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Trip Report from a Consultancy in Zambia: HEALTH FACILITY SURVEY RELATING TO ESTABLISHMENT OF IMCI

20 July to 9 August, 1996

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ACRONYMS

BASICS	Basic Support for Institutionalizing Child Survival Project
IMCI	integrated management of childhood illness
KAP	knowledge, attitudes, and practices
MCH	maternal and child health
MoH	Ministry of Health
ORS	oral rehydration solution
ORT	oral rehydration therapy
PHC	primary health care
SSS	sugar salt solution
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
ZCH	Zambia Child Health Project

HEALTH FACILITY SURVEY RELATING TO ESTABLISHMENT OF IMCI

SUMMARY

This consultancy was carried out to assess health facilities and services they provide in both urban and rural Lusaka districts. In nine rural health facilities the baseline assessments were conducted in advance of IMCI training for selected health workers which was to begin the following week. For the eight urban health centres, the repeat assessments followed by two months the IMCI training for health workers from the these units. Baseline assessments for these health units had been carried out during a previous consultancy in March 1996.

Impressions set out here are made on the basis of observations at the time of the survey, and from entering the data. The data is still being entered in Zambia, and no analysis of data has been carried out. In most health centres where health workers had received IMCI training there was clear evidence of the impact of this training. Danger signs were being asked about, as were details about diarrhoea, though presence of blood in the stool was seldom asked. Cough or difficulty breathing was being regularly asked, as were questions about feeding. The quality of the physical examination was also clearly improved. Advice about medications was generally good, although adverse reactions were not commonly asked after. Communication with the mother was problematic. Mothers knew when they were to return, but little about the illness of the child, signs or symptoms indicating the need for return, or home nursing care which the child should receive. The biggest concern by mothers was the long waiting time in some clinics (up to nine hours). There were some complaints about staff attitudes, but these were uncommon. The congestion in some urban clinics was severe.

A concern from observing several health workers was the need to integrate the IMCI training with actual outpatient department work so there would be an understanding of how to use the approach during the normal conduct of business in health centres. The need to carry out qualitative studies among key informants and among mothers in the community (rather than in the health centres) was noted. The issue of job aids should be reviewed, since neither wall charts or the desk-top references entirely meet needs. Decisions about where and how often detailed surveys are to be carried out need to be made. The data handling system needs to be clearly established, both in Zambia and in the USA. The feedback of information to health units and health managers in Zambia needs to be improved.

The need for supervision to support IMCI was also very evident;.the supervision system does not work well. It is important that health workers recently trained in IMCI receive strong support while beginning their use of IMCI in their own clinics. An approach where trainers visit trainees after they return to their units would be one approach. BASICS/Zambia should consider how it can support trainees, as well as contribute to revitalization of the supervision system.

INTRODUCTION

Background

The intent of the survey process is to assess the provision of health services to children under the age of five with common childhood illnesses, and to determine the impact of training for health care workers in the use of the integrated management of childhood illness (IMCI) approach. Assessment is carried out using four instruments. These are

- the observation of the health worker providing service
- an exit interview with the mother
- an interview with the health worker about knowledge and practices
- an inventory of health unit activities, records and supplies.

These instruments are used by a survey team of experienced health workers on three occasions at each facility selected: prior to IMCI training to provide a baseline assessment, shortly following health worker training, and again at 8-12 months to determine sustained practices. The four instruments were developed during a previous consultancy in March 1996, and used to assess services in eight urban health centres in Lusaka prior to IMCI training for staff members providing clinical services to young children. Details of the March 1996 consultancy are covered in a separate trip report.

Scope of Work

1. Conduct a baseline survey for nine health centres in Lusaka rural districts. This involves reviewing the previously developed instruments with the survey team, and adapting these instruments for a second baseline survey, based on experience obtained in the first survey round. Changes are not contemplated which would alter the comparability of the two data sets. This component will look at the effect that training a staff member from the health unit has on changing the performance of other health workers in the health unit.

2. Conduct a follow-up survey for eight urban health centres in Lusaka in which baseline surveys were carried out from 18-21 March 1996.

3. Begin work on analysis of results as time allows, and investigate the potential of recruiting personnel in Lusaka to carry out analysis. Possible assistance with the analysis through links with the Department of Community Medicine of the College of Medicine, as well as links with the Ministry of Health, will be explored.

4. Take steps to encourage the development of supervisory capacity within urban and rural districts of Lusaka Provence. Questions from the survey questionnaire will be extracted to serve as a component of the district survey instrument, as data is available.

ACTIVITIES CARRIED OUT DURING THE CONSULTANCY

Initial Discussions with BASICS/Zambia (20 and 21 July)

On arrival in Zambia, discussions were carried out with Chief of Party Dr. Remi Sogunro and Child Health Advisor Dr. Abdikamal Alisalad concerning the activities to be carried out. Issues relating to data processing and report preparation were discussed. The IMCI workshop which was to begin the subsequent week was discussed, along with arrangements made for selecting Lusaka rural health centres and health workers to be evaluated. Practical constraints in evaluating the work of lower cadre health personnel who were to receive IMCI training, such as environmental health technicians or classified daily workers were considered. These personnel are not trained to provide clinical care, but often do so because nurses or clinical officers who usually provide these services are frequently away from the health units.

Results from the previous survey of Lusaka urban areas were also discussed. General issues concerning locations and sequence of IMCI training were also discussed. The matter of analysis and feedback of results was discussed in detail, and it was decided to provide a briefing for Lusaka provincial health personnel concerning the preliminary results from the March baseline survey.

Preparations for the Survey

The Provincial Medical Officer, Dr. Mutembo, and the District Director of Health, Dr. Kumwenda Phiri, had kindly agreed to release from regular duties members of the survey team who conducted the March 1996 health facility survey. The majority of the team members who participated in the March survey met on 22 July to discuss the upcoming two surveys. The first activity was to nominate two new members to replace two previous members of the team who were unable to participate. Those selected were Chanda Mulenga, a health information clerk from the Provincial Medical Office, and Riness Siyubo, a clinical officer from Chelstone clinic.

The conduct of the previous survey was reviewed. Each of the four survey instruments was reviewed with the group question by question. Those which were difficult to ask or liable to being misunderstood were reexamined. Changes which the group felt would make the instruments easier to use and improve accuracy and reliability were incorporated. The revised instruments are contained in Appendix C.

