treatment, or medicine for (NAME’S) fever/hot body? I’m going to read you a list. READ RESPONSES OUT LOUD. DO NOT READ “DON’T KNOW.” TICK ONE.</p>	<p><input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health post <input type="checkbox"/> Government health center or hospital <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> (<i>Don’t know</i>)</p>

BOX 2 INSTRUCTIONS COMPLETE BOX 2 IF YOU MARKED <u>CONVULSIONS/FITS</u> IN Q. 3. IF YOU DID NOT MARK <u>CONVULSIONS/FITS</u>, GO TO Q. 11.	
<p>8. Let's talk about (NAME'S) convulsions/fits. When (NAME) had convulsions/fits, what did you do? I will read you a list. Listen to the whole list before you respond. READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW."</p>	<p><input type="checkbox"/> You left it alone/watched until it got better. SKIP TO Q. 11</p> <p><input type="checkbox"/> You treated it at home without going anywhere for advice, treatment, or medicine. SKIP TO Q. 11</p> <p><input type="checkbox"/> You treated it at home and you went somewhere for advice, treatment, or medicine.</p> <p><input type="checkbox"/> You only sought advice, treatment, or medicine outside the home.</p> <p><input type="checkbox"/> <i>(Don't know/don't recall)</i> SKIP TO Q. 11</p>
<p>9. How long after the convulsions/fits started did you first seek advice, treatment, or medicine outside the home? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW."</p>	<p><input type="checkbox"/> Same day</p> <p><input type="checkbox"/> Next day</p> <p><input type="checkbox"/> Two days after the convulsions/fits started</p> <p><input type="checkbox"/> Three or more days after the convulsions/fits started</p> <p><input type="checkbox"/> <i>(Don't know)</i></p>
<p>10. Where, outside the home, did you <i>first</i> seek advice, treatment, or medicine for (NAME'S) convulsions/fits? I'm going to read you a list. READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ONE.</p>	<p><input type="checkbox"/> Traditional healer</p> <p><input type="checkbox"/> Government health post</p> <p><input type="checkbox"/> Government health center or hospital</p> <p><input type="checkbox"/> Private or mission health facility</p> <p><input type="checkbox"/> Pharmacy/drugstore</p> <p><input type="checkbox"/> General shop/store</p> <p><input type="checkbox"/> Market</p> <p><input type="checkbox"/> Community health worker/TBA</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> <i>(Don't know)</i></p>

SAY: Now we're going to talk about medicines.	
<p>11. During (NAME'S) illness, did he/she receive any injections?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
<p>12. During (NAME'S) illness, did he/she take any Western or modern medicine?</p>	<p><input type="checkbox"/> Yes SKIP TO Q. 14A</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> <i>(Don't know)</i> SKIP TO Q. 14A</p>
<p>13. What, if anything, did you do to care for (NAME) during his/her illness? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.</p>	<p><input type="checkbox"/> Nothing/left it alone</p> <p><input type="checkbox"/> Patting or wiping the child's skin with a wet or damp cloth or other material</p> <p><input type="checkbox"/> Went to traditional healer</p> <p><input type="checkbox"/> Gave traditional teas or herbs</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> <i>(Don't know)</i></p>

IF ANSWERED Q. 13, GO TO Q. 23.

<p>14A. Can you tell me the names or show me the medicines or packaging from the medicines that (NAME) took during his/her illness? PROBE ONCE, "ANYTHING ELSE?"</p> <p>WRITE DOWN IN THE LEFT-HAND COLUMN BELOW THE NAMES OF MEDICINES AS THEY ARE WRITTEN ON THE MEDICINE OR PACKAGING OR AS THEY ARE TOLD TO YOU. IF YOU CANNOT TELL THE NAME OF A PARTICULAR MEDICINE, CHECK "DON'T KNOW" IN THE APPROPRIATE BOX. IF YOU CANNOT OBTAIN THE NAME OF ANY MEDICINE, TICK "UNABLE TO OBTAIN NAME OF ANY MEDICINE."</p> <p>FOR ALL MEDICINES OR PACKAGING THAT WERE SHOWN TO YOU, TICK "SHOWN" IN THE RIGHT-HAND COLUMN BELOW. IF A PARTICULAR MEDICINE WAS NOT SHOWN TO YOU, LEAVE THE CORRESPONDING "SHOWN" BOX BLANK.</p>	<p>14B. Were there any other medicines that (NAME) took during his/her illness?</p>	<p>14C. How many medicines whose names you cannot recall or that you no longer have, did (NAME) take during his/her illness?</p>	
<p><input type="checkbox"/> Name of medicine 1 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 2 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 3 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 4 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 5 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 6 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Unable to obtain name of any medicine SKIP TO Q. 23</p>	<p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No DO NOT READ Q. 14C. FOLLOW INSTRUCTIONS BELOW.</p> <p><input type="checkbox"/> Don't know DO NOT READ Q. 14C. FOLLOW INSTRUCTIONS BELOW.</p>	<p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 3</p> <p><input type="checkbox"/> 4</p> <p><input type="checkbox"/> 5</p> <p><input type="checkbox"/> 6</p> <p><input type="checkbox"/> More than six</p> <p><input type="checkbox"/> Don't know</p>
<p>IF NO MEDICINES WERE SHOWN OR MENTIONED IN Q. 14A, GO TO Q. 23.</p>			

COLLECT THE FOLLOWING INFORMATION FOR ALL MEDICINES THAT WERE NAMED IN Q. 14A. DO NOT COLLECT INFORMATION FOR MEDICINES WHOSE NAMES YOU DO NOT HAVE. ASK QUESTIONS 15A THROUGH 22A FOR THE FIRST MEDICINE. WHEN YOU HAVE FINISHED ASKING ABOUT ONE MEDICINE, ASK QUESTIONS 15B THROUGH 22B FOR THE NEXT ONE, AND SO ON, UNTIL ALL QUESTIONS HAVE BEEN ASKED FOR ALL MEDICINES.

SAY: Let's talk about _____ [WRITE DOWN (BELOW) THE NUMBER AND NAME OF MEDICINE FROM Q. 14A], the first medicine you showed me/mentioned, the _____ (POINT TO PACKET, MENTION NAME of first medicine or description of first medicine).

MEDICINE NUMBER: _____ **MEDICINE NAME:** _____

<p>15A. Who prescribed or advised that (NAME) take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>16A. How long after the illness started did (NAME) first take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>17A. Where did you get (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>18A. What was the name of the place where you (originally) got (NAME OF MEDICINE)/this medicine?</p>	<p>19A. For how many days did (NAME) take (NAME OF MEDICINE)/this medicine?</p>
<p><input type="checkbox"/> No one or you decided yourself</p> <p><input type="checkbox"/> Health worker in facility</p> <p><input type="checkbox"/> Pharmacy/person in pharmacy/drugstore</p> <p><input type="checkbox"/> Person in general shop/store/market/kiosk</p> <p><input type="checkbox"/> Community health worker/TBA</p> <p><input type="checkbox"/> Friend/neighbor/relative</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> (Don't know) (DO NOT READ)</p>	<p><input type="checkbox"/> Same day</p> <p><input type="checkbox"/> Next day</p> <p><input type="checkbox"/> Two days after the illness started</p> <p><input type="checkbox"/> Three or more days after the illness started</p> <p><input type="checkbox"/> (Don't know) (DO NOT READ)</p>	<p><input type="checkbox"/> Was already in house</p> <p><input type="checkbox"/> Traditional healer</p> <p><input type="checkbox"/> Government health facility</p> <p><input type="checkbox"/> Private or mission health facility</p> <p><input type="checkbox"/> Pharmacy/drugstore</p> <p><input type="checkbox"/> General shop/store</p> <p><input type="checkbox"/> Market</p> <p><input type="checkbox"/> CHW/TBA</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> (Don't know) (DO NOT READ) SKIP TO Q. 19A</p>	<p>Place: _____</p> <p>_____</p> <p><input type="checkbox"/> Don't know</p>	<p>[] []</p> <p>days</p> <p><input type="checkbox"/> Don't know</p>
<p>20A. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?</p>		<p>21A. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK:</p> <p>Was (NAME OF MEDICINE)/this medicine in a package by itself or were other medicines included in the same package?</p>		<p>22A. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.</p>
<p><input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 22A</p> <p><input type="checkbox"/> Loose tablets/capsules in sealed plastic package</p> <p><input type="checkbox"/> Some other way SKIP TO Q. 22A</p> <p><input type="checkbox"/> Don't know SKIP TO Q. 22A</p>		<p><input type="checkbox"/> Packaged by itself</p> <p><input type="checkbox"/> With other medicines</p> <p><input type="checkbox"/> Don't know</p>		<p><input type="checkbox"/> The medicine's name</p> <p><input type="checkbox"/> The dose or how much to take each time the medicine is taken</p> <p><input type="checkbox"/> The number of times each day to take the medicine</p> <p><input type="checkbox"/> The number of days to take the medicine</p> <p><input type="checkbox"/> (Don't know)</p>

Annex 5C. Child Malaria Household Questionnaire

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
15B. Who prescribed or advised that (NAME) take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	16B. How long after the illness started did (NAME) first take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	17B. Where did you get (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	18B. What was the name of the place where you (originally) got (NAME OF MEDICINE) /this medicine?	19B. For how many days did (NAME) take (NAME OF MEDICINE) /this medicine?
<input type="checkbox"/> No one or you decided yourself <input type="checkbox"/> Health worker in facility <input type="checkbox"/> Pharmacy/person in pharmacy/drugstore <input type="checkbox"/> Person in general shop/store/market/kiosk <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Friend/neighbor/relative <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the illness started <input type="checkbox"/> Three or more days after the illness started <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Was already in house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> CHW/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ) SKIP TO Q. 19B	Place: _____ _____ <input type="checkbox"/> Don't know	[] [] days <input type="checkbox"/> Don't know
20B. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?		21B. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK: Was (NAME OF MEDICINE) /this medicine in a package by itself or were other medicines included in the same package?		22B. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.
<input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 22B <input type="checkbox"/> Loose tablets/capsules in sealed plastic package <input type="checkbox"/> Some other way SKIP TO Q. 22B <input type="checkbox"/> Don't know SKIP TO Q. 22B		<input type="checkbox"/> Packaged by itself <input type="checkbox"/> With other medicines <input type="checkbox"/> Don't know		<input type="checkbox"/> The medicine's name <input type="checkbox"/> The dose or how much to take each time the medicine is taken <input type="checkbox"/> The number of times each day to take the medicine <input type="checkbox"/> The number of days to take the medicine <input type="checkbox"/> <i>(Don't know)</i>

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
15C. Who prescribed or advised that (NAME) take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	16C. How long after the illness started did (NAME) first take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	17C. Where did you get (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	18C. What was the name of the place where you (originally) got (NAME OF MEDICINE) /this medicine?	19C. For how many days did (NAME) take (NAME OF MEDICINE) /this medicine?
<input type="checkbox"/> No one or you decided yourself <input type="checkbox"/> Health worker in facility <input type="checkbox"/> Pharmacy/person in pharmacy/drugstore <input type="checkbox"/> Person in general shop/store/market/kiosk <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Friend/neighbor/relative <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the illness started <input type="checkbox"/> Three or more days after the illness started <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Was already in house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> CHW/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ) SKIP TO Q. 19C	Place: _____ _____ _____ <input type="checkbox"/> Don't know	[] [] days <input type="checkbox"/> Don't know
20C. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?		21C. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK: Was (NAME OF MEDICINE) /this medicine in a package by itself or were other medicines included in the same package?		22C. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.
<input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 22C <input type="checkbox"/> Loose tablets/capsules in sealed plastic package <input type="checkbox"/> Some other way SKIP TO Q. 22C <input type="checkbox"/> Don't know SKIP TO Q. 22C		<input type="checkbox"/> Packaged by itself <input type="checkbox"/> With other medicines <input type="checkbox"/> Don't know		<input type="checkbox"/> The medicine's name <input type="checkbox"/> The dose or how much to take each time the medicine is taken <input type="checkbox"/> The number of times each day to take the medicine <input type="checkbox"/> The number of days to take the medicine <input type="checkbox"/> <i>(Don't know)</i>

Annex 5C. Child Malaria Household Questionnaire

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
<p>15D. Who prescribed or advised that (NAME) take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>16D. How long after the illness started did (NAME) first take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>17D. Where did you get (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>18D. What was the name of the place where you (originally) got (NAME OF MEDICINE)/this medicine?</p>	<p>19D. For how many days did (NAME) take (NAME OF MEDICINE)/this medicine?</p>
<p><input type="checkbox"/> No one or you decided yourself</p> <p><input type="checkbox"/> Health worker in facility</p> <p><input type="checkbox"/> Pharmacy/person in pharmacy/drugstore</p> <p><input type="checkbox"/> Person in general shop/store/market/kiosk</p> <p><input type="checkbox"/> Community health worker/TBA</p> <p><input type="checkbox"/> Friend/neighbor/relative</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)</p>	<p><input type="checkbox"/> Same day</p> <p><input type="checkbox"/> Next day</p> <p><input type="checkbox"/> Two days after the illness started</p> <p><input type="checkbox"/> Three or more days after the illness started</p> <p><input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)</p>	<p><input type="checkbox"/> Was already in house</p> <p><input type="checkbox"/> Traditional healer</p> <p><input type="checkbox"/> Government health facility</p> <p><input type="checkbox"/> Private or mission health facility</p> <p><input type="checkbox"/> Pharmacy/drugstore</p> <p><input type="checkbox"/> General shop/store</p> <p><input type="checkbox"/> Market</p> <p><input type="checkbox"/> CHW/TBA</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ) SKIP TO Q. 19D</p>	<p>Place: _____</p> <p>_____</p> <p><input type="checkbox"/> Don't know</p>	<p>[__ __] days</p> <p><input type="checkbox"/> Don't know</p>
<p>20D. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?</p>	<p>21D. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK:</p> <p>Was (NAME OF MEDICINE)/this medicine in a package by itself or were other medicines included in the same package?</p>		<p>22D. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.</p>	
<p><input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 22D</p> <p><input type="checkbox"/> Loose tablets/capsules in sealed plastic package</p> <p><input type="checkbox"/> Some other way SKIP TO Q. 22D</p> <p><input type="checkbox"/> Don't know SKIP TO Q. 22D</p>	<p><input type="checkbox"/> Packaged by itself</p> <p><input type="checkbox"/> With other medicines</p> <p><input type="checkbox"/> Don't know</p>		<p><input type="checkbox"/> The medicine's name</p> <p><input type="checkbox"/> The dose or how much to take each time the medicine is taken</p> <p><input type="checkbox"/> The number of times each day to take the medicine</p> <p><input type="checkbox"/> The number of days to take the medicine</p> <p><input type="checkbox"/> <i>(Don't know)</i></p>	

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
15E. Who prescribed or advised that (NAME) take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	16E. How long after the illness started did (NAME) first take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	17E. Where did you get (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	18E. What was the name of the place where you (originally) got (NAME OF MEDICINE) /this medicine?	19E. For how many days did (NAME) take (NAME OF MEDICINE) /this medicine?
<input type="checkbox"/> No one or you decided yourself <input type="checkbox"/> Health worker in facility <input type="checkbox"/> Pharmacy/person in pharmacy/drugstore <input type="checkbox"/> Person in general shop/store/market/kiosk <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Friend/neighbor/relative <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the illness started <input type="checkbox"/> Three or more days after the illness started <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Was already in house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> CHW/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ) SKIP TO Q. 19E	Place: _____ _____ <input type="checkbox"/> Don't know	[] [] days <input type="checkbox"/> Don't know
20E. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?		21E. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK: Was (NAME OF MEDICINE) /this medicine in a package by itself or were other medicines included in the same package?		22E. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.
<input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 22E <input type="checkbox"/> Loose tablets/capsules in sealed plastic package <input type="checkbox"/> Some other way SKIP TO Q. 22E <input type="checkbox"/> Don't know SKIP TO Q. 22E		<input type="checkbox"/> Packaged by itself <input type="checkbox"/> With other medicines <input type="checkbox"/> Don't know		<input type="checkbox"/> The medicine's name <input type="checkbox"/> The dose or how much to take each time the medicine is taken <input type="checkbox"/> The number of times each day to take the medicine <input type="checkbox"/> The number of days to take the medicine <input type="checkbox"/> <i>(Don't know)</i>

Annex 5C. Child Malaria Household Questionnaire

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
<p>15F. Who prescribed or advised that (NAME) take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>16F. How long after the illness started did (NAME) first take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>17F. Where did you get (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>18F. What was the name of the place where you (originally) got (NAME OF MEDICINE)/this medicine?</p>	<p>19F. For how many days did (NAME) take (NAME OF MEDICINE)/this medicine?</p>
<p><input type="checkbox"/> No one or you decided yourself</p> <p><input type="checkbox"/> Health worker in facility</p> <p><input type="checkbox"/> Pharmacy/person in pharmacy/drugstore</p> <p><input type="checkbox"/> Person in general shop/store/market/kiosk</p> <p><input type="checkbox"/> Community health worker/TBA</p> <p><input type="checkbox"/> Friend/neighbor/relative</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)</p>	<p><input type="checkbox"/> Same day</p> <p><input type="checkbox"/> Next day</p> <p><input type="checkbox"/> Two days after the illness started</p> <p><input type="checkbox"/> Three or more days after the illness started</p> <p><input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)</p>	<p><input type="checkbox"/> Was already in house</p> <p><input type="checkbox"/> Traditional healer</p> <p><input type="checkbox"/> Government health facility</p> <p><input type="checkbox"/> Private or mission health facility</p> <p><input type="checkbox"/> Pharmacy/drugstore</p> <p><input type="checkbox"/> General shop/store</p> <p><input type="checkbox"/> Market</p> <p><input type="checkbox"/> CHW/TBA</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ) SKIP TO Q. 19F</p>	<p>Place: _____</p> <p>_____</p> <p><input type="checkbox"/> Don't know</p>	<p>[__ __] days</p> <p><input type="checkbox"/> Don't know</p>
<p>20F. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?</p>		<p>21F. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK:</p> <p>Was (NAME OF MEDICINE)/this medicine in a package by itself or were other medicines included in the same package?</p>		<p>22F. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.</p>
<p><input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 22F</p> <p><input type="checkbox"/> Loose tablets/capsules in sealed plastic package</p> <p><input type="checkbox"/> Some other way SKIP TO Q. 22F</p> <p><input type="checkbox"/> Don't know SKIP TO Q. 22F</p>		<p><input type="checkbox"/> Packaged by itself</p> <p><input type="checkbox"/> With other medicines</p> <p><input type="checkbox"/> Don't know</p>		<p><input type="checkbox"/> The medicine's name</p> <p><input type="checkbox"/> The dose or how much to take each time the medicine is taken</p> <p><input type="checkbox"/> The number of times each day to take the medicine</p> <p><input type="checkbox"/> The number of days to take the medicine</p> <p><input type="checkbox"/> <i>(Don't know)</i></p>

SAY: Now, I am finished asking about (CHILD'S NAME) illness or medicines taken and I have just a few more questions.

