Pakistan Child Survival Project

Extension Period

(October 1993 — May 1994)

FINAL REPORT

Project Number
[illegible]

Contract Number
[illegible]

Contractor
[illegible]

Sub Contractor
[illegible]

May [illegible]

Sponsored by the United States Agency for International Development

PAKISTAN CHILD SURVIVAL PROJECT
Project Number 391-0496
Contract No. 391-0496-C-00-3866-00

FINAL REPORT
Extension Period
October 1, 1993 - May 31, 1994

Submitted to
The Basic Health Services Cell, Ministry of Health of Pakistan
The United States Agency for International Development

by the Technical Assistance Team of
Harvard Institute for International Development

This report was prepared by
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May 30, 1994

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List of Abbreviations

ADB	Asian Development Bank
ADDR	Applied Diarrheal Disease Research Project (HIID)
ADG	Assistant Director General
ADHO	Assistant District Health Officer
AJK	Azad, Jammu, Kashmir
ARI	Acute Respiratory Infections
BCG	Bacillus of Calmet/Guerin
BHS	Basic Health Services
BHSC	Basic Health Services Cell
BHU	Basic Health Unit
CDD	Control of Diarrheal Diseases
CEC	Continuing Education Cell
CHW	Community Health Worker
COP	Chief of Party
CS	Child Survival
CSTU	Child Survival Training Unit
DA	Daily Allowance
DD	Deputy Director
DDG	Deputy Director General
DG	Director General
DHO	District Health Officer
DHQ	District Headquarter Hospital
DHQTU	District Headquarters Training Unit
DHS	Director of Health Services
DPT	Diphtheria, Pertussis, Tetanus
EPI	Expanded Program of Immunizations
FANA	Federally Administered Northern Areas
FATA	Federally Administered Tribal Areas
FBSC	Federal Biostatistics Cell
FHP	Family Health Project
FLCF	First Level Care Facilities
GOP	Government of Pakistan
HID	Health Institution Database
HIID	Harvard Institute for International Development
HIS	Health Information Systems
HMIS	Health Management Information Systems
ICST	Integrated Child Survival Training
IDD	Iodine Deficiency Disease
IPC	Interpersonal Communication

JBL	Jaffer Brothers (Pvt.) Limited
LHV	Lady Health Visitor
MBBS	Medical Bachelor - Bachelor of Surgery
MCBA	Mothers of Child Bearing Age
MCH	Maternal and Child Health
MIS	Management Information Systems
MOH	Ministry of Health
MOIC	Medical Officer in Charge
MS	Medical Superintendent
MSD	Medical Store Depot
NGO	Non-Governmental Organization
NIH	National Institute of Health
NWFP	Northwest Frontier Province
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
PCSP	Pakistan Child Survival Projec
PHC	Primary Health Care
PHDC	Provincial Health Development Center
PIMS	Pakistan Institute of Medical Sciences
PMRC	Pakistan Medical Research Council
RHC	Rural Health Center
SCKL	Supervisory Checklist
STTA	Short-Term Technical Assistance
TA	Travelling Allowance
TAT	Technical Assistance Team
TBA	Traditional Birth Attendant
TT	Tetanus Toxoid
USAID	United States Agency for International Development
UNICEF	United Nations International Children's Educational Fund
WHO	World Health Organization
WMO	Woman Medical Officer

ACKNOWLEDGEMENTS

The Pakistan Child Survival Project Team wishes to express sincere thanks for all the efforts and for the continuous spirit of collaboration to our colleagues in the Basic Health Services Cell and Biostatistics Cell, Ministry of Health, as well as in the Provincial Departments of Health, particularly the Secretaries, the Director Generals, the PCSP Project Directors, the HMIS Coordinators, and the ICST coordinators.

Our next thought of appreciation goes to donor community, and first of all to USAID, whose encouragements and professional respect in a difficult funding environment has been of tremendous help. We are particularly thankful to UNICEF and the World Bank for cooperative planning to assure the continuation of the ICST training and HMIS activities.

Jaffer Brothers (Pvt.) Limited, as in the first three years, has provided invaluable administrative and logistical help, and has shown the necessary flexibility needed to provide efficient technical assistance in a complex administrative environment such as the Pakistan Child Survival Project.

Most importantly, my sincere thanks and appreciation go to my colleagues and members of the Pakistan Child Survival Project, for their continuous devotion to implement this extremely challenging project. I wish them all the luck they need in their future careers.

Sincerely and ... khuda hafiz,

Theo Lippeveld,
Chief of Party
Pakistan Child Survival Project (extension period)

DEDICATED TO THE MEMORY OF
DRS. DUANE SMITH AND ABDUL GHAFOOR

We want once more to dedicate the final report of the extension period of the Pakistan Child Survival Project to the memory of Dr. Duane Smith and Dr. Abdul Ghafoor.

Dr. Duane Smith's tireless devotion to this project provided the foundation for its ultimate achievements. The accomplishments of the Pakistan Child Survival Project are a tribute to Dr. Smith's leadership during his tenure as the Chief of Party.

Dr. Abdul Ghafoor provided constant, and unflagging support to the Pakistan Child Survival Project particularly during the difficult days following the evacuation. He was instrumental during the development of the early collaborative bodies, such as the steering committees, and also in the development of the ARI research projects.

Both Drs. Smith and Ghafoor provided technical and managerial leadership which contributed greatly to the ultimate success of this project. Pakistan Child Survival Project pays tribute to these two outstanding individuals who contributed their lives to decreasing infant and child mortality in Pakistan.

EXECUTIVE SUMMARY

PAKISTAN CHILD SURVIVAL PROJECT (Extension Period)
October 1993 - May 1994

The Pakistan Child Survival Project (PCSP), is supported by a bilateral cooperative program between the Ministry of Health, Government of Pakistan and the United States Agency for International Development. The overall goal of the Project is to expand and institutionalize child survival programs, in order to decrease infant and child mortality.

Between July 1990 and September 1993, the Project was implemented through six project components which have been identified as having particular importance for the strengthening of child survival programs: planning and management, health management information systems (HMIS), integrated child survival training (ICST), communications, drugs and logistics, and research.

In 1991, due to the Pressler Amendment, severe budget cuts and time restrictions have been imposed on the PCSP. They have limited to a great extent the initially planned activities. USAID therefore decided, at the request of the Government of Pakistan, to provide limited additional funds to extend the HMIS and ICST components for an additional eight months until May 1994. Technical assistance (TA) for this additional period was contracted out to Harvard Institute for International Development (HIID). The TA team consisted of an expatriate Health Information System Advisor, a local training specialist, and a local technical and administrative team managed by Jaffer Brothers Limited as subcontractor to HIID.

This report should be read in continuation to the final report on the 1990-1993 period. Most of the thoughts and recommendations expressed in that report are still valid.

ACCOMPLISHMENTS

Critical accomplishments in the two extension components are listed below:

HMIS

* Further completion of the implementation of the Health Management Information System for First Level Care Facilities (HMIS/FLCF) which now covers about half of the FLCFs in the country;
* Finalization of district data collection instruments, including the supervisory checklist;
* Regular monthly and yearly reporting from around forty districts;
* Further development and fine tuning of the computerized feedback system which offers feedback information on more than hundred different formats;
* Provision of training to more than 400 public health managers and supervisors in using the information for planning and management;
* HMIS/FLCF institutionalization well underway: PC-1s are expected to be approved soon in all the provinces.

ICST

* Opening of two additional district CSTUs
* Additional training of 750 medical officers and paramedics
* Initial assessment of training shows improved child case management skills in care providers who received ICST training.

CHALLENGES AND CONSTRAINTS

HMIS

* The slow pace of HMIS/FLCF implementation creates confusion in the reporting system;
* Weak health services management capabilities result in limited use of HMIS/FLCF information;
* The functioning of the computerized data processing is hampered by the lack of institutionalization measures;
* Delays in approval of PC-1s threaten to cause stock-outs of printed HMIS/FLCF supplies.

ICST

* Additional ICST assessment is necessary in order to finalize strategies for in-service training in child case management;
* Lack of supportive supervision decreases the impact of ICST training on child case management skills.

RECOMMENDED ACTIONS FOR SUSTAINABILITY

HMIS

* HMIS/FLCF implementation should be completed in the shortest time possible;
* At district level, tight supervision is required to maintain quality of data collection and regular reporting of minimum 80 %;
* In order to avoid major stock-outs of printed supplies, PC1s need to be approved as soon as possible;
* Positions of computer programmers and of computer operators need to be created both at federal and provincial levels;
* The Family Health Projects in the provinces should teach and promote HMIS/FLCF as a tool for planning and management of the basic health services;
* Waiting for more permanent budget support by the government, UNICEF, WHO and the FHPs should provide further funding for technical assistance and for selected recurrent costs.