The two upcoming surveys were discussed with the team and their purposes reviewed. The importance of the reassessment for being able to detect any change in the performance of those health workers trained was again stressed. Dates and health facilities to be assessed were presented. The group divided themselves into individual teams so that three health facilities could be assessed on each day. The entire survey process was reviewed using the survey manual developed in March 1996.

Carrying out the surveys

Rural districts
Health personnel from the three rural districts had been selected by the MCH director in the Provincial Medical Office. Drs. Alisalad and Burnham visited the district medical officers for these districts on 23 July, and obtained their assistance in identifying for assessment the health centres where those to be trained worked. The district medical officers informed these health centres about the purpose of the visit and the estimated time of arrival.

On the day of the survey, the teams were dropped off at health centres as early as possible. One person observed the health worker attending the children while a second conducted the exit interview. The facility assessment and interviews with the health workers were conducted by the third person. At the end of the day, the team reassembled at the BASICS Lusaka office to check their survey forms for missing information. In the evening, Dr. Burnham reviewed each form so those with missing information could be returned to individual survey team members the following morning to provide missing information where possible.

On 24 July, two of the most distant health centres in Kafue district, Chikupi and Chanyanya clinics, were visited. Because of the low population density in the area (characteristic of rural Zambia as a whole), and the distance from Lusaka (making for a mid-morning arrival), it was elected to revisit these clinics along with an additional rural Kafue health centre at Chipapa again on 29 July.

Three rural health centres in Chongwe District of Lusaka Provence, Kasisi, Chongwe Boma, and Kambakete, were surveyed on 25 July. From there the team proceeded to Luawanga, staying overnight there, and surveying Luangwa Boma, Kasinsa, and Chipula clinics the following day. Except in the clinics at the *bomas* (district administrative centres) patient volume was relatively low, given that many of them were in areas of quite low population density. These low numbers may bias data from these locations, if used for comparison between sites.

The eight urban health centres were resurveyed over the period from 30 July to 2 August. Because of the large number of patients seen in these clinics, teams were constituted of three members plus a supervisor, with each team surveying one health centre each day. On 30 July, surveys were carried out at Chelstone and Chilenje clinics, on 31 July at Mutendere and Kamwala clinics, onl August at Chipata and Chawama clinics, and on 2 August at the Matero reference clinic and Kanyama clinic.

Feedback from the March survey

A meeting was convened by Dr. Rosemary Kumwenda Phiri, district medical officer for the Lusaka Urban District, and was attended by health personnel from the district and from the BASICS project. At this meeting, the preliminary findings from the March survey were presented. The district health team was deeply appreciative for the information provided, which confirmed some of their impressions, and raised many new areas about which they were unaware. There was extensive discussion about what changes were required in light of these data, how these changes should be implemented, and how BASICS/Zambia could play a role. The district looks forward to receiving the full report.

Assessment of the survey process

This second survey went very smoothly, as might be expected as the team gained confidence and experience during the March survey. The small number of children under age five seen in the rural health units presents problems in assessing health worker performance. In rural areas, health workers were frequently away from their posts, in spite of efforts to communicate to them in advance the nature and timing of the survey. In both rural and urban clinics there were some difficulties with the information systems. In neither location did the numbers recorded on the MF-47 health facility returns forms correspond with the tally sheets. In several rural health centres, all records had been taken to the district offices for analysis. In urban clinics, the health records were fragmented and it was often difficult to determine what treatment children with various illnesses actually received, since diagnosis and treatment were not recorded in the patient register, as was the practice in rural clinics. In urban clinics, the child's vital signs and weight were taken during the registration process rather than by the health worker, making it difficult to assess the accuracy of these procedures. In urban, but not rural clinics, instructions in ORT were given at the ORS corner, and not usually by the health worker, making assessment of this part of the consultation difficult. In all cases the health personnel in the various clinics were cooperative, and in most instances expressed an interest in feedback about the results.

In urban Lusaka clinics, IMCI training had created considerable interest. There were multiple requests by health workers for additional IMCI desk references. Clinical officer students who were rotating through these health centres had a particular interest in the approach, often helping themselves to unsecured IMCI desktop references or wall charts.

Computer entry of data collected

The discussions on building the data processing capacity at BASICS/Zambia had not been resolved by the time of this consultancy, so academic organizations within Zambia were not approached concerning assistance with data management and first-tier analysis. This is a decision which should be reached soon. It is very important that there be a rapid turn-around in supplying information from the surveys back to the district health teams as well as to the health facilities themselves. Establishing the capacity to do this in Zambia should be a priority. If

BASICS/Zambia hires a person to do data entry for this and for other country activities, the desired feedback could be obtained through rapid input of data and analysis following a standard program which could be easily written in EPIINFO. If the decision is not to hire someone within the project to carry out these functions, then a contractual arrangement should be entered into with an organization within Lusaka to handle these functions in a timely manner. The organization of data and the second level of analysis could be carried out in Baltimore using part-time student help. Arrangements could then be made with BASICS/USA to design the analysis approach and nature of reports to be generated at this second level.

General observations in the clinics where health workers had received IMCI training

These are preliminary observations on the follow-up observations in the Lusaka urban health centres, unsupported by analysis of collected data, much of which has not yet been entered, and none of which analysed. In most of the eight health centres there was some evidence of the impact of IMCI training, whether it was just wall charts being posted or that the consultation was conducted. In some instances the persons trained were not present at the time of the visit.

In the worst case observed, the clinic health worker's performance showed little impact of IMCI training. In the best case, health workers clearly followed the algorithm, referring frequently to the IMCI wall chart posted in the consulting room.

Health workers in July, after IMCI training, were more likely to ask about danger signs than during the March baseline survey, although convulsions were still infrequently asked after. The health worker usually asked about diarrhoea, but in some cases even if the mother volunteered that the child had diarrhoea, details were not pursued. The question about blood in the stool was seldom asked. Coughing or difficulty breathing were regularly asked about, as was feeding. Physical examination seemed substantially better than during the baseline, although counting the respiratory rates was not universal for children with cough or difficulty breathing. A major barrier for counting respiration rates was the absence of a watch or clock with a second hand at many if not most patient consultations.

By and large, treatment seemed appropriate, though this has not been examined in detail. Instruction provided to mothers about medications prescribed was almost universal, however, the exit interviews gave the impression that the mother's grasp of information provided was not nearly as good. No health worker explained potential adverse reaction to medication, and few said what to do with any medications remaining at the end of treatment. ORS preparation was hard to judge, since mothers of children needing ORS were frequently sent to the ORS corner, which we did not observe. Injections were very infrequently given.