23. Have you ever heard of a medicine called (NAME/NAMES FOR FIRST-LINE ANTIMALARIAL) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO Q. 26 <input type="checkbox"/> Don't know SKIP TO Q. 26
24. Can you always get (NAME/NAMES OF FIRST-LINE ANTIMALARIAL) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
25. Do you have any (NAME/NAMES OF FIRST-LINE ANTIMALARIAL) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
26. Have you ever heard of a medicine called (NAME/NAMES FOR SECOND-LINE ANTIMALARIAL) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No END INTERVIEW <input type="checkbox"/> Don't know END INTERVIEW
27. Can you always get (NAME/NAMES OF SECOND-LINE ANTIMALARIAL) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
28. Do you have any (NAME/NAMES OF SECOND-LINE ANTIMALARIAL) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No END INTERVIEW <input type="checkbox"/> Don't know END INTERVIEW

SAY: We are finished with our discussion. Thank you for talking with me. I learned a lot from talking with you and the information you gave me is very helpful. Do you have any questions for me?

End time of interview: ____/____

ANNEX 5D. CHILD MALARIA HOUSEHOLD ANALYSIS TABLES

Characteristics of Sample

Indicator A. Age of children in sample (percentage of children who are 0–less than 1 year, 1 year–less than 2 years, 2 years–less than 3 years, 3 years–less than 4 years, 4 years–less than 5 years) (Q1)

Response Category	Response Count	Percentage
0–less than 1 year		%
1 year–less than 2 years		%
2 years–less than 3 years		%
3 years–less than 4 years		%
4 years–less than 5 years		%
Total		%
<i>Missing</i>		

Indicator B. Percentage of children in sample who are male/female (Q2)

Response Category	Response Count	Percentage
Male		%
Female		%
Total		%
<i>Missing</i>		

Caregiver Recognizes Symptoms and Decides Child Requires Treatment

Indicator C. Percentage of respondents whose child had fever/hot body and convulsions/fits (Q3)

Response Category	Response Count	Percentage
Fever/hot body		%
Convulsions/fits		%
Total		%
<i>Missing</i>		

Indicator D. Percentage of respondents who thought their child’s illness was very serious, somewhat serious, not serious (Q4)

Response Category	Response Count	Percentage
Very serious		%
Somewhat serious		%
Not serious		%
Don't know		%
Total		%
<i>Missing</i>		

Caregiver Seeks Timely Care from an Appropriate Source

Indicator 1. Percentage of respondents who sought care outside the home when their child had fever/hot body (Q5)

Response Category	Response Count	Percentage	Combined Percentage
Left it alone/watched		%	
Treated at home		%	
Treated at home and went somewhere for advice, treatment, or medicine		%	%
Only sought advice, treatment, care outside the home		%	
Don't know		%	
Total		%	
<i>Missing</i>			

Indicator 2. Percentage of respondents who sought care outside the home when their child had convulsions/fits (Q8)

Response Category	Response Count	Percentage	Combined Percentage
Left it alone/watched		%	
Treated at home		%	
Treated at home and went somewhere for advice, treatment, or medicine		%	%
Only sought advice, treatment, care outside the home		%	
Don't know		%	
Total		%	
<i>Missing</i>			

Indicator E. Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with fever/hot body) (Q7)

Response Category	Response Count	Percentage
Traditional healer		%
Government health post		%
Government health center or hospital		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator F. Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with convulsions/fits) (Q10)

Response Category	Response Count	Percentage
Traditional healer		%
Government health post		%
Government health center or hospital		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 3. Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with fever/hot body) (Q7)³⁹

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 4. Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with convulsions/fits) (Q10)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 5. Percentage of respondents whose child had fever/hot body who report that their child took an antimalarial on the same day or the next day after the fever/hot body started (Q3, 14, 16)

Response Category	Response Count	Percentage	Combined Percentage
Same day		%	%
Next day		%	
Two days after the fever/hot body started		%	
Three or more days after the fever/hot body started		%	
Don't know		%	
Total		%	
<i>Missing</i>			

³⁹ This indicator should be calculated in countries that do *not* have a strategy of promoting home management of fever (i.e., stocking in the home and appropriately using an appropriate antimalarial).

Indicator 6. Percentage of respondents whose child had convulsions/fits who sought care from a source outside the home on the same day the convulsions/fits started (Q9)

Response Category	Response Count	Percentage
Same day		%
Next day		%
Two days after the convulsions/fits started		%
Three or more days after the convulsions/fits body started		%
Don't know		%
Total		%
<i>Missing</i>		

Caregiver Obtains Appropriate Medicine

Indicator 7. Percentage of respondents who have heard of first-line antimalarial (Q23)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 8. Percentage of respondents who have heard of second-line antimalarial (Q26)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 9. Percentage of respondents who had the first-line antimalarial at home (Q25)⁴⁰

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total from Indicator 7		%

Note: Use TOTAL from Indicator 7 as base; do NOT add up those in rows above.

⁴⁰ This indicator should be calculated in countries that have a strategy of promoting home management of fever (i.e., stocking in the home and appropriately using an appropriate antimalarial).

Indicator 10. Percentage of respondents who had second-line antimalarial at home (Q28)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total from Indicator 8		%

Note: Use TOTAL from Indicator 8 as base; do NOT add up those in rows above.

Indicator 11. Percentage of respondents who say they can always get first-line antimalarial in the area where they live (Q24)

Response Category	Response Count	Percentage
Always		%
Sometimes		%
Never		%
Don't know		%
Total from Indicator 7		%

Note: Use TOTAL from Indicator 7 as base; do NOT add up those in rows above.

Indicator 12. Percentage of respondents who say they can always get second-line antimalarial in the area where they live (Q27)

Response Category	Response Count	Percentage
Always		%
Sometimes		%
Never		%
Don't know		%
Total from Indicator 8		%
<i>Missing</i>		

Note: Use TOTAL from Indicator 8 as base; do NOT add up those in rows above.

Indicator 13. Percentage of all antimalarials that were already in the home or were obtained from X source (among all antimalarials used) (Q14, 17)

Response Category	Response Count	Percentage
Already in home		%
Traditional healer		%
Government health facility		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator G. Percentage of medicines obtained on the advice of the following: self, health worker in facility, pharmacist/person in pharmacy or drugstore, vendor in general store/market/kiosk, community health worker/TBA, neighbor/friend/relative, other (Q15)

Response Category	Response Count	Percentage
Self/no one		%
Health worker in facility		%
Pharmacist/person in pharmacy/drugstore/shop		%
Person in general store/market/kiosk		%
Community health worker/TBA		%
Friend/neighbor/relative		%
Other 1 _____		%
Other 2 _____		%
Don't know		%
Total		%
<i>Missing</i>		

**Indicator 14. Percentage of respondents whose child received no medicine
(among children with fever/hot body and convulsions/fits) (Q3, 14)**

Response Category	Response Count	Percentage
Yes, received NO medicines		%
No, received some medicine(s)		%
Total		%
<i>Missing</i>		

**Indicator 15. Percentage of respondents whose child received any antibiotic
(among entire sample) (Q14)**

Response Category	Response Count	Percentage
Yes		%
No		%
Total sample		%
<i>Missing</i>		

**Indicator 16. Percentage of respondents whose child received an injection
(among entire sample) (Q11)**

Response Category	Response Count	Percentage
Yes		%
No		%
Total sample		%
<i>Missing</i>		

Indicator H. Percentage of respondents who did nothing, gave “tepid sponging,” went to traditional healer, gave traditional teas/herbs, and other (among respondents with children with fever/hot body and convulsion/fits who received no medicine) (Q 3, 13)

Response Category	Response Count	Percentage
Nothing/left it alone		%
Patting or wiping the child's skin with a wet or damp cloth or other material		%
Went to traditional healer		%
Gave traditional teas or herbs		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Caregiver Administers Appropriate Medicine Correctly

Indicator 17. Percentage of respondents whose child had fever/hot body and took first-line antimalarial (Q3, 14)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Indicator 18. Percentage of respondents whose child had convulsions/fits and fever and took appropriate antimalarial (Q3, 14)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Indicator 19. Percentage of first-line antimalarials that were taken for too short, too long, and correct amount of time (Q14, 19)

Response Category	Response Count	Percentage
Correct		%
Too short		%
Too long		%
Total		%
<i>Missing</i>		

Note: Base is total cases where first-line antimalarial was taken.

Indicator 20. Percentage of second-line antimalarials that were taken for too short, too long, and correct amount of time (Q14, 19)

Response Category	Response Count	Percentage
Correct		%
Too short		%
Too long		%
Total		%
<i>Missing</i>		

Note: Base is total cases where second-line antimalarial was taken.

Health Care Worker/Drug Provider

Indicator 21. Percentage of medicines dispensed in appropriate packaging (i.e., sealed plastic package or original manufacturer's package with one type of medicine per pack) (Q20, 21)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Note: Base is all medicines .

Indicator 22. Percentage of medicines that were appropriately labeled with all of the following: name of medicine, dose, frequency, and duration (Q22)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Note: Base is all medicines .

ANNEX 5E. CHILD MALARIA HOUSEHOLD MALARIA INSTRUMENT ADAPTATION

ADAPTATION OF HOUSEHOLD MALARIA INSTRUMENT FOR AREAS WHERE COMBINATION THERAPY IS THE RECOMMENDED FIRST-LINE TREATMENT

23. Have you ever heard of a medicine called (NAME/NAMES FOR COMBINATION THERAPY) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO Q. 25B <input type="checkbox"/> Don't know SKIP TO Q. 25B
24. Can you always get (NAME/NAMES OF COMBINATION THERAPY) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
25. Do you have any (NAME/NAMES COMBINATION THERAPY) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
25A. Does (NAME OF THE COMBINATION) include one, two, or more than two kinds of drug?	<input type="checkbox"/> One <input type="checkbox"/> Two <input type="checkbox"/> More than two <input type="checkbox"/> Don't know
25B. Have you ever heard of a medicine called (NAME/NAMES FOR FIRST COMPONENT OF COMBINATION THERAPY) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO Q. 25F <input type="checkbox"/> Don't know SKIP TO Q. 25F
25C. Can you always get (NAME/NAMES FOR FIRST COMPONENT OF COMBINATION THERAPY) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
25D. Do you have any (NAME/NAMES FOR FIRST COMPONENT OF COMBINATION THERAPY) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
25E. Is (NAME/NAMES FOR FIRST COMPONENT OF COMBINATION THERAPY) sufficient to treat fever/hot body by itself, or does it have to be used with another medicine?	<input type="checkbox"/> Sufficient alone <input type="checkbox"/> Has to be used with another medicine <input type="checkbox"/> Don't know
25F. Have you ever heard of a medicine called (NAME/NAMES FOR SECOND COMPONENT OF COMBINATION THERAPY) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO Q. 26 <input type="checkbox"/> Don't know SKIP TO Q. 26
25G. Can you always get (NAME/NAMES FOR SECOND COMPONENT OF COMBINATION THERAPY) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know

25H. Do you have any (NAME/NAMES FOR SECOND COMPONENT OF COMBINATION THERAPY) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
25I. Is (NAME/NAMES FOR SECOND COMPONENT OF COMBINATION THERAPY) sufficient to treat fever/hot body by itself, or does it have to be used with another medicine?	<input type="checkbox"/> Sufficient alone <input type="checkbox"/> Has to be used with another medicine <input type="checkbox"/> Don't know
26. Have you ever heard of a medicine called (NAME/NAMES FOR SECOND-LINE ANTIMALARIAL) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No END INTERVIEW <input type="checkbox"/> Don't know END INTERVIEW
27. Can you always get (NAME/NAMES OF SECOND-LINE ANTIMALARIAL) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
28. Do you have any (NAME/NAMES OF SECOND-LINE ANTIMALARIAL) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know

SAY: We are finished with our discussion. Thank you for talking with me. I learned a lot from talking with you and the information you gave me is very helpful. Do you have any questions for me?

End time of interview: _____/____

ANNEX 5F. CHILD MALARIA HOUSEHOLD EVALUATION STANDARDS

#	Indicator	Results for District X N =	Evaluation Standards (should be adapted to the specific district situations)
Characteristics of sample			
A	Age of children in sample (percentage of children who are 0–less than 1 year, 1 year–less than 2 years, 2 years–less than 3 years, 3 years–less than 4 years, 4 years–less than 5 years)		NA ⁴¹
B	Percentage of children in sample who are male/female		NA
Caregiver recognizes symptoms and decides child requires treatment			
C	Percentage of respondents whose child had fever/hot body and convulsions/fits		NA
D	Percentage of respondents who thought that their child's illness was very serious/somewhat serious/not serious		NA
Caregiver seeks timely care from an appropriate source			
	<i>Treatment-seeking behavior and source of treatment/medicine</i>		
1	Percentage of respondents who sought care outside the home when their child had fever/hot body		Good: Over 80% Fair: 50–79% Poor: Under 50% (the standard will vary depending on the STG regarding fever management at home)
2	Percentage of respondents who sought care outside the home when their child had convulsions/fits		Good: Over 80% Fair: 50–79% Poor: Under 50%
E	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with fever/hot body)		NA
F	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with children with convulsions/fits)		NA
3	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with fever/hot body) ⁴²		Good: Over 80% Fair: 50–79% Poor: Under 50%
4	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with children with convulsions/fits)		Good: Over 80% Fair: 50–79% Poor: Under 50%

⁴¹ NA = Not applicable.

⁴² This indicator should be calculated in countries that do *not* have a strategy of promoting home management of fever (i.e., stocking in the home and appropriately using an appropriate antimalarial).

#	Indicator	Results for District X N =	Evaluation Standards (should be adapted to the specific district situations)
	<i>Timeliness of action</i>		
5	Percentage of respondents whose child had fever/hot body who report that their child took an antimalarial on the same day or the next day after the fever/hot body started		Good: Over 80% Fair: 50–79% Poor: Under 50%
6	Percentage of respondents whose child had convulsions/fits who sought care from a source outside the home on the same day the convulsions/fits started		Good: Over 80% Fair: 50–79% Poor: Under 50%
Caregiver obtains appropriate medicine			
	<i>Awareness of first-line medicines</i>		
7	Percentage of respondents who have heard of the first-line antimalarial		Good: Over 80% Fair: 50–79% Poor: Under 50%
8	Percentage of respondents who have heard of the second-line antimalarial		Good: Over 80% Fair: 50–79% Poor: Under 50%
	<i>Availability of medicines</i>		
9	Percentage of respondents who had the first-line antimalarial at home ⁴²		Good: Over 80% Fair: 50–79% Poor: Under 50%
10	Percentage of respondents who had the second-line antimalarial at home ⁴³		Good: Over 80% Fair: 50–79% Poor: Under 50%
11	Percentage of respondents who say they can always get the first-line antimalarial in the area where they live		Good: Over 80% Fair: 50–79% Poor: Under 50%
12	Percentage of respondents who say they can always get the second-line antimalarial in the area where they live		Good: Over 80% Fair: 50–79% Poor: Under 50%
	<i>Source of treatment/medicine</i>		
13	Percentage of all antimalarials that were already in the home or were obtained from X source (among antimalarials used)		NA
G	Percentage of medicines obtained on the advice of the following: self, health worker in facility, pharmacist/person in pharmacy or drugstore, vendor in general store/market/kiosk, community health worker/TBA, neighbor/friend/relative, other		NA

⁴³ This indicator should be calculated in countries which have a strategy of promoting home management of fever (i.e., stocking in the home and appropriately using an appropriate antimalarial).

