

**DISTRICT SUPPORT FOR IMCI
ZAMBIA
JULY 12-31, 1998**

Lusaka, Zambia

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BASICS Technical Directive 019 ZA 01 021
USAID Contract Number HRN-Q-19-93-00032-00

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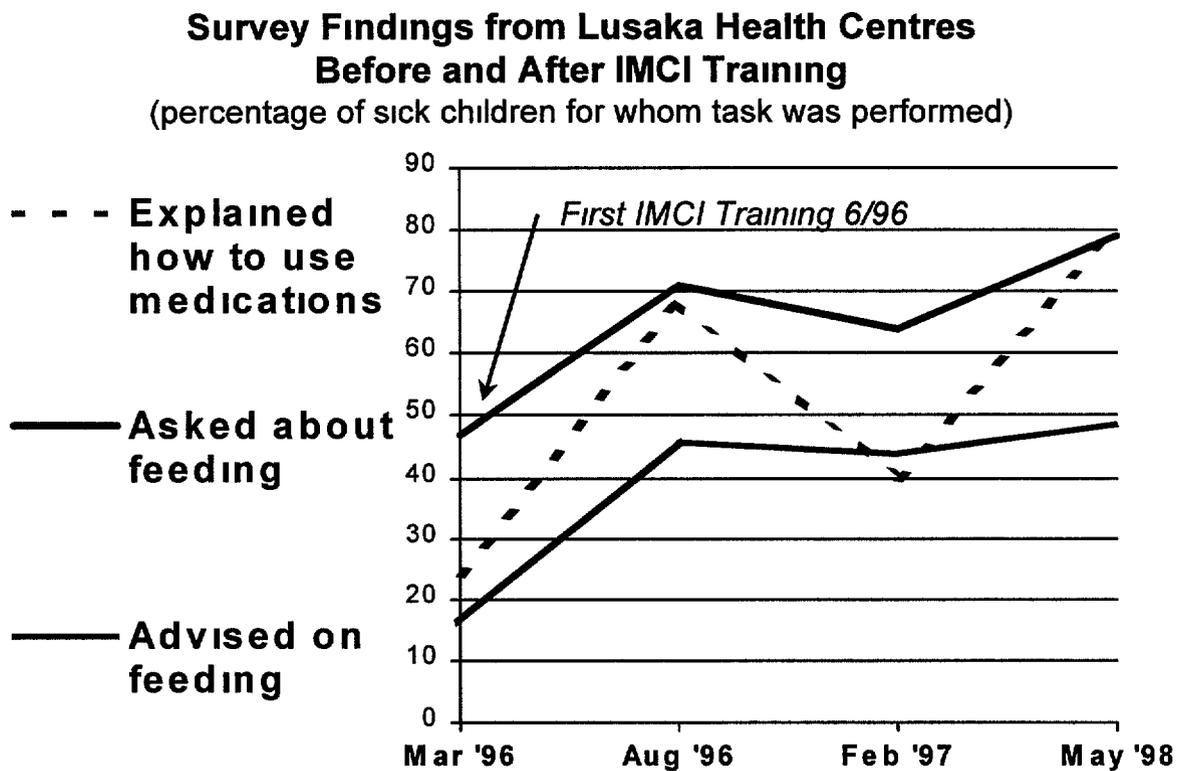
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ACRONYMS

BASICS	Basic Support for Institutionalizing Child Survival
CBoH	Central Board of Health
CDE	Casual Daily Employee
CO	Clinical Officer
DHMT	District Health Management Team
EDMSS	Essential Drugs & Medical Supply Store
EHT	Environmental Health Technician
HMIS	Health Management Information System
IMCI	Integrated Management of Childhood Illness
MCH	Maternal and Child Health
MD	Doctor of Medicine
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
QA	Quality Assurance
RN	Registered Nurse
TB	Tuberculosis
USAID	United States Agency for International Development
ZEN	Zambia Enroll Nurse

BACKGROUND

Integrated management of childhood illness (IMCI) has been introduced in several districts in Zambia over the last two years. The effectiveness of this approach for improving the care of sick children has been documented through a series of health facility surveys. These surveys suggest that quality of care improved significantly immediately following IMCI training, then began to decline somewhat over the following year. However, the most recent survey, carried out 20 months after IMCI was first introduced to Zambian health centers, showed that quality of care was at an all time high. This is illustrated by the following chart demonstrating trends in counseling practices of IMCI-trained health workers at eight health centers in Lusaka.



The same data, however, have also identified important gaps in the performance of many health workers

- 1 Most health workers still do not ask caretakers about key danger signs (e.g., convulsions)
- 2 Most health workers still do not provide adequate counseling (especially on feeding)

PURPOSE OF THE TRIP

To help document some of the factors underlying trends in health worker performance over the last year, a BASICS consultant met with district and health center staff (two health centers in each district) in Lusaka, Kitwe, and Kafue districts from July 13 to 31. Discussions centered on the supervision and other support that these districts have provided for IMCI following training. At a special meeting of the Zambian IMCI Advisory Group held on July 30, a representative of each of the three districts presented a summary of their district's experiences with support of IMCI.

TRENDS AND FINDINGS

Staff in each of the three districts at both health center and district levels reported generally similar trends and findings related to the support provided to health workers trained in IMCI.

- 1 Prior to 1997, supervision of clinical care in general was infrequent and not structured. During their supervisory visits, district staff focused largely on administrative issues.
- 2 At a supervisory skills workshop in February 1997, an integrated checklist was introduced to help structure supervision and focus it on key features of the quality of care provided for reproductive health, child health, sexually transmitted infections, tuberculosis, and water and sanitation. Staff of Kitwe District did not participate in the supervisory skills workshop, but they began to make use of the integrated checklist after it was forwarded to them by the Quality Assurance Unit of the Central Board of Health.
- 3 District supervisors report that in the last year they have visited each health center at least once every three months and that as part of each visit, one member of the supervisory team has usually been able to use the IMCI section of the checklist to observe and evaluate one or more health workers managing sick children.
- 4 Supervisors agree that observation of IMCI with a checklist is practical and helpful for the following reasons:
 - a Before the introduction of the checklist, supervisors had been uncertain how to support quality of care and they rarely observed health workers dealing with patients.
 - b The checklist reminds the supervisors of the key aspects of quality to observe and gives them the confidence to advise health workers who omit key tasks.

- c Health workers report that they find it helpful to have supervisors observe and comment on their clinical care—this approach to supervision is acceptable and even appreciated by workers
- 5 On the other hand, district and health center staff report several problems with observation with checklist
- a To competently observe and advise on case management, the supervisor, even when aided with a checklist, must herself/himself be trained in IMCI
 - b During some supervisory visits to rural health centers with smaller patient loads, there might not be any sick children in attendance, especially if the supervisors arrive after 10 a m
 - c At larger urban health centers, the IMCI-trained staff work in shifts and some of them might be absent when the supervisory team visits
 - d The integrated supervisory checklist is so long (91 items), that after following it closely for a few rounds of visits, the supervisors now tend to skip over certain sections and use the checklist inconsistently
 - e Supervisors also report that shortages of paper and difficulties with photocopying discourage them from using the checklist itself as a record of the supervisory visit They use a single copy of the checklist repeatedly (as a job aide) rather than filling out a fresh copy during each supervisory visit They do not preserve the record for future reference The records that are kept of supervisory visits include few if any comments about the quality of care
 - f Without adequate records, supervisors find it difficult to keep track of which health workers have been adequately supervised and what the findings were during previous supervisory visits
 - g The IMCI section of the checklist should be further developed to include items to more carefully assess counseling and items to assess the appropriateness of the health worker's classifications and treatments
 - h To date, district staff have not distributed the checklist to health center staff Thus, health workers are not quite sure which standards they are being assessed against

RECOMMENDATIONS

At the IMCI Advisory Group meeting of July 30, representatives of the three districts presented various recommendations for strengthening supervision of IMCI

- 1 Supervision should be **supportive**. In general, in the last two years there has been a shift in the attitude of district staff from fault finding to coaching. This change in attitude has been appreciated by health center staff. It helps to make supervision more effective.
- 2 Health center and district staff should **emphasize a team problem-solving approach**. When discussing their findings at the end of supervisory visits, supervisors should discuss with health center staff the underlying causes of key problems identified and develop a consensus on practical steps to address these problems. In this way, supportive supervision will build upon the quality assurance effort.
- 3 Supportive supervision should remain **integrated**. Separate supervision for each vertical program will not be practical for districts.
- 4 **Supervision of clinical care should be emphasized** as an essential and integral part of routine supervision.
- 5 Supervisors should continue to **use a checklist to structure their supervision**.
- 6 **District staff should meet** once each year or two **to review the checklist and update it**.
- 7 **Supervision of IMCI should be done by a health worker** with adequate clinical experience and who is **trained in IMCI**.
- 8 As part of routine supervision, an IMCI-trained supervisor should **carefully observe health workers managing sick children and discuss the findings with them**.
- 9 The **checklist for observing IMCI should be further developed** to include items for assessing how well a health worker counsels and how appropriate are their classifications and treatments.
10. Supervisors using the IMCI section of the checklist should **ask further questions** to identify any problems health workers are having with the IMCI approach. Further discussions with health workers are needed to **identify underlying reasons** why health workers omit certain steps, such as asking about danger signs or counseling on feeding. These discussions should be briefly summarized in the supervisory record.
- 11 Each supervisor of IMCI could be given an **IMCI Supervision Record Book** made up of multiple copies of the one page (front and back) IMCI section of the checklist. The copies

of the checklist would remain bound up in this book. This way the supervisor would always have enough copies of the checklist, and the checklists completed during past visits would be available for review.