Few mothers said the health worker had told them what was wrong with their child. Health workers did not do a good job in explaining what symptoms should prompt a return to the health centres, though they usually gave the mothers the date for return. Almost all mothers reported that little if any information on home nursing of their child had been given them.

On the exit interview, few mothers admitted to giving their child any treatment at home. When they did, it was usually for fever (paracetamol or chloroquine), and to a lesser extent ORS for diarrhoea. Most mothers did not know the correct volume for mixing ORS. They would use a Mazoe bottle (750ml) instead of the appropriate number of cups of water. Almost no mothers knew how to mix SSS.

Health workers looked at the immunization card most of the time. Almost all mothers knew that their child could receive immunizations even if sick. Few mothers had ever been turned away from an immunization session. Almost all mothers waited long times, some as long as 9 hours. The long waits were a frequent cause of complaints. Other complaints were attitude of health workers, shortage of health workers, and need for a special children's clinic. The average length of consultation was observed to be about 7 minutes, fairly similar to that noted at baseline, before IMCI training.

In contrast to the findings of the baseline survey in urban Lusaka health centres, these centres had adequate supplies of syringes and needles as well as other supplies on this present visit. Rural health centres were also well stocked. In fact, some rural centres were overstocked with medications, given present consumption rates, leading to the possibility that these would outdate before use. Some potentially serious irregularities were noted in rural drug supplies, and the provincial medical officer was informed.

As noted in the March survey, there are major problems with supervision of health facilities. The survey looked for frequency of supervisory visits from district or provincial personnel as well as the activities which were carried out during these visits. Frequency of visits seemed to be one or less per year in most cases. Visits had been so infrequent that few health workers recalled what the supervisor had done during the last visit. The study did not look at mechanisms for internal supervision within the health unit, in that there seemed to be no established or standard method of carrying this out.

Recommendations concerning future surveys

The intent of this survey process is to provide important information concerning child health care practices to ZCH and the USAID/BASICS project and to assess the impact of IMCI training on provision of services. In addition, data will provide key indicators which can be monitored by supervisors and project personnel in day-to-day activities to assess the quality of services provided. To meet these expectations, the survey needs to be carried out three times: a baseline survey, to be followed up at 2-3 months by an immediate post-IMCI training survey, and at 10-12 months by a later survey to determine how IMCI training has been sustained. For clinics in rural and urban districts of Lusaka Province, this schedule is summarized below.

ACTIVITY	STATUS
Lusaka Urban (8 zones, 8 health facilities)	
Baseline survey	done March 18-21
First follow-up survey	done Jul 30-Aug 5
Second follow-up survey	scheduled Mar 97
Lusaka Rural (3 districts, 9 health facilities)	
Baseline survey	done Jul 22-26
First follow-up survey	scheduled Oct 96
Second follow-up survey	scheduled Mar 97

Future survey considerations

Doing a set of three surveys for a specific area is a fairly intense activity, requiring substantial commitment of personnel, coordination, and support. Further, it requires considerable effort to enter, to analyse and to draw conclusions from the data generated. This raises two major issues: planning for future survey sites and survey frequency, and storage and analysis of data.

Survey sites and frequency
Now that it has been established what is involved in carrying out the surveys and entering the data, it is important to decide in which geographic areas the project would like to carry out the set of surveys in the future. It is probably impractical to think of applying this to all sites where IMCI training is to be held, so selecting representative sites is important. Obviously, the larger the volume of children (and therefore higher sample numbers), the greater the validity of the sample is likely to be. This makes urban areas, and health facilities in district and provincial bomas attractive. At the same time, it is important not to exclude rural areas which would result in an unrepresentative picture of health care worker performance following IMCI training. In the process of scheduling the IMCI training workshops decisions should be made as to which areas will receive detailed follow-up assessments. Doing at least one survey in each of the provinces where IMCI training is to be carried out would be a reasonable plan. Some of the present survey team could serve as a nucleus, augmented by personnel from the various provinces to ensure knowledge of local language and customs.

Organizing and banking data
It is important that an organized databank for this information be established which can be accessed for future comparisons by the BASICS headquarters personnel and other interested

parties. There is a wealth of information being collected concerning the provision of PHC services to children in Zambia. This can also serve as a permanent record of outcomes of the project over time. This work is something which could be done by a graduate student probably under existing contract arrangements, allocating a few days per month at most. Details need to be worked out to put this into place soon.

Changes in the questionnaire

Obviously, it is important to keep as much of the questionnaire as possible unchanged to allow for comparisons with baseline data. However, there are areas dealing with patient flow and record keeping which should be changed according to local practices. In some busy health centres, at registration of the child the vital signs are taken, the child weighed, and the initial complaints recorded by a person other than the clinician providing care. No efforts are now made to assess the quality of instruction at the ORT corner, except in the exit interview with the mother. This is a component which should be added to the assessment process.

There is no specific assessment of actions taken by the health worker in cases where malnutrition is detected, nor are there questions concerning nutrition on the exit interview with the mother. This should be corrected in a way which does not make the instrument overly long.

Other surveys needed

There is a need for additional surveys to be conducted at the community level and among a selected group of health workers. In the first instance, a survey of community leaders using qualitative methods is needed to assess community expectations concerning provision of health services, particularly for children. This can help identify access issues such as barriers to use of existing services, and help identify unmet needs. The same approach can be used for mothers in the community, with additional KAP information on present household practices, such as nutrition, water and sanitation, and housing, that have a major impact on child health.

The health worker survey could be carried out among selected health workers to identify their own satisfaction and concerns with the way services are being provided. This survey would look at health worker needs and frustrations, and would help define morale and motivation issues which have an impact on service delivery.

GENERAL OBSERVATIONS AND RECOMMENDATIONS

Observation on the training process

This was not a consultancy to assess training, however some observations can be made. It appears that relying on inpatients for the training process may adequately convey the signs and symptoms of common diseases required, but does not allow the health worker to gain the

necessary facility in using the IMCI approach in the outpatient setting. It would seem important to have some time in the training schedule when IMCI skills can be used in an integrated manner in sequential children who present to an outpatient facility. Selecting a site where this could be done, and where the IMCI approach is already well established, would seem to be good decision. If this is to be implemented in Lusaka, Matero Reference Clinic, where standards are high, should be considered.

It would seem that the current workshop approach overloads health workers with information. For some who have already had some training in disease-specific treatment, and who are experienced and bright health workers, much of the material is review, and there may not be major problems. However, lower level personnel, or personnel from more peripheral units (who have not been exposed to as much additional training), may find it difficult to absorb all the information. A "sandwich" approach, where health workers have an opportunity to integrate part of the training into their work at their own health unit before returning for the remainder of the training, might be an approach to consider.