#	Indicator	Results for District X N =	Evaluation Standards (should be adapted to the specific district situations)
	<i>Overall medicine treatment</i>		
14	Percentage of respondents whose child received no medicine (among children with fever/hot body, and convulsions/fits)		Good: Under 10% Fair: 10–15% Poor: Over 50%
15	Percentage of respondents whose child received any antibiotic		NA
16	Percentage of respondents whose child received an injection		NA
H	Percentage of respondents who did nothing, gave “tepid sponging,” went to traditional healer, gave traditional teas/herbs, and other (among respondents with children with fever/hot body and convulsion/fits who received no medicine)		NA
Caregiver administers appropriate medicine correctly			
	<i>First-line appropriate medicine is administered</i>		
17	Percentage of respondents whose child had fever/hot body and took first-line antimalarial		Good: Over 80% Fair: 50–79% Poor: Under 50%
18	Percentage of respondents whose child had convulsions/fits and fever and took the appropriate antimalarial		Good: Over 80% Fair: 50–79% Poor: Under 50%
	<i>Right dose/duration regimen is followed</i>		
19	Percentage of first-line antimalarials that were taken for too short, too long, or correct amount of time		Correct amount of time: Good: Over 80% Fair: 50–79% Poor: Under 50%
20	Percentage of second-line antimalarials that were taken for too short, too long, and correct amount of time		Correct amount of time: Good: Over 80% Fair: 50–79% Poor: Under 50%
Health care worker/drug provider			
	<i>Provides appropriate information/instruction/advice/labeling</i>		
21	Percentage of medicines dispensed in appropriate packaging (i.e., sealed plastic package or original manufacturer’s package with one type of medicine per pack)		Good: Over 80% Fair: 50–79% Poor: Under 50%
22	Percentage of medicines that were appropriately labeled with all of the following: name of medicine, dose, frequency, and duration		Good: Over 70% Fair: 40–69% Poor: Under 40%

ANNEX 6A. CHILD MALARIA PROVIDER INDICATORS

#	Indicator	Level	Sources
Characteristics of sample			
a	Type of drug outlets	Descriptive	Local observation
b	Ownership of drug outlet (public/private/mission/other)	Descriptive	Local observation
c	Outlet setting/location (urban/rural)	Descriptive	Local observation
d	Distance/walking time from nearest health facility	Descriptive	Q 1
e	Training of respondent	Descriptive	Q 2
Health care worker/drug provider keeps appropriate and affordable medicine available in stock (first-line, second/third-line medicines to be defined based on local STGs)			
Availability of appropriate medicines			
1	Percentage of outlets with a recommended specific first-line antimalarial in stock	Primary	Q 7 and STG
2	Percentage of outlets with all recommended first-line antimalarials in stock	Secondary	Q 7 and STG
3	Percentage of outlets with a specific second- or third-line antimalarial in stock	Secondary	Q 7 and STG
4	Percentage of outlets with specific first-line antimalarial tablets but not syrup currently available in stock	Secondary	Q 7 and STG
5	Percentage of outlets that have second- or third-line medicines for malaria in children but not the first-line medicines	Secondary	Q 7 and STG
Affordability of appropriate medicines			
6	Average cost [and range] for first-line antimalarial in form of syrup recommended in the treatment of malaria in a two-year-old child (<i>if syrup is available</i>)	Secondary	Q 8 and STG
7	Average number of working days needed to pay for treatment of malaria in a two-year-old child using first-line antimalarial syrup	Secondary	I 6 and NMW ⁴⁴
8	Average cost [and range] for first-line antimalarial in form of tablets recommended in the treatment of malaria in a two-year-old child	Secondary	Q 8 and STG
9	Average number of working days needed to pay for treatment of malaria in a two-year-old child using first-line antimalarial tablets	Secondary	I 8 and NMW
10	Average cost [and range] for second-line antimalarial in form of syrup recommended in the treatment of malaria in a two-year-old child (<i>if syrup is available</i>)	Secondary	Q 8 and STG
11	Average cost [and range] for second-line antimalarial in form of tablets recommended in the treatment of malaria in a two-year-old child	Secondary	Q 8 and STG

⁴⁴ NMW = National Minimum Wage

#	Indicator	Level	Sources
	Health care worker/drug provider assesses symptoms appropriately		
12	Percentage of respondents who do not mention fever with convulsion or fits as key symptoms for differentiating severe malaria	Primary	Q 5
13	Percentage of respondents who mentioned an antimalarial for children with malaria symptoms	Primary	Q 4
14	Percentage of respondents mentioning the first-line antimalarial for children with malaria symptoms	Secondary	Q 4 and STG
15	Percentage of respondents who mentioned an injection for malaria symptoms in children	Primary	Q 4
	Health care worker/drug provider prescribes, dispenses, or recommends appropriate medicine or refers: Knowledge of appropriate treatment of reported symptoms		
16	Percentage of respondents who know the recommended medicine for malaria in children	Primary	Q 6 and STG
17	Percentage of respondents who know the correct treatment duration with the recommended medicine for malaria in children	Primary	Q 6a and STG
	Health care worker/drug provider prescribes, dispenses, or recommends appropriate medicine or refers: Commonly sold or dispensed medicines		
18	Percentage of respondents who do not mention the first-line medicine in the STG as the most commonly sold or dispensed for malaria in children	Primary	Q 9 and STG
19	Percentage of respondents who mentioned they would refer children with symptoms of malaria	Secondary	Q 6
	Health care worker/drug provider provides appropriate information/instructions/advice/labeling		
20	Percentage of respondents who know the correct elements of appropriate labeling	Primary	Q 10
21	Percentage of respondents who know what should be explained about medicines by dispensers	Primary	Q 11
22	Percentage of providers who dispensed medicines (pills/tablets and/or syrup) outside of manufacturers' original packaging	Primary	Q 13
23	Percentage of providers who dispensed loose tablets in incorrect packaging	Primary	Q 14
24	Percentage of providers who mixed different types of pills in the same container	Primary	Q 15
25	Percentage of providers who dispensed syrup in incorrect packaging	Primary	Q 17
26	Percentage of providers who dispensed labeled medicines	Secondary	Q 18
27	Percentage of providers who gave verbal instruction when dispensing medicines	Secondary	Q 19
28	Percentage of providers who confirmed customers' understanding of how to take dispensed medicines	Secondary	Q 20

ANNEX 6B. CHILD MALARIA PROVIDER QUESTIONNAIRE

Say aloud: **My name is _____.** I am working for an organization that is trying to develop ways to improve child health. I am talking to people who dispense medicines about how they treat or give advice for children with malaria. Neither your name nor the name of your facility/shop will be written on this form nor released to any authorities. May I ask you a few questions?

If Yes: **Do you, yourself, regularly dispense or sell medicines to patients or customers?**

If Yes: Fill out the information below, then start the interview with Q 1.

If No, say: **Is there someone here today who regularly sees patients or customers?**

If Yes, say: **May I please talk to that person?** Start interview again with new respondent.

If No, say: **Thank you, I will come back another time.** End interview.

General Information

Country:	Town/Village:	Outlet Code:
Name of Interviewer:	Date of Interview: _____/_____/_____ Day Month Year	Language of Interview:
Setting/location:	<input type="checkbox"/> Urban	<input type="checkbox"/> Periurban <input type="checkbox"/> Rural
Ownership of facility:	<input type="checkbox"/> Government	<input type="checkbox"/> Private <input type="checkbox"/> Mission <input type="checkbox"/> Other
Start time of interview: ____/____ Hour Minute	End time of interview: ____/____ Hour Minute	
Type of drug outlet: (Check the type that best describes the outlet)	<input type="checkbox"/> Health facility (government, private or mission hospital, health center, or dispensary) <input type="checkbox"/> Licensed retail drug outlet (pharmacy) <input type="checkbox"/> Other retail outlet (general store, kiosk, variety store) <input type="checkbox"/> Authorized individual dispensing drugs (community paramedic, midwife, CHW, etc.) <input type="checkbox"/> Other individual dispensing drugs (traditional healer, unlicensed practitioner, street vendor)	
<i>If not a health facility, ask:</i> 1. How far from here is the nearest health facility? (Listen to response and check one.)	<input type="checkbox"/> Under 1 km (or less than 15 minutes walking) <input type="checkbox"/> Between 1 and 5 km (up to one hour walking) <input type="checkbox"/> More than 5 km (more than one hour walking) <input type="checkbox"/> Don't know	
2. What kind of training in clinical care or pharmacy do you have? (Do not read. Listen to response and check all that apply.)	<input type="checkbox"/> Pharmacist <input type="checkbox"/> Pharmacy technician or some pharmacy training <input type="checkbox"/> Medical doctor <input type="checkbox"/> Paramedic, physician assistant <input type="checkbox"/> Nurse, nurse assistant <input type="checkbox"/> Medical assistant, medical technologist, lab technician, or other health-related training <input type="checkbox"/> None	

Understanding of Symptoms and Appropriate Actions

<p>Say: <i>I would like to ask you some questions about the kinds of children with malaria you may attend to here.</i></p>			
<p>3. Can you tell me the symptoms you might find in a two-year-old child suffering from mild malaria? (Do not read. Listen to responses and check all that apply.)</p>			
<input type="checkbox"/> Cough <input type="checkbox"/> Blocked or runny nose <input type="checkbox"/> Headache <input type="checkbox"/> Fever (hot body)	<input type="checkbox"/> Earache <input type="checkbox"/> Chest in-drawing <input type="checkbox"/> Fast/difficulty breathing <input type="checkbox"/> Thirst	<input type="checkbox"/> Sweating <input type="checkbox"/> Vomiting <input type="checkbox"/> Fever with convulsion or fits <input type="checkbox"/> Child is lethargic	<input type="checkbox"/> Child cannot sleep <input type="checkbox"/> Child refuses to eat <input type="checkbox"/> Don't know <input type="checkbox"/> Other _____
<p>4. What is the most effective medicine to treat a child with mild malaria? (Do not read. Listen and write down the response.)</p>		<p>_____</p> <input type="checkbox"/> I don't know	
<p>5. What would you say are the key symptoms for telling a case of mild malaria from a case of severe malaria in children? (Do not read. Listen to responses and check all that apply.)</p>			
<input type="checkbox"/> Cough <input type="checkbox"/> Blocked or runny nose <input type="checkbox"/> Headache <input type="checkbox"/> Fever (hot body)	<input type="checkbox"/> Earache <input type="checkbox"/> Chest in-drawing <input type="checkbox"/> Fast/difficulty breathing <input type="checkbox"/> Thirst	<input type="checkbox"/> Sweating <input type="checkbox"/> Vomiting <input type="checkbox"/> Fever with convulsion or fits <input type="checkbox"/> Child is lethargic	<input type="checkbox"/> Child cannot sleep <input type="checkbox"/> Child refuses to eat <input type="checkbox"/> Don't know <input type="checkbox"/> Other _____

Knowledge of Appropriate Treatment of Reported Symptoms

<p>6. Do you know which medicine is recommended on the national treatment guidelines for a two-year-old child with malaria? (Listen to response and write down the answer, then ask Q 6a. If the person answered "I don't know" or "I usually refer them," move to Q 7.)</p>	<p>Medicine name: _____</p> <input type="checkbox"/> I don't know <input type="checkbox"/> I usually refer them
<p>6a. For how long should this medicine be taken? →</p>	<p>Duration: _____</p>

Say: Sometimes you may recommend medicines for certain conditions, but many times people buy medicines on others' recommendations, or for other reasons. We are interested in what medicines people generally get here, whether or not you would recommend them.

<p>9. Would you please show me the medicine that most people may buy or receive for a child with mild malaria?</p> <p><i>Write the name of the medicine on the line at the right. If the person does not have the medicine in stock, ask:</i></p> <p align="center">What is the name of that medicine?</p>	<p>Medicine name _____</p> <p>Form _____</p> <p><input type="checkbox"/> Don't know or don't recall</p> <p>Generic name: _____</p> <p><i>To be completed by the supervisor</i></p>
--	--

Prescribing, Dispensing, Recommendation of Appropriate Medicines or Referrals

Appropriate Information/Instructions/Advice/Labeling

<p>10. What should be written on the package label of a medicine as it is dispensed?</p> <p><i>(Do not read. Listen and check all that apply.)</i></p>	<p><input type="checkbox"/> Patient name</p> <p><input type="checkbox"/> Medicine name</p> <p><input type="checkbox"/> How to take</p> <p><input type="checkbox"/> Duration</p> <p><input type="checkbox"/> Other <i>(specify)</i> _____</p> <p><input type="checkbox"/> Don't know</p>
<p>11. What things about the medicine should be explained to a customer as it is dispensed?</p> <p><i>(Do not read. Listen and check all that apply.)</i></p>	<p><input type="checkbox"/> Medicine name</p> <p><input type="checkbox"/> What it treats</p> <p><input type="checkbox"/> When and how to take</p> <p><input type="checkbox"/> Side effects</p> <p><input type="checkbox"/> Other <i>(specify)</i> _____</p> <p><input type="checkbox"/> Don't know</p>

Say: That was my last question. Thank you very much for your participation. End interview.

Return to the front page and record the time that the interview ended, then complete the last page of the questionnaire on quality of dispensing.

Observed Dispensing Practices

Packaging and Advice on Signs of Treatment Failure and/or Need for Referral

<p><i>If any customers came to buy medicine during the interview, recall how the medicines were dispensed to those customers and complete this section.</i></p>	
<p>12. Medicines were dispensed to one or more customers during the interview.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p><i>If yes, complete the following section on dispensing practice.</i></p>	
<p>13. Tablets were dispensed outside of manufacturers' original packaging.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>14. If yes, what kind of packaging was used to dispense those tablets or pills? <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Small bottle with cap <input type="checkbox"/> Plastic package (mini-grips) <input type="checkbox"/> Sealable envelope <input type="checkbox"/> Folded paper envelope <input type="checkbox"/> Other <i>(specify)</i> _____</p>
<p>15. Several types of tablets were dispensed in the same package.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>16. Syrups were dispensed outside of manufacturers' packaging.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>17. If yes, what kind of packaging was used to dispense the syrups? <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Small airtight bottle (with cap) <input type="checkbox"/> Small bottle without cap <input type="checkbox"/> Other <i>(specify)</i> _____</p>
<p>18. Packages contained the following types of labeling. <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Printed manufacturer's label <input type="checkbox"/> Printed label produced in outlet <input type="checkbox"/> Information written on label by the dispenser <input type="checkbox"/> No labeling</p>
<p>19. Dispenser gave customer verbal instruction on how to take the medicine.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>20. Dispenser asked customer to repeat verbal instruction about how to take the medicine.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>

ANNEX 6C. CHILD MALARIA PROVIDER ANALYSIS TABLES

Descriptive Characteristics

Characteristic a. Distribution of types of drug outlets included in the survey

A	B	C	D
Type of outlet	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
Health facility (government, private or mission hospital, health center, or dispensary)			
Licensed retail drug outlet (pharmacy, chemist, or drug shop)			
Other retail outlet (general store, kiosk, variety store)			
Licensed individual dispensing drugs (doctor/nurse, community paramedic, midwife, CHW, etc.)			
Other individual dispensing drugs (traditional healer, unlicensed practitioner, street vendor)			
Total number of outlets [®]			

Characteristic b. Ownership of facility

A	B	C	D
Ownership of facility	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
Public			
Private			
Mission			
Total number of outlets [®]			

Characteristic c. Setting/location of outlets

A	B	C	D
Setting/Location	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
Urban			
Periurban			
Rural			
Total number of outlets →			

Characteristic d. Proximity to health facility

A	B	C	D
Distance from nearest health facility	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
This is a health facility			
Under 1 km (15 minutes walking)			
Between 1 and 5 km (up to one hour walking)			
More than 5 km (more than one hour walking)			
Don't know			
Total number of outlets ®			

Characteristic e. Level of training of respondents

A	B	C	D
Ownership of facility	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
Pharmacist			
Pharmacy technician or para-pharmacist			
Medical doctor			
Paramedic, physician assistant			
Nurse, nurse assistant			
Medical assistant, medical technologist, etc.			
None			
Total number of outlets ®			

Primary and Secondary Indicators

The following tabulation forms can be used to calculate the indicators from the health provider survey. On each form first record the type of drug outlet (see Sample characteristic a.) in the upper right-hand corner. Next, record the information from each questionnaire in the summary form as described. Finally, use the formulas in Chapter 6 to calculate the indicators.