- 12 The first page of the IMCI Supervision Record Book could list the names of all the IMCI-trained health center staff in the district. **Next to the name of each health worker could be recorded the dates when the health worker has been supervised.** In this way supervisors could quickly identify health workers who are due for another supervision.
- 13 **A duplicate copy of the completed checklist should be left with the individual health worker** who has been observed. This would serve to remind the health worker of the IMCI standards and remind him or her of the findings.
- 14 **Supervisory visits should be scheduled at a time when IMCI-trained health workers are on duty and can be observed managing sick children.** The supervisory team could communicate with the health center in advance to make sure that a specific health worker is on duty when the supervisor(s) visit.
- 15 **The supervisory checklist should be distributed and discussed** at a meeting of health center in-charges. Each in-charge should then organize a meeting at their health center to distribute the checklist and discuss it with the clinical staff.
- 16 **Health center in-charges and clinical care specialists who are trained in IMCI should be observing other health workers** managing sick children and offering supportive supervision to them.

In addition to these findings and recommendations related to supervision, district and health center staff reported on other activities in support of IMCI: “internal supervision” by other health center staff, the health center QA approach (team-based, problem-solving), drug management, and hiring of part-time staff to improve patient flow. These various findings and recommendations were noted in the presentations made on July 30. These presentations constitute the remainder of this report.

APPENDIXES

APPENDIX A

AGENDA FOR IMCI ADVISORY GROUP MEETING

**District Support for IMCI
A Special Meeting of The IMCI Advisory Group**

Lusaka Intercontinental Hotel, July 30, 1998

AGENDA

- | | | |
|---------------|---|------------|
| 9 00 - 9 30 | Introductions | |
| 9 30 - 10 15 | Findings from health facility surveys | |
| | * Presentation by Ms Emily Moonze,
BASICS | Appendix B |
| | * Discussion | |
| 10 15 - 10 30 | Tea | |
| 10 30 - 12 00 | District support for IMCI | |
| | * Presentation by Mr Graham Samungole,
Lusaka DHMT | Appendix C |
| | * Presentation by Mr Bruno Chilundu,
Kitwe District | Appendix D |
| | * Presentation by Mrs P Liayo,
Kafue District | Appendix E |
| | * Discussion on various topics
Supervision,
Quality Assurance,
Drug management,
Other | |

APPENDIX B

PRESENTATION BY MS. EMILY MOONZE, BASICS

Survey Findings from Zambian Health Centers Before and After IMCI Training

Over the last two years a series of surveys has been carried out to look at the quality of health services offered to children at Zambian health centers. I would like to present key findings from these surveys.

LUSAKA HEALTH FACILITY SURVEY FINDINGS

Four health facility surveys have been carried out of 8 health centers in Lusaka city. A baseline survey was conducted in March of 1996. Three months later, in June of 1996, some of the health workers in these 8 health centers were trained in the 11 day IMCI course. Surveys 2, 8 and 22 months after this initial IMCI training documented the changes in performance of health workers trained in the course.

IMCI improves assessment of the sick child

Slide #1 (page 5) illustrates data on health worker performance of two key clinical tasks:

- * counting of respiratory rate in children with cough or difficult breathing
- * checking the skin pinch in children with diarrhoea

The slide shows how IMCI training has effectively introduced for the first time assessment of respiratory rate and it has reinforced the assessment of dehydration.

IMCI promotes rational use of drugs

It is often noted how important drug availability is for the success of IMCI. At the same time, it is appropriate to point out that IMCI itself helps to make drugs more available by promoting the rational use of antibiotics.

During the baseline survey in March 1996, 47% of children with a common cold and 45% of children with non-bloody diarrhoea were treated with antibiotics. Slide #2 (page 6) shows how such irrational antibiotic usage declined dramatically following IMCI training. At the time of the February 1997 survey, health worker performance was still better than during the baseline survey, but it had slipped from the period immediately after IMCI training. At the time of the last months survey, however, health worker prescribing practices were about as rational as immediately following IMCI training. At the end of this presentation I hope to discuss further the reasons for the decline in health worker performance from August '96 to February '97 as well as some of the factors leading to improved performance between February '97 and May of '98.

IMCI improves counseling

Slide #3 (page 7) illustrates data on health worker performance of several key counseling tasks:

- * explaining to parents how to use the medications that have been prescribed (This shows how often parents were explained the dosage, the number of times each day to give the drug and the number of days to continue the treatment),
- * asking parents about the current feeding practices of the sick child, and

* advising parents on feeding of the sick child

Note once again that IMCI training led to significant improvements in these key counseling tasks, but that health worker performance slipped somewhat between August 1996 and February 1997 before again improving

Summary

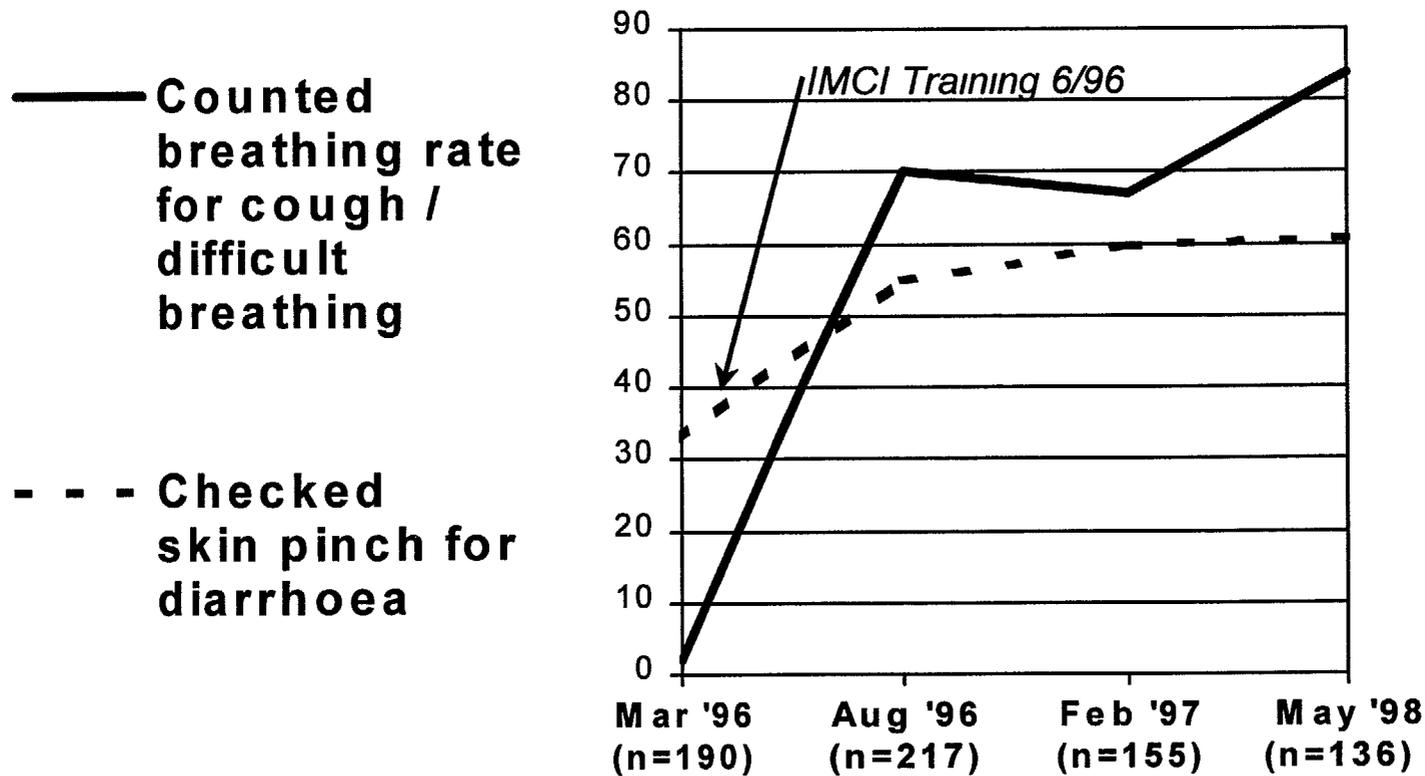
Slide #4 (page 8) shows all the data illustrated in the previous three slides. Also shown, at the bottom of the slide, are data on the average duration (in minutes) of the sick child consultation. Note the overall improvements in health worker performance brought about following the initial IMCI training. Note the general tendency for performance to slip by the time of the February 1997 survey then improve by the time of the May 1998 survey. In fact, the average duration of sick child consultations as observed during the February 1997 survey was only 4.6 minutes. This was even briefer than the consultations observed before IMCI training. In contrast, during last month's survey of these eight clinics, the sick child consultations observed lasted an average of 8.3 minutes - the longest average so far observed. Note that these surveys were carried out in very busy urban health centers where 8 minutes per patient is considered a long time.