There clearly needs to be continuing support to health workers after training, particularly in the early phases. At one level, this could be done by the supervision system. However, since this system in not working well in the sites surveyed (and probably most places), this is a medium or long term approach. A short term approach would be to have the IMCI trainers visit trainees in their usual place of work on a frequent basis, starting shortly after training, to support application of new knowledge.

Another area concerns health workers who will probably not have the opportunity to receive IMCI training, but who care for sick children, either regularly or intermittently. Developing the capacity of a clinical facility to provide on-the-job training for these personnel, in an environment where IMCI is the regular way of doing business, would be an effective approach. This approach could also be used for health managers who need to know about IMCI, but would not directly use it in their every day work, and who otherwise would be unlikely to be targeted for training.

Consideration needs to be given as to how best to train the lower cadre of health workers in IMCI. It is unlikely that the present approach will be fully comprehended by this group. In some cases these workers are in job classifications which do not call for provision of direct clinical care, but in reality they have clinical responsibilities.

Finally, there appears to be a need for a desk-top job aid to steer the health worker through the algorithm without necessarily having to list in detail each classification and treatment. A simple laminated A4 card, showing the pathway to be followed, and key determinations to be made, might serve as a reminder to the health worker. The current wall charts, although set out in great detail, are likely not to be utilized by most health workers. This suspicion was borne out in several health units where they were used along with health education posters as "wall paper," and scattered about walls in the OPD. The spiral bound reference would seem to have a much

better chance of usage, but an adequate supply and on-going replacement would need to be ensured. This is a potentially expensive component.

Other observations

A major need in Zambia is to support revitalization of the supervision process. BASICS can play an important role in helping to develop an approach supportive for IMCI, and in a way which would facilitate restoring other health centre supervision activities. If IMCI is to be sustained in Zambia, this should be a high priority for the project. BASICS can certainly draw on support from other health programs and various departments in the MoH which also have much to gain through a restoration of the supervision system.

Since the survey found that few health workers have access to a watch or clock with a second hand for counting respirations in the consultation areas, the project should consider purchasing or acquiring the small UNICEF timers, and incorporating their use in the training process.

APPENDIXES

APPENDIX A
Summary of Activities Carried Out

Daily activity schedule

Date	Activity
Sa 20 July	Arrive BA 045 Meeting with Sogunro and Alikamal
Su 21 July	Finalize SOW and schedule for consultancy
Mo 22 July	8:00 Meet Mrs. Mwanza 8:30 Dr. Mutembo PMO Lusaka 2:30 Dr. Kumwenda-Phiri DMO Lusaka urban 3:00 Survey team
Tu 23 July	Making revisions in the survey instruments, calculating copies needed and photocopying afternoon meet with full survey team, go over results of first survey, and review survey goals, objectives and process. Orient replacement personnel. Team Members Ms. Margaret Mwanza Ms. Muripo Reed Ms. Prisca Mulenga Ms. Rachel Mwape Ms. Riness Siyubo Mr. Chanda Mulenga
We 24 July	Survey in two HCs Kafue Chikupi Chanyanya
Th 25 July	Survey in three HCs Chongwe Kasisi Chongwe Boma Kambakete
Fr 26 July	Survey in three HCs in Luwanga Luangwa Boma Kasinsa Chipula
Sa 27 July	off
Su 28 July	Review survey returns from previous week Prepare summary from March survey for distribution to Lusaka Urban health centres

Mo 29 July	Return to Kafue to reach missed health centres and personnel Chipapa Chikuti Chinyanya
Tu 30 July	Lusaka Urban Chelstone Chilenje
We 31 July	Lusaka Urban Mutendere Kamwala
Th 1 August	Lusaka Urban Chipata Chawama
Fr 2 August	Lusaka Urban Matero Ref Kanyama
Sa 3 August	OFF
Su 4 August	Develop data base format
Mo 5 August	Holiday (Farmers Day) Meetings to discuss strategy for Copperbelt Data entry
Tu 6 August	Data organization Data entry Presentation of preliminary impressions
We 7 August	Data entry
Th 8 August	Data entry Wrap up meeting with survey personnel
Fr 9 August	Depart for Lilongwe 1545

APPENDIX B
Listing of Persons Met

Health workers met during the survey process

KAFUE

Chanyanya
- Dorothy Phiri (ZEN)
- Gertrude Bwalyao (CO)
- Donald Zulu (EHT)

Chikupi
- Vivian Kangwe (ZEN)
- Grace Mufune (ZEN)
- Patric Matapo (CO)

Chipapa
- Mrs. Siamuswe (ZEN)
- Mr. Mulila (CO)
- Mrs. Himaanga (ZEN)

LUANGWA

Boma HC
- Enock Chinkusu (EHT)
- Maggie Mwila (ZEN)
- Mrs. B Santana (ZEN)

Kasinsa
- Mrs. Zulu (CDE)

LUSAKA Urban

Chelstone
- Mr. Chambeshi (CO)
- Mr. Ngwenya (CO)

Chilenje
- Mrs. S Kaunda (CO)
- Mrs. Kyebu (ZEN)
- Mrs. Sichone (ZEN)

Mutendere
- Fred Chongo (CO)

Kamwala
- Mrs. Monde (CO)
- Mrs. Mungu (ZRN)

Chipata
- Mr. Edgar Mulungushi (CO)

Chawama
- Mr. Monde (CO)
- Mr. Kunda (CO)

Matero Ref HC
- Mrs. Kapakasa (ZRN)
- Mrs. Katakale (CO)

APPENDIX C
Survey Instruments

Observing the Health Worker Caring for Sick Children

District _____ Facility _____ Date____/____/____
Interviewer _____ Health Worker Name_____ Survey No.____

Background information

1. Child's age from clinic card (months) _____

2. What type of health worker is being observed?
___ Clinical officer (CO) ___ Environmental Health Technician (EHT)
___ Registered nurse (ZRN) ___ Enrolled Nurse (ZEN)
___ Doctor (DR) ___ Community Health Worker (CHW)
___ Other _____

*--BEGIN TIMING THE CONSULTATION NOW-- TIME:*_____

Initial screening (circle correct answer)

Does the health worker determine the child's:

3. Age by questioning? Y N

4. Weight for age? Y N

5. Body temperature (by thermometer or by touch)? Y N

6. Immunisation status (by card)? Y N No card brought

Assessment questions

About which of the following does the health worker <u>ask?</u>

7. Why the mother or guardian brought the child to the health centre? Y N
if so write down—
1st cause_____ 2nd cause _____
other causes_____

8. Length of the illness Y N

9. Previous treatment for the same illness Y N
IF YES—

10. did she or he ask if treatment was at home or in a clinic? Y N

11. Fever in the past 24 hours Y N

12. Fits (convulsions) Y N

13. Change in level of consciousness/drowsy or sleepy? Y N

14. Diarrhoea Y N *if NO, jump to 18*

15. If Yes - did health worker ask how many days? Y N

16. If Yes - was blood in the stool queried? Y N

17. If Yes - was frequency and consistency queried Y N

18. Cough or difficulty breathing? Y N

19. Vomiting Y N. *if No, jump to Q21*
If YES—
20. did the health worker try to find out if just spitting up or vomiting everything? Y N

21. Able to breast feed? if under age two, does the health worker ask? Y N N/A

22. How well the child was eating? Y N

Examination of the child

Which of the following areas does the health worker examine?

23. Pinch the skin to check skin turgor? Y N

24. Count respiratory rate? Y N

25. Lift the shirt or dress to look for chest in-drawing? Y N

26. Listen to chest with stethoscope? Y N

27. Observe the palms or conjunctivae for pallor? Y N

Treatment prescribed for the child

28. What does the health worker administer, prescribe or recommend for the child (tick ALL which apply)
___ Immunisation(s)
___ Chloroquine, tablets or syrup
___ Chloroquine, injection
___ An antibiotic, tablets or syr%w
___ An antibiotic, injection
___ Paracetamol
___ ASA
___ Vitamin A
___ ORS or home available fluids
___ Antimotility or antidiarrhoeal drug
___ Other (specify)_____
___ no drugs or treatments were advised
___ referral to hospital

29. Total number of drugs administered or prescribed ____

30. Total number of injections administered ____

For any tablets or syrup dispensed or prescribed does the health worker explain:

31. Dose of medication? Y N

32. Times of day to give medication? Y N

33. Duration of treatment? Y N

34. Potential adverse reactions (side effects) Y N

35. Not to take any other medications along with those prescribed during this visit? Y N

36. What to do with any medications remaining at the end of treatment? Y N

If ORS is given or prescribed, does a health worker—

37. Explain how to prepare ORS? Y N ☐ sent to ORT corner for instructions

38. Demonstrate how to prepare ORS? Y N ☐ sent to ORT corner for instructions

39. Ask the mother to demonstrate how she will prepare ORS? Y N ☐ sent to ORT corner for instructions

Talking to the Mother

Does health worker explain to the mother or guardian:

40. What is wrong with the child? Y N

41. To give more fluids than usual? Y N

42. To continue breast feeding or encouraging the child to eat? Y N

43. What treatment mother should carry out at home? Y N

44. To return for further evaluation--

___ Fever does not go away after a certain length of time
___ the child is unable to drink
___ blood appears in the stool
___ diarrhoea persists
___ the child develops fast or difficult breathing
___ the child becomes worse for any reason
___ at the end of treatment for a check up
___ other _____

Does the health worker ask open-ended questions to determine whether the mother guardian understands:

45. How to give medicine (dose, frequency, number of days)? Y N

46. When to return with the child? Y N

CHECK THE TIME AT THE END OF THE CONSULTATION WITH THE NURSE OR CLINICAL OFFICER

Start_____ Stop _____ Resume _____ Finish _____ Duration: _____ minutes

47. Please ask the health worker for his or her provisional diagnosis for this patient

---

END OF HEALTH WORKER OBSERVATION

At the end of the series of observations, be sure to thank the health worker for his or her help during the clinic session.

Questions for the Exit Interview with the Mother or Guardian of a Sick Child

District_____ Facility name_____ Date___/___/___

Interviewer _____ Child's Age (months) _____ Survey No._____
☐ if referred to hospital by nurse or clinical officer

Greet the mother and tell her that you would like to ask some questions about her visit to the health centre today. Make her feel free, and assure confidentiality of answers.

Information about the illness

1. What conditions does you child have that brought you to the clinic today?
   1._____2._____3._____

2. Is this the child's first visit to the heath centre for this illness?
   ___ First visit
   ___ Return visit because the child is not getting better

3. How many days ago did you child first develop signs of illness? ____ days

4. Did you give any treatment at home for this illness before coming to the clinic? Y N
   If NO jump to Q9
   If YES--
5. For what conditions? _____
   (If it is "diarrhoea" go to Q6, if it is "cough" jump to Q7, and if it is "fever" jump to Q8)

6. Did you give your child treatment for diarrhoea at home? Y N
   If YES, what did you give—
   (tick what the mother volunteers—do not prompt)
   ___ ORS (Madzi a Moyo)
   ___ home available fluids (tea, milk, soda)
   ___ extra water
   ___ extra breast feeding
   ___ antibiotics
   ___ Panadol or ASA
   ___ traditional medicines/herbs/tatoos
   ___ medicines from private clinic
   ___ other medications_____

7. Did you give your child treatment for coughing/difficult breathing at home? Y N
   If YES what did you give--
   (tick what the mother volunteers—do not prompt)
   ___ cough syrup
   ___ traditional medicines/herbs/tatoos
   ___ Panadol or ASA
   ___ medicines from private clinic
   ___ antibiotics
   ___ extra water
   ___ kept child warm
   ___ other medications_____

8. Did you give your child treatment for fever at home? Y N

If YES, what did you give?