Note that each tabulation form will require up to 40 rows to accommodate the target number of drug outlets of each type in the sample. Only the first form (for Indicators 1–2) has been developed as it would actually appear, with 40 rows and a space to record type of drug outlet in the upper corner. The remaining forms would need to be developed in the same format before using them in an actual survey.

Availability and Affordability of Appropriate Medicines

Availability of Appropriate Medicines

The first three tabulation forms are used for calculating *Indicators 1–5, which measure the availability of appropriate medicines.*

Type of Drug Outlet: _____

Indicators 1–2. Percentage of outlets with specific first-line antimalarials in stock (Q 7)

A	B	C	D	E	F	G
Survey #	Medicine 1: _____	Medicine 2: _____	Medicine 3: _____	Medicine 4: _____	Medicine 5: _____	Has all first-line medicines

Indicator 3. Percentage of outlets with specific second/third-line antimalarials in stock (Q 7)

A	B	C	D	E	F
Survey #	Medicine 1: _____	Medicine 2: _____	Medicine 3: _____	Medicine 4: _____	Medicine 5: _____
Total # of providers: _____					
Total # of checks per column ®					
Percentage (see formula)	I _{3a} :	I _{3b} :	I _{3c} :	I _{3d} :	I _{3e} :

Note: For each specific medicine under investigation, insert the relevant name on top of columns B to F.

Indicators 4–5. Availability of medicines (Q 7)

A	B	C
Survey #	Has first-line antimalarial tablets but not syrup	Has second- or third-line medicines for malaria but not first-line
Total # of providers: _____		
Total # of checks per column ®		
Percentage (see formula)	I ₄ :	I ₅ :

Affordability of Appropriate Medicines

The following nine tabulation forms can be used to calculate the *Indicators 6–11, which measure affordability of medicines* for malaria. Each form in this group needs to be updated by the field coordinator with treatment information from the STG and information on the prevailing national daily minimum wage.

Indicators 6 and 7. Treatment costs for malaria in children with first-line antimalarial syrup (from Q 8 and STG and NMW)

Standard malaria treatment with first-line antimalarial syrup for a two-year-old child =						
First-line antimalarial syrup on STG: _____						
A	B	C	D	E		F
Survey #	Package price	Package size	Price per unit	Total treatment cost		National Minimum Wage per day (NMW)
						NMW = _____
Total # of providers: _____			Total cost ®			
			Minimum	I ₆ :	Avg. number of working days to pay for treatment ®	I ₇ :
			Maximum	I ₆ :		
			Average cost	I ₆ :		

Indicators 8 and 9. Treatment costs for malaria in children with first-line antimalarial tablets

Standard malaria treatment with first-line antimalarial tablets for a two-year-old child =							
First-line antimalarial tablet on STG: _____							
A	B	C	D	E		F	
Survey #	Package price	Package size	Price per unit	Total treatment cost			National Minimum Wage per day (NMW)
							NMW = _____
Total # of providers: _____			Total cost ®				
			Minimum	I ₈ :		Avg. number of working days to pay for treatment ®	I ₉ :
			Maximum	I ₈ :			
			Average cost	I ₈ :			

Indicator 10. Average cost for second-line antimalarial syrup recommended for malaria in children

<i>Standard malaria treatment with second-line antimalarial syrup for a two-year-old child =</i>				
<i>Second-line antimalarial syrup on STG: _____</i>				
A	B	C	D	E
Survey #	Package price	Package size	Price per unit	Total treatment cost
Total # of providers: _____			Total cost ®	
			Minimum	I ₁₀ :
			Maximum	I ₁₀ :
			Average cost	I ₁₀ :

Indicator 11. Average cost for second-line antimalarial tablets recommended for malaria in children

<i>Standard malaria treatment with second-line antimalarial tablets for a two-year-old child =</i>				
<i>Second-line antimalarial tablet on STG: _____</i>				
A	B	C	D	E
Survey #	Package price	Package size	Price per unit	Total treatment cost
Total # of providers: _____			Total cost ®	
			Minimum	I ₁₁ :
			Maximum	I ₁₁ :
			Average cost	I ₁₁ :

Provider Understands Symptoms and Treats Appropriately

Provider Understands Symptoms Correctly

The following tabulation form can be used to calculate *Indicators 12–15*, which provide information on whether providers understand symptoms of childhood illness correctly.

Indicators 12–15. Percentage of providers who understand symptoms and take appropriate actions for malaria

A	B	C	D	F
	Malaria			
Survey #	Q5 Did not mention key symptoms (fever with fits or convulsion) Y/N	Q4 Mentioned antimalarial Y/N	Q4 Mentioned first-line antimalarial Y/N	Q4 Mentioned injection Y/N
Total # of providers: _____				
Total # of checks per column ®				
Percentage (see formula)	I₁₂:	I₁₃:	I₁₄:	I₁₅:

Provider Knows Appropriate Treatment

The following tabulation form can be used to calculate *Indicators 16–17*, which inform on the providers' knowledge of appropriate treatments.

Indicators 16–17. Percentage of providers who know recommended treatments

A	B	C
	Malaria	
Survey #	Q6 Know recommended medicine	Q6a Know treatment duration
Total # of outlets _____		
Total # of checks per column →		
Percentage (see formula) ®	I₁₆:	I₁₇:

Prescribing, Dispensing of Appropriate Medicines, and Referral Patterns

The following tabulation form can be used to calculate *Indicators 18–19*, which inform about how providers prescribe, dispense, and recommend appropriate medicines or refer children with malaria.

Indicators 18–19. Percentage of respondents who mention first-line medicines or refer

A	D	E
	Malaria	
Survey #	Q9 Did not mention first-line medicine	Q6 Would refer
Total # of outlets _____		
Total # of checks per column →		
Percentage (see formula) ®	I₁₈:	I₁₉:

Appropriateness of Information, Instructions, Advice, and Labeling

The following table models can be used to calculate *Indicators 20–28*, which measure the appropriateness of information, instructions, advice, and labeling at the drug outlets.

Indicator 20. Percentage of respondents who know the correct elements of appropriate labeling (Q 10)

A	B	C	D	E	F	G
Survey #	Patient name	Medicine name	How to take	Duration	Don't know or other	Included all items in label (columns B to E)
Total # of outlets						
Percentage (see formula) ®						I ₂₀ :

Indicator 21. Percentage of respondents who know what should be explained when dispensing medicines (Q 11)

A	B	C	D	E	F	G
Survey #	Medicine name	What it treats	When and how to take	Side effects	Don't know or other	Instruction included all items (columns B to E)
Total # of outlets						
Percentage (see formula) ®						I ₂₁ :

Packaging

The following tabulation form can be used to calculate *Indicators 22–28, which measure quality of dispensing* for the respondents who were observed dispensing medicine during the interview. Note that the total number of outlets used in this table refers **only** to the number of providers who were observed, not to the overall number of drug outlets in the survey.

Indicators 22–28. Quality of packaging, labeling, dispensing, and verbal instruction

A	B	C	D	E	F	G	H
Survey #	Q13 Dispensed medicine outside of original packaging	Q14 Dispensed loose tablets in incorrect packaging	Q15 Mixed different pills in same container	Q17 Dispensed syrup in incorrect packaging	Q18 Dispensed labeled medicine	Q19 Gave verbal instructions	Q20 Had customer repeat verbal instruction
Total # of outlets _____							
Total # of checks per column ®							
Percentage (see formula) ®	l₂₂:	l₂₃:	l₂₄:	l₂₅:	l₂₆:	l₂₇:	l₂₈:

ANNEX 6D. CHILD MALARIA PROVIDER EVALUATION STANDARDS

Indicators		Priority Level	Provider Characteristics				Evaluation Standards
			_____	_____	_____	_____	
			n = _____	n = _____	n = _____	n = _____	
Availability of appropriate medicines							
1	Percentage of outlets with a recommended specific first-line antimalarial in stock	Primary					Good: Over 80% Fair: 60–79% Poor: Under 60 %
2	Percentage of outlets with all recommended first-line antimalarials in stock	Secondary					Good: Over 75% Fair: 50–75% Poor: Under 50%
3	Percentage of outlets with a specific second/third line antimalarial in stock	Secondary					
							Good: Over 75% Fair: 50–75% Poor: Under 50%
4	Percentage of outlets with specific first-line antimalarial tablets but not syrup currently available in stock	Secondary					Good: Under 20% Fair: 20–40% Poor: Over 40%
5	Percentage of outlets that have second- or third-line medicines for malaria in children but not the first-line	Secondary					

Indicators	Priority Level	Provider Characteristics				Evaluation Standards	
		_____	_____	_____	_____		
Affordability of appropriate medicines							
6	Average cost [and range] for first-line antimalarial in form of syrup recommended in the treatment of malaria in a two-year-old child (if syrup is available)	Secondary					No particular standards. Interpretation depends on local economy.
7	Average number of working days needed to pay for treatment of malaria in a two-year-old child using first-line antimalarial syrup	Secondary					
8	Average cost [and range] for first-line antimalarial in form of tablets recommended in the treatment of malaria in a two-year-old child	Secondary					
9	Average number of working days needed to pay for treatment of malaria in a two-year-old using first-line antimalarial tablets	Secondary					
10	Average cost [and range] for second-line antimalarial in form of syrup recommended in the treatment of malaria in a two-year-old child (if syrup is available)	Secondary					
11	Average cost [and range] for second-line antimalarial in form of tablets recommended in the treatment of malaria in a two-year-old child	Secondary					
Provider's understanding of symptoms and appropriate actions							
12	Percentage of respondents who do not mention fever with convulsion or fits as key symptoms for differentiating severe malaria	Primary					Good: Under 20% Fair: 20–40% Poor: Over 40%
13	Percentage of respondents who mentioned an antimalarial for children with malaria symptoms	Primary					
14	Percentage of respondents who mentioned the first-line antimalarial for children with malaria symptoms	Secondary					

Annex 6D. Child Malaria Provider Evaluation Standards

Indicators	Priority Level	Provider Characteristics				Evaluation Standards	
		n = _____	n = _____	n = _____	n = _____		
15	Percentage of respondents who mentioned an injection for malaria symptoms in children	Primary					Good: Under 10% Fair: 10–20% Poor: Over 20%
Knowledge of appropriate treatment of reported symptoms							
16	Percentage of respondents who know the recommended medicine for malaria in children	Primary					Good: Over 85% Fair: 65–84% Poor: Under 65 %
17	Percentage of respondents who know the correct treatment duration with the recommended medicine for malaria in children	Primary					
Prescribing, dispensing/recommendation of appropriate medicines, or referral patterns							
18	Percentage of respondents who do not mention the first-line medicine as the most commonly sold or dispensed for malaria in children	Primary					Good: Under 10% Fair: 10–20% Poor: Over 20%
19	Percentage of respondents who mentioned they would refer children with symptoms of malaria						Health posts, CHWs, retail outlets and traditional healers should refer
Appropriateness of information/instructions/advice/labeling							
20	Percentage of respondents who know the correct elements of appropriate labeling	Primary					Good: Over 80% Fair: 60–80% Poor: Under 60%
21	Percentage of respondents who know what should be explained about medicines by dispensers	Primary					

Indicators	Priority Level	Provider Characteristics				Evaluation Standards	
		_____	_____	_____	_____		
Packaging							
22	Percentage of providers who dispensed medicines (pills/tablets and/or syrup) outside of manufacturers' original packaging	Primary					General information
23	Percentage of providers who dispensed loose tablets in incorrect packaging	Primary					Good: Under 10% Fair: 10–20% Poor: Over 20%
24	Percentage of providers who mixed different types of pills in the same container	Primary					
25	Percentage of providers who dispensed syrup in incorrect packaging	Primary					
26	Percentage of providers who dispensed labeled medicines	Secondary					Good: Over 80% Fair: 60–80% Poor: Under 60%
27	Percentage of providers who gave verbal instruction when dispensing medicines	Secondary					
28	Percentage of providers who confirmed customers' understanding of how to take dispensed medicines	Secondary					

ANNEX 7A. ADULT MALARIA HOUSEHOLD INDICATORS

#	Indicator	Level	Question #
Characteristics of sample			
A	Age of respondents in sample (percentage of respondents who are 15–24, 25–34, 35–44, 45–54, 55+)	Descriptive	1
B	Percentage of sample that is male/female	Descriptive	2
C	Percentage of women in sample who are pregnant	Descriptive	29
Recognizes symptoms and decides to treat			
D	Percentage of respondents who had fever/hot body, and convulsions/fits	Descriptive	3
E	Percentage of respondents who thought that their illness was very serious/somewhat serious/not serious	Descriptive	4
Seeks timely care from an appropriate source			
<i>Treatment-seeking behavior and source of treatment/medicine</i>			
1	Percentage of respondents who sought care outside the home when they had fever/hot body	Primary	5
2	Percentage of respondents who sought care outside the home when they had convulsions/fits	Primary	8
F	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with fever/hot body)	Descriptive	7
G	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with convulsions/fits)	Descriptive	10
3	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with fever/hot body) ⁴⁵	Primary	7
4	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with convulsions/fits)	Primary	10
<i>Timeliness of action</i>			
5	Percentage of respondents who had fever/hot body who report that they took an antimalarial on the same day or the next day after the fever/hot body started	Primary	3, 14, 16
6	Percentage of respondents who had convulsions/fits who sought care from a source outside the home on the same day the convulsions/fits started	Primary	9

⁴⁵ This indicator should be calculated in countries that do *not* have a strategy of promoting home management of fever (i.e., stocking in the home and using appropriately an appropriate antimalarial).

#	Indicator	Level	Question #
	Obtains appropriate medicine		
	<i>Awareness of first-line medicines</i>		
7	Percentage of respondents who have heard of the first-line antimalarial	Secondary	23
8	Percentage of respondents who have heard of the second-line antimalarial	Secondary	26
	<i>Availability of medicines</i>		
9	Percentage of respondents who had the first-line antimalarial at home ⁴⁶	Primary	25
10	Percentage of respondents who had the second-line antimalarial at home	Primary	28
11	Percentage of respondents who say they can always get the first-line antimalarial in the area where they live	Secondary	24
12	Percentage of respondents who say they can always get the second-line antimalarial in the area where they live	Secondary	27
	<i>Source of treatment/medicine</i>		
13	Percentage of all antimalarials that were already in the home or that were obtained from X source (among antimalarials used)	Primary	14, 17
H	Percentage of medicines obtained on the advice of the following: self, health worker in facility, pharmacist/person in pharmacy or drugstore, vendor in general store/market/kiosk, community health worker/TBA, neighbor/friend/relative, other	Descriptive	15
	<i>Overall medicine treatment</i>		
14	Percentage of respondents who received no medicines (among those with fever/hot body and convulsions/fits)	Primary	3, 14
15	Percentage of respondents who received any antibiotic	Primary	14
16	Percentage of respondents who received an injection	Primary	11
I	Percentage of respondents who did nothing, gave "tepid sponging," went to traditional healer, gave traditional teas/herbs, and other (among respondents with fever/hot body and convulsion/fits who received no medicine)	Descriptive	3, 13
	Administers appropriate medicine correctly		
	<i>First-line appropriate medicine is administered</i>		
17	Percentage of respondents who had fever/hot body and took first-line antimalarial	Primary	3, 14
18	Percentage of respondents who had convulsions/fits and fever and took the appropriate antimalarial	Primary	3, 14

⁴⁶ This indicator should be calculated in countries that have a strategy of promoting home management of fever (i.e., stocking in the home and using appropriately an appropriate antimalarial).

Annex 7A. Adult Malaria Household Indicators

#	Indicator	Level	Question #
	<i>Right dose/duration regimen is followed</i>		
19	Percentage of first-line antimalarials that were taken for too short, too long, and the correct amount of time	Primary	14, 19
20	Percentage of second-line antimalarials that were taken for too short, too long, and the correct amount of time	Primary	14, 19
	Health care worker/drug provider		
	<i>Provides appropriate information/instruction/advice/labeling</i>		
21	Percentage of medicines dispensed in appropriate packaging (i.e., sealed plastic package or original manufacturer's package and one type of medicine per package)	Primary	20, 21
22	Percentage of medicines that were appropriately labeled with all of the following: name of medicine, dose, frequency, and duration	Primary	22

ANNEX 7B. ADULT MALARIA HOUSEHOLD SCREENER

Site name: _____

Site type: Urban ___ Periurban___ Rural___

Name of supervisor: _____

Name of interviewer: _____

Date of interview: ___/___/___
 Day Month Year

Language of interview: Language 1___ Language 2___ Language 3___ Language 4___

READ OUT: My name is _____. I am from an organization called ___[name of organization], concerned with improving health. To develop programs to improve health, I am talking to people about what they do when they get ill. May I ask you a few questions? **IF "NO," END INTERVIEW AND THANK RESPONDENT.**

Are there any adults aged 15 years or older living in this household who have been ill with any of the following in the last two weeks?