Improvements in supervision may explain these trends in health worker performance. These health centers received little technical supervision between the initial IMCI training in 1996 and early 1997. As shown on this summary slide, immediately following the health facility survey of February 1997, a supervisory skills workshop was held at which the Lusaka Urban District Health Management Team developed a plan for technical supervision. Subsequently, district staff report visiting each health center quarterly for supervision including observation of sick child case management with feedback to health workers of the problems identified.

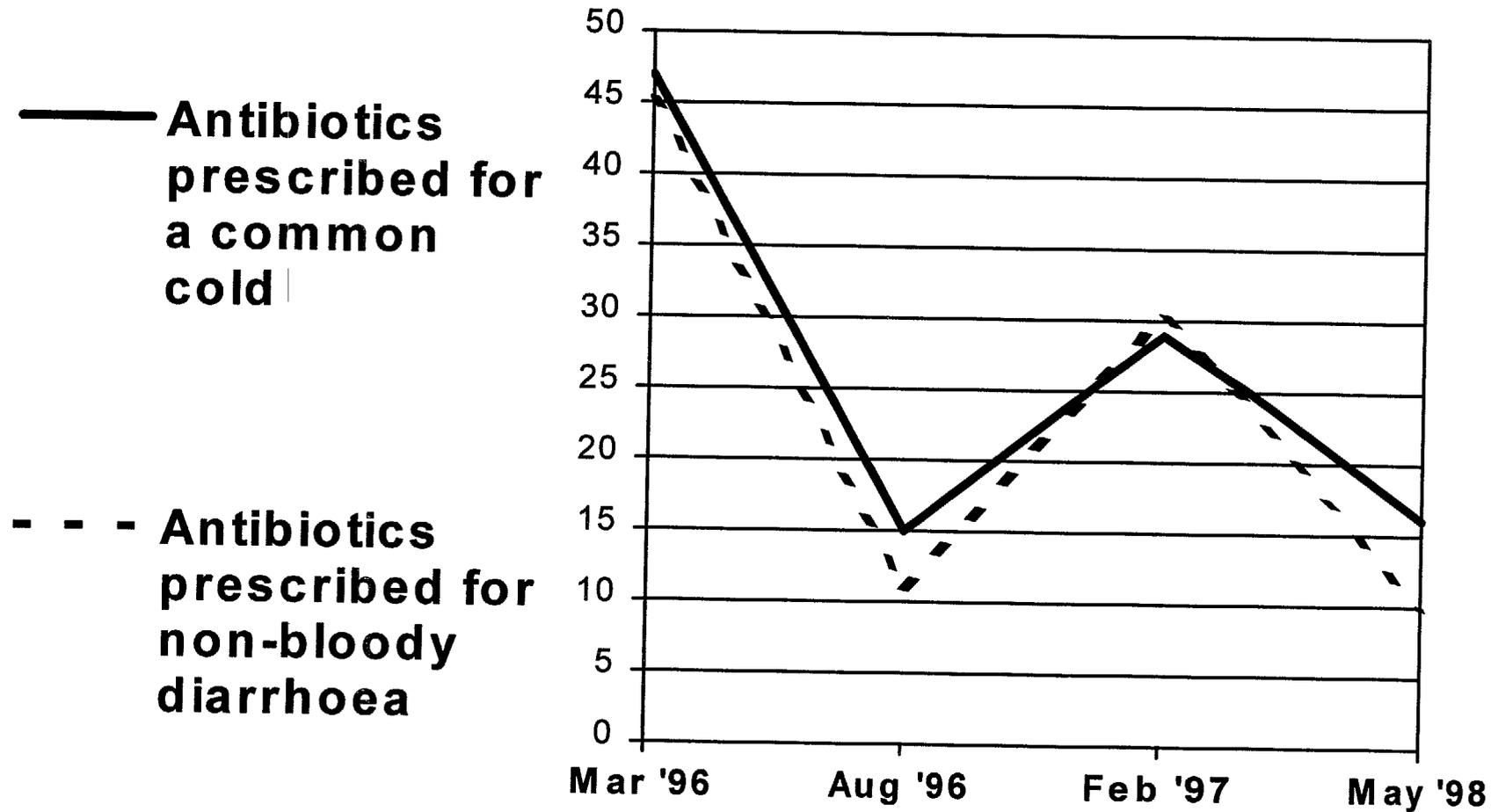
The health facility surveys have documented a successful effort on the part of district and health center staff to introduce and sustain improved health worker practices.

IMCI improves assessment

**Survey Findings from 8 Lusaka Health Centres
3 Months Before and 2, 8 & 22 Months After IMCI Training**
(percentage of sick children for whom task was performed)