(tick what the mother volunteers—do not prompt)

___ chloroquine syrup or tabs
___ Fansidar
___ antibiotics
___ Panadol or ASA (or other analgesics or antipyretics)
___ traditional medicines/herbs/tatoos
___ tepid bath/cooling sponging
___ medicines from private clinic
___ other _____

9. Did the health worker tell you what was wrong with your child? Y N

If YES, ask—

10. What did he or she say was wrong with your child?

(Tick all that the mother or guardian volunteers—do not prompt)

___ Fever/Malaria
___ Diarrhoea
___ Dysentery
___ Cold/upper respiratory infection
___ Pneumonia
___ Measles
___ Malnutrition
___ There was nothing wrong
___ Didn't understand what I was told
___ Other condition: (specify)_____

11. Were you given a date by the health worker when you should return with the child for a follow-up visit? Y N

12. Did the health worker tell you to bring the child back if it becomes worse? Y N

13. How will you know if your child becomes worse and should be brought back?

(Tick all that the mother or guardian volunteers)

___ Fever doesn't go away
___ Child becomes drowsy or difficult to arouse
___ Child unable to eat
___ Child unable to drink
___ Blood in the stool
___ Diarrhoea persists
___ Child has fast or difficult breathing
___ Child fails to get better
___ Mother cannot explain or can't remember
___ Other: (specify)_____

Medications

14. Were you given any medicines or prescriptions for your child at the health centre today?
Y N If NO, jump to Q19
If "Yes"

15. Were you explained how to give the medications at home? Y N
If "No" jump to Q17

16. If YES, ask to see each medicine
For each medicine either dispensed or prescription given ask—
Please tell me how you are going to give this?
Then probe to find out—
HOW MUCH medicine will be given the child **EACH TIME**?
WHEN DURING THE DAY it is given?
And **FOR HOW MANY DAYS** is the medicine to be given?
Circle Y or N for correct response

Medicine	*How much is to be given at each dose*		*When during the day is it to be given*		*For how many days is it to be taken*	
☐ Chloroquine tabs	Y	N	Y	N	Y	N
☐ Chloroquine syrup	Y	N	Y	N	Y	N
☐ Cotrimoxazole tabs	Y	N	Y	N	Y	N
☐ Cotrimoxazole syrup	Y	N	Y	N	Y	N
☐ Paracetamol tabs	Y	N	Y	N	Y	N
☐ Paracetamol syrup	Y	N	Y	N	Y	N
☐ ORS	Y	N	Y	N	Y	N
☐ Amoxycillin tabs	Y	N	Y	N	Y	N
☐ Amoxycillin syrup	Y	N	Y	N	Y	N
☐ Erythromycin suspension	Y	N	Y	N	Y	N
☐ Pen V/Orapen	Y	N	Y	N	Y	N
☐ Metronidazole	Y	N	Y	N	Y	N
☐ Naladixic acid	Y	N	Y	N	Y	N
☐ Vitamin A	Y	N	Y	N	Y	N
☐ $FeSO_4$	Y	N	Y	N	Y	N
☐ Folic Acid	Y	N	Y	N	Y	N
☐ other	Y	N	Y	N	Y	N

17. Did the health worker(s) tell you about the possible adverse reactions (side effects) which the medicine(s) or prescription you were given might have? Y N

18. Did the health worker(s) tell you what to do with any medications remaining after your child's treatment is completed? Y N

19. For all mothers, not just whose children have diarrhoea---
Could you please demonstrate to me how ORS is prepared? *(have necessary items available including measures; it is not necessary for mother or guardian to actually open the ORS sachet)*
How much water is used to prepare ORS?
___ Correct volume (about 1 litre)
___ Incorrect volume (much less than 1 litre)
___ Incorrect volume(much more than 1 litre)
___ Has no idea about correct volume
___ 1 sachet to be added (correct)
___ Incorrect number of sachets suggested
___ Doesn't know correct number of sachets

20. If ORS is not available. can you explain to me how you would make SSS at home?
(Correct= 8 level teaspoonfuls of sugar + 1 level teaspoonful of salt – 1 litre of clean water or 4 level tablespoonfuls + 1 level teaspoonful + 1 litre of clean water)
___ correctly explained
___ incorrectly explained
___ Does not know

21. Did any health worker tell youduring this visit what home nursing care to do for the child when you return home? Y N
If YES: what did the health worker tell you to do?
(Tick all mother volunteers—do not prompt)
___ Give more fluids
___ Continue or increase feedings or breast feeding
___ Give medicine
___ tepid baths for fever
___ keep the child warm
___ avoid giving medications other than those prescribed at this visit
___ Wasn't told anything
___ Can't remember
___ Other_____

Immunisations

22. Did you bring your child's immunisation card? Y N

23. If NO, why was it not brought? _____

24. Did the clinician at the clinic today ask to look at the child's immunisation card? Y N

25. Interviewer: examine the immunisation record.
Did the child receive needed vaccines at this visit?
__ Yes
__ Can't know since mother did not bring card
__ No if no---
ask☞ __ mother or guardian has been told when to return for needed immunisation
__ none are needed at this visit
__ should have received, I have referred the child back for immunisation

26. If you child is ill with fever, or cough or diarrhoea or some other illness. would you still bring it to the MCH clinic for immunisations? Y N

27. Have you ever come to the clinic for an immunisation session but for various reason failed to have your child immunised? Y N

28. If YES was this because— *(tick what mother volunteers. do not prompt)*
___ immunisation session was cancelled
___ immunisation session was finished by the time I arrived
___ supplies had run out by the time I arrived
___ I was late
___ There was no place to sit—I got tired of standing and left.
___ There was a long queue and I couldn't wait
___ I was told that my child was too ill to receive immunisation. and to return again.
___ other reasons_____

Mother or Guardian satisfaction

29. How long did you have to wait before being first seen by any clinic staff?
_____ minutes _____ hours ☐ don't know

30. Do you think this waiting time was too long? Y N

31. Are there any parts of your visit to the clinic today with which you were not satisfied?
Y N

32. If YES, what parts of your visit are you not satisfied about?
☐ waiting too long ☐ clinic congestion
☐ shortage of medicines ☐ no doctor present
☐ other (specify) _____
_____

33. Do you think the service your child has received is any better now than ___ months ago?
Y N ☐ don't know *Ask only if there has been a recent IMCI training for health workers.*

34. If you could suggest three ways in which service could be improved for children at this health centre, what would they be?
(may ask probing questions if needed)
☐ none ☐ special children's clinic
☐ more drugs ☐ have more staff
☐ staff should be more receptive
☐ other (specify) _____

35. Do you have any other comments (good or bad) about the service you received today at the clinic today?

Do you have any questions about your child's illness or treatment which I could answer for you at this time? *Minor questions or incorrect understanding can be cleared up; for major problems mothers should see clinic staff again.*

Thank the mother for answering questions, and wish her and her baby well.

END OF INTERVIEW

Facility, Equipment, and Supply Questions

District_____ Facility name_____ Date___/___/____
Interviewer_____

Space and equipment

Are the following present in the clinic?