- Fever/hot body
- Convulsions/fits

IF NO ADULT HAD ANY OF THE ABOVE, END INTERVIEW AND THANK RESPONDENT. OTHERWISE, CONTINUE

COLLECT FIRST NAME OF EACH ADULT, THEN ASK ALL OTHER QUESTIONS IN GRID FOR FIRST ADULT, THEN NEXT ADULT, ETC.

Please give me the first names of all of the adults aged 15 years or older who had fever/hot body or convulsions/ fits in the last two weeks.	How old is (NAME) ?	Is (NAME) a man or a woman?	Is (NAME) now healthy?	Was (NAME) ill for more than four weeks, that is, more than one month?
Adult 1				
(FILL IN NAME)	[] years	<input type="checkbox"/> Man <input type="checkbox"/> Woman	<input type="checkbox"/> Yes <input type="checkbox"/> No DOES NOT MEET CRITERIA; SKIP TO NEXT ADULT	<input type="checkbox"/> Yes DOES NOT MEET CRITERIA <input type="checkbox"/> No MEETS CRITERIA
Adult 2				
(FILL IN NAME)	[] years	<input type="checkbox"/> Man <input type="checkbox"/> Woman	<input type="checkbox"/> Yes <input type="checkbox"/> No DOES NOT MEET CRITERIA; SKIP TO NEXT ADULT	<input type="checkbox"/> Yes DOES NOT MEET CRITERIA <input type="checkbox"/> No MEETS CRITERIA
Adult 3				
(FILL IN NAME)	[] years	<input type="checkbox"/> Man <input type="checkbox"/> Woman	<input type="checkbox"/> Yes <input type="checkbox"/> No DOES NOT MEET CRITERIA; SKIP TO NEXT ADULT	<input type="checkbox"/> Yes DOES NOT MEET CRITERIA <input type="checkbox"/> No MEETS CRITERIA
Adult 4				
(FILL IN NAME)	[] years	<input type="checkbox"/> Man <input type="checkbox"/> Woman	<input type="checkbox"/> Yes <input type="checkbox"/> No DOES NOT MEET CRITERIA; SEE BOX BELOW	<input type="checkbox"/> Yes DOES NOT MEET CRITERIA <input type="checkbox"/> No MEETS CRITERIA

IF NONE OF THE ADULTS MEET THE CRITERIA FOR INTERVIEW, END THE INTERVIEW.

AMONG THE ADULTS WHO MEET THE CRITERIA FOR INTERVIEW, CHOOSE THE YOUNGEST.

[IF TWINS MEET THE CRITERIA FOR INTERVIEW, ASK “WHO IS THE YOUNGER?” CHOOSE THE YOUNGER TWIN.]

SAY: “Could I please speak to this person?”

IF THE PERSON YOU WILL BE INTERVIEWING IS DIFFERENT FROM THE PERSON YOU TALKED TO EARLIER, INTRODUCE YOURSELF AGAIN AND CONFIRM THE ABOVE CRITERIA.

SAY: “All of the information you give me will be kept private. Will you agree to speak with me for about 15 or 20 minutes?”

INTERVIEWER SIGN HERE IF PERSON AGREES TO PARTICIPATE _____

ANNEX 7C. ADULT MALARIA HOUSEHOLD QUESTIONNAIRE

<p>1. RECORD AGE OF ADULT YOU HAVE SELECTED TO INTERVIEW</p>	<p><input type="checkbox"/> 15–24 years <input type="checkbox"/> 25–34 years <input type="checkbox"/> 35–44 years <input type="checkbox"/> 45–54 years <input type="checkbox"/> 55+ years</p>
<p>2. RECORD SEX OF ADULT YOU HAVE SELECTED TO INTERVIEW</p>	<p><input type="checkbox"/> Male <input type="checkbox"/> Female</p>
<p>3. Just to be sure, please tell me which of the following symptoms you had in the last two weeks. READ RESPONSES OUT LOUD. TICK ALL THAT APPLY.</p>	<p><input type="checkbox"/> Fever/hot body <input type="checkbox"/> Convulsions/fits</p>
<p>4. Did you think the illness that you had this time was very serious, somewhat serious, or not serious? TICK ONE. DO NOT READ “DON’T KNOW.”</p>	<p><input type="checkbox"/> Very serious <input type="checkbox"/> Somewhat serious <input type="checkbox"/> Not serious <input type="checkbox"/> (<i>Don’t know</i>)</p>
<p>BOX 1 INSTRUCTIONS COMPLETE BOX 1 IF YOU MARKED <u>FEVER/HOT BODY</u> IN Q. 3. IF YOU DID NOT MARK <u>FEVER/HOT BODY</u>, GO TO BOX 2 INSTRUCTIONS.</p>	
<p>5. Let’s talk about your fever/hot body. When you had fever/hot body, what did you do? I will read you a list. Listen to the whole list before you respond. READ RESPONSES OUT LOUD. DO NOT READ “DON’T KNOW.”</p>	<p><input type="checkbox"/> You left it alone/watched until it got better. SKIP TO BOX 2 INSTRUCTIONS <input type="checkbox"/> You treated it at home without going anywhere for advice, treatment, or medicine. SKIP TO BOX 2 INSTRUCTIONS <input type="checkbox"/> You treated it at home and you went somewhere for advice, treatment, or medicine. <input type="checkbox"/> You only sought advice, treatment, or medicine outside the home. <input type="checkbox"/> (<i>Don’t know/don’t recall</i>) SKIP TO BOX 2 INSTRUCTIONS</p>
<p>6. How long after the fever/hot body started did you first seek advice, treatment, or medicine outside the home? READ RESPONSES OUT LOUD. DO NOT READ “DON’T KNOW.”</p>	<p><input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the fever/hot body started <input type="checkbox"/> Three or more days after the fever/hot body started <input type="checkbox"/> (<i>Don’t know</i>)</p>
<p>7. Where, outside the home, did you <i>first</i> seek advice, treatment, or medicine for your fever/hot body? I’m going to read you a list. READ RESPONSES OUT LOUD. DO NOT READ “DON’T KNOW.” TICK ONE.</p>	<p><input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health post <input type="checkbox"/> Government health center or hospital <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> (<i>Don’t know</i>)</p>

BOX 2 INSTRUCTIONS COMPLETE BOX 2 IF YOU MARKED <u>CONVULSIONS/FITS</u> IN Q. 3. IF YOU DID NOT MARK <u>CONVULSIONS/FITS</u>, GO TO Q. 11.	
<p>8. Let's talk about your convulsions/fits. When you had convulsions/fits, what did you do? I will read you a list. Listen to the whole list before you respond. READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW."</p>	<p><input type="checkbox"/> You left it alone/watched until it got better. SKIP TO Q. 11</p> <p><input type="checkbox"/> You treated it at home without going anywhere for advice, treatment, or medicine. SKIP TO Q. 11</p> <p><input type="checkbox"/> You treated it at home and you went somewhere for advice, treatment, or medicine.</p> <p><input type="checkbox"/> You only sought advice, treatment, or medicine outside the home.</p> <p><input type="checkbox"/> (Don't know/don't recall) SKIP TO Q. 11</p>
<p>9. How long after the convulsions/fits started did you first seek advice, treatment, or medicine outside the home? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW."</p>	<p><input type="checkbox"/> Same day</p> <p><input type="checkbox"/> Next day</p> <p><input type="checkbox"/> Two days after the convulsions/fits started</p> <p><input type="checkbox"/> Three or more days after the convulsions/fits started</p> <p><input type="checkbox"/> (Don't know)</p>
<p>10. Where, outside the home, did you <i>first</i> seek advice, treatment, or medicine for your convulsions/fits? I'm going to read you a list. READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ONE.</p>	<p><input type="checkbox"/> Traditional healer</p> <p><input type="checkbox"/> Government health post</p> <p><input type="checkbox"/> Government health center or hospital</p> <p><input type="checkbox"/> Private or mission health facility</p> <p><input type="checkbox"/> Pharmacy/drugstore</p> <p><input type="checkbox"/> General shop/store</p> <p><input type="checkbox"/> Market</p> <p><input type="checkbox"/> Community health worker/TBA</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> (Don't know)</p>

SAY: Now we're going to talk about medicines.	
<p>11. During your illness, did you receive any injections?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
<p>12. During your illness, did you take any Western or modern medicine?</p>	<p><input type="checkbox"/> Yes SKIP TO Q. 14A</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> (Don't know) SKIP TO Q. 14A</p>
<p>13. What, if anything, did you do during your illness? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.</p>	<p><input type="checkbox"/> Nothing/left it alone</p> <p><input type="checkbox"/> Patting or wiping the skin with a wet or damp cloth or other material</p> <p><input type="checkbox"/> Went to traditional healer</p> <p><input type="checkbox"/> Gave traditional teas or herbs</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> (Don't know)</p>

IF ANSWERED Q. 13, GO TO Q. 23.

<p>14A. Can you tell me the names or show me the medicines or packaging from the medicines that you took during your illness? PROBE ONCE, "ANYTHING ELSE?"</p> <p>WRITE DOWN IN THE LEFT-HAND COLUMN BELOW THE NAMES OF MEDICINES AS THEY ARE WRITTEN ON THE MEDICINE OR PACKAGING OR AS THEY ARE TOLD TO YOU. IF YOU CANNOT TELL THE NAME OF A PARTICULAR MEDICINE, CHECK "DON'T KNOW" IN THE APPROPRIATE BOX. IF YOU CANNOT OBTAIN THE NAME OF ANY MEDICINE, TICK "UNABLE TO OBTAIN NAME OF ANY MEDICINE."</p> <p>FOR ALL MEDICINES OR PACKAGING THAT WERE SHOWN TO YOU, TICK "SHOWN" IN THE RIGHT-HAND COLUMN BELOW. IF A PARTICULAR MEDICINE WAS NOT SHOWN TO YOU, LEAVE THE CORRESPONDING "SHOWN" BOX BLANK.</p>		<p>14B. Were there any other medicines that you took during your illness?</p>	<p>14C. How many medicines whose names you cannot recall or that you no longer have, did you take during your illness?</p>
<p><input type="checkbox"/> Name of medicine 1 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 2 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 3 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 4 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 5 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Name of medicine 6 _____ <input type="checkbox"/> Don't know</p> <p><input type="checkbox"/> Unable to obtain name of any medicine SKIP TO Q. 23</p>	<p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p> <p><input type="checkbox"/> Shown?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No DO NOT READ Q. 14C. FOLLOW INSTRUCTIONS BELOW.</p> <p><input type="checkbox"/> Don't know DO NOT READ Q. 14C. FOLLOW INSTRUCTIONS BELOW.</p>	<p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 3</p> <p><input type="checkbox"/> 4</p> <p><input type="checkbox"/> 5</p> <p><input type="checkbox"/> 6</p> <p><input type="checkbox"/> More than six</p> <p><input type="checkbox"/> Don't know</p>
<p>IF NO MEDICINES WERE SHOWN OR MENTIONED IN Q. 14A, GO TO Q. 23.</p>			

COLLECT THE FOLLOWING INFORMATION FOR ALL MEDICINES THAT WERE NAMED IN Q. 14A. DO NOT COLLECT INFORMATION FOR MEDICINES WHOSE NAMES YOU DO NOT HAVE. ASK QUESTIONS 15A THROUGH 22A FOR THE FIRST MEDICINE. WHEN YOU HAVE FINISHED ASKING ABOUT ONE MEDICINE, ASK QUESTIONS 15B THROUGH 22B FOR THE NEXT ONE, AND SO ON, UNTIL ALL QUESTIONS HAVE BEEN ASKED FOR ALL MEDICINES.

SAY: Let's talk about _____ [WRITE DOWN (BELOW) THE NUMBER AND NAME OF MEDICINE FROM Q. 14A], the first medicine you showed me/mentioned, the _____ (POINT TO PACKET, MENTION NAME of first medicine or description of first medicine).

MEDICINE NUMBER: _____ **MEDICINE NAME:** _____

<p>15A. Who prescribed or advised that you take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>16A. How long after the illness started did you first take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>17A. Where did you get (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>18A. What was the name of the place where you (originally) got (NAME OF MEDICINE)/this medicine?</p>	<p>19A. For how many days did you take (NAME OF MEDICINE)/this medicine?</p>
<p><input type="checkbox"/> No one or you decided yourself</p> <p><input type="checkbox"/> Health worker in facility</p> <p><input type="checkbox"/> Pharmacy/person in pharmacy/drugstore</p> <p><input type="checkbox"/> Person in general shop/store/market/kiosk</p> <p><input type="checkbox"/> Community health worker/TBA</p> <p><input type="checkbox"/> Friend/neighbor/relative</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> (Don't know) (DO NOT READ)</p>	<p><input type="checkbox"/> Same day</p> <p><input type="checkbox"/> Next day</p> <p><input type="checkbox"/> Two days after the illness started</p> <p><input type="checkbox"/> Three or more days after the illness started</p> <p><input type="checkbox"/> (Don't know) (DO NOT READ)</p>	<p><input type="checkbox"/> Was already in house</p> <p><input type="checkbox"/> Traditional healer</p> <p><input type="checkbox"/> Government health facility</p> <p><input type="checkbox"/> Private or mission health facility</p> <p><input type="checkbox"/> Pharmacy/drugstore</p> <p><input type="checkbox"/> General shop/store</p> <p><input type="checkbox"/> Market</p> <p><input type="checkbox"/> CHW/TBA</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> (Don't know) (DO NOT READ) SKIP TO Q. 19A</p>	<p>Place: _____</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> Don't know</p>	<p>[] []</p> <p>days</p> <p><input type="checkbox"/> Don't know</p>
<p>20A. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?</p>		<p>21A. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK:</p> <p>Was (NAME OF MEDICINE)/this medicine in a package by itself or were other medicines included in the same package?</p>		<p>22A. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.</p>
<p><input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 22A</p> <p><input type="checkbox"/> Loose tablets/capsules in sealed plastic package</p> <p><input type="checkbox"/> Some other way SKIP TO Q. 22A</p> <p><input type="checkbox"/> Don't know SKIP TO Q. 22A</p>		<p><input type="checkbox"/> Packaged by itself</p> <p><input type="checkbox"/> With other medicines</p> <p><input type="checkbox"/> Don't know</p>		<p><input type="checkbox"/> The medicine's name</p> <p><input type="checkbox"/> The dose or how much to take each time the medicine is taken</p> <p><input type="checkbox"/> The number of times each day to take the medicine</p> <p><input type="checkbox"/> The number of days to take the medicine</p> <p><input type="checkbox"/> (Don't know)</p>

Annex 7C. Adult Malaria Household Questionnaire

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
15B. Who prescribed or advised that you take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	16B. How long after the illness started did you first take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	17B. Where did you get (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	18B. What was the name of the place where you (originally) got (NAME OF MEDICINE) /this medicine?	19B. For how many days did you take (NAME OF MEDICINE) /this medicine?
<input type="checkbox"/> No one or you decided yourself <input type="checkbox"/> Health worker in facility <input type="checkbox"/> Pharmacy/person in pharmacy/drugstore <input type="checkbox"/> Person in general shop/store/market/kiosk <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Friend/neighbor/relative <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the illness started <input type="checkbox"/> Three or more days after the illness started <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Was already in house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> CHW/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ) SKIP TO Q. 19B	Place: _____ _____ <input type="checkbox"/> Don't know	[__ __] days <input type="checkbox"/> Don't know
20B. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?		21B. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK: Was (NAME OF MEDICINE) /this medicine in a package by itself or were other medicines included in the same package?		22B. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.
<input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 22B <input type="checkbox"/> Loose tablets/capsules in sealed plastic package <input type="checkbox"/> Some other way SKIP TO Q. 22B <input type="checkbox"/> Don't know SKIP TO Q. 22B		<input type="checkbox"/> Packaged by itself <input type="checkbox"/> With other medicines <input type="checkbox"/> Don't know		<input type="checkbox"/> The medicine's name <input type="checkbox"/> The dose or how much to take each time the medicine is taken <input type="checkbox"/> The number of times each day to take the medicine <input type="checkbox"/> The number of days to take the medicine <input type="checkbox"/> <i>(Don't know)</i>