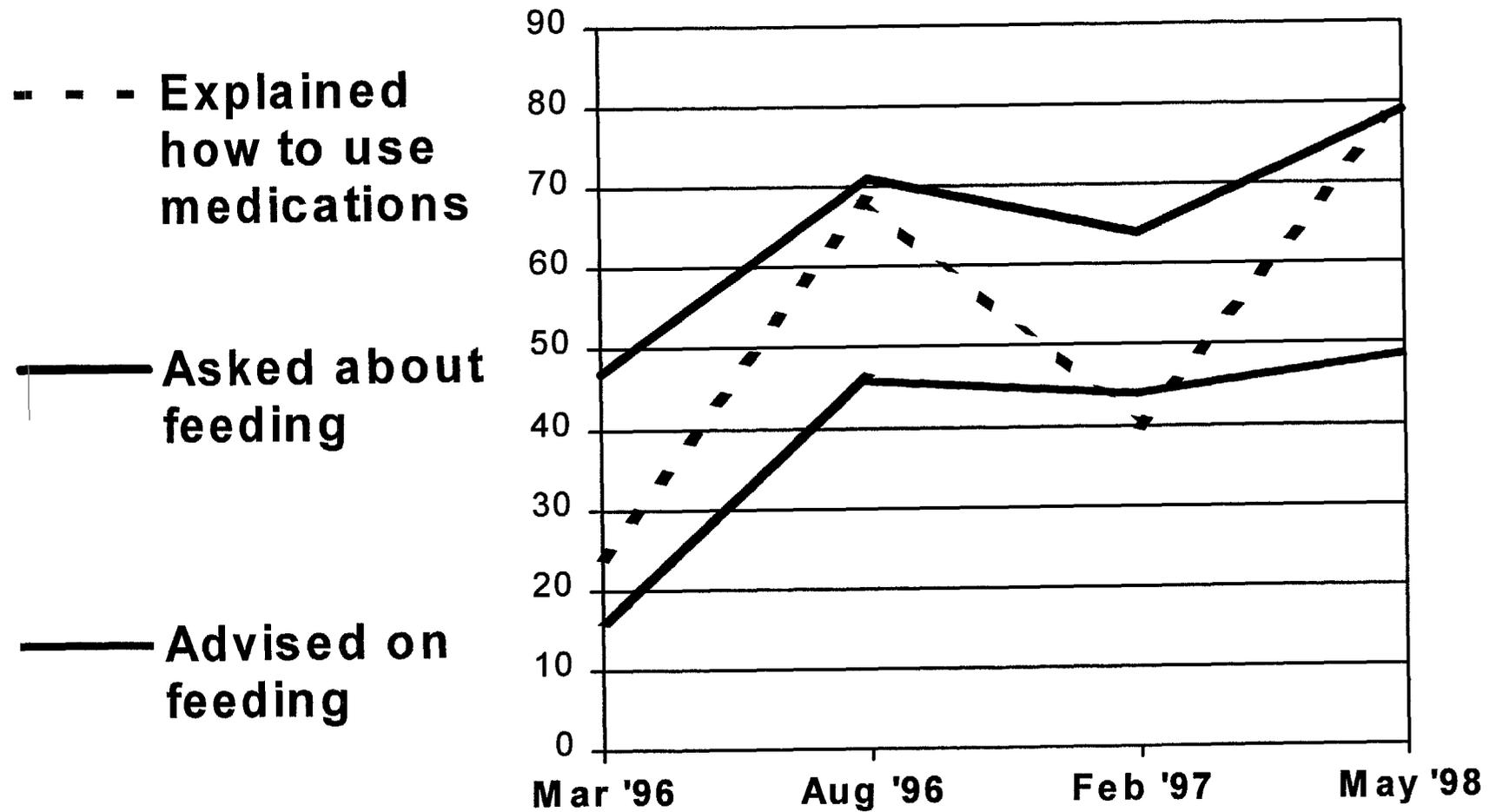


IMCI promotes rational use of drugs



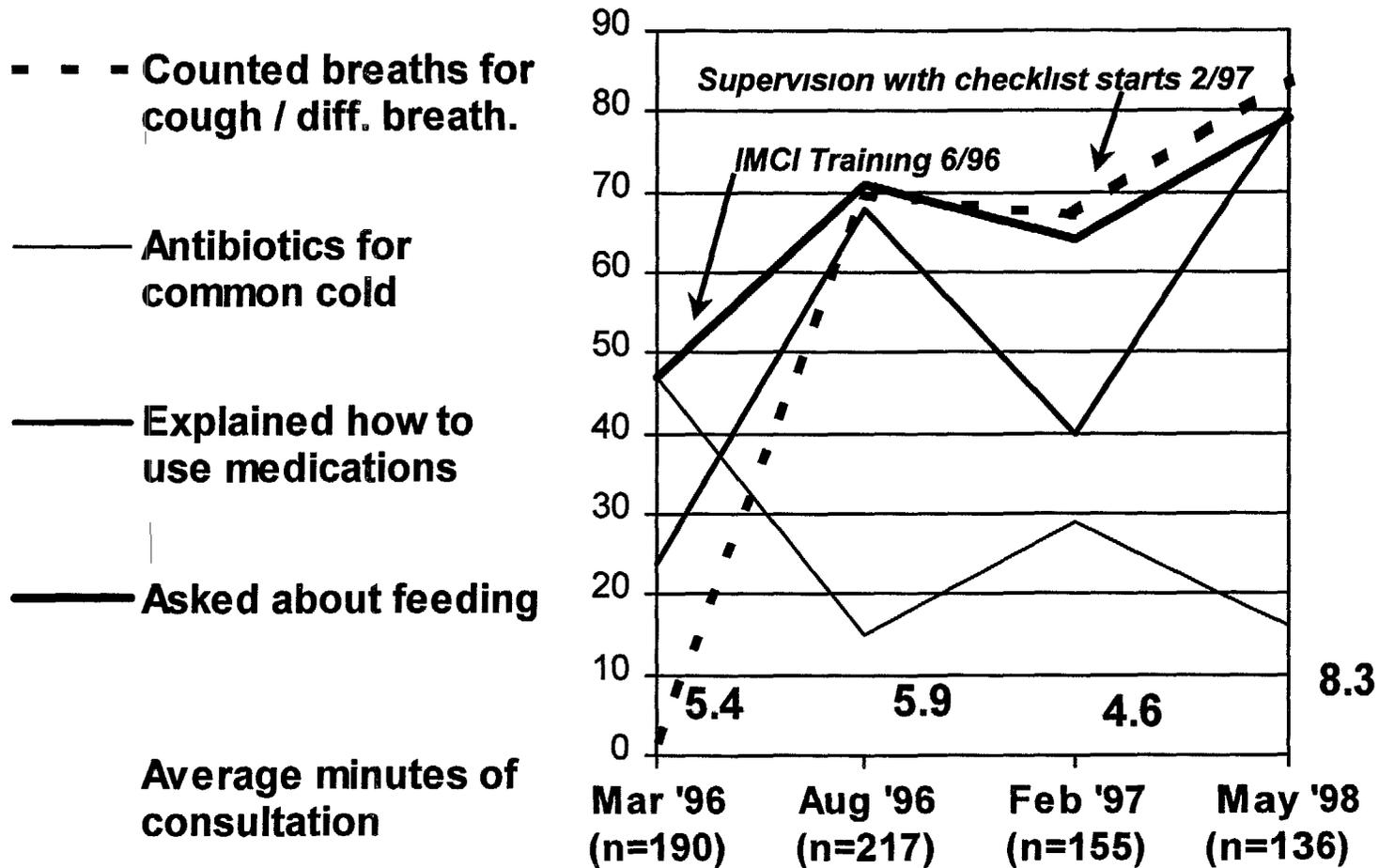
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IMCI improves counseling



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Survey Findings from 8 Lusaka Health Centres 3 Months Before and 2, 8 & 22 Months After IMCI Training (percentage of sick children for whom task was performed)



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SURVEY FINDINGS FROM KITWE AND KAFUE DISTRICTS

As shown in the following tables (pages 10 and 11), IMCI has also brought about significant improvements in health worker performance in Kitwe and Kafue districts. Only two health facility surveys have been carried out in each of these districts: a baseline survey soon before the initial IMCI training and a follow-up survey in May 1998 about 20 months after the initial IMCI training.

One notable difference between the three districts is the average amount of time spent by health workers on the sick child consultation. In May 1998, IMCI trained health workers in Kafue were observed to spend an average of 18.4 minutes with each sick child. This compares to 10.4 minutes spent in Kitwe district and 8.3 minutes in Lusaka. It should be noted that the health centers surveyed in Kafue are in rural areas and have smaller patient loads making it possible for health workers to spend a longer time with each patient. The data show that with this extra time, the health workers in Kafue were significantly more likely than the health workers in Kitwe or Lusaka to advise on feeding.

COMPARISON OF THE QUALITY OF CARE PROVIDED BY IMCI-TRAINED VS IMCI-UNTRAINED HEALTH WORKERS

Shown on page 12 is an analysis of the quality of care that was observed during the May 1998 survey. For each consultation that was observed, the quality of care was scored on a scale from 0 to 100% depending upon how many of 20 tasks were carried out appropriately by the health worker. That is, 5% was taken off of the quality of care score for each task that the health worker failed to perform appropriately: ask about danger signs, count respirations for a child with cough of difficult breathing, check immunization status, advise on feeding, etc.

The graph on page 12 compares the performance of health workers in Lusaka and Copperbelt Provinces trained in IMCI to health workers in the same provinces not trained in IMCI. On the horizontal axis is the quality of care. On the vertical axis is the number of sick children who received care of that quality. For example, the graph shows that the care of 13 of the sick children managed by IMCI-trained health workers was scored at the highest level of 100%.

The graph shows that the quality of care provided by IMCI-trained health workers was significantly higher than the quality of care provided by IMCI-untrained health workers. The average quality of care provided by IMCI-trained health workers was 82%. Three quarters of the children managed by IMCI-trained health workers received a quality of care of 75% or higher. In comparison, the average quality of care provided by IMCI-untrained health workers was 65%. Three quarters of the children managed by IMCI-untrained health workers received a quality of care of 70% or lower.