1. Are all mothers or guardians able to be seated while waiting? Y N

2. Does each health worker caring for children have a chair and table or desk? Y N

3. Are the mother or guardian and child able to be attended in privacy? Y N

4. Is a watch with a second hand or a timer available for each health workers managing sick children? Y N

5. Is an adequate volume water available? Y N

6. Is there a latrine in good working order for patients and staff? Y N

7. Is a weighing scale present and in working order? Y N

8. Is there a cooker/stove for sterilization in working order, with adequate fuel & distilled water? Y N (=N if anything missing)

9. Is there a steam sterilizer present and in use for BCG needles? Y N

10. Is a refrigerator for vaccines present and in working order? Y N

11. Is a thermometer present inside? Y N

12. Is a temperature for the MCH refrigerator being recorded twice daily? Y N (1x on Sundays)

13. How many days out of the previous 30 was the temperature above 8C?
____ days N/A

14. For how many days out of the previous 30 was the temperature below 0C?
____ days N/A

15. In your opinion are there adequate health education materials displayed about the health of children which are appropriate, and up to date? Y N

Management of drugs and other supplies

16. Are drugs and supplies stored in a locked cabinet or room with grill doors? Y N

17. Is there a two week supply of unused disposable needles in stock? Y N

18. Is there a two week supply of unused disposable syringes in stock? Y N

19. Is there a two week supply of IV fluids and giving sets in stock? Y N

20. Availability of drugs: *Please fill in the following table:*

medicine	is the control card current?	amount stock recorded	actual stock present	days o/s last month	date drug last in stock
☐ cotrimoxazole syrup	Y N	Y N	Y N	Y N	Y N
☐ cotrimoxazole tabs	Y N	Y N	Y N	Y N	Y N
☐ chloroquine syrup	Y N	Y N	Y N	Y N	Y N
☐ chloroquine tabs	Y N	Y N	Y N	Y N	Y N
☐ ORS sachets	Y N	Y N	Y N	Y N	Y N
☐ DPT	Y N	Y N	Y N	Y N	Y N
☐ IV fluids	Y N	Y N	Y N	Y N	Y N
☐ Pen V syrup	Y N	Y N	Y N	Y N	Y N
☐ eye ointment	Y N	Y N	Y N	Y N	Y N
☐ Panadol syrup	Y N	Y N	Y N	Y N	Y N
☐ amoxycillin syrup	Y N	Y N	Y N	Y N	Y N
☐ mebendazole	Y N	Y N	Y N	Y N	Y N
☐ metronidazole	Y N	Y N	Y N	Y N	Y N
☐ multivitamins	Y N	Y N	Y N	Y N	Y N

ORT corner

21. Is there a place where a child and mother or guardian can stay for several hours and be observed while the child is treated for dehydration? Y N

22. Does the facility have all the necessary cups, containers, spoons and measuring and mixing utensils to prepare ORS? Y N

Clinic records

23. Are OPD registers kept up-to-date, including diagnosis and treatment given? Y N

24. Is the immunization tally sheet kept up-to-date? Y N

25. Was the MF-47 (monthly return) completed last month? Y N
(If MF-47 can not be found, circle "N")

26. Is there at least a two week supply of under-5 cards for new children coming? Y N

Review the OPD register for the last month and fill in the following:

27. According to the OPD register how many first visits under age five were made last month? ____ number

28. Does this total from the OPD register agree with the total on the MF-47? Y N

29. How many of the children under five seen last month have more than one diagnosis recorded in the register?
_____ number ☐ Information not available

30. From the MF-47, how many of the following diagnoses were made last month in children under 5?
____ malaria
____ diarrhoea
____ dysentery
____ pneumonia
____ malnutrition
____ anaemia
____ measles
____ ear infection

31. Of the last 10 cases of simple childhood diarrhoea or "gastroenteritis" (but not dysentery) recorded in the register, for how many were antibiotics prescribed?
_____ number ☐ Information not available

32. Of the last 10 cases of childhood diarrhoea or "gastroenteritis" recorded in the register, for how many was ORS prescribed?
_____ number ☐ Information not available

33. Of the last 10 cases of upper respiratory tract infection recorded for how many were antibiotics prescribed?
_____ number ☐ Information not available

34. Of the last 10 cases of malaria recorded, how many received chloroquine injections?
_____ number ☐ Information not available

35. How many children were referred to hospital last month for any condition?
_____ number referred ☐ Information not available

General Health Centre information.

36. Are the following present?
____ map of catchment area
____ population statistics, including population <5 yrs <1 yr
____ immunization coverage graphs
____ graph of the most common diagnoses
____ outreach and clinic activities schedule
____ clinical guidelines

37. Is there an equipment inventory present, and well kept? Y N

38. What is the state of cleanliness of the toilets (both staff and patient)?
____ clean
____ not very clean
____ unspeakable

39. What is the state of cleanliness of the kitchen?
____ good
____ fair
____ poor

END OF EQUIPMENT AND SUPPLY QUESTIONS

Be sure to thank the in-charge for his or her kind assistance in helping to supply this information.

Health Care Worker Interview Questions

District_____ Facility name_____ Date _________
Health Worker Name _____ Interviewer _____

Introduce yourself to the health care worker. Tell him/her that you would like to ask him/her some general questions about the clinic followed by some questions about his/her job and some of the diseases likely to be seen. Please assure the worker that this is not an inspection, and their responses are confidential and will not be disclosed to their supervisors.

Activities at the Health Centre

1. Type of health worker
   ___ Clinical officer(CO)
   ___ Registered Nurse (ZRN)
   ___ Enrolled Nurse (ZEN)
   ___ Other (OTH)
   ___ Environmental Health Technician (EHT)
   ___ Classified Daily Worker (CDW)
   ___ Doctor (MD)
   ___ Community Health Worker (CHW)

2. How many years have you been at this facility? _____yrs

3. How many hours a day does the clinic see patients? _____ hrs
   How many days per wk? ____ days

4. In a usual day, how many staff are on duty treating children in the OPD? _____

5. How many of those treating children have received training in treating childhood illness. ____ □ don't know

6. In the last 5 years, which of the following training courses (and lasting 2 days or more) have you participated in?
   (read out the list and tick responses)
   ___ immunisation
   ___ management of malaria
   ___ management of diarrhoea
   ___ management of malnutrition
   ___ management of respiratory infections
   ___ Quality Assurance
   ___ Other _____
   ___ attended no training courses

7. How many hours per day does this clinic offer immunisations to children? ___hours
   How many days per week is it open for children at least some hours? ___ days

8. How many times during the past month has some health worker from this clinic done outreach work in the following locations? *(please tick responses volunteered—do not prompt)*
   ___ schools
   ___ markets
   ___ households
   ___ community groups

9. In the past 12 months, how many times has a supervisor visited your health centre?
_____ times

10. Which of the following did your supervisor do the last time he or she made a supervisory visit?
(Read the following to the health worker and tick all that apply)
__ Discussed staff complaints about work conditions
__ Observed management of sick children
__ Interviewed patients/guardians
__ Discussed drug delivery problems
__ Reviewed records and reports
__ Inspected the facility
__ Provided clinical training or continuing education
__ Discussed problems with supplies and equipment
__ Met with the entire team to provide feedback from the visit
__ This health worker was not present during last visit so cannot answer
__ Other _____
_____

Clinical Management

Now I would like to ask some questions on treatment of common childhood diseases.