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
<p>15C. Who prescribed or advised that you take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>16C. How long after the illness started did you first take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>17C. Where did you get (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>18C. What was the name of the place where you (originally) got (NAME OF MEDICINE)/this medicine?</p>	<p>19C. For how many days did you take (NAME OF MEDICINE)/this medicine?</p>
<p><input type="checkbox"/> No one or you decided yourself</p> <p><input type="checkbox"/> Health worker in facility</p> <p><input type="checkbox"/> Pharmacy/person in pharmacy/drugstore</p> <p><input type="checkbox"/> Person in general shop/store/market/kiosk</p> <p><input type="checkbox"/> Community health worker/TBA</p> <p><input type="checkbox"/> Friend/neighbor/relative</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> (Don't know) (DO NOT READ)</p>	<p><input type="checkbox"/> Same day</p> <p><input type="checkbox"/> Next day</p> <p><input type="checkbox"/> Two days after the illness started</p> <p><input type="checkbox"/> Three or more days after the illness started</p> <p><input type="checkbox"/> (Don't know) (DO NOT READ)</p>	<p><input type="checkbox"/> Was already in house</p> <p><input type="checkbox"/> Traditional healer</p> <p><input type="checkbox"/> Government health facility</p> <p><input type="checkbox"/> Private or mission health facility</p> <p><input type="checkbox"/> Pharmacy/drugstore</p> <p><input type="checkbox"/> General shop/store</p> <p><input type="checkbox"/> Market</p> <p><input type="checkbox"/> CHW/TBA</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> (Don't know) (DO NOT READ) SKIP TO Q. 19C</p>	<p>Place: _____</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> Don't know</p>	<p>[][]</p> <p>days</p> <p><input type="checkbox"/> Don't know</p>
<p>20C. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?</p>		<p>21C. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK:</p> <p>Was (NAME OF MEDICINE)/this medicine in a package by itself or were other medicines included in the same package?</p>		<p>22C. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.</p>
<p><input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 22C</p> <p><input type="checkbox"/> Loose tablets/capsules in sealed plastic package</p> <p><input type="checkbox"/> Some other way SKIP TO Q. 22C</p> <p><input type="checkbox"/> Don't know SKIP TO Q. 22C</p>		<p><input type="checkbox"/> Packaged by itself</p> <p><input type="checkbox"/> With other medicines</p> <p><input type="checkbox"/> Don't know</p>		<p><input type="checkbox"/> The medicine's name</p> <p><input type="checkbox"/> The dose or how much to take each time the medicine is taken</p> <p><input type="checkbox"/> The number of times each day to take the medicine</p> <p><input type="checkbox"/> The number of days to take the medicine</p> <p><input type="checkbox"/> (Don't know)</p>

Annex 7C. Adult Malaria Household Questionnaire

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
15D. Who prescribed or advised that you take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	16D. How long after the illness started did you first take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	17D. Where did you get (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	18D. What was the name of the place where you (originally) got (NAME OF MEDICINE) /this medicine?	19D. For how many days did you take (NAME OF MEDICINE) /this medicine?
<input type="checkbox"/> No one or you decided yourself <input type="checkbox"/> Health worker in facility <input type="checkbox"/> Pharmacy/person in pharmacy/drugstore <input type="checkbox"/> Person in general shop/store/market/kiosk <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Friend/neighbor/relative <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> (Don't know) (DO NOT READ)	<input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the illness started <input type="checkbox"/> Three or more days after the illness started <input type="checkbox"/> (Don't know) (DO NOT READ)	<input type="checkbox"/> Was already in house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> CHW/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> (Don't know) (DO NOT READ) SKIP TO Q. 19D	Place: _____ _____ <input type="checkbox"/> Don't know	[__ __] days <input type="checkbox"/> Don't know
20D. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?	21D. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK: Was (NAME OF MEDICINE) /this medicine in a package by itself or were other medicines included in the same package?	22D. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.		
<input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 22D <input type="checkbox"/> Loose tablets/capsules in sealed plastic package <input type="checkbox"/> Some other way SKIP TO Q. 22D <input type="checkbox"/> Don't know SKIP TO Q. 22D	<input type="checkbox"/> Packaged by itself <input type="checkbox"/> With other medicines <input type="checkbox"/> Don't know	<input type="checkbox"/> The medicine's name <input type="checkbox"/> The dose or how much to take each time the medicine is taken <input type="checkbox"/> The number of times each day to take the medicine <input type="checkbox"/> The number of days to take the medicine <input type="checkbox"/> (Don't know)		

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
15E. Who prescribed or advised that you take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	16E. How long after the illness started did you first take (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	17E. Where did you get (NAME OF MEDICINE) /this medicine? READ RESPONSES OUT LOUD. TICK ONE.	18E. What was the name of the place where you (originally) got (NAME OF MEDICINE) /this medicine?	19E. For how many days did you take (NAME OF MEDICINE) /this medicine?
<input type="checkbox"/> No one or you decided yourself <input type="checkbox"/> Health worker in facility <input type="checkbox"/> Pharmacy/person in pharmacy/drugstore <input type="checkbox"/> Person in general shop/store/market/kiosk <input type="checkbox"/> Community health worker/TBA <input type="checkbox"/> Friend/neighbor/relative <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Same day <input type="checkbox"/> Next day <input type="checkbox"/> Two days after the illness started <input type="checkbox"/> Three or more days after the illness started <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ)	<input type="checkbox"/> Was already in house <input type="checkbox"/> Traditional healer <input type="checkbox"/> Government health facility <input type="checkbox"/> Private or mission health facility <input type="checkbox"/> Pharmacy/drugstore <input type="checkbox"/> General shop/store <input type="checkbox"/> Market <input type="checkbox"/> CHW/TBA <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> <i>(Don't know)</i> (DO NOT READ) SKIP TO Q. 19E	Place: _____ _____ <input type="checkbox"/> Don't know	[__ __] days <input type="checkbox"/> Don't know
20E. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?	21E. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK: Was (NAME OF MEDICINE) /this medicine in a package by itself or were other medicines included in the same package?		22E. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK: Did (NAME OF MEDICINE) /this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.	
<input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 22E <input type="checkbox"/> Loose tablets/capsules in sealed plastic package <input type="checkbox"/> Some other way SKIP TO Q. 22E <input type="checkbox"/> Don't know SKIP TO Q. 22E	<input type="checkbox"/> Packaged by itself <input type="checkbox"/> With other medicines <input type="checkbox"/> Don't know		<input type="checkbox"/> The medicine's name <input type="checkbox"/> The dose or how much to take each time the medicine is taken <input type="checkbox"/> The number of times each day to take the medicine <input type="checkbox"/> The number of days to take the medicine <input type="checkbox"/> <i>(Don't know)</i>	

Annex 7C. Adult Malaria Household Questionnaire

MEDICINE NUMBER: _____ MEDICINE NAME: _____				
<p>15F. Who prescribed or advised that you take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>16F. How long after the illness started did you first take (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>17F. Where did you get (NAME OF MEDICINE)/this medicine? READ RESPONSES OUT LOUD. TICK ONE.</p>	<p>18F. What was the name of the place where you (originally) got (NAME OF MEDICINE)/this medicine?</p>	<p>19F. For how many days did you take (NAME OF MEDICINE)/this medicine?</p>
<p><input type="checkbox"/> No one or you decided yourself</p> <p><input type="checkbox"/> Health worker in facility</p> <p><input type="checkbox"/> Pharmacy/person in pharmacy/drugstore</p> <p><input type="checkbox"/> Person in general shop/store/market/kiosk</p> <p><input type="checkbox"/> Community health worker/TBA</p> <p><input type="checkbox"/> Friend/neighbor/relative</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> (Don't know) (DO NOT READ)</p>	<p><input type="checkbox"/> Same day</p> <p><input type="checkbox"/> Next day</p> <p><input type="checkbox"/> Two days after the illness started</p> <p><input type="checkbox"/> Three or more days after the illness started</p> <p><input type="checkbox"/> (Don't know) (DO NOT READ)</p>	<p><input type="checkbox"/> Was already in house</p> <p><input type="checkbox"/> Traditional healer</p> <p><input type="checkbox"/> Government health facility</p> <p><input type="checkbox"/> Private or mission health facility</p> <p><input type="checkbox"/> Pharmacy/drugstore</p> <p><input type="checkbox"/> General shop/store</p> <p><input type="checkbox"/> Market</p> <p><input type="checkbox"/> CHW/TBA</p> <p><input type="checkbox"/> Other (specify) _____</p> <p><input type="checkbox"/> (Don't know) (DO NOT READ) SKIP TO Q. 19F</p>	<p>Place: _____</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> Don't know</p>	<p>[__ __]</p> <p>days</p> <p><input type="checkbox"/> Don't know</p>
<p>20F. WRITE DOWN HOW MEDICINE IS PACKAGED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine come in the original manufacturer's packaging or as tablets/capsules in a sealed plastic package, or did it come some other way?</p>	<p>21F. WRITE DOWN WHETHER MEDICINE WAS PACKAGED ALONE OR CAME WITH OTHER MEDICINES IN SAME PACKAGE. IF YOU CANNOT TELL, ASK:</p> <p>Was (NAME OF MEDICINE)/this medicine in a package by itself or were other medicines included in the same package?</p>		<p>22F. WRITE DOWN HOW MEDICINE WAS LABELED. IF YOU CANNOT TELL, ASK:</p> <p>Did (NAME OF MEDICINE)/this medicine have any of the following information on it? READ RESPONSES OUT LOUD. DO NOT READ "DON'T KNOW." TICK ALL THAT APPLY.</p>	
<p><input type="checkbox"/> In original manufacturer's packaging SKIP TO Q. 22F</p> <p><input type="checkbox"/> Loose tablets/capsules in sealed plastic package</p> <p><input type="checkbox"/> Some other way SKIP TO Q. 22F</p> <p><input type="checkbox"/> Don't know SKIP TO Q. 22F</p>	<p><input type="checkbox"/> Packaged by itself</p> <p><input type="checkbox"/> With other medicines</p> <p><input type="checkbox"/> Don't know</p>		<p><input type="checkbox"/> The medicine's name</p> <p><input type="checkbox"/> The dose or how much to take each time the medicine is taken</p> <p><input type="checkbox"/> The number of times each day to take the medicine</p> <p><input type="checkbox"/> The number of days to take the medicine</p> <p><input type="checkbox"/> (Don't know)</p>	

SAY: Now, I am finished asking about your illness or medicines taken and I have just a few more questions.

23. Have you ever heard of a medicine called (NAME/NAMES FOR FIRST-LINE ANTIMALARIAL) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO Q. 26 <input type="checkbox"/> Don't know SKIP TO Q. 26
24. Can you always get (NAME/NAMES FOR FIRST-LINE ANTIMALARIAL) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
25. Do you have any (NAME/NAMES FOR FIRST-LINE ANTIMALARIAL) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
26. Have you ever heard of a medicine called (NAME/NAMES FOR SECOND-LINE ANTIMALARIAL) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO INSTRUCTIONS BEFORE Q 29 <input type="checkbox"/> Don't know SKIP TO INSTRUCTIONS BEFORE Q 29
27. Can you always GET (NAME/NAMES OF SECOND-LINE ANTIMALARIAL) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
28. Do you have any (NAME/NAMES OF SECOND-LINE ANTIMALARIAL) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
IF PERSON BEING INTERVIEWED IS MALE, END INTERVIEW. OTHERWISE, CONTINUE.	
29. Could you please tell me if you are currently pregnant?	<input type="checkbox"/> Yes END INTERVIEW <input type="checkbox"/> No END INTERVIEW

SAY: We are finished with our discussion. Thank you for talking with me. I learned a lot from talking with you and the information you gave me is very helpful. Do you have any questions for me?

End time of interview: ____/____

ANNEX 7D. ADULT MALARIA HOUSEHOLD ANALYSIS TABLES

Characteristics of Sample

Indicator A. Age of respondents in sample (percentage of respondents who are 15–24, 25–34, 35–44, 45–55, 55+) (Q1)

Response Category	Response Count	Percentage
15–24 years		%
25–34 years		%
35–44 years		%
45–54 years		%
55+ years		%
Total		%
<i>Missing</i>		

Indicator B. Percentage in sample who are male/female (Q2)

Response Category	Response Count	Percentage
Male		%
Female		%
Total		%
<i>Missing</i>		

Indicator C. Percentage of women in sample who are pregnant (Q29)

Response Category	Response Count	Percentage
Pregnant		%
Not pregnant		%
Total		%
<i>Missing</i>		

Recognizes Symptoms and Decides to Treat

Indicator D. Percentage of respondents who had fever/hot body and convulsions/fits (Q3)

Response Category	Response Count	Percentage
Fever/hot body		%
Convulsions/fits		%
Total		%
<i>Missing</i>		

Indicator E. Percentage of respondents who thought their illness was very serious, somewhat serious, not serious (Q4)

Response Category	Response Count	Percentage
Very serious		%
Somewhat serious		%
Not serious		%
Don't know		%
Total		%
<i>Missing</i>		

Seeks Timely Care from an Appropriate Source

Indicator 1. Percentage of respondents who sought care outside the home when they had fever/hot body (Q5)

Response Category	Response Count	Percentage	Combined Percentage
Left it alone/watched		%	
Treated at home		%	
Treated at home and went somewhere for advice, treatment, or medicine		%	%
Only sought advice, treatment, care outside the home		%	
Don't know		%	
Total		%	
<i>Missing</i>			

Indicator 2. Percentage of respondents who sought care outside the home when they had convulsions/fits (Q8)

Response Category	Response Count	Percentage	Combined Percentage
Left it alone/watched		%	
Treated at home		%	
Treated at home and went somewhere for advice, treatment, or medicine		%	%
Only sought advice, treatment, care outside the home		%	
Don't know		%	
Total		%	
<i>Missing</i>			

Indicator F. Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with fever/hot body) (Q7)

Response Category	Response Count	Percentage
Traditional healer		%
Government health post		%
Government health center or hospital		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator G. Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with convulsions/fits) (Q10)

Response Category	Response Count	Percentage
Traditional healer		%
Government health post		%
Government health center or hospital		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 3. Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with fever/hot body) (Q7)⁴⁷

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 4. Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with convulsions/fits) (Q10)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 5. Percentage of respondents who had fever/hot body who report that they took an antimalarial on the same day or the next day after the fever/hot body started (Q3, 14, 16)

Response Category	Response Count	Percentage	Combined Percentage
Same day		%	%
Next day		%	
Two days after the fever/hot body started		%	
Three or more days after the fever/hot body started		%	
Don't know		%	
Total		%	
<i>Missing</i>			

⁴⁷ This indicator should be calculated in countries that do *not* have a strategy of promoting home management of fever (i.e., stocking in the home and appropriately using an appropriate antimalarial).

Indicator 6. Percentage of respondents who had convulsions/fits who sought care from a source outside the home on the same day the convulsions/fits started (Q9)

Response Category	Response Count	Percentage
Same day		%
Next day		%
Two days after the convulsions/fits started		%
Three or more days after the convulsions/fits body started		%
Don't know		%
Total		%
<i>Missing</i>		

Obtains Appropriate Medicine**Indicator 7. Percentage of respondents who have heard of first-line antimalarial (Q23)**

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 8. Percentage of respondents who have heard of second-line antimalarial (Q26)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator 9. Percentage of respondents who had the first-line antimalarial at home (Q25)⁴⁸

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total from Indicator 7		%

Note: Use TOTAL from Indicator 7 as base; do NOT add up those in rows above.

⁴⁸ This indicator should be calculated in countries that have a strategy of promoting home management of fever (i.e., stocking in the home and appropriately using an appropriate antimalarial).

Indicator 10. Percentage of respondents who had second-line antimalarial at home (Q28)

Response Category	Response Count	Percentage
Yes		%
No		%
Don't know		%
Total from Indicator 8		%

Note: Use TOTAL from Indicator 8 as base; do NOT add up those in rows above.

Indicator 11. Percentage of respondents who say they can always get first-line antimalarial in the area where they live (Q24)

Response Category	Response Count	Percentage
Always		%
Sometimes		%
Never		%
Don't know		%
Total from Indicator 7		%

Note: Use TOTAL from Indicator 7 as base; do NOT add up those in rows above.

Indicator 12. Percentage of respondents who say they can always get second-line antimalarial in the area where they live (Q27)

Response Category	Response Count	Percentage
Always		%
Sometimes		%
Never		%
Don't know		%
Total from Indicator 8		%
<i>Missing</i>		

Note: Use TOTAL from Indicator 8 as base; do NOT add up those in rows above.