Survey Findings from 3 Kitwe Health Centers
1 Month Before and 20 Months IMCI Training
 (percentage of sick children for whom task was performed)

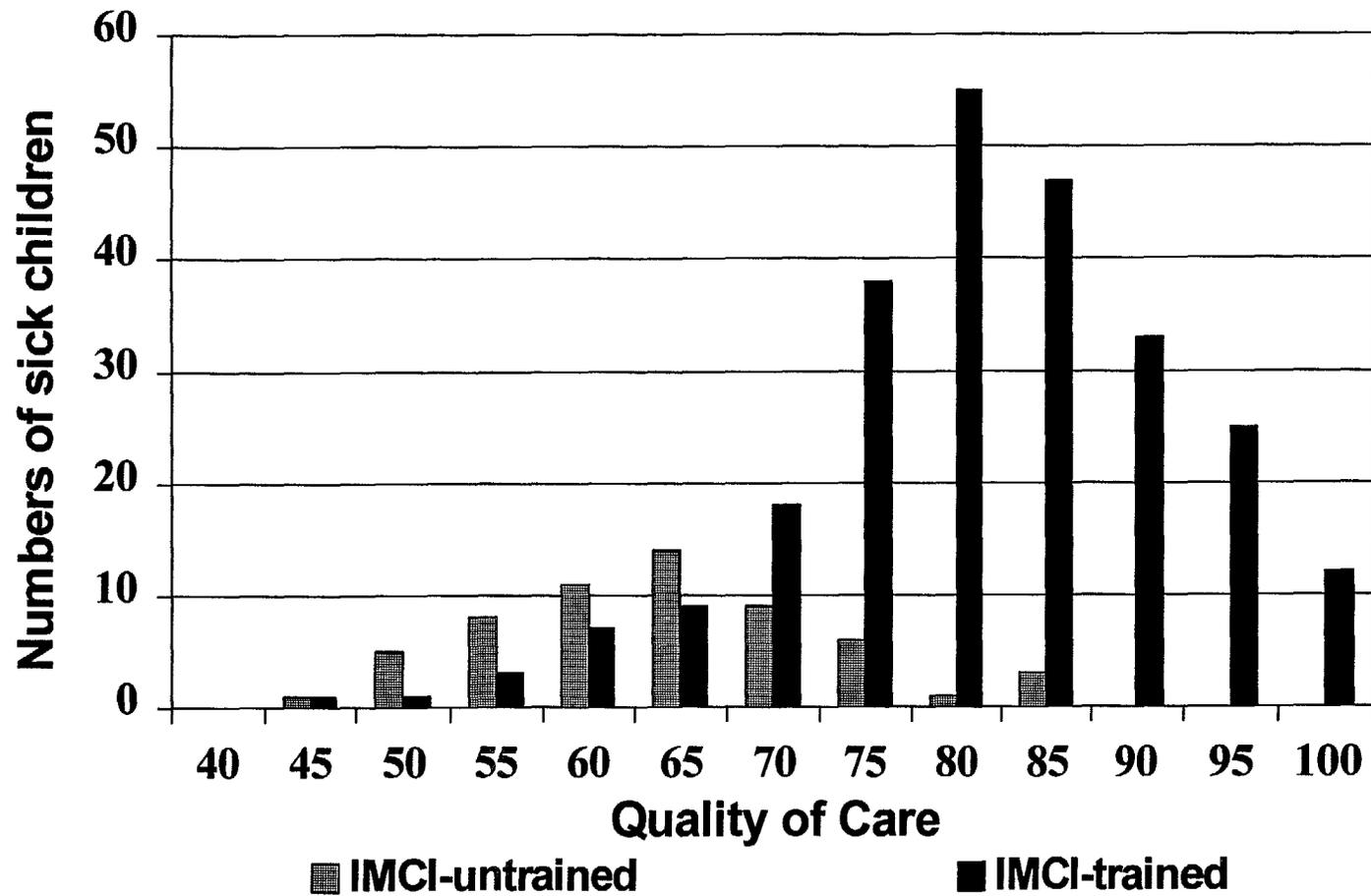
	August '96	May '98
Number of cases observed	54	39
Checked for danger signs		
drinking poorly, vomits everything or convulsion	0%	26%
checked for at least one danger sign	26%	74%
If cough or difficult breathing		
checked respiratory rate	21%	75%
checked chest for in-drawing	51%	83%
Prescribed antibiotic for common cold	83%	21%
If diarrhoea		
asked about duration	100%	38%
asked about blood in the stool	20%	50%
checked skin pinch	70%	88%
Prescribed ORT for diarrhoea	80%	88%
Prescribed antibiotic for non-bloody diarrhoea	50%	14%
If fever		
prescribed an antimalarial	77%	93%
Checked weight for age	44%	46%
Checked immunization status	42%	72%
Explained use of medication (dose, frequency, duration)	20%	27%
Asked about feeding	17%	74%
Advised on feeding	7%	36%
Duration of consultation in minutes	4 0	10 5

Survey Findings from 3 Kafue Health Centers
1 Month Before and 20 Months IMCI Training
 (percentage of sick children for whom task was performed)

	August '96	May '98
Number of cases observed	22	14
Checked for danger signs		
drinking poorly, vomits everything or convulsion	0%	35%
If cough or difficult breathing		
checked respiratory rate	6%	100%
checked chest for in-drawing	25%	100%
Prescribed antibiotic for common cold	69%	0%
If diarrhoea		
asked about duration	38%	90%
asked about blood in the stool	24%	90%
checked skin pinch	10%	80%
Prescribed ORT for diarrhoea	23%	80%
Prescribed antibiotic for non-bloody diarrhoea	59%	0%
If fever		
prescribed an antimalarial	46%	100%
Checked weight for age	36%	93%
Checked immunization status	27%	86%
Explained use of medication (dose, frequency, duration)	38%	71%
Asked about feeding	32%	100%
Advised on feeding	10%	71%
Duration of consultation in minutes	7 7	18 4

The quality of care for sick children

from May '98 observations of health workers trained and untrained in IMCI



SURVEY FINDINGS ON DRUG AVAILABILITY

Shown in the table below are data from May 1998 on availability of drugs at the 26 health centers surveyed. These findings suggest that supply of most drugs for IMCI has been reasonably good. Rural health centers in Zambia have benefitted from receipt of drug kits. But districts implementing IMCI have also done a fair job of providing supplemental drugs not included in the kit. The fact that chloramphenicol injection was not available at most health centers probably reflects ongoing resistance by decision makers at various levels to the recommendation of the IMCI Advisory Group to provide this drug to first-level health facilities for urgent pre-referral treatment.

Availability of Essential Drugs for IMCI	
Proportion of health centres with drugs in stock at the time of the May '98 health facility survey	
Drugs in the kit	
Oral antibiotics (cotrim, amoxicillin)	19/26
ORS	22/26
Oral chloroquine	23/26
Iron	20/26
Drugs not in the kit	
Sulfa-pyrimethamine (Fansidar)	17/26
Vitamin A	17/26
Quinine injection	15/26
Gentamycin injection	21/26
Benzyl penicillin injection	19/26
Chloramphenicol injection	6/26

APPENDIX C

PRESENTATION BY MR. GRAHAM SAMUNGOLE, LUSAKA DHMT

Lusaka District Support for IMCI

Good morning My name is Graham Sumungole I am a clinical officer with the Lusaka District Health Management Team In my presentation I want to tell you about our experience with supervision in Lusaka district I will focus in particular on supervision of IMCI I will also briefly mention some of the other efforts made by the district to support IMCI and improve clinical care in general

Background on Lusaka District

First, I would like to give you some background information about Lusaka District About one and a half million people live in the district We operate 23 health centers Last year these health centers reported managing 144,000 first attendances of sick children That is, on an average day each health center managed between 50 and 400 sick children

IMCI in Lusaka

Integrated Management of Childhood illness was first introduced in the district in July of 1996 Since that time about 40 clinical staff have been trained in IMCI They work at 12 of the 23 health centers Even at these 12 health centers most children are still managed by health workers not trained in IMCI In addition to these health center staff, 4 members of the DHMT have been trained in IMCI including the district director, the two deputy directors and myself

Supervision of Lusaka Health Centers

Before last year supervision of health centers in the district was done on an irregular schedule and it tended to focus on administrative issues such as staffing changes, disciplinary actions and supply of drugs In February of 1997 staff of the Lusaka, Kafue and Chongwe DHMT's participated in a supervisory skills workshop at which we developed plans for supervision, designed a supervisory checklist and practiced supportive supervision

The Lusaka DHMT decided that supervision should be carried out by a team of 5 to 10 district staff This team is made up of the "department heads" for accounts, pharmacy, HMIS, QA, MCH, TB, etc Over the last year and a half a supervisory team has visited each of the health centers in the district between 4 and 6 times On each visit we stay 2 to 3 hours Thus, we are able to supervise two health centers in a day The supervision is guided by an integrated checklist developed at the February 1997 workshop