11. What things should you examine if a child has a history of cough or difficulty breathing?
(Tick all answers given by the health worker—without prompting)
___ Count respiratory rate
___ Listen with a stethoscope for crepitations
___ Look for chest in-drawing
___ Listen for wheezing/or stridor
___ Look for flaring of the nostrils
___ Other_____
___ Doesn't know

12. A 9 month old child has a cough. How can you tell if the child has pneumonia?
(Tick all answers given by the health worker—without prompting)
___ Rapid or difficulty breathing
___ Look for chest in-drawing
___ Listen with a stethoscope
___ Other_____
___ Doesn't know

13. Have you ever learned from any source that rapid respiration at rest in a two-year old child means that the child probably has pneumonia? Y N

14. If a 9 month old child should have a breathing rate of 30 per minute would you consider this child as having pneumonia? Y N

15. If a child should be brought to you with a cough, but no fever or rapid respiration, what would you do?
(Tick all answers given by the health worker—without prompting)
___ advise increasing fluids
___ refer to hospital
___ prescribe antibiotics
___ check for ascaris worms
___ prescribe paracetamol
___ prescribe cough mixture
___ other _____

16. If a child with diarrhoea is brought to you, what questions would you ask of its mother?
(Tick all answers given by the health worker—without prompting)
___ How many days ago did the diarrhoea begin?
___ Is blood or mucus present in the stool?
___ Other (details need not be recorded)

17. If a child has diarrhoea what things should you examine for?
(Tick all answers given by the health worker—without prompting)
___ Skin pinch/skin turgor
___ Sunken eyes
___ Dryness of eyes or mouth
___ Thirst
___ Level of consciousness
___ Other (details need not be recorded)

18. How do you know if the child with diarrhoea is dehydrated?
(Tick all answers given by the health worker—without prompting)
___ Lethargic or unconscious or not able to drink
___ Restless or irritable
___ Sunken eyes
___ Thirsty
___ Skin pinch goes back slowly
___ Dry mouth or dry eyes
___ Other (details need not be recorded)

19. What treatment and advice would you give for a child with mild diarrhoea of two days' duration?
(Tick all answers given by the health worker—without prompting)
___ ORS/ORT
___ Advise mother to give extra fluids at home
___ Advise mother to continue feeding (breast feeding if under 2 years)
___ Advise mother to return if blood or mucus in the stool
___ Advise mother to return if child not drinking well
___ Antibiotics
___ Antimotility drugs/antidiarrhoeal drugs
___ Other _____

20. If a child you diagnosed and treated for malaria three days previously is brought back by its mother or guardian with continuing fever and you believe the treatment was taken appropriately, what are the next things you would do?
(Tick all answers given by the health worker—without prompting)

___ Ask the mother to bring the child back every day for the next three days to be given chloroquine under direct observation.
___ Prescribe cotrimoxazole with a repeat course of oral chloroquine
___ Advise the mother to purchase fansidar since you do not have it
___ Refer to hospital
___ Reassess the child to determine if there is some other condition present
___ other _____

21. Which of the following would cause you to refer a child to hospital without delay?
(Read the list to health worker and tick which are selected)

___ Child is drowsy/abnormally sleepy/unconscious
___ Child has had convulsions
___ Child is not eating or drinking anything
___ Child vomits everything
___ Fever does not respond to the drugs which have been given
___ Chest in-drawing or difficulty breathing or wheezing
___ Severe dehydration
___ Stiff neck
___ Severe malnutrition: visible severe wasting or edema of both feet
___ Severe pallor
___ Infant less than two months old with fever or fast breathing
___ Other (details need not be recorded)

22. If a ten month old child comes to the clinic who is hot to the touch, has diarrhoea, and has received no immunisations, what would you do?
(Tick all answers given by the health worker—without prompting)

___ Give BCG
___ Give DPT-1
___ Give polio-1
___ Give measles immunisation
___ Assess and treat the fever
___ Assess and treat the diarrhoea
___ Tell the mother to return for immunisations when the child is well

Health Worker Perceptions

23. What do you think three important reasons which prevent mothers or guardians from bringing children to the health centre when they are ill?
(Tick all answers given by the health worker—without prompting)

___ Lack of money
___ Lack of time, busy selling in the market or other work
___ ignorance
___ Too many children
___ Difficult or expensive transport
___ long distances to clinics
___ Long waiting times in the clinics
___ Lack of drugs in the clinics
___ Lack of services in clinics which mothers think are important
___ Fear of febrile reactions or abscess formation
___ Others (specify) _____
_____
_____

24. What are reasons you think why mothers do not follow instructions given them by health workers?
(Tick all answers given by the health worker—without prompting)

___ Mothers don't have enough time to carry out instructions given
___ The mothers ignore the advice given
___ Health Workers need additional training in communication skills
___ Nobody cares whether health workers do communicate effectively
___ The clinic doesn't have adequate materials (posters, flip charts, etc) to teach effectively
___ The health centre is too noisy and lacks privacy
___ Mothers are confused by conflicting messages from health workers, some of whom are not up-to-date on recommended treatment and advice
___ Other (specify) _____
_____
_____

25. What are the biggest difficulties about your present job?
(Tick all answers given by the health worker—without prompting)

___ Lack of adequate in-service training or upgrading
___ Mothers don't bring children to clinic
___ Staff shortages
___ Lack of drugs or supplies
___ Lack of supervision
___ Lack of feedback on performance
___ Inadequate transport
___ Health facilities are inadequate and too small
___ Lack of knowledge
___ Inadequate salary
___ Poor opportunities for promotion
___ Demoralised
___ Others_____

26. If you could choose three things which would improve the quality of care for children in your clinic, what would they be? *(can name more than three if desired, some probing questioning may be required.)*

_____

_____

_____

END OF THE HEALTH WORKER INTERVIEW

Thank the health worker for his/her cooperation and answer any questions that he/she may have about the correct recommendations for immunisations or management of sick children.