Indicator 13. Percentage of all antimalarials that were already in the home or were obtained from X source (among all antimalarials used) (Q14, 17)

Response Category	Response Count	Percentage
Already in home		%
Traditional healer		%
Government health facility		%
Private or mission health facility		%
Pharmacy/drugstore		%
General shop/store		%
Market		%
Community health worker/TBA		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Indicator H. Percentage of medicines obtained on the advice of the following: self, health worker in facility, pharmacist/person in pharmacy or drugstore, vendor in general store/market/kiosk, community health worker/TBA, neighbor/friend/relative, other (Q15)

Response Category	Response Count	Percentage
Self/no one		%
Health worker in facility		%
Pharmacist/person in pharmacy/drugstore/shop		%
Person in general store/market/kiosk		%
Community health worker/TBA		%
Friend/neighbor/relative		%
Other 1 _____		%
Other 2 _____		%
Don't know		%
Total		%
<i>Missing</i>		

**Indicator 14. Percentage of respondents who received no medicines
(among those with fever/hot body and convulsions/fits) (Q3, 14)**

Response Category	Response Count	Percentage
Yes, received NO medicines		%
No, received some medicine(s)		%
Total		%
<i>Missing</i>		

**Indicator 15. Percentage of respondents who received any antibiotic
(among entire sample) (Q14)**

Response Category	Response Count	Percentage
Yes		%
No		%
Total sample		%
<i>Missing</i>		

**Indicator 16. Percentage of respondents who received an injection
(among entire sample) (Q11)**

Response Category	Response Count	Percentage
Yes		%
No		%
Total sample		%
<i>Missing</i>		

Indicator I. Percentage of respondents who did nothing, gave “tepid sponging,” went to traditional healer, gave traditional teas/herbs, and other (among respondents with fever/hot body and convulsion/fits who received no medicine) (Q 3, 13)

Response Category	Response Count	Percentage
Nothing/left it alone		%
Patting or wiping the skin with a wet or damp cloth or other material		%
Went to traditional healer		%
Gave traditional teas or herbs		%
Other 1 _____		%
Other 2 _____		%
Other 3 _____		%
Don't know		%
Total		%
<i>Missing</i>		

Administers Appropriate Medicine Correctly**Indicator 17. Percentage of respondents who had fever/hot body and took first-line antimalarial (Q3, 14)**

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Indicator 18. Percentage of respondents who had convulsions/fits and fever and took appropriate antimalarial (Q3, 14)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Indicator 19. Percentage of first-line antimalarials that were taken for too short, too long, and correct amount of time (Q14, 19)

Response Category	Response Count	Percentage
Correct		%
Too short		%
Too long		%
Total		%
<i>Missing</i>		

Note: Base is total cases where first-line antimalarial was taken.

Indicator 20. Percentage of second-line antimalarials that were taken for too short, too long, and correct amount of time (Q14, 19)

Response Category	Response Count	Percentage
Correct		%
Too short		%
Too long		%
Total		%
<i>Missing</i>		

Note: Base is total cases where second-line antimalarial was taken.

Health Care Worker/Drug Provider

Indicator 21. Percentage of medicines dispensed in appropriate packaging (i.e., sealed plastic package or original manufacturer’s package with one type of medicine per pack) (Q20, 21)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Note: Base is all medicines .

Indicator 22. Percentage of medicines that were appropriately labeled with all of the following: name of medicine, dose, frequency, and duration (Q22)

Response Category	Response Count	Percentage
Yes		%
No		%
Total		%
<i>Missing</i>		

Note: Base is all medicines .

ANNEX 7E. ADULT MALARIA HOUSEHOLD INSTRUMENT ADAPTATION

ADAPTATION OF HOUSEHOLD MALARIA INSTRUMENTS FOR AREAS WHERE COMBINATION THERAPY IS THE RECOMMENDED FIRST-LINE TREATMENT

23. Have you ever heard of a medicine called (NAME/NAMES FOR COMBINATION THERAPY) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO Q. 25B <input type="checkbox"/> Don't know SKIP TO Q. 25B
24. Can you always get (NAME/NAMES FOR COMBINATION THERAPY) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
25. Do you have any (NAME/NAMES FOR COMBINATION THERAPY) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
25A. Does name of the combination include one, two or more than two kinds of drug?	<input type="checkbox"/> One <input type="checkbox"/> Two <input type="checkbox"/> More than two <input type="checkbox"/> Don't know
25B. Have you ever heard of a medicine called (NAME/NAMES FOR FIRST COMPONENT OF COMBINATION THERAPY) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO Q. 25F <input type="checkbox"/> Don't know SKIP TO Q. 25F
25C. Can you always get (NAME/NAMES FOR FIRST COMPONENT OF COMBINATION THERAPY) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
25D. Do you have any (NAME/NAMES FOR FIRST COMPONENT OF COMBINATION THERAPY) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
25E. Is (NAME/NAMES FOR FIRST COMPONENT OF COMBINATION THERAPY) sufficient to treat fever/hot body by itself, or does it have to be used with another medicine?	<input type="checkbox"/> Sufficient alone <input type="checkbox"/> Has to be used with another medicine <input type="checkbox"/> Don't know
25F. Have you ever heard of a medicine called (NAME/NAMES FOR SECOND COMPONENT OF COMBINATION THERAPY) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No SKIP TO Q. 26 <input type="checkbox"/> Don't know SKIP TO Q. 26
25G. Can you always get (NAME/NAMES FOR SECOND COMPONENT OF COMBINATION THERAPY) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
25H. Do you have any (NAME/NAMES FOR SECOND COMPONENT OF COMBINATION THERAPY) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know

25l. Is (NAME/NAMES FOR SECOND COMPONENT OF COMBINATION THERAPY) sufficient to treat fever/hot body by itself, or does it have to be used with another medicine?	<input type="checkbox"/> Sufficient alone <input type="checkbox"/> Has to be used with another medicine <input type="checkbox"/> Don't know
26. Have you ever heard of a medicine called (NAME/NAMES FOR SECOND-LINE ANTIMALARIAL) ?	<input type="checkbox"/> Yes <input type="checkbox"/> No END INTERVIEW <input type="checkbox"/> Don't know END INTERVIEW
27. Can you always (NAME/NAMES FOR SECOND-LINE ANTIMALARIAL) , sometimes get it, or never get it in the area where you live?	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never <input type="checkbox"/> Don't know
28. Do you have any (NAME/NAMES FOR SECOND-LINE ANTIMALARIAL) at home now?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know

SAY: We are finished with our discussion. Thank you for talking with me. I learned a lot from talking with you and the information you gave me is very helpful. Do you have any questions for me?

End time of interview: ____/____

ANNEX 7F. ADULT MALARIA HOUSEHOLD EVALUATION STANDARDS

#	Indicator	Results for District X N =	Evaluation Standards (should be adapted to the specific district situations)
Characteristics of sample			
A	Age of respondents in sample (percentage who are 15–24 years, 25–34 years, 35–44 years, 45–55 years, 55+ years)		NA ⁴⁹
B	Percentage of respondents in sample who are male/female		NA
C	Percentage of women in sample who are pregnant		
Recognizes symptoms and decides to treat			
D	Percentage of respondents who had fever/hot body and convulsions/fits		NA
E	Percentage of respondents who thought that their illness was very serious/somewhat serious/not serious		NA
Seeks timely care from an appropriate source			
	<i>Treatment-seeking behavior and source of treatment/medicine</i>		
1	Percentage of respondents who sought care outside the home when they had fever/hot body		Good: Over 80% Fair: 50–79% Poor: Under 50% (the standard will vary depending on the STG regarding fever management at home)
2	Percentage of respondents who sought care outside the home when they had convulsions/fits		Good: Over 80% Fair: 50–79% Poor: Under 50%
F	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with fever/hot body)		NA
G	Percentage of respondents going outside the home who went to X source category as the first source of care (among respondents with convulsions/fits)		NA
3	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with fever/hot body) ⁵⁰		Good: Over 80% Fair: 50–79% Poor: Under 50%
4	Percentage of respondents going outside the home who went to an appropriate source as the first source of care (among respondents with convulsions/fits)		Good: Over 80% Fair: 50–79% Poor: Under 50%

⁴⁹ NA = Not applicable.

⁵⁰ This indicator should be calculated in countries that do *not* have a strategy of promoting home management of fever (i.e., stocking in the home and appropriately using an appropriate antimalarial).

#	Indicator	Results for District X N =	Evaluation Standards (should be adapted to the specific district situations)
	<i>Timeliness of action</i>		
5	Percentage of respondents who had fever/hot body who report that they took an antimalarial on the same day or the next day after the fever/hot body started		Good: Over 80% Fair: 50–79% Poor: Under 50%
6	Percentage of respondents who had convulsions/fits who sought care from a source outside the home on the same day the convulsions/fits started		Good: Over 80% Fair: 50–79% Poor: Under 50%
Obtains appropriate medicine			
	<i>Awareness of first-line medicines</i>		
7	Percentage of respondents who have heard of the first-line antimalarial		Good: Over 80% Fair: 50–79% Poor: Under 50%
8	Percentage of respondents who have heard of the second-line antimalarial		Good: Over 80% Fair: 50–79% Poor: Under 50%
	<i>Availability of medicines</i>		
9	Percentage of respondents who had the first-line antimalarial at home ⁵¹		Good: Over 80% Fair: 50–79% Poor: Under 50%
10	Percentage of respondents who had the second-line antimalarial at home		Good: Over 80% Fair: 50–79% Poor: Under 50%
11	Percentage of respondents who say they can always get the first-line antimalarial in the area where they live		Good: Over 80% Fair: 50–79% Poor: Under 50%
12	Percentage of respondents who say they can always get the second-line antimalarial in the area where they live		Good: Over 80% Fair: 50–79% Poor: Under 50%
	<i>Source of treatment/medicine</i>		
13	Percentage of all antimalarials that were already in the home or were obtained from X source (among antimalarials used)		NA
H	Percentage of medicines obtained on the advice of the following: self, health worker in facility, pharmacist/person in pharmacy or drugstore, vendor in general store/market/kiosk, community health worker/TBA, neighbor/friend/relative, other		NA

⁵¹ This indicator should be calculated in countries which have a strategy of promoting home management of fever (i.e., stocking in the home and appropriately using an appropriate antimalarial).

#	Indicator	Results for District X N =	Evaluation Standards (should be adapted to the specific district situations)
	<i>Overall medicine treatment</i>		
14	Percentage of respondents who received no medicine (among those with fever/hot body and convulsions/fits)		Good: Under 10% Fair: 10–15% Poor: Over 50%
15	Percentage of respondents who received any antibiotic		NA
16	Percentage of respondents who received an injection		NA
1	Percentage of respondents who did nothing, gave “tepid sponging,” went to traditional healer, gave traditional teas/herbs, and other (among those with fever/hot body and convulsion/fits who received no medicine)		NA
Administers appropriate medicine correctly			
	<i>First-line appropriate medicine is administered</i>		
17	Percentage of respondents who had fever/hot body and took first-line antimalarial		Good: Over 80% Fair: 50–79% Poor: Under 50%
18	Percentage of respondents who had convulsions/fits and fever and took the appropriate antimalarial		Good: Over 80% Fair: 50–79% Poor: Under 50%
	<i>Right dose/duration regimen is followed</i>		
19	Percentage of first-line antimalarials that were taken for too short, too long, or correct amount of time		Correct amount of time: Good: Over 80% Fair: 50–79% Poor: Under 50%
20	Percentage of second-line antimalarials that were taken for too short, too long, and correct amount of time		Correct amount of time: Good: Over 80% Fair: 50–79% Poor: Under 50%
Health care worker/drug provider			
	<i>Provides appropriate information/instruction/advice/labeling</i>		
21	Percentage of medicines dispensed in appropriate packaging (i.e., sealed plastic package or original manufacturer’s package with one type of medicine per pack)		Good: Over 80% Fair: 50–79% Poor: Under 50%
22	Percentage of medicines that were appropriately labeled with all of the following: name of medicine, dose, frequency, and duration		Good: Over 70% Fair: 40–69% Poor: Under 40%

ANNEX 8A. ADULT MALARIA PROVIDER INDICATORS

#	Indicator	Level	Sources
Characteristics of sample			
a	Type of drug outlets	Descriptive	Local observation
b	Ownership of drug outlet (public/private/mission/other)	Descriptive	Local observation
c	Outlet setting/location (urban/rural)	Descriptive	Local observation
d	Distance/walking time from nearest health facility	Descriptive	Q 1
e	Training of respondent	Descriptive	Q 2
Health care worker/drug provider keeps appropriate and affordable medicine available in stock (first-line, second/third-line medicines to be defined based on local STGs)			
<i>Availability of appropriate medicines</i>			
1	Percentage of outlets with a recommended specific first-line antimalarial in stock	Primary	Q 7 and STG
2	Percentage of outlets with all recommended first-line antimalarials in stock	Secondary	Q 7 and STG
3	Percentage of outlets with a specific second- or third-line antimalarial in stock	Secondary	Q 7 and STG
4	Percentage of outlets that have second- or third-line medicines for malaria in adults but not the first-line medicines	Secondary	Q 7 and STG
<i>Affordability of appropriate medicines</i>			
5	Average cost [and range] for first-line antimalarial in form of tablets recommended in the treatment of malaria in an adult	Secondary	Q 8 and STG
6	Average number of working days needed to pay for treatment of malaria in an adult using first-line antimalarial tablets	Secondary	I 5 and NMW ⁵²
7	Average cost [and range] for second-line antimalarial in form of tablets recommended in the treatment of malaria in an adult	Secondary	Q 8 and STG
Health care worker/drug provider assesses symptoms appropriately			
8	Percentage of respondents who do not mention fever with convulsion or fits as key symptoms for differentiating severe malaria	Primary	Q 5
9	Percentage of respondents who mentioned an antimalarial for adults with malaria symptoms	Primary	Q 4
10	Percentage of respondents mentioning the first-line antimalarial for adults with malaria symptoms	Secondary	Q 4 and STG
11	Percentage of respondents who mentioned an injection for malaria symptoms in adults	Primary	Q 4

⁵² NMW = National Minimum Wage

#	Indicator	Level	Sources
	Health care worker/drug provider prescribes, dispenses, or recommends appropriate medicine or refers: Knowledge of appropriate treatment of reported symptoms		
12	Percentage of respondents who know the recommended medicine for malaria in adults	Primary	Q 6 and STG
13	Percentage of respondents who know the correct treatment duration with the recommended medicine for malaria in adults	Primary	Q 6a and STG
	Health care worker/drug provider prescribes, dispenses, or recommends appropriate medicine or refers: Commonly sold or dispensed medicines		
14	Percentage of respondents who do not mention the first-line medicine in the STG as the most commonly sold or dispensed for malaria in adults	Primary	Q 9 and STG
15	Percentage of respondents who mentioned they would refer adults with symptoms of malaria	Secondary	Q 6
	Health care worker/drug provider provides appropriate information/instructions/advice/labeling		
16	Percentage of respondents who know the correct elements of appropriate labeling	Primary	Q 10
17	Percentage of respondents who know what should be explained about medicines by dispensers	Primary	Q 11
18	Percentage of providers who dispensed medicines (pills/tablets and/or syrup) outside of manufacturers' original packaging	Primary	Q 13
19	Percentage of providers who dispensed loose tablets in incorrect packaging	Primary	Q 14
20	Percentage of providers who mixed different types of pills in the same container	Primary	Q 15
21	Percentage of providers who dispensed syrup in incorrect packaging	Primary	Q 17
22	Percentage of providers who dispensed labeled medicines	Secondary	Q 18
23	Percentage of providers who gave verbal instruction when dispensing medicines	Secondary	Q 19
24	Percentage of providers who confirmed customers' understanding of how to take dispensed medicines	Secondary	Q 20

ANNEX 8B. ADULT MALARIA PROVIDER QUESTIONNAIRE

Say aloud: **My name is _____ . I am working for an organization that is trying to develop ways to improve community health. I am talking to people who dispense medicines about how they treat or give advice to adults with malaria. Neither your name nor the name of your facility/shop will be written on this form nor released to any authorities. May I ask you a few questions?**

If Yes: **Do you, yourself, regularly dispense or sell medicines to patients or customers?**

If Yes: Fill out the information below, then start the interview with Q 1.

If No, say: **Is there someone here today who regularly sees patients or customers?**

If Yes, say: **May I please talk to that person?** Start interview again with new respondent.

If No, say: **Thank you, I will come back another time.** End interview.