The Supervisory Checklist

The checklist includes separate sections for assessing general health center management as well as quality of care for reproductive health, child health, TB, sexually transmitted infections, and water and sanitation The checklist is divided up among team members so that while one member of the team is assessing management of childhood illness, other members of the team are assessing other aspects

The supervisory checklist clearly has limitations

- District staff focused on clinical care find the checklist more useful than those focused on management issues (personnel, HMIS, drugs, accounts)
- If it is used mechanically, in the same way on each visit, the checklist could become boring to use after several visits
- The checklist helps to identify problems but doesn't include the questions and the discussion that are needed to identify the underlying causes of problems
- The checklist doesn't tell the supervisors how to prioritize among the findings and decide which issues to spend time investigating

In spite of these limitations we find that the checklist helps to remind us to review key issues and to assess whether the health center meets key standards

Until now we have not distributed the checklist to the in-charges or other health center staff to remind them of the same standards

Observation of Health Workers Managing Childhood Illness

Shown below is part of the section of the checklist used for assessing management of childhood illness. This section is used by myself or one of the two deputy directors trained in IMCI. The supervisory team almost always includes one of the deputy directors or myself. When we have visited one of the 12 health centers with IMCI trained health workers we have usually found an IMCI trained health worker and we have usually been able to observe him or her managing a sick child. On some occasions I have even observed a health worker managing several sick children. After observing, I spend about 15 minutes talking with the individual health worker about my findings. Unfortunately, some IMCI trained health workers have not been on duty on the days when we have visited. Thus, some IMCI trained health workers have been supervised more than others.

Feedback

After we have assessed various aspects of the health center we speak with individual health workers to discuss findings and then we meet with the staff as a group for a general feedback discussion. This discussion typically lasts about half an hour. The objective is for district staff to be supportive rather than fault finding.

Written Reports of Supervision

A report is written on each supervisory visit. These reports reflect the minutes that are kept of the general feedback discussions. Unfortunately, these supervision reports often do not include our findings from observation of health workers and the individual discussions we have held with them. When we first started using the integrated supervisory checklist, we used to complete the checklist and keep it for future reference. For the last year, however, the checklist has usually been used as a job aide rather than a record form. We refer to it to remind us of issues to

investigate but we don't actually fill it in or if we mark on the form we don't keep it for future reference

Observation of Assessment of the Sick Child 2 Months to 5 Years

Health Worker's Name _____ CO ZEN EHT RN MD CDE

Health Worker trained with 11 day IMCI course Yes No

Age of child ___ months Starting time _____ Finishing time _____ Duration ___ minutes

Does the health worker **greet the mother/caretaker**?

**Does the Health Worker
ASK about (or does mother report)**

**Does the Health Worker
EXAMINE for:**

Danger signs

- Not able to drink or breast-feed?
- Vomits everything
- Convulsions

Lethargic or unconscious

- Raise the shirt
- Count the breaths
- Look for chest indrawing
- Offer fluid (or observe breastfeeding)
- Pinch the skin of the abdomen

- Cough or difficult breathing?**
- For how long?

- Look or feel for stiff neck

Diarrhoea?

- For how long?
- Is there blood in the stool?
- Fever in the last 24 hours?**
- For how long?

Malnutrition

- Undress child to check for visible severe wasting
- Palmar or conj Pallor
- Oedema of both feet
- Very low weight for age

Ask to see **Immunization** Card

Due for immunization

Due for vitamin A

Feeding (if <2 years or very low wt).

- Do you breastfeed your child?
- If Yes, how many times in 24 hours?
- Does the child take any other food?
- If Yes, what food or fluids?
- How many times per day?

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Regional Support for District Supervision of Health Centers

Supervision is one of the issues examined by staff of the South East Regional Office of the CBoH when they visit each quarter for a Performance Audit. They compare the number of supervision visits planned by the district to the number of visits actually carried out. They ask to see the supervision records. They visit a few health centers to perform a sort of supervision themselves. Until now, however, the regional advisors have had relatively little to say about the content or the approach to supervision that districts should adopt.

Efforts beyond supervision to improve health worker practices

In addition to improved supervision, in the last year the district and the health centers have made other efforts to improve quality of care:

- District QA coaches are supporting the Problem Solving Methodology in 5 health centers
- The district is reviewing health worker performance to make decisions about who should be hired by the district health board
- In some health centers, drugs and therapeutics committees have been more active in holding meetings and symposiums to discuss quality of care
- At some health centers medical officers or IMCI-trained clinical officers have been given the role of clinical care specialist. These staff have been made to feel more accountable for the clinical performance of other staff. In general, however, the district needs to do more to build the skills of these senior clinical staff to provide supervision.

Other Support for IMCI

Finally, I want to point out two other kinds of support that district and health center staff provide for IMCI and quality of care in general. I do not have time to discuss this other support in detail, but I want to at least acknowledge it.

Drug kits have not been available for urban health centers for more than one year. Thus, IMCI and other clinical care now depends much more than in the past on the drug management efforts of district and health center staff. Districts do not receive any extra funds for procurement of drugs. Instead they receive credit to obtain drugs from the EDMSS drug store. Recently, however, our district has not been able to obtain sufficient quantities even of cotrimoxazole and chloroquine from the EDMSS. Lusaka District now procures additional drugs on its own using funds collected through fees that are charged to patients. This is not possible for IMCI, however, because no fees are charged for treatment of children.

Secondly, in the last year or so the district has made arrangements for health centers to hire part-time clinical staff. This has helped to permit health workers to spend more time with patients.

Recommendations for strengthening supervision of clinical care

Based upon our experience in Lusaka district I want to offer the following recommendations for strengthening supervision of IMCI and clinical care in general

- 1 The district needs to stick to a more regular schedule and increase the frequency of supervision After the initial push to strengthen supervision some of the momentum has been lost and the frequency of visits has declined somewhat
- 2 District staff should meet formally to review and update the checklist based upon the last year of experience District staff may want to add or subtract some items or restructure the checklist so that it is easier for each team member to use a separate section of it
- 3 The IMCI section of the checklist should be further developed to assess counseling and appropriateness of treatments Shown below is a draft of such a checklist (pages 21 and 22)
- 4 Supervisors using the IMCI section of the checklist should be trained to ask further questions to identify any problems health workers are having with the IMCI approach Further discussions with health workers are needed to identify the underlying reasons why health workers omit certain steps such as asking about danger signs or counseling on feeding
- 5 Each supervisor could be given a book made up of copies of the IMCI section of the checklist The copies of the checklist would remain bound up in this book This way the supervisor would always have enough copies of the checklist and the checklists completed during past visits would be available for review The first page of the book could list the names of all the IMCI-trained health center staff in the district Next to the name of each health worker could be recorded the dates when the health worker has been supervised In this way supervisors could quickly identify health workers who are due for another supervision Shown below (pages 19 and 20) is a draft of such a form for recording the dates of supervision of each health worker
- 6 A duplicate copy of the completed checklist should be left with the individual health worker who has been observed This would serve to remind the health worker of the IMCI standards and remind him or her of the findings
- 7 Supervisory visits should be scheduled at a time when IMCI-trained health workers are on duty and can be observed managing sick children The supervisory team could communicate with the health center in advance to make sure that a specific health worker is on duty when the supervisors visit
- 8 Finally, the more experienced clinical staff at a health center or the staff who have been trained with special courses such as IMCI should function as clinical care specialists for their health center The district should give these clinical care specialists copies of the supervisory checklist and encourage them to organize staff meetings to review clinical standards Special supervisory skills training could be provided to these specialists

Observation Checklist For Integrated Management of Childhood Illness

Note This checklist is to be used along with other information (e.g. information on drug management and vaccines management) collected as part of an integrated supervisory visit

Date _____ Name of supervisor _____

Health Center _____ Name of Health Worker _____
 Age of child ____ months Starting time _____ Finishing time _____ Duration ____ minutes

A Observation of ASSESSMENT of the Sick Child Age 2 Months to 5 Years

1 Does the health worker greet the mother/caretaker?

Does the Health Worker ASK about (or does caretaker report)	Does the Health Worker EXAMINE for:
--	--

Danger signs

- | | |
|---|---|
| <input type="checkbox"/> 2 Not able to drink or breast-feed? | <input type="checkbox"/> 7 Count the breaths |
| <input type="checkbox"/> 3 Vomits everything | <input type="checkbox"/> 8 Raise the shirt to look for chest in-drawing |
| <input type="checkbox"/> 4 Convulsions | <input type="checkbox"/> 12 Offer fluid (or observe breastfeeding) |
| <input type="checkbox"/> 5 Cough or difficult breathing? | <input type="checkbox"/> 13 Pinch the skin of the abdomen |
| <input type="checkbox"/> 6 For how long? | <input type="checkbox"/> 16. Look or feel for stiff neck |
| <input type="checkbox"/> 9 Diarrhoea? | Malnutrition |
| <input type="checkbox"/> 10 For how long? | <input type="checkbox"/> 17 Undress child to check for visible severe wasting |
| <input type="checkbox"/> 11 Is there blood in the stool? | <input type="checkbox"/> 18 Palmar or conjunctival pallor |
| <input type="checkbox"/> 14 Fever in the last 24 hours? | <input type="checkbox"/> 19 Oedema of both feet |
| <input type="checkbox"/> 15 For how long? | <input type="checkbox"/> 20 Very low weight for age |
| <input type="checkbox"/> 21 Ask to see Child Health Card | <input type="checkbox"/> 22 Due for immunization |
| Feeding | <input type="checkbox"/> 23 Due for vitamin A |

Feeding

- 24 Do you breastfeed your child?
- 25 If Yes, how many times in 24 hour?
- 26 Does the child take any other food?
- 27 If Yes, what food or fluids?
- 28 How many times per day?