ICST

* A scientific study needs to be organized to further demonstrate the positive impact of ICST on child case management in the first level care facilities;
* The ICST programme should become full part of the in-service training programme in the PHDCs;
* The supervisory system needs to be strengthened through training in supportive supervision and through administrative reform

PAKISTAN CHILD SURVIVAL PROJECT

FINAL REPORT

Extension Period
October 1, 1993 - May 31, 1994

INTRODUCTION

The Pakistan Child Survival Project (PCSP) is a bilateral cooperative programme between the Ministry of Health, Government of Pakistan, and the United States Agency for International Development. The overall goal of the Project is to expand and institutionalize child survival programs, in order to decrease infant and child mortality.

Between July 1990 and September 1993, the Project was implemented through six project components which have been identified as having particular importance for the strengthening of child survival programs: planning and management, health management information systems (HMIS), integrated child survival training (ICST), communications, drugs and logistics, and research.

Technical assistance was provided through a consortium of three nonprofit international consulting agencies: Management Sciences for Health (MSH), Harvard Institute for International Development (HIID), and the Academy for Educational Development (AED). in addition, a local subcontractor, Jaffer Brothers Limited, was utilized for administrative and logistical support. For more details on the main project period, the reader can consult the Final Report of the Pakistan Child Survival Project, produced in October 1993.

In 1991, due to the Pressler Amendment, severe budget cuts and time restrictions have been imposed on the PCSP. They have limited to a great extent the initially planned activities. USAID therefore decided, at the request of the Government of Pakistan, to provide limited additional funds to extend the HMIS and ICST components for an additional eight months until May 1994. Technical assistance for this additional period was contracted out to Harvard Institute for International Development.

In the following chapters, accomplishments and outputs both for the Health Management Information Systems component and for the Integrated Child Survival Training Component during the extension period are reviewed. Challenges and constraints are discussed, and actions for sustainability are advised to the Government of Pakistan for further follow-up.

HEALTH MANAGEMENT INFORMATION SYSTEM

I. BACKGROUND

The improvement of existing health information systems is a major national strategy for the development of primary health care based service delivery systems in Pakistan. It was therefore one of the main components of the Pakistan Child Survival Project (PCSP) that started its activities in June 1990.

In the last six months of 1990, the Health Information System team of the PCSP undertook a comprehensive assessment study and published a report, describing in detail the shortcomings of the existing health information system. Recommendations for eventual restructuring of the system were provided.

Based on this study, a National Workshop on Health Management Information Systems was held in Islamabad in May 1991. One of the outcomes of the workshop was an agreement between the federal and provincial health officials to transform the existing routine reporting system for government managed First Level Care Facilities (FLCFs) into a comprehensive and integrated Health Management Information System (HMIS). Priority was given to first level care facilities because these are the principal level for the delivery of child survival related services.

The Basic Health Services Cell of the Federal Ministry of Health (MOH), assisted by the Health Information System team from PCSP, received the mandate to coordinate the restructuring process of this **Health Management Information System for First Level Care Facilities (HMIS/FLCF).**

Between June 1991 and July 1992, the HMIS/FLCF design was finalized with active involvement of the future users of the system. National Programme managers, Provincial Directors, District Health Officers, Medical Officers in Charge, and representatives of the paramedical staff were consulted by organizing workshops and meetings.

Based on the actual functions of the first level care facilities, indicators were chosen for inclusion in the HMIS/FLCF. Data collection procedures, information flows, and data processing mechanisms were defined. In place of outdated data collection instruments, new instruments were designed and field tested. The new information system, although comprehensive, has a particular focus on maternal and child health. It also provides information on quality of care delivered in first level care facilities. For

the latter, a supervisory checklist and other district level data collection instruments have been developed as management tools for supportive supervision.

Data processing for the new system has been computerized at appropriate levels in the health system. Computers were installed and data processing staff of 30 computer centers has been trained in using a customized data processing system for HMIS/FLCF data.

In October 1992, a nationwide training programme has been started to familiarize an estimated 15,000 medical officers and paramedics employed in government managed first level care facilities with the data collection procedures for the newly designed HMIS/FLCF. The training programme was implemented district wise. As soon as health personnel of a district were trained, use of outdated registers and forms was discontinued and the new system was adopted.

Unfortunately, the implementation of the Pressler Amendment induced severe budget cuts and time restrictions on the Pakistan Child Survival Project, so that within its scope neither the time nor the funding were sufficient to complete HMIS/FLCF implementation. Indeed, by the end of September 1993, only approximately 40 % of FLCF staff had been trained in the new system. The district level data collection instruments had not been put into general use. Computer centers had developed limited experience in data processing, and training of health facility staff and their supervisors in the use of HMIS/FLCF data for decision making were in an early stage.

II. OBJECTIVES

1. To assist the Federal Ministry of Health (MOH) and the Provincial Departments of Health (DOHs) (including AJK and NA) in institutionalization of the HMIS/FLCF as initiated under PCSP;

2. To strengthen the GOP's capability in using the restructured HMIS/FLCF for decision making;

3. To provide technical assistance for transfer of technology in HMIS management and in computerized data processing nationwide;

4. To strengthen the HMIS/FLCF as a tool for planners and supervisors to monitor the progress and impact specifically of child survival interventions;

5. To assist BHSC in the implementation of the WHO funded project on District Level Management.

III. ACCOMPLISHMENTS AND OUTPUTS

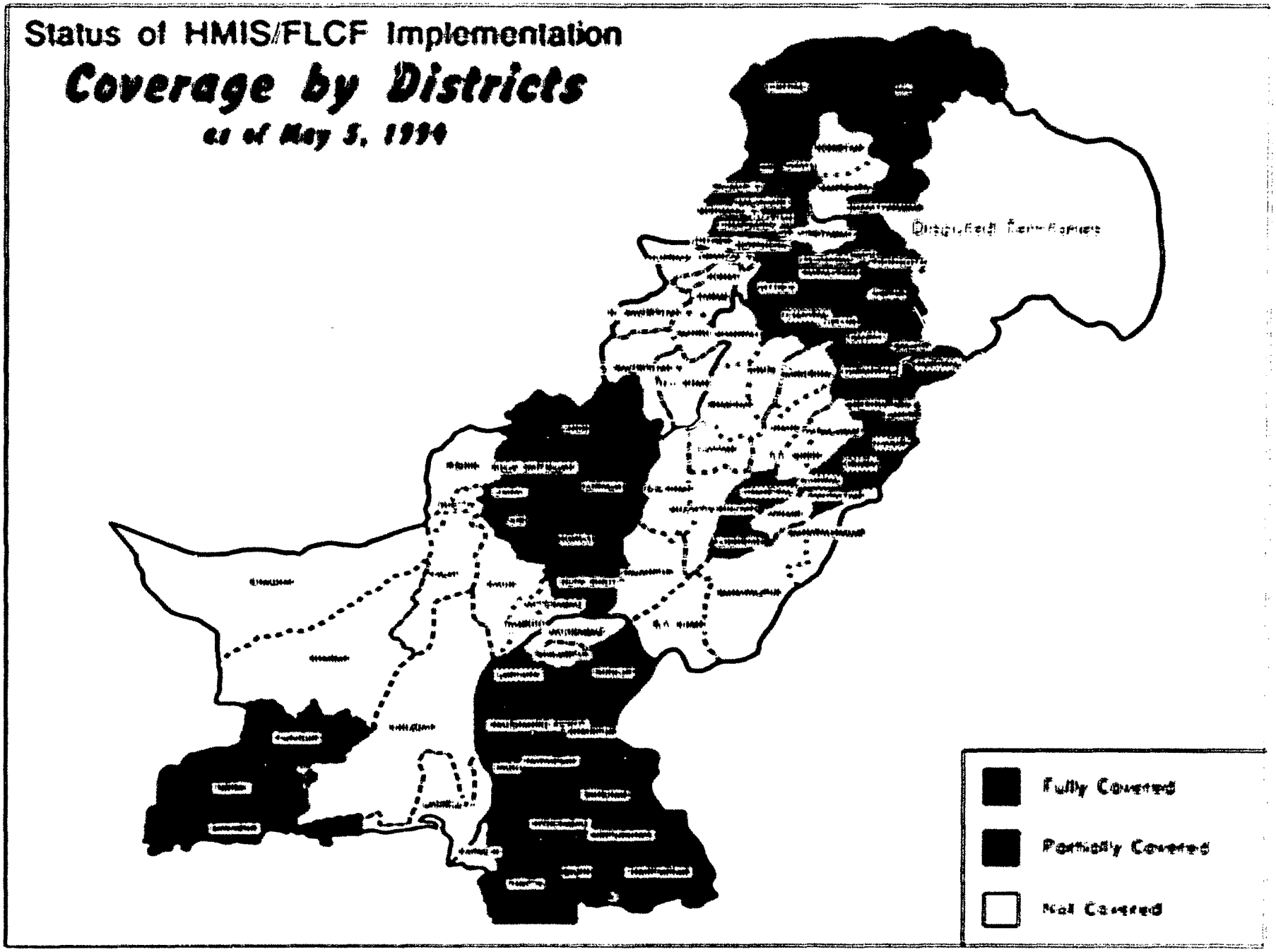
NOTE: In the following paragraphs the term "federal HMIS team" stands for the staff of the Basic Health Services Cell, of the Biostatistics Cell, and of the PCSP/HMIS TA Team. The TA team also includes one HMIS coordinator in Lahore for the province of Punjab.