General Information

Country:	Town/Village:	Outlet Code:
Name of Interviewer:	Date of Interview: ____ / ____ / ____ Day Month Year	Language of Interview:
Setting/location:	<input type="checkbox"/> Urban	<input type="checkbox"/> Periurban <input type="checkbox"/> Rural
Ownership of facility:	<input type="checkbox"/> Government	<input type="checkbox"/> Private <input type="checkbox"/> Mission <input type="checkbox"/> Other
Start time of interview: ____ / ____ Hour Minute	End time of interview: ____ / ____ Hour Minute	
Type of drug outlet: (Check the type that best describes the outlet)	<input type="checkbox"/> Health facility (government, private or mission hospital, health center, or dispensary) <input type="checkbox"/> Licensed retail drug outlet (pharmacy) <input type="checkbox"/> Other retail outlet (general store, kiosk, variety store) <input type="checkbox"/> Authorized individual dispensing drugs (community paramedic, midwife, CHW, etc.) <input type="checkbox"/> Other individual dispensing drugs (traditional healer, unlicensed practitioner, street vendor)	
<i>If not a health facility, ask:</i> 1. How far from here is the nearest health facility? (Listen to response and check one.)	<input type="checkbox"/> Under 1 km (or less than 15 minutes walking) <input type="checkbox"/> Between 1 and 5 km (up to one hour walking) <input type="checkbox"/> More than 5 km (more than one hour walking) <input type="checkbox"/> Don't know	
2. What kind of training in clinical care or pharmacy do you have? (Do not read. Listen to response and check all that apply.)	<input type="checkbox"/> Pharmacist <input type="checkbox"/> Pharmacy technician or some pharmacy training <input type="checkbox"/> Medical doctor <input type="checkbox"/> Paramedic, physician assistant <input type="checkbox"/> Nurse, nurse assistant <input type="checkbox"/> Medical assistant, medical technologist, lab technician, or other health-related training <input type="checkbox"/> None	

Understanding of Symptoms and Appropriate Actions

<p>Say: <i>I would like to ask you some questions about the kinds of adults with malaria you may attend to here.</i></p>			
<p>3. Can you tell me the symptoms you might find in an adult suffering from malaria? (Do not read. Listen to responses and check all that apply.)</p>			
<input type="checkbox"/> Cough <input type="checkbox"/> Blocked or runny nose <input type="checkbox"/> Headache	<input type="checkbox"/> Thirst <input type="checkbox"/> Fever (hot body) <input type="checkbox"/> Sweating	<input type="checkbox"/> Vomiting <input type="checkbox"/> Fever with convulsion or fits <input type="checkbox"/> Fatigue	<input type="checkbox"/> Loss of appetite <input type="checkbox"/> Don't know <input type="checkbox"/> Other _____
<p>4. What is the most effective medicine to treat adults with mild malaria? (Do not read. Listen and write down the response.)</p>		<p>_____</p> <input type="checkbox"/> I don't know	
<p>5. What would you say are the key symptoms for telling a case of mild malaria from a case of severe malaria in adults? (Do not read. Listen to responses and check all that apply.)</p>			
<input type="checkbox"/> Cough <input type="checkbox"/> Blocked or runny nose <input type="checkbox"/> Headache	<input type="checkbox"/> Thirst <input type="checkbox"/> Fever (hot body) <input type="checkbox"/> Sweating	<input type="checkbox"/> Vomiting <input type="checkbox"/> Fever with convulsion or fits <input type="checkbox"/> Fatigue	<input type="checkbox"/> Loss of appetite <input type="checkbox"/> Don't know <input type="checkbox"/> Other _____

Knowledge of Appropriate Treatment of Reported Symptoms

<p>6. Do you know which medicine is recommended on the national treatment guidelines for adults with malaria? (Listen to response and write down the answer, then ask Q 6a. If the person answered "I don't know" or "I usually refer them," move to Q 7.)</p>	<p>Medicine name: _____</p> <input type="checkbox"/> I don't know <input type="checkbox"/> I usually refer them
<p>6a. For how long should this medicine be taken? →</p>	<p>Duration: _____</p>

Say: Sometimes you may recommend medicines for certain conditions, but many times people buy medicines on others' recommendations, or for other reasons. We are interested in what medicines people generally get here, whether or not you would recommend them.

<p>9. Would you please show me the medicine that most adults may buy or receive for malaria? <i>Write the name of the medicine on the line at the right. If the person does not have the medicine in stock, ask: What is the name of that medicine?</i></p>	<p>Medicine name _____ Form _____ <input type="checkbox"/> Don't know or don't recall Generic name: _____ <i>To be completed by the supervisor</i></p>
--	--

Prescribing, Dispensing, Recommendation of Appropriate Medicines or Referrals

Appropriate Information/Instructions/Advice/Labeling

<p>10. What should be written on the package label of a medicine as it is dispensed? <i>(Do not read. Listen and check all that apply.)</i></p>	<p><input type="checkbox"/> Patient name <input type="checkbox"/> Medicine name <input type="checkbox"/> How to take <input type="checkbox"/> Duration <input type="checkbox"/> Other (<i>specify</i>) _____ <input type="checkbox"/> Don't know</p>
<p>11. What things about the medicine should be explained to a customer as it is dispensed? <i>(Do not read. Listen and check all that apply.)</i></p>	<p><input type="checkbox"/> Medicine name <input type="checkbox"/> What it treats <input type="checkbox"/> When and how to take <input type="checkbox"/> Side effects <input type="checkbox"/> Other (<i>specify</i>) _____ <input type="checkbox"/> Don't know</p>

Say: That was my last question. Thank you very much for your participation. End interview.

Return to the front page and record the time that the interview ended, then complete the last page of the questionnaire on quality of dispensing.

Observed Dispensing Practices

Packaging and Advice on Signs of Treatment Failure and/or Need for Referral

<i>If any customers came to buy medicine during the interview, recall how the medicines were dispensed to those customers and complete this section.</i>	
12. Medicines were dispensed to one or more customers during the interview.	<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If yes, complete the following section on dispensing practice.</i>	
13. Tablets were dispensed outside of manufacturers' original packaging.	<input type="checkbox"/> Yes <input type="checkbox"/> No
14. If yes, what kind of packaging was used to dispense those tablets or pills? <i>(Check all that apply.)</i>	<input type="checkbox"/> Small bottle with cap <input type="checkbox"/> Plastic package (mini-grips) <input type="checkbox"/> Sealable envelope <input type="checkbox"/> Folded paper envelope <input type="checkbox"/> Other <i>(specify)</i> _____
15. Several types of tablets were dispensed in the same package.	<input type="checkbox"/> Yes <input type="checkbox"/> No
16. Syrups were dispensed outside of manufacturers' packaging.	<input type="checkbox"/> Yes <input type="checkbox"/> No
17. If yes, what kind of packaging was used to dispense the syrups? <i>(Check all that apply.)</i>	<input type="checkbox"/> Small airtight bottle (with cap) <input type="checkbox"/> Small bottle without cap <input type="checkbox"/> Other <i>(specify)</i> _____
18. Packages contained the following types of labeling. <i>(Check all that apply.)</i>	<input type="checkbox"/> Printed manufacturer's label <input type="checkbox"/> Printed label produced in outlet <input type="checkbox"/> Information written on label by the dispenser <input type="checkbox"/> No labeling
19. Dispenser gave customer verbal instruction on how to take the medicine.	<input type="checkbox"/> Yes <input type="checkbox"/> No
20. Dispenser asked customer to repeat verbal instruction about how to take the medicine.	<input type="checkbox"/> Yes <input type="checkbox"/> No

ANNEX 8C. ADULT MALARIA PROVIDER ANALYSIS TABLES

Descriptive Characteristics

Characteristic a. Distribution of types of drug outlets included in the survey

A	B	C	D
Type of outlet	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
Health facility (government, private or mission hospital, health center, or dispensary)			
Licensed retail drug outlet (pharmacy, chemist, or drug shop)			
Other retail outlet (general store, kiosk, variety store)			
Licensed individual dispensing drugs (doctor/nurse, community paramedic, midwife, CHW, etc.)			
Other individual dispensing drugs (traditional healer, unlicensed practitioner, street vendor)			
Total number of outlets [®]			

Characteristic b. Ownership of facility

A	B	C	D
Ownership of facility	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
Public			
Private			
Mission			
Total number of outlets [®]			

Characteristic c. Setting/location of outlets

A	B	C	D
Setting/Location	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
Urban			
Periurban			
Rural			
Total number of outlets →			

Characteristic d. Proximity to health facility

A	B	C	D
Distance from nearest health facility	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
This is a health facility			
Under 1 km (15 minutes walking)			
Between 1 and 5 km (up to one hour walking)			
More than 5 km (more than one hour walking)			
Don't know			
Total number of outlets ®			

Characteristic e. Level of training of respondents

A	B	C	D
Ownership of facility	Enter survey number for outlet in one box ⁻	Number of outlets in each box ⁻	Percentage of outlets (see formula)
Pharmacist			
Pharmacy technician or para-pharmacist			
Medical doctor			
Paramedic, physician assistant			
Nurse, nurse assistant			
Medical assistant, medical technologist, etc.			
None			
Total number of outlets ®			

Indicator 3. Percentage of outlets with specific second/third-line antimalarials in stock (Q7)

A	B	C	D	E	F
Survey #	Medicine 1: _____	Medicine 2: _____	Medicine 3: _____	Medicine 4: _____	Medicine 5: _____
Total # of providers: _____					
Total # of checks per column ®					
Percentage (see formula)	I _{3a} :	I _{3b} :	I _{3c} :	I _{3d} :	I _{3e} :

Note: For each specific medicine under investigation, insert the relevant name on top of columns B to F.

Indicators 4. Availability of antimalarials in stock (Q 7)

A	B
Survey #	Has second- or third-line medicines for malaria but not first-line
Total # of providers: _____	
Total # of checks per column ®	
Percentage (see formula)	I ₄ :

Affordability of Appropriate Medicines

The following nine tabulation forms can be used to calculate the *Indicators 5–7, which measure affordability of medicines* for malaria. Each form in this group needs to be updated by the field coordinator with treatment information from the STG and information on the prevailing national daily minimum wage.

Indicators 5 and 6. Treatment costs for malaria in adults with first-line antimalarial tablets

<i>Standard malaria treatment with first-line antimalarial tablets for an adult =</i>						
<i>First-line antimalarial tablet on STG: _____</i>						
A	B	C	D	E		F
Survey #	Package price	Package size	Price per unit	Total treatment cost		National Minimum Wage per day (NMW)
Total # of providers: _____			Total cost ®			NMW = _____
			Minimum	I ₅ :	Avg. number of working days to pay for treatment ®	I ₆ :
			Maximum	I ₅ :		
			Average cost	I ₅ :		

Indicator 7. Average cost for second-line antimalarial tablets recommended for malaria in adults

<i>Standard malaria treatment with second-line antimalarial tablets for an adult =</i>				
<i>Second-line antimalarial tablet on STG: _____</i>				
A	B	C	D	E
Survey #	Package price	Package size	Price per unit	Total treatment cost
Total # of providers: _____			Total cost ®	
			Minimum	I₇:
			Maximum	I₇:
			Average cost	I₇:

Understanding of Symptoms and Appropriate Treatment

Provider Understands Symptoms Correctly

The following tabulation form can be used to calculate *Indicators 8–11*, which provide information on whether providers understand symptoms of malaria.

Indicators 8–11. Percentage of providers who understand symptoms and take appropriate actions for malaria

A	B	C	D	F
	Malaria			
Survey #	Q5 Did not mention key symptoms (fever with fits or convulsion) Y/N	Q4 Mentioned antimalarial Y/N	Q4 Mentioned first-line antimalarial Y/N	Q4 Mentioned injection Y/N
Total # of providers: _____				
Total # of checks per column ®				
Percentage (see formula)	I₈:	I₉:	I₁₀:	I₁₁:

Provider Knows Appropriate Treatment

The following tabulation form can be used to calculate *Indicators 12–13, which inform on the providers' knowledge of appropriate treatments.*

Indicators 12–13. Percentage of providers who know recommended treatments

A	B	C
	Malaria	
Survey #	Q6 Know recommended medicine	Q6a Know treatment duration
Total # of outlets _____		
Total # of checks per column →		
Percentage (see formula) ®	I ₁₂ :	I ₁₃ :

Prescribing, Dispensing of Appropriate Medicines, and Referral Patterns

The following tabulation form can be used to calculate *Indicators 14–15, which inform about how providers prescribe, dispense, and recommend appropriate medicines or refer adults with malaria.*

Indicators 14–15. Percentage of respondents who mention first-line medicines or refer

A	B	C
	Malaria	
Survey #	Q9 Did not mention first-line medicine	Q6 Would refer
Total # of outlets _____		
Total # of checks per column →		
Percentage (see formula) ®	I ₁₄ :	I ₁₅ :

Appropriateness of Information, Instructions, Advice, and Labeling

The following table models can be used to calculate *Indicators 16–24*, which measure the appropriateness of information, instructions, advice, and labeling at the drug outlets.

Indicator 16. Percentage of respondents who know the correct elements of appropriate labeling (Q 10)

A	B	C	D	E	F	G
Survey #	Patient name	Medicine name	How to take	Duration	Don't know or other	Included all items in label (columns B to E)
Total # of outlets _____						
Percentage (see formula) ®						

Indicator 17. Percentage of respondents who know what should be explained when dispensing medicines (Q 11)

A	B	C	D	E	F	G
Survey #	Medicine name	What it treats	When and how to take	Side effects	Don't know or other	Instruction included all items (columns B to E)
Total # of outlets _____						
Percentage (see formula) ®						

Packaging

The following tabulation form can be used to calculate *Indicators 18–24, which measure quality of dispensing* for the respondents who were observed dispensing medicine during the interview. Note that the total number of outlets used in this table refers **only** to the number of providers who were observed, not to the overall number of drug outlets in the survey.

Indicators 18–24. Quality of packaging, labeling, dispensing, and verbal instruction

A	B	C	D	E	F	G	H
Survey #	Q13 Dispensed medicine outside of original packaging	Q14 Dispensed loose tablets in incorrect packaging	Q15 Mixed different pills in same container	Q17 Dispensed syrup in incorrect packaging	Q18 Dispensed labeled medicine	Q19 Gave verbal instructions	Q20 Had customer repeat verbal instruction
Total # of outlets							
Total # of checks per column ®							
Percentage (see formula) ®	I₁₈:	I₁₉:	I₂₀:	I₂₁:	I₂₂:	I₂₃:	I₂₄:

ANNEX 8D. ADULT MALARIA PROVIDER EVALUATION STANDARDS

Indicators	Priority Level	Provider Characteristics				Evaluation Standards	
		n = _____	n = _____	n = _____	n = _____		
Availability of appropriate medicines							
1	Percentage of outlets with a recommended specific first-line antimalarial in stock	Primary					Good: Over 80% Fair: 60–79% Poor: Under 60 %
2	Percentage of outlets with all recommended first-line antimalarials in stock	Secondary					Good: Over 75% Fair: 50–75% Poor: Under 50%
3	Percentage of outlets with a specific second/third-line antimalarial in stock	Secondary					Good: Over 75% Fair: 50–75% Poor: Under 50%
4	Percentage of outlets that have second- or third-line medicines for malaria in adults but not the first-line	Secondary					Good: Under 20% Fair: 20–40% Poor: Over 40%

Indicators	Priority Level	Provider Characteristics				Evaluation Standards	
		_____	_____	_____	_____		
Affordability of appropriate medicines							
5	Average cost [and range] for first-line antimalarial in form of tablets recommended in the treatment of malaria in an adult	Secondary					No particular standards. Interpretation depends on local economy.
6	Average number of working days needed to pay for treatment of malaria in an adult using first-line antimalarial tablets	Secondary					
7	Average cost [and range] for second-line antimalarial in form of tablets recommended in the treatment of malaria in an adult	Secondary					
Provider's understanding of symptoms and appropriate actions							
8	Percentage of respondents who do not mention fever with convulsion or fits as key symptoms for differentiating severe malaria	Primary					Good: Under 20% Fair: 20–40% Poor: Over 40%
9	Percentage of respondents who mentioned an antimalarial for adults with malaria symptoms	Primary					Good: Over 80% Fair: 60–80% Poor: Under 60%
10	Percentage of respondents who mentioned the first-line antimalarial for adults with malaria symptoms	Secondary					
11	Percentage of respondents who mentioned an injection for malaria symptoms in adults	Primary					Good: Under 10% Fair: 10–20% Poor: Over 20%
Knowledge of appropriate treatment of reported symptoms							
12	Percentage of respondents who know the recommended medicine for malaria in adults	Primary					Good: Over 85% Fair: 65–84% Poor: Under 65 %
13	Percentage of respondents who know the correct treatment duration with the recommended medicine for malaria in adults	Primary					

Annex 8D. Adult Malaria Provider Evaluation Standards

Indicators	Priority Level	Provider Characteristics				Evaluation Standards	
		_____	_____	_____	_____		
Prescribing, dispensing/recommendation of appropriate medicines, or referral patterns							
14	Percentage of respondents who do not mention the first-line medicine as the most commonly sold or dispensed for malaria in adults	Primary					Good: Under 10% Fair: 10–20% Poor: Over 20%
15	Percentage of respondents who mentioned they would refer adults with symptoms of malaria						Health posts, CHWs, retail outlets and traditional healers should refer
Appropriateness of information/instructions/advice/labeling							
16	Percentage of respondents who know the correct elements of appropriate labeling	Primary					Good: Over 80% Fair: 60–80% Poor: Under 60%
17	Percentage of respondents who know what should be explained about medicines by dispensers	Primary					
Packaging							
18	Percentage of providers who dispensed medicines (pills/tablets and/or syrup) outside of manufacturers' original packaging	Primary					General information
19	Percentage of providers who dispensed loose tablets in incorrect packaging	Primary					Good: Under 10% Fair: 10–20% Poor: Over 20%
20	Percentage of providers who mixed different types of pills in the same container	Primary					
21	Percentage of providers who dispensed syrup in incorrect packaging	Primary					

Indicators		Priority Level	Provider Characteristics				Evaluation Standards
			_____ n = _____	_____ n = _____	_____ n = _____	_____ n = _____	
22	Percentage of providers who dispensed labeled medicines	Secondary					Good: Over 80% Fair: 60–80% Poor: Under 60%
23	Percentage of providers who gave verbal instruction when dispensing medicines	Secondary					
24	Percentage of providers who confirmed customers' understanding of how to take dispensed medicines	Secondary					