SUMMARY OF FINDINGS
 (including response of health worker)

Page # _____

B Observation of COMMUNICATION with the Caretaker

- 29 Does the health worker use **words that are easy for the caretaker to understand**?
- 30 Does the health worker give the caretaker time and encouragement to answer and does the health worker **listen carefully**?
- 31 Does the health worker **praise** the caretaker for some good practices?
- 32 Does a health worker ask **open-ended questions** to determine whether the caretaker understands all the important information?

For each drug that the child is prescribed to take at home, **does the health worker explain** correctly to the caretaker

- 33 Dose 34 Frequency 35 Duration

- 36 If appropriate, does the health worker offer any of the following **advice on feeding**
 - Increase the frequency of breastfeeding
 - Reduce or stop other foods besides breast milk
 - Begin or increase the frequency of complementary foods
 - Give food that is thicker or enriched (e.g. with sugar, oil,)

- 37 Does the health worker **advise on when to bring the child again**?

- 38 Does the health worker **advise to return immediately** if the child
 - develops a fever or fever does not go away
 - is drinking poorly
 - has blood in the stool
 - has fast or difficult breathing
 - becomes worse

Note answer "yes" if the health worker advises to return immediately for any of the above reasons

C CLASSIFICATION and TREATMENT

Ask the health worker to list all of the child's classifications

Tick the box if correct. If incorrect, write the correct classification on the same line

_____	<input type="checkbox"/> Correct	_____
_____	<input type="checkbox"/> Correct	_____
_____	<input type="checkbox"/> Correct	_____
_____	<input type="checkbox"/> Correct	_____

List all of the treatments (drug dose frequency, days) prescribed by the health worker

Tick the box if correct. If incorrect write the correct treatment

_____	<input type="checkbox"/> Correct	_____
_____	<input type="checkbox"/> Correct	_____
_____	<input type="checkbox"/> Correct	_____
_____	<input type="checkbox"/> Correct	_____

APPENDIX D

PRESENTATION BY MR BRUNO CHILUNDU, KITWE DISTRICT

Kitwe District Support for IMCI

Good Morning My name is Mr Bruno Chilundu I am a clinical officer from Kitwe District From 1991 to the end of last year I was in-charge of Kamfinsi Health Center Since January of this year I have been in-charge of a new health center that has just opened in Kawama Last year I was trained in IMCI and trained as a facilitator of the IMCI course

In my presentation I want to tell you about the supervision conducted at the health centers where I have worked and elsewhere in Kitwe district I want to tell you about supervision from the perspective of someone working at the health center I will also comment on some of the other support which the district provides for IMCI

Supervision of Health Centers in Kitwe District

There are **18 health centers** in Kitwe district In the last few years a team of district staff have been visiting each health center **each 1 to 2 months** for supervision The team includes **3 to 4 district staff** Some members of the team have **clinical skills** Other members of the district team have **administrative skills** But there is **not much specialization** among the team members For example, for any particular visit any of 4 or 5 different district staff might have responsibility for supervising child health During most of these visits the team stays **less than one hour** But **three or four times each year the district supervisors have stayed several hours**

The things emphasized by the supervisors have changed from one year to the next

- During **1995 and 1996** the supervisors emphasized **physical rehabilitation** of the health center and development of **neighborhood health committees**
- Then in November of **1996** a QA training was carried out for health center staff After that QA training, district supervisors asked health center staff about the progress they had made with this **problem solving approach**
- District **supervisors began to use checklists in 1996** These checklists have been forwarded to the district by the QA unit in Lusaka
- Since the middle of **1997** district supervisors on some visits have begun to **observe health workers while they manage sick children**

Supervision with Checklist

District supervisors in Kitwe find the supervisory checklist useful and frequently refer to it during their supervisory visits

For a couple of reasons they want to modify the checklist

- 1 Some staff feel that it is **long** It includes 91 items
- 2 However, the district director, who is trained in IMCI, feels that **the IMCI section of the checklist should be even longer** He has suggested, for example, that the checklist should include items to more carefully assess counseling and items to assess the appropriateness of the health worker's classification and treatment

However, the DHMT has not yet had any formal discussions or developed any written proposals on how best to modify the checklist

Until now, little has been done to inform health center staff about the checklist

At one point I asked for a copy of the checklist and the supervisors gave me a copy, but, in general, these checklists have not been given to health center in-charges or to health workers. Thus, it has not been entirely clear to us what things are assessed when the supervisors visit

Observation of Health Workers Managing Childhood Illness

Observation of health workers practicing IMCI was introduced about one year ago as one component of a new checklist which the district received from the QA unit in Lusaka. For the last year, when the supervisory team visits the health center, one member of the team has observed a health worker throughout the time they are screening a sick child. **The supervisor uses the checklist to guide his or her observations. Then the supervisor talks briefly with the individual health worker to advise him or her on how to improve.** Some staff at my health center have commented that it **makes them a bit nervous** to have supervisors observe their work. On the other hand, the same staff insist that observation by supervisors is helpful - it **provides encouragement and support. It is not fault finding.**

In our district **only two district staff, including the director, have been trained in IMCI.** This situation will improve after this week because 5 more Kitwe district staff are being trained in the course now taking place in Lusaka. Until now, however, **the observation of IMCI has usually been done by supervisors who have not been trained in IMCI.** These untrained district supervisors have acknowledged that they feel unprepared to use the checklist, especially to observe a health worker who has been trained in IMCI. Another problem is that **in some cases when the supervisor visits there is no sick child present in the health center to observe health workers manage.**

Feedback

District staff have several ways of providing us with **feedback** on what they find during their supervisory visit

- 1 As I have just said, sometimes an **individual supervisor will talk with an individual health worker** about any findings. This is how supervisors usually provide feedback after observing a health worker manage a sick child.
- 2 At the end of the supervisory visit the district team **discuss their findings with the in-charge.** Findings from observation of individual health workers are usually not discussed during this general feedback.
- 3 I will then discuss the district's findings with the health center staff during a **staff meeting the following week.**

4 **Sometimes** the supervisors will give us a copy of a **written report** of their last visit the next time that they visit. In general, however, even I do not receive any written report of the supervisory visit.

Quality Assurance

As I have already said, health center staff placed a lot of emphasis on **Quality Assurance** following a **workshop in November of 1996**. Staff were taught how to identify problems, find the underlying causes of the problem, develop and carry out solutions and monitor improvements. Chimwenwe health center selected patient waiting time as a problem and was able to find ways to reorganize the health center to considerably **reduce waiting times**. District supervisory staff used to regularly ask what problems the health center was working on solving. For the last year, however, the district's QA effort has changed. The district has not organized any meetings especially for QA. Instead, the **district QA coaches now come during routine supervisory visits**. On these visits they **ask about minimum physical standards or performance indicators rather than** asking so much about **problem solving** or facilitating problem solving.

"Internal Supervision"

At the health centers where I have worked I have **supervised the clinical work of my co-workers**. Sometimes we **screen patients together in the same room**. Then it is possible for me to observe the work of other staff and for them to observe my work. If I am not working in the same room then I supervise when other staff **ask for my assistance with a complicated case** or sometimes when I invite them to **join me in examining an interesting case**. Once a week I **visit the pharmacy to check on drug availability**.