1. Completion and present status of HMIS/FLCF implementation

a. Assistance to and monitoring of district level HMIS/FLCF training workshops

During the extension period, 42 district workshops in data collection methods were organized during which an additional 1,816 staff members of 1102 first level care facilities were trained. The breakdown by province is as follows: AJK 10; Northern Areas 2; NWFP 2; Punjab 26; and Sindh 2. All these workshops were funded by UNICEF. Table 1 gives a complete overview of the training programme since its inception in November 1992. Figure 1 shows a geographical distribution of trained districts.

Figure 1


Status of HMIS/FLCF Implementation
Coverage by Districts
as of May 5, 1994
Fully Covered
Partially Covered
Not Covered

The main reason why the focused target of 1,500 health facilities could not be reached, is the slow implementation of the Family Health Projects (FHPs) in the Provinces. Although all four FHPs have committed to complete HMIS/FLCF implementation in their province, not one workshop in data collection has been funded through the FHPs. At the IXth National HMIS Team Meeting on May 11, all FHPs promised to start the remaining training programme later in 1994.

Table 1

OVERVIEW OF TRAINING IN DATA COLLECTION
as of May 31, 1994

Province/ Region	Workshops			# of Trainees Trained	FLCF's Trained
	Target	Completed	% Compl.		
AJK	18	18	100%	884	573
Balochistan	43	17	40%	592	380
Federal	2	2	100%	56	48
NAs	9	7	78%	258	197
NWFP	67	28	42%	1,409	818
Punjab	174	70	40%	3,117	1,900
Sindh	31	23	74%	1,056	625
TOTAL	344	165	48%	7,372	4,541

Funding source for the workshops:

PCSP	65	39 %
UNICEF	87	53 %
Govt. Punjab	13	8 %

Following is an overview of the HMIS/FLCF implementation status:

Federal: Islamabad Capital Territory (ICT) and Central Health Establishment (CHE) institutions have been trained and are using the new system. HMIS/FLCF will still need to be implemented in the OPDs of major federal hospitals (see under b).

AJK: The AJK training programme is finalized. All districts have been trained and will be reporting soon.

Balochistan: FLCF staff of three divisions has been trained in using the new HMIS/FLCF. The required 30 workshops to train FLCF staff of the remaining three divisions and a stock of printed supplies for one year will be funded through the Family Health Project. The training programme is projected to start later in 1994.

Northern Areas: FLCF staff of four out of five districts have been trained. Since no Family Health Project exists in Northern Areas, UNICEF will most likely provide the remaining funds for 2 workshops to complete HMIS/FLCF implementation in 1994.

NWFP: FLCF staff of three divisions has been trained in using the new HMIS/FLCF. FHP/NWFP has committed to complete HMIS/FLCF implementation in the three remaining divisions. The training programme is projected to start later in 1994.

Punjab: In July 1994, FLCF staff of four divisions will have been trained in using the new HMIS/FLCF. FHP/Punjab has committed to complete HMIS/FLCF implementation in the four remaining divisions. The training programme is projected to start later in 1994.

Sindh: FLCF staff of the main divisions has been trained in using the new HMIS/FLCF. FHP/Sindh has committed to complete HMIS/FLCF implementation in Larkana and Karachi divisions. The training programme is projected to start later in 1994. For this purpose Rs. 1.7 million have been released.

b. Pilot-testing of HMIS/FLCF training and implementation in OPDs of major hospitals

HMIS/FLCF implementation in major hospitals is a special challenge, because of the high number of consulting doctors and of the high patient load in the OPDs of these hospitals. Although the system is already operational in the OPDs of several district hospitals, it was planned to pilot-test HMIS/FLCF implementation in a major hospital at federal level.

Contacts have therefore been made with the Federal Government Services Hospital in Islamabad to train its OPD staff and to implement HMIS/FLCF after study of the patient flow in the hospital. Several constraints resulted in the fact that at the end of May, pilot testing had still not started: lack of printed supplies, non-availability of coordinating staff, the hepatitis epidemic in Islamabad.

c. Distribution of printed supplies and training materials

Remaining orders of printed supplies and training materials financed by UNICEF have been completed in October-November 1993 and have been distributed to the provinces. Annex 5 gives a detailed overview of the printed supplies distributed under the Pakistan Child Survival Project since 1992.

A new order of printed supplies has been submitted to UNICEF in early 1994, to provide printed supplies to an additional 2,200 FLCFs. At the end of the Project, the order was still not completed. Distribution will be done directly from the printer to the provincial HMIS coordinators.

d. Approval for final formats of district level data collection instruments.

After additional discussions at provincial level, the four district level data collection instruments have been approved at the VIIIth National HMIS Team Meeting on December 20-21, 1993.

It was obvious that general distribution and training of supervisors in using these new instruments could not more be done within the scope of the PCSP. The supervisory checklist has been printed in 2,000 copies and distributed to the provinces. It has been recommended that the district level data collection instruments and more particularly the supervisory checklist would be used by the Family Health Projects in future management training.

e. Launching of the HMIS/FLCF Yearly Report

The HMIS/FLCF Yearly Report has been printed in 20,000 copies, and was distributed to the provinces at the end of November 1993. The reports were distributed in the FLCFs of those districts where HMIS/FLCF had been operationalized. The return rate varied from district to district, in the same way as the monthly reports (see under 3.b). The data entered from these yearly reports have been utilized on a test basis in the design the formats for yearly analysis.

2. Use of HMIS/FLCF information for decision making in planning and management

a. Training in the use of HMIS/FLCF generated information

One of the main tasks under the extension period was to familiarize managers at all levels and FLCF staff with the potential uses of the HMIS/FLCF generated information. Ideally, in the long run, this training should be part of a more general management training, where HMIS/FLCF data could be used in planning and management of priority health programmes.

Since the time was limited, it was decided to focus training on district level supervisors. They in turn could later involve FLCF staff in using HMIS/FLCF information. We developed therefore a three day "Workshop on Use of HMIS/FLCF Information and Supportive Supervision" (also called "feedback workshop"). The main message provided was that in order to make consistent use of information for improvement of the delivery of care, supportive supervision was the methodology of choice. As long as supervisors limited their visits to pure administrative checking, HMIS/FLCF information would not really be used. During the workshop the supervisory checklist and various feedback report formats were presented. These feedback reports were based on data from the monthly reports of the last quarter of FLCFs supervised by the participants of the workshop.

In total 11 workshops involving more than 400 supervisors were organized in the four provinces and AJK during the extension period (see Table 2). Funding for these workshops has been provided by UNICEF and by the FHP in NWFP.

b. Further development of a computerized feedback system

The computerized feedback system initiated in 1993 has been further developed during the extension. We consulted with health services managers and programme managers such as the ARI, EPI, CDD, Malaria, Guinea Worm Disease, AIDS, Population and Welfare, etc. We had relatively few inputs from them for the development of various formats, since they themselves were mostly not used to have good information, and therefore had very little experience on criteria for a good feedback report.

With the help of Randy Wilson, who came as a consultant for two weeks in March 1994 with UNICEF funding, we developed more than fifty formats of feedback reports based on data from monthly and yearly HMIS/FLCF reports. These feedback reports address all levels in the health services, from the FLCF level up to the federal level. They concern health problems as recorded in the first level care facilities, services provided by the FLCF staff, and resources available and used in the FLCFs. Information is presented in tabular form, in graphic form, or also as G.I.S. maps. They

Table 2

Training in Supervision and Use of Information for district level supervisors

PROVINCE	VENUE	# OF TRAINEES
AJK	Islamabad	25
Balochistan *(Zhob, Sibi, Mekran)*	Quetta	25
NWFP *(Malakand, Peshawar, Mardan)*	Saidu Sharif	38
NWFP *(Malakand,Peshawar,Mardan)*	Peshawar	35
Punjab *(Lahore,R.Pindi,G.Walla,Multan)*	Lahore	56
Punjab *(Community Health Teachers)*	Lahore	50
Punjab *(Rawalpindi Division)*	Rawalpindi	30
Punjab *(Multan Division)*	Multan	30
Punjab *(Gujranwala Division)*	Gujranwala	35
Punjab *(Lahore Division)*	Lahore	35
Punjab *(CCM)*	Lahore	30
Sindh *(BIHS, MPH students)*	Karachi	30
Sindh *(Sukkur,Hyderabad)*	Hyderabad	30
	TOTAL:	449

compare aggregates of FLCFs, districts, divisions or provinces, or they present time trends (see appendix 7 for a complete list with some actual examples).

Customized software has been developed that permits easy production of these computerized feedback reports through a menu driven system. Computer operators with very little training can print the tables and ensure distribution to the relevant decision makers. A final training for computer supervisors was organized in Islamabad on May 8-11, 1994. They in turn will provide additional training to computer operators in the peripheral computer centers. A detailed user's manual will further facilitate operation of the system.

c. Technical Assistance to other health projects in using HMIS/FLCF generated information

We organized two workshops for the teachers and students of the College for Community Medicine in Lahore and of the Master of Public Health Programme of Baqai Medical College in Karachi (see Table 2).

Further contacts have been established with the Provincial Health Development Center (PHDC) staff of the FHPs of the four provinces. Discussions have focused on the introduction of HMIS/FLCF as a management tool in the various projected in-service training programmes. The responses have always been very positive. Most of these in-service training programmes in management are planned to start later this year or next year.

We also coordinated with Prof. Colin Thurnhurst and his team, who provide training in strategic planning in the four provinces with ODA funding. The ultimate goal is to move towards a decentralized district level health system in the country. HMIS/FLCF will become an important source of information in such a system. We participated in some of their training workshops, while they attended our feedback workshops.

Finally, we established contacts with the Health Services Academy staff. They plan to start a training programme leading to a master degree in public health with technical assistance and funding from GTZ (Germany) under the leadership of Dr. Arnfield Kielmann. Dr. Naseem Haque, our training coordinator, has been hired as advisor in the technical assistance team. Dr. Lippeveld has been asked to develop and teach a course on health information systems in the spring of 1995. This course will obviously use HMIS/FLCF as an example of a management information system.

3. HMIS/FLCF Institutionalization

a. Overall HMIS/FLCF management at federal and provincial levels

Federal

Overall HMIS coordination and management at federal level has been ensured by the Basic Health Services Cell with technical assistance from our team. Particularly Dr. Riaz Malik as Assistant Director Operations will continue to fulfill this role.

Until now, two mechanisms were used in overall HMIS management and coordination: (1) regular visits to the provinces; and (2) National HMIS Team Meetings (see under 4.b). It is important that both activities can be continued after May 1994. UNICEF has been contacted for financial assistance in an initial

period, waiting for the Government to ensure sufficient funds in the regular non-development budget for TA/DA and other related costs.

As for financing of recurrent costs of HMIS/FLCF in federal institutions and departments such as Islamabad Capital Territory (ICT), Central Health Establishment (CHE), and the major federal hospitals, will be ensured through the regular non-development budgets of these institutions and departments.

AJK

Overall HMIS/FLCF coordination is ensured by Ch. Mohammad Sharif, Assistant Director of Statistics at the Health Directorate.

Official HMIS/FLCF notification has been issued. A PC-1 of Rs. 3.9 millions for 2 years has been submitted to the Planning Department for printing of HMIS/FLCF data collection instruments and for computer supplies and maintenance. Since no Family Health Project exists in AJK, UNICEF will continue its support in the next fiscal year until approval of the PC-1. An order for printing of a limited amount of HMIS instruments has been placed with existing government funds.

Balochistan

Overall HMIS/FLCF coordination is ensured by Dr. Masood Nowsherwani, Deputy Director of the FHP Project in Quetta. Dr. Akhtar Hameed Khan, former PCSP/HMIS coordinator for Balochistan, will also assist in overall HMIS management in his present role as Chief Planning Officer of the Health Department.

Official HMIS/FLCF notification has been issued by the Secretary of Health. A PC-1 of Rs. 2.5 million/year for two years has been approved last year in November for printing of HMIS/FLCF instruments for the three operational divisions, and for computer supplies and maintenance. A NOC from the government printing press was obtained in May 1994 and tenders have been requested from private printers. UNICEF has been requested to provide additional assistance for monitoring HMIS implementation in the participating districts.

Northern Areas

Overall HMIS/FLCF coordination is ensured by Dr. Sher Wali Khan, Deputy Director at the Health Directorate in Gilgit.

A PC-1 of Rs. 1 million has been prepared to cover recurrent funds for printed supplies and for computer maintenance and supplies. It has been approved by the Health Department and has been submitted to the Planning Department since last year. In the mean time, UNICEF will provide additional assistance.

NWFP

Overall HMIS/FLCF coordination is ensured by Dr. Sharif Khan, Deputy Director FATA, assisted by Dr. Zaffar, PHDC Director, and by Dr. Imtiaz Malang, PHDC Trainer of FHP.

NWFP will issue soon a notification of the new system. A PC-1 of Rs. 20.5 million from FHP funds has been prepared to cover: (1) the HMIS/FLCF remaining training programme and one year stock of printed supplies; (2) additional printed supplies for operational divisions for two years; (3) computer supplies and maintenance for two years; and (4) 24 computer operator positions for two years. The PC-1 was approved by the Health Department and is now with P&D department.

District Health Officers have been requested to submit SNEs for HMIS/FLCF recurrent costs, so that after the two year PC-1 the HMIS/FLCF functioning will be ensured through the regular non-development budget.

Punjab

Overall HMIS/FLCF coordination in Punjab is ensured by Dr. Naeem-ud-din Mian, ADB Project Director. He is assisted by Dr. S.M. Mursalin, the present PCSP/HMIS coordinator. UNICEF has agreed to further fund the technical assistance team under the direction of Dr. Mursalin until December 1994.

HMIS/FLCF Notification has been issued by the Government of Punjab in October 1993. A comprehensive PC-1 of Rs. 42.5 million has been prepared to ensure recurrent funding for: (1) the HMIS/FLCF remaining training programme (FHP funds) and one year stock of printed supplies (GOPb); (2) additional printed supplies for operational divisions for three years; (3) computer supplies and maintenance for two years (FHP funds); (4) Computers/Printers for 31 additional computer centers (FHP funds); and (5) 44 computer operator positions. The PC-1 has been approved by the Health Department and is now with the P&D Department. In the mean time, the government has directed all district health officers to use allocated district funds of the regular budget to print HMIS/FLCF instruments.

Sindh

Overall HMIS/FLCF coordination is ensured by Dr. M.B. Bhurgari, management analyst in the Basic Health Services Cell. His long standing experience in health information systems management is an asset for future HMIS institutionalization in Sindh.

Notification approving the new system was issued in January, 1994. A comprehensive PC-1 of Rs. 42 million for five years has been prepared to cover printed supplies, computer supplies, and computer maintenance for the operational divisions. The approval process of this PC-1 needs further follow-up. The FHP will provide computers/printers for the districts. Computer operator positions have already been sanctioned in the existing computer centers.

b. HMIS/FLCF institutionalization at the district level

End of April 1994, 39 districts of the 58 trained districts were reporting through HMIS/FLCF. Average reporting regularity and quality in each province are given in table 3.

Table 3

HEALTH MANAGEMENT INFORMATION SYSTEM
FOR FIRST LEVEL CARE FACILITIES

FIRST RESULTS

Situation End of March 1994

Province	Total Districts	Districts Fully Trained	Districts Reporting	% of Total Districts	Average Reporting Regularity	Average Reporting Quality
AJK	5	5	4	80	45	30
Balo	26	12	7	27	21	32
NAs	5	4	2	40	46*	-
NWFP	27	13	7	26	59*	65
Punjab	32	13	10	31	66	52
Sindh	20	11	9	45	60*	47
Total	115	57	39	34	50	45

* Based on reports sent but partially entered in computers

At the occasion of the feedback workshops, special sessions have been organized to discuss HMIS/FLCF district management with the supervisors. In all participating districts, District HMIS Coordinators have been appointed officially by the Director General. Their role is to assist the DHO in (1) monitoring regularity and quality of reporting; (2) managing storage and distribution of printed supplies; (3) monitoring computerized data processing (if computer center at district level); and (4) disseminating computerized feedback reports. In addition, all supervisors are supposed to specifically monitor quality of data collection during their supervisory visits. For that purpose a "Checklist For Data Recording And Reporting System" has been developed (see appendix 8).

It is obvious that further efforts will be required to increase reporting regularity to the desired level of 80%. The quality of data collection and reporting depends largely on the coordination and supervision efforts by the district staff. In districts with a motivated DHO excellent results have been obtained. In other districts, reporting regularity and quality remain below 50%. Particularly in Balochistan, although FLCF staff has been trained in 1993, several districts are still not reporting through the new system. In some of those, printed supplies have not been distributed. In others, no participation could be obtained.

c. Institutionalization of the computer centers.

Since 1992, thirty computer centers have been established throughout the country, mostly at provincial and divisional level, and computer operators have been trained to enter and process HMIS/FLCF data (see table 4). During the extension period, regular visits have been done to these computer centers to assist computer supervisors and operators to handle routine operations such as data entry, production of feedback reports, software trouble shooting, etc. A detailed overview of the functional status in each of the computer centers is given in appendix 6.

Five computer centers were established on an experimental basis at district level. At least four of those have shown excellent performance. Moreover, it was found that feedback can be given in a more efficient way to the district staff, if the computer is present at the district headquarters. District computerization should therefore be encouraged. Particularly in Punjab, another major reason for district computerization is to decrease the data entry load at the divisional computer centers. All FHPs have budgets that permit the purchase of the necessary hardware.

The Federal Biostatistics Cell (FBSC) plays a double role in the computerized data processing system: (1) To maintain and further develop the computerized data processing system; and (2) to be a clearing house for data from all the provinces. With its present staffing and equipment, the FBSC is not able to fulfill this double role.

Table 4

HEALTH MANAGEMENT INFORMATION SYSTEM
FIRST LEVEL CARE FACILITIES

STATUS OF COMPUTERIZATION
(as of April 30, 1994)

PROVINCES/REGIONS	COMPUTERS PROVIDED				PEOPLE TRAINED	
	By PCSP	By UNICEF	Total	Installed & Functional	Generic	Specific
AJK	1	1	2	2	2	5
BALOCHISTAN	1	2	3	3	11	13
FEDERAL (Bio. Stat & Nat. programs)	-	-	-	-	-	7
FEDERAL (CHE)	-	1	1	1	2	2
NAs	1	-	1	1	2	2
NWFP	1	5	6	6	11	9
PUNJAB	8	3	11	10	30	21
SINDH	4	3	7	7	13	14
TOTAL:	16	15	31	30	71	73

During the extension period, not much progress has been made to strengthen the Biostatistics Cell. In April 1994, a file has been constituted and has been submitted to the Secretary of Health, requesting the transfer of the Biostatistics Cell under the Basic Health Services Cell, and the creation of a post of epidemiologist and of computer programmer for the Biostatistics Cell. Further follow-up will be necessary. In the mean time, the BSC staff has been trained partially to take up the second role. As for the first role, UNICEF has agreed to finance additional technical assistance in computer system maintenance. Mr. Shafat Sharif, the PCSP computer specialist, and later on the Community Health Sciences Department of Aga Khan University are ready to provide this assistance.

d. Institutionalization of the printed supplies distribution system

During the extension, further follow-up visits have been done and advice has been given to the provincial health departments in setting up a printed supplies distribution system. Since PC-1s are mostly not approved, no orders have been placed by the health departments themselves, except on a small scale in Punjab and in AJK. In Balochistan, a PC-1 was approved, but it took more than eight months to convince the government press to issue a No-Objection Certificate (NOC) to allow printing of material from private sector printers. It is also not fully realized that the time between ordering and delivery of the supplies can be several months. In the mean time, several districts, where HMIS/FLCF is operational since more than a year will very soon face stock-outs for printed supplies.

The same situation applies to the computer supplies, although the time between order and delivery is not necessarily so long. Moreover, most provinces can order computer supplies through the FHP budgets.

4. Monitoring and evaluation of HMIS/FLCF

a. Monitoring of HMIS/FLCF at the district level

Our team has constantly been monitoring HMIS/FLCF in the districts where the system has been operationalized. Through contacts with the computer centers, reporting regularity and quality in the districts has been followed on a monthly basis. During the feedback workshops, districts with problems were given particular attention.

We also performed "spotchecks" of FLCFs. Whenever possible no prior announcement was made of our visit. We used the "Checklist For Data Recording And Reporting System" as a standardized monitoring tool. The results of these visits showed us the absolute need for ongoing supervision and refresher courses.

b. National HMIS Team Meetings

During the extension period, two National HMIS Team Meetings were held.

On December 20-21, the VIIIth National HMIS Team Meeting was held in Islamabad. All federal and provincial HMIS coordinators were invited and also the FHP Directors. Particular outcomes of this meeting were:

1. HMIS/FLCF implementation needs to be completed as soon as possible;
2. Official HMIS/FLCF notification will be issued in all provinces;
3. PC-1s and/or SNEs need to be finalized as soon as possible to ensure recurrent HMIS/FLCF funding ;
4. Certain minor changes in reporting were agreed upon;

5. The district level data collection instruments will be approved in their present format, unless provinces send additional comments before February 1994.

On May 11, the IXth National HMIS Team Meeting was organized in Islamabad. Since it was the last meeting before the end of the technical assistance, Secretaries and Director Generals of the Provincial Health Departments were also invited. The recommendations of this meeting are mostly consistent with those given in this report.

c. External evaluation

At this moment, no dates for an external evaluation have been agreed upon. We advise to plan for such an evaluation in mid 1995. By that time, most government health facilities will be using the new system, and some of the districts will be reporting since more than two years. The external evaluation could provide an objective assessment of the potential benefits of the system as a tool for health services planning and management.

d. Operations Research

Neither time nor money were foreseen for operations research during the extension period. Nonetheless, we had discussions with the Thatta Health Systems Research Project Team from Aga Khan University on eventual testing of new feedback report formats. We also hope that the FHPs in all provinces will set aside money and time to undertake operations research studies, which, combined with an external evaluation, could contribute to gradual improvement and fine-tuning of HMIS/FLCF.

d. HMIS/FLCF international dissemination of results

Dr. Riaz A. Malik and Dr. Theo Lippeveld attended the proceedings where they presented a poster session at the VIth International Conference on Infectious Diseases held in Prague (Czech Republic) between April 26 and 30, 1994. They jointly wrote a paper "Managing Infectious Diseases in Pakistan through a Comprehensive Health Management Information System". It is projected to publish this paper in a international scientific journal.

5. Development of a HMIS for Village Health Workers (VHW)

It was initially foreseen, that the HMIS technical assistance team would also provide assistance to the WHO funded project on District Level Management. During the extension period, it soon became clear that this project would have to focus in an initial phase on the development and pilot testing of community based health services. At the end of 1993, a new programme was launched by the Government called "The Prime Minister's Programme for Family Planning and Primary Health Care". Under this programme 30.000 female Village Health Workers (VHW) would be trained and posted in the village to provide a limited package of first level care to the population. At the request of the Ministry of Health, the HMIS team therefore developed a Health Management Information System (HMIS) for these Village Health Workers (VHW).

The system has been kept very simple and takes into account the functions/activities to be performed by the VHW. In the "Family Register", all households of the catchment area are registered, and pregnant women and children under three followed during their risk episodes. The "Curative Care and Family Planning Register" is used for recording of curative care and family planning activities performed by the VHW. Finally, in the "Monthly Report Register" the VHW keeps track of all vital events in the community, and reports her activities to the BHU/RHC. HMIS/VHW is perfectly compatible with HMIS/FLCF. Certain data recorded and reported by the VHW will be incorporated in the HMIS/FLCF Monthly Report of the FLCF in which catchment area the VHW is operational.

In May 1994, training materials were developed, and initial training in using the HMIS/VHW has been provided to more than 100 master trainers.

IV. CHALLENGES AND CONSTRAINTS

In the final report on the PCSP from 1990 to 1993, an extensive analysis has been given on the HMIS/FLCF implementation challenges and constraints. The results of this analysis are still valid and should be kept in mind when reading this report. In the following paragraphs we want to highlight additional challenges and constraints as they appeared during the extension period.

1. Slow pace of completion of HMIS/FLCF implementation

HMIS/FLCF implementation is taking longer than foreseen. This is specially true in Punjab, NWFP and Sindh, where the staff of more than half of the FLCFs still needs to be trained in using the new system. The delays are mostly due to the fact that the FHPs, who had committed to take further training, have complex and time-consuming mechanisms of mobilizing funds. Also, HMIS/FLCF is not yet operational in big hospitals such as federal hospitals and the teaching hospitals.

The result is that the former reporting system and HMIS/FLCF are coexisting within each province. This situation is likely to create confusion in the management of the health services. In districts where the whole FLCF staff has been trained, managers are still hesitating to drop totally the former system of reporting. FLCF staff (such as vaccinators and LHV) are still sending separate reports in addition to the comprehensive HMIS/FLCF reports. At divisional and provincial levels, information from two different systems needs to be processed.

In order to decrease this confusion and its negative effects on planning and managing the health services, HMIS/FLCF implementation needs to be completed as soon as possible. During the last National HMIS Team Meeting on May 11, 1994, all FHPs have committed to start the final training programme this year.

2. The limited health services management capabilities of HMIS/FLCF information users

HMIS/FLCF information is mostly intended to assist district supervisors in the management of the basic health services, but, during our feedback workshops, it became more and more obvious that district supervisors are insufficiently trained in information management and in supervisory techniques. Although aggregated HMIS/FLCF information is available from the computer centers in the form of computerized feedback reports, or of computer outputs from the Health Institutions Database, district managers are not yet interacting with these centers or making specific information demands. Supervisory visits to health facilities mostly consist of a five minutes stop to check on the presence of staff, or to do some verification of

records. Quality of care delivered is mostly not assessed, because supervisors have not been trained in clinical case management supervision. They also need training in communications skills necessary to provide supportive supervision to FLCF staff. In addition to these knowledge and attitude gaps, district supervisors also lack time and physical means to ensure regular supervision of all the FLCFs under their management.

Other main potential users of HMIS/FLCF data are the FLCF staff themselves. Again, presently this staff is mostly not trained to use data in daily management. Although the new HMIS could give them the necessary information for planning and management of all primary health care services and activities, most FLCFs are not providing services and activities such as growth monitoring, preventive obstetrical care, family planning services, etc. Essential drugs and equipment are not available to the staff.

It is obvious that in such a management environment, HMIS/FLCF information will be underutilized. Solutions involve behavioural and administrative changes, and are therefore not immediate. Fortunately, the main objectives of the Family Health Projects in the four provinces are to improve the management practices of the government health services. With a planned duration of at least seven years, these projects have a real potential for change. It will therefore be of utmost importance that HMIS/FLCF is made full part of the planned management training programmes under the FHPs.

3. How can the computerized data processing system be maintained and further developed?

During the planning/design phase of the Health Management Information System in 1991 it was decided to computerize the health management information system. In addition to the set up of provincial, divisional and later on district computer centers, it was foreseen that the Federal Biostatistics Cell (FBSC) would become the clearing house of the HMIS information received from the provinces. In this institution, all data sets would be processed through computers and feedback sent to the Planning Cell and to the National Programmes (see table 5). The Federal Biostatistics Cell would also be in charge of maintaining the computerized data processing system and provide hardware and software support to the Provincial Computer Centers as required.

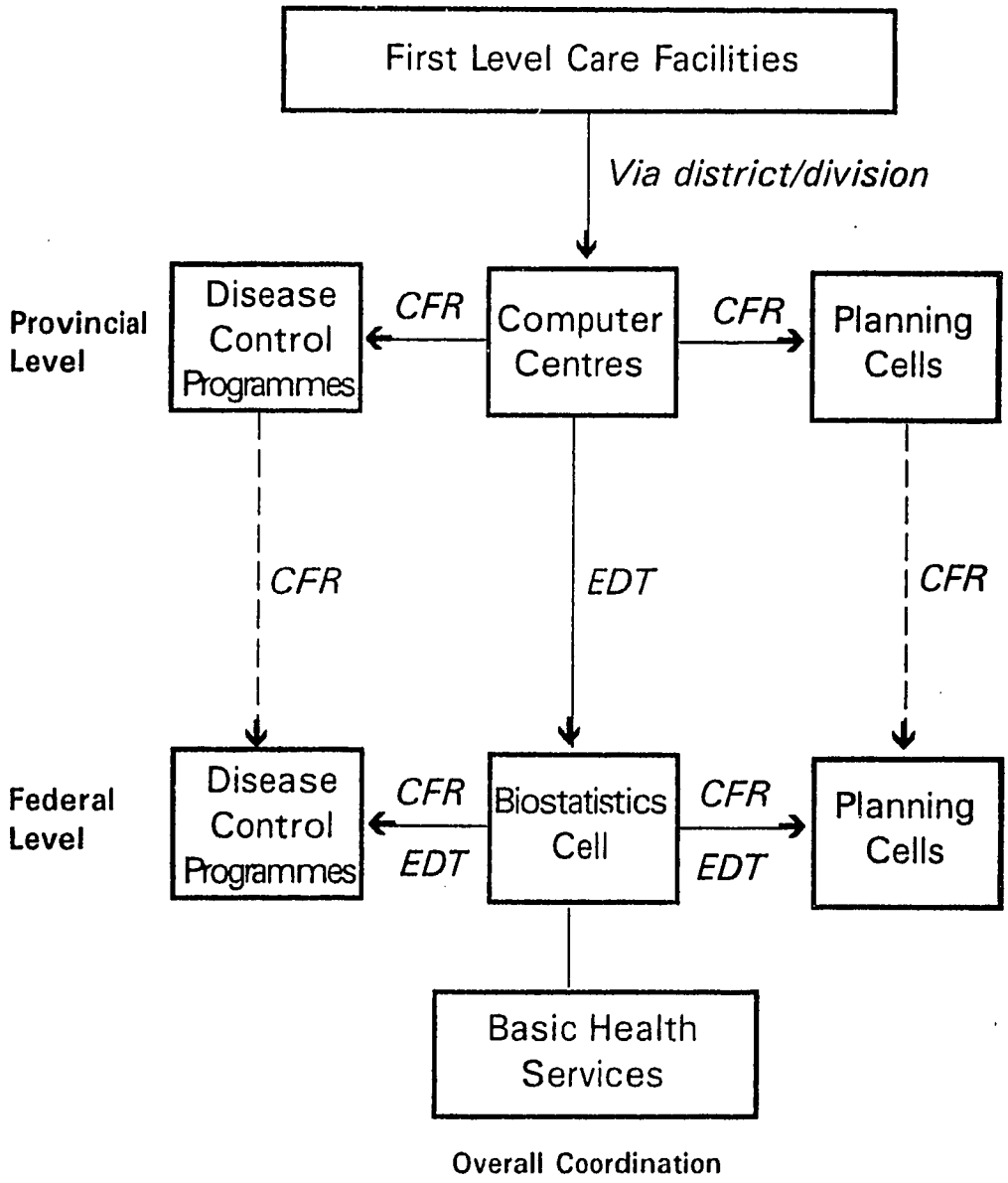
The Biostatistics Cell with its present staff and equipment is in no position to take over the expanded role of overall HMIS management. Recently it was proposed to attach the FBSC to the Basic Health Services Directorate (BHS). The BHS with the assistance of the PCSP/HMIS team has managed the design and early implementation of the new HMIS since 1990. The ADG/Operations of the BHS has been specifically trained for this purpose. He could overview the activities of the Biostatistics Cell after the transfer. Also, all the required hardware and software and the physical space to

Table 5

Health Management Information System for First Level Care Facilities (HMIS / FLCF)

Data Flow Diagram

PROVINCIAL ⟷ FEDERAL LEVEL



EDT = Electronic Data Transmission
CFR = Computerized Feedback Reports

run the computerized system is already available in the building of the Basic Health Services Cell.

The transfer of the FBSC to the Basic Health Services in itself is not sufficient. Additional staff and equipment need to be invested. The FBSC will need an epidemiologist and a computer programmer in order to ensure its role in the further development and maintenance of the computerized data processing system. Both positions are not existing at this moment. The process of creating new positions is very lengthy and will need full commitment of the Ministry of Health. In the mean time, WHO has already offered to finance the services of an epidemiologist on a temporary basis. As for the computer programmer, we suggest that the MOH approaches UNICEF to finance additional technical assistance until the position is created in the government system. The PCSP computer specialist will be available for some additional months, and the Community Health Sciences Department of Aga Khan University has also shown keen interest in providing such assistance. Also, more powerful computer equipment to handle large databases will be required very soon. UNICEF is ready to finance such equipment provided that the necessary steps have been taken by the MOH to create a computer programmer position.

4. The functioning of computer centers is hampered by lack of adequate institutionalization measures

As shown in the detailed report on the functional status of computer centers, problems are arising that endanger present and future functioning of the computer centers. Computer operators normally are full time occupied with the various tasks required by the HMIS/FLCF computerized data processing system: data entry, maintenance of HID, production of feedback reports, etc. Presently, in most computer centers the positions of computer operators are not sanctioned. They are mostly statistical assistants or clerical staff who were trained to function as computer operators. They therefore can be requested at any time by their superiors to do other tasks, thereby neglecting the routine computer tasks such as data entry. Also, since computer positions are not sanctioned, there is no real career structure for these "volunteer" computer staff. Some of the operators are trying to get transferred. The provincial health departments should therefore urgently create computer operator positions for all computer centers.

Another institutionalization issue is linked to the supervision of the computer centers. As a general management principle, no system can work without adequate supervision. Under the PCSP, one computer supervisor for each province has been trained, to ensure regular monitoring of and training support to the computer centers. Since the computerized system is a recent creation, no budgetary provisions are available to permit provincial supervisors to visit these centers.

5. Delays in the approval of PC-1s will eventually lead to stock-outs of printed supplies and computer supplies

The Health Departments of all provinces have decided to ensure HMIS/FLCF supplies in an initial phase through the development budget, and then later on to get approvals for increases in non-development budgets. All provinces have therefore prepared PC-1s, but after more than one year, only Balochistan got approval of its PC-1. Even if these PC-1 will be approved in the next few months, it will take several months to mobilize funds, to order the supplies, and to get them printed.

As already mentioned earlier in this report, several districts, where HMIS/FLCF is operational since more than a year are facing or will very soon face stock-outs for printed supplies. Obviously, without OPD registers, without abstract registers, without monthly report forms, HMIS/FLCF can NOT function.

Solutions are not obvious. In Punjab and in AJK it was decided to use the available recurrent budgets for ordering limited quantities of supplies. An order of a one-year stock for 2,200 first level care facilities financed by UNICEF will be ready around July 1994. In the mean time we have advised the provinces to ensure at least the most essential printed supplies such as registers and report forms.

V. ACTIONS FOR SUSTAINABILITY

Based on the previous analysis and on the discussions held with the federal Ministry of Health and with the provincial Health Departments, the PCSP/HMIS Technical Assistance Team recommends the following actions in order to ensure sustainability and future institutionalization of the new Health Management Information System for First Level Care Facilities:

1. Related to HMIS/FLCF Implementation

HMIS/FLCF implementation should be completed in the shortest time possible and if possible by the end of 1994. Operational and financial commitments have been made as follows:

Province/Region	Training Workshops	Printed Supplies
AJK	Completed	Completed
Balochistan	FHP	FHP
Northern Areas	UNICEF	UNICEF
NWFP	FHP	FHP
Punjab	FHP	Government of Punjab
Sindh	FHP	FHP

2. Related to Data Collection

2.1 In an initial phase, special efforts are required from district supervisors during supervision to ensure appropriate HMIS/FLCF data collection by the FLCF staff. For this purpose it is advised to use the checklist specially developed for HMIS/FLCF monitoring (see appendix 8).

2.2 If particular and recurrent problems in data collection procedures are found in the majority of FLCFs, refresher courses should be organized at the district level

2.3 Coordinators should be appointed in the OPD of all hospitals, for supervision of data collection procedures and for report drafting.

2.4 Further study is required to implement HMIS/FLCF in OPDs of teaching hospitals. HMIS/FLCF briefing should be provided to the MS of all teaching hospitals.

3. Related to Data Transmission

3.1 The DHO assisted by the district HMIS coordinator should ensure regular reporting from minimum 80% of all FLCFs under his supervision. Quality of reports needs to be checked prior to entering the report in the computer.

3.2 In districts where HMIS/FLCF implementation is complete, all parallel reporting for disease specific national programmes should stop. This includes reporting on family planning activities.

3.3 Provincial data sets are to be transmitted to the Biostatistics Cell in the Federal Ministry of Health, who in turn will provide data sets and feedback reports to the National Programmes and to other departments. Data sets from monthly reports should arrive at federal level one month and one week after the end of the reporting month; data sets from yearly reports, two months and one week after the end of the reporting year.

4. Related to Printed Supplies

4.1 PC-1s or increase of regular non-development budget support need to be approved as soon as possible, so as to ensure regular supply of printed forms to the FLCFs already using the new system.

4.2 For initial printed supplies orders it is advised to print through the private printing press and avoid further delays. It is therefore necessary to obtain Non-Objection Certificates.

4.3 In the interim period, essential HMIS/FLCF printed supplies such as registers and report forms could be ordered through funds available in the regular non-development budget

5. Related to the Computerized Data Processing System

5.1 In order to ensure software maintenance and additional software development, positions for computer programmers need to be created at FEDERAL and PROVINCIAL levels. In the mean time, additional technical assistance will be required at least in the coming year. The Community Health Sciences Department of Aga Khan University has expressed its willingness to provide this assistance at the provincial level in Sindh, and, provided some funding source can be identified, also at federal level.

5.2 In order to avoid high turnover rates and irrelevant use of computer staff, positions for two computer operators need to be created for each computer

center. These computer operators should be provided with explicit job descriptions.

5.3 District computer centers need to be established as soon as possible, particularly in Punjab, so as to avoid data entry overload.

5.4 The regular non-development budget should provide the necessary funds for computer supplies and maintenance contracts. Initially PC-1s can ensure these costs for two or three years.

5.5 Federal and provincial computer supervisors should be provided with travel permission and TA/DA for monitoring and in-service training visits to the peripheral computer centers.

6. Related to the Use of HMIS/FLCF Information

By Managers and Supervisors

6.1 The Family Health Projects should build HMIS/FLCF applications in the projected management training programmes for supervisors.

6.2 Provincial and/or divisional meetings for supervisors should be organized at least two times a year to study HMIS/FLCF data sets and apply the findings to the planning and management of the health services.

6.3 Budget allocations should permit quarterly visits of all FLCFs by the district supervisors.

6.4. All supervisors need to be trained in supervisory techniques, particularly in supportive supervision. The supervisory checklist developed under HMIS/FLCF can be used as a tool for supportive supervision.

6.5 As a long term recommendation, the district level supervisory system needs to be carefully reviewed in the following areas:

* Required qualifications and job descriptions of the supervisors
* Decision making procedures related to personnel management
* Administrative and financial decentralization

By FLCF Staff

6.6 The District Health Development Centers of the Family Health Projects should use HMIS/FLCF applications and data in their planned in-service training activities

6.7 Meetings need to be organized at district level at least on a quarterly basis to study HMIS/FLCF data sets and use the findings for improvement of the health services provided.

6.8 Supervisors should take with them computerized feedback tables when visiting the FLCFs and discuss the information contained in theses tables with the FLCF staff.

6.9 Health management information systems and concepts on information and management need to be taught as full part of the pre-service training curriculum of doctors and paramedics

7. Related to HMIS/FLCF Overall Coordination

7.1 At the federal level, staff of the Basic Health Services Directorate should regularly visit the provinces to monitor completion of HMIS/FLCF implementation and further institutionalization. Recurrent budgets need to be revised accordingly.

7.2 In order to strengthen the Federal Biostatistics Cell, positions for an epidemiologist and for at least one computer programmer need to be created as soon as possible.

7.3 Additional HMIS National Team Meetings need to be organized in future to ensure interprovincial coordination in the HMIS development

7.4 HMIS coordinators in the provinces need to be provided with transport means and TA/DA, so as to make regular visits to the districts where the system has been implemented.

7.5 Waiting for more permanent budget support for HMIS/FLCF from the government, external donors should provide on a temporary basis additional funding for short term technical assistance and for selected recurrent costs.

* Federal level:	UNICEF or WHO
* Provincial level:	FHPs (World Bank, ODA), also UNICEF in Punjab
* In AJK and NAs:	UNICEF

8. Related to further HMIS development

8.1 An external evaluation of HMIS/FLCF need to be organized in mid 1995, so that the actual implementation status and the real contributions of the system to health services planning and management could be assessed in an objective manner.

8.2 HMIS needs to be further developed, so as to gradually become a nation wide comprehensive management information system. Areas for development in the coming years are:

* Community based health services
* In-patient/referral services
* Private sector health services
* Vital events registration
* Communication with information systems from other sectors

8.3 These system development efforts should build upon the existing HMIS structure.

8.4 In the mean time, information generated through HMIS/FLCF should be shared where possible with other sectors, such as public health engineering, population and welfare, education, etc.

INTEGRATED CHILD SURVIVAL TRAINING

I. BACKGROUND

One of the main components of PCSP is the Integrated Child Survival Training Component (ICST). Until September 1993, this component was coordinated by a training team based at the Federal Basic Services cell. The team was made up by the Assistant Director General (BHS) and by a technical assistance team (TAT) under the direction of Dr. Tara Upreti (training advisor). In the provinces the team was further assisted by four Provincial Training Coordinators and their counterparts, working under the four Provincial Project Directors. It has not been easy to introduce the concept and implement the training course in Integrated Child Case Management. A great deal of effort from Pakistani government officials and TAT was put in to arriving at an understanding and a consensus on Integrated Child Survival Training. The Secretaries of Health and Director Generals of Health Services from all four Provinces had all shown keen interest in the integrated approach to the delivery of child health services and the integrated Child Survival Training Course and have provided all necessary support.

After a process of consensus building, a training curriculum was developed using available W.H.O. training materials for immunization, ARI and diarrhoea. For nutrition, interpersonal communications, and integrated child case management new materials were drafted. After approval of these materials by National Programme Coordinators and by the Provincial Health Departments, ten training manuals were printed to teach the concept of integrated case management of children under 5 years of age. The training programme focussed mainly on health staff of first level care facilities (FLCFs). Four different types of workshops have been developed:

1.	Trainers	13 days
2.	Medical Officers	12 days
3.	Paramedics	9 days
4.	Supervisors	6 days

After assessing 18 teaching hospitals and 15 District Hospitals, a total of 25 sites for CSTUs were selected. In other teaching hospitals, it was not feasible to establish training units due to lack of adequate space/facilities. At the conclusion of the MSH contract in September 1993, 26 CSTUs had been established (one additional site was selected later): 15 at the teaching hospitals and 11 at District/Divisional Hospitals).

After completion of Medical Officers Training manuals, the training activities for Medical Officers were initiated in December 1991 with a test workshop in Faisalabad. This was followed by a workshop for Master Trainers from all the Provinces. From May 1992, the Provinces began training of trainers for their CSTUs and soon after, initiated medical officers training first at teaching hospitals and then at the DHQs. The federal training team ensured continuous supervision and monitoring of the training activities. In the mean time, manuals for paramedics and the supervisors were developed. Training for supervisors and paramedics was started in February and April 1993 respectively.

Till August 1993, a total of 107 workshops were held, at which 1340 persons were trained. The training target was 1400, so the project fell short of its target by 60. However, this number has been made up in September 1993, with UNICEF supported training initiated in Azad Kashmir and Punjab. Table 6 provides break up of the total number of Personnel trained at Federal and Provincial Level.

Table 6

SUMMARY OF PERSONAL TRAINED IN INTEGRATED CHILD SURVIVAL COURSE AT FEDERAL AND PROVINCIAL LEVEL
from January 1992 to September 1993

Location	Trainers	MO/WMO	Paramedics	Supervi-sors	Total
Federal Level	70*	21	-	18	109
Balochistan	28	85	56	20	189
NWFP	34	109	90	17	250
Punjab	76	143	98	17	363
Sindh	95	222	70	20	407
AJ & K	-	10	12	-	22
TOTAL	**303**	**619**	**326**	**92**	**1340**

In July 1993, the Integrated Child Survival Activities were assessed by an external evaluation team consisting of USAID and a WHO expert. The team appreciated the work on integrated approach done by PCSP. According to them the ICST curricula developed by GOP and PCSP are consistent with the curricula being developed by WHO and should be given a "fair trial" of at least 2 years (or used as the starting point for any new efforts).

At the request of the Government of Pakistan, USAID therefore provided limited funds to extend the ICST component of PCSP for an additional eight months. Funding consisted of five months of salary and travel costs for Dr Salarya, Federal Training Specialist (the first four months were paid for by UNICEF), and to operational support of Basic Health Services Cell in Ministry of Health. Fortunately since the beginning of 1993, UNICEF has joined USAID in supporting ICST training activities. Since the beginning of the PCSP extension, all ICST activities in the provinces were funded through UNICEF.

In the following chapters, a overview is given on the accomplishments during the extension period and on challenges and constraints faced. Actions are recommended to the Government of Pakistan to ensure future sustainability of the ICST training programme.

II. OBJECTIVES

1. To assist in the establishment of a Continuing Education Cells in Federal and Provincial Health Departments as initiated under PCSP.

2. To continue integrated child survival training through the established CSTUs in 15 teaching hospitals and 11 District/Divisional Hospitals.

3. To expand training activities through establishment of new CSTUs in other districts of the Provinces.

4. To assist Provincial Health Departments to strengthen the supervisory system.

III. ACCOMPLISHMENTS AND OUTPUTS

Up to September, 1993. the federal ICST team consisted of one expatriate training advisor, two locally hired training specialists, and the Assistant Director General/Training of the Basic Health Services Cell as government counterpart. At the provincial level, coordination was ensured by a locally hired PCSP training coordinator and his government counterpart. During the extension period, the two federally based training specialists were initially maintained with funding by UNICEF. After January 1994, only one training specialist continued his services funded by USAID. No more PCSP staff was maintained in the provinces, but ICST coordinators were appointed by the government in each province (see appendix 3)

1. ICST Planning

In the initial months of the extension period a number of visits were made and meetings were held in the Provinces to plan training activities all over the country. This planning effort culminated with a National ICST Meeting held in Islamabad on January 31, 1994. The meeting under the leadership of Dr. Talat Rizvi, ADG (Training) of the Basic Health Services Directorate gathered all the provincial ICST coordinators and provincial representatives of UNICEF. During this meeting constructive exchanges took place between the provinc and the following outcomes were recorded:

1. Initially and at least until mid 1995, UNICEF will provide financial assistance to the provinces to organize additional workshops in the CSTUs.

2. Later new partnerships need to be established particularly with the Family Health Projects, so that the ICST programme becomes part of the

in-services training programme of the Provincial Health Development Centers (PHDCs).

3. The provinces themselves will be responsible for coordination and monitoring of the ICST training activities in their province. They will also coordinate with the federal ICST team.

4. Supportive supervision by district supervisors is a sine-qua-non for maintaining quality of clinical child case management in FLCF staff who have been trained in the ICST workshops. The supervisory checklist will be further promoted as a tool for supportive supervision.

Based on this meeting, a five-year training plan for 1994-1998 was developed and was shared with several donors in order to ensure adequate funding (see appendix 9).

2. Establishment of new CSTUs

Until September 93, 15 CSTUs had been established in teaching hospitals and 11 in the district hospitals. Between September 1993 and May 1994, further assessment was done to establish new CSTUs. In total 14 hospitals were assessed, two teaching hospitals and twelve district hospitals. In some of these places, conditions were found to be inadequate for ICST training. In others, training will start soon.

Table 7

ASSESSMENT AND FUNCTIONAL STATUS OF CSTUs
May 1994

Province	Teaching Hospitals		DHQ Hospitals	
	Assessed	Functioning in May 1994	Assessed	Functioning in May 1994
Punjab	2	6	2	3
Sindh	0	5	1	2
Baluchistan	0	1	1	2
NWFP	0	3	5	3
AJ&K	0	0	2	2
Northern Areas	0	0	1	1
TOTAL	2	15	12	13

At the end of May 1994, two additional district CSTUs were functioning: one in NWFP and one in Northern Areas (see table 7)

3. ICST Implementation

a) ICST workshops

During the extension period Sept 93 to May 94, 62 work shops were conducted which brings the total number of ICST workshops since the beginning of the Project to 169. A complete update on number of persons trained under PCSP is given in Table 8. The number of training workshops could have been more, but training activities were interrupted for the month of Ramazan and during the national polio campaign.

Table 8

PCSP INTEGRATED CHILD SURVIVAL TRAINING PROGRAMME
Number of trainees per professional category and per province
1992 - 1994

Provinces	Trainers	M.O.s	Para-medics	Super-visors	TOTALS
FEDERAL	70	21	*	18	109
PUNJAB	86	333	220	17	656
NWFP	74	145	165	34	418
BALUCHISTAN	28	85	71	20	204
SINDH	95	367	100	20	582
AJ&K	*	53	61	8	122
TOTALS	**353**	**1004**	**617**	**117**	**2091**

b) Supply of training materials

As sufficient training material had all ready been supplied to all the provinces at the end of PCSP, there was no problem in restarting training. Later during the extension, supplernentary materials were sent as follows:

Baluchistan	200 copies of each module 250 copies of paramedic modules
NWFP	200 copies of each module 20 copies of training methodology module

Punjab	200 copies of each module 75 Nutrition training for PHC (Participant) 50 Nutrition training for PHC (Reading) 100 ICST Course for MOs 100 Diarrhoea module for supervisors 50 ARI (Reading) 75 ARI Management of young child 25 Diarrhoea (Reading) 25 Immunization in practice
Sindh	200 copies of each module
AJ&K	100 copies of each module
Northern Areas	100 copies of each module

Demand for more modules has been sent to UNICEF and an order is under process.

4. ICST Monitoring and Evaluation

a. Follow-up visits to training workshops

Regular monitoring of training activities has been done by the federal ICST team in the four provinces and in AJK/Northern Areas. As a rule, the PCSP training specialists have always participated actively in the Training of Trainers workshops. As for the other workshops, spot checking of the quality of training has been performed.

b. ICST training assessment in FLCFs

An important part of the ICST programme was the pre/post assessment of the participants, for a double purpose: (1) to verify the effect of the training on clinical case management; and (2) to stimulate supervisors to perform supportive supervision through observations of clinical case management, using the supervisory checklist. Supervisors were therefore requested to do pre/post assessment of the trainees in their district.

In reality, very little or no pre/post assessment has been done. Mostly, lack of transport, or lack of time were given as an excuse. This shows clearly that supervisors, although they had received a six day course on supportive supervision, explaining in detail the use of the supervisory checklist, are not as yet motivated to perform supportive supervision, and that a single course is not sufficient to generate important behavioural changes.

Training assessment has therefore only been done on a sample basis by the ADG (Training) of the BHS Cell and by the two training specialists. Taking