Recommendations for strengthening technical supervision

Based upon the experience I have just shared with you I would like to offer the following **recommendations** for strengthening supervision of child health care and other technical services

- 1 Supervision should be **supportive** In general, in the last two years there has been a shift in the attitude of district staff from fault finding to coaching This change in attitude has been appreciated by health center staff It helps to make supervision more effective
- 2 Health center and district staff should once again **emphasize a problem solving approach** District supervisors should use the problem solving approach when discussing findings at the end of supervisory visits As an example, when I reviewed the district's reports of supervision in the last year I found that it was repeatedly noted that certain health centers lacked an ORT corner and that district staff had advised health center staff to correct the problem If this problem had been carefully discussed with health center staff I believe that in some case they would have been noted that shortage of staff, shortage of clinic space or lack of ORT supplies at the district offices prevented them from easily resolving the problem With further problem solving discussions, however, the health centers should have been able to finally solve this problem
- 3 District staff should **visit for an hour or more** to properly assess the health center and discuss issues with the staff As shown by the ORT corner example, supportive supervision takes time With briefer visits, supervision once again becomes fault finding rather than supportive
- 4 **District supervisors should be trained in IMCI** to properly support health workers managing childhood illness
- 5 It is helpful to the health worker when a supervisor trained in IMCI can **carefully observe health workers managing a sick child and discuss the findings with them**
- 6 The **checklist for observing IMCI should be further developed** to include items for assessing how well a health worker counsels and how appropriate their classifications and treatments are
- 7 The **supervisory checklist should be distributed and discussed** at a meeting of health center in-charges Each in-charge should then organize a meeting at their health center to distribute the checklist and discuss it with the clinical staff
- 8 **Health center in-charges and clinical care specialists who are trained in IMCI should be observing other health workers** managing sick children and offering supportive supervision to them

APPENDIX E

PRESENTATION BY P LIAYO, KAFUE DISTRICT

Kafue District Support for IMCI

Good morning My name is Mrs Patricia Liayo I am a Registered Nurse/Midwife I have worked in Kafue since 1979 I joined the Kafue District Health Management Team in 1993 I was trained in IMCI in November, 1996 Since then I have joined the district director in supervising the 45 health workers in the district trained in IMCI

In my presentation I want to tell you about the supervision carried out in Kafue district

Supervision of Health Centers in Kafue District

There are 13 health centers in the district - 7 are rural and 6 are urban Since February, 1997 a district supervisory team visits each of these health centers every 2 to 3 months The team typically consists of 3 district staff We typically spend two to three hours at each health center and supervise two health centers in a day The supervision is guided by the integrated checklist that was developed at the February, 1997 Supervisory Skills workshop

Why use a checklist? There are several reasons why we use the checklist and have found it helpful

- 1 It is integrated and touches on all the key areas
- 2 It gives consistency to supervision Use of the checklist need not be boring, however, if the checklist questions are asked in a natural way and asked in the order that issues arise during the visit rather than in the order that items are listed on the checklist
- 3 It includes a section for observing IMCI-trained health workers while they work This permits supervisors to identify problems with clinical care that might otherwise be hidden
- 4 The health workers I have spoken to say that this approach to supervision is supportive They say that they want to know how they can improve their performance The first time that a health worker is observed he or she is often a bit nervous, but then they relax

Difficulties with use of the checklist

We have had several difficulties with use of the checklist

- 1 When we use the checklist the supervision process takes longer Most health center staff say that they appreciate a longer visit With a small health center having only 2 staff, however, a lengthy supervisory visit can disrupt patient care This is especially true if the supervisory team arrives early in the morning when the health center is busiest
- 2 On the other hand, if the supervisory team arrives after 10 00 or 11 00 there may be no sick children present and then I cannot observe IMCI
- 3 The section for observing management of a sick child is difficult to use unless both the supervisor and the health worker are trained in IMCI Health workers not trained in IMCI may carry out many of the same tasks listed on the checklist but in a different order This makes it difficult to use the checklist to observe health workers not trained in IMCI

Review of Case Records

When I or the district director are not able to observe IMCI during our supervisory visits then we often review case records instead. Each of the health centers in the district keeps exercise books to record essential information on patient visits. There is one exercise book for each patient. Supervisors pick several exercise books at random and review the case records with the health workers. The case records have the advantage that they indicate how the health worker manages patients when the supervisors is not observing them. The case records have the disadvantage that there is much variation between one health worker and another in the completeness of the case record. Counseling, for example, is seldom recorded.

Feedback

Supervisors have two ways of providing "feedback" to health workers.

- 1 After I observe a health worker I discuss my findings with the individual health worker. For example, I have observed several health workers who have failed to ask mothers about general danger signs such as convulsion. When I discussed this with one health worker he explained that he assumed that if the child had a convulsion at home then the mother would say so even if she were not asked about it.
- 2 After providing feedback to individual health workers the supervisory team sits with the staff of the health center as a group to review and discuss major findings. During these discussions we select a few key problems, brainstorm about their causes and their possible solutions. These discussions take up to one hour.

From our experience, to solve problems with IMCI both individual and group feedback are needed. It is usually obvious when it is an individual problem and when it is a group problem - when only one of several health workers has the problem it is best to address the problem through feedback to the individual health worker concerned.

Records and Reports of Supervision

Minutes are recorded of the group discussions at the end of the supervisory visit. The written report of the supervisory visit is based upon these minutes. Major issues of discussion are noted in these reports. Findings from observation of health workers are often omitted from the supervisory reports. The checklist itself is usually not written on - one copy of the checklist is used for one supervisory visit after another. District staff are reluctant to complete the entire checklist on each visit then file it for future reference. This is because of a lack of stationary and because some parts of the checklist are not used.

Other District Support for Quality of Care

Aside from training and supervision there are several other ways that the district has supported IMCI and improvements in clinical care in general.

- Five staff in the district have been trained as **Quality Assurance** coaches. They have facilitated a team problem solving approach at most of the health centers in the district. Most health centers have focused on administrative problems rather than problems with quality of care. Estate Clinic, however, successfully dealt with the problem of patient waiting time by changing the time that staff started work. Nangangwe clinic became concerned about drug

stock outs and is now attempting to promote more rational use of drugs by the staff. In general, however, in recent months most health centers have begun to relax the problem solving effort. It seems that either a QA coach must visit more frequently from the district or a member of the clinic staff should be trained as a QA facilitator. The DHMT hopes to organize a workshop this year to review the QA experience up to this time. This may help to reinvigorate efforts.

- Rural health centers have been fortunate to receive essential drug kits. Even then, the district had to supply vitamin A, fansidar, IV fluid, quinine and other injectable drugs. In addition, the district sometimes provided supplemental supplies of cotrim and chloroquine. No drug kits have been available since April, however, and health centers are now entirely dependent upon the **supplemental drug supply system**. Drug supplies have been generally adequate until now but there is growing concern that there will soon be major stock outs.
- To relieve congestion, the district or health centers themselves have funded **construction** of low cost structures. This too helps improve clinical care.

Recommendations for Strengthening Quality of Care

Based upon our experience in Kafue District I can suggest the following recommendations for strengthening support for IMCI and quality of care in general.

- 1 Supervision of clinical care should be an integral part of routine supervision. In this way administrators will come to recognize how administrative issues impact on quality of care.
- 2 A checklist can help supervisors to integrate clinical care issues into routine supervision. Supervisors should meet each year or two to review the checklist and update it.
- 3 District supervision of health centers should be **regular and comprehensive without disrupting the work** of the health centers. This is difficult to accomplish at small health centers. Perhaps some services need not be supervised on every visit. For example, maternal and child health could be supervised on half of the visits while care for STIs, TB and other adult health problems could be supervised on the other half of the visits. Key management issues (accounts, personnel, drugs) could be supervised on every visit.
- 4 Supervision of IMCI should be done by a health worker with adequate clinical experience who is trained in IMCI.
- 5 Supervisors should regularly observe health workers managing sick children. It would help to have some sort of record to keep track of which IMCI-trained health workers have recently been observed and which have not.

- 6 When records show that an IMCI-trained health worker has not recently been observed, supervisors should schedule their supervisory visit early enough in the morning to be sure that IMCI can be observed
- 7 Copies of the IMCI section of the checklist should be printed separately Two copies of this IMCI checklist should be completed each time that a supervisors observes IMCI One copy should be kept with the district and one copy should be given to the health worker
- 8 Review of case records is another useful way to assess how health workers manage patients Guidelines should be developed and distributed to health workers on what minimum information to record in the case record These guidelines could include instructions on how to use abbreviations to reduce the time spent on record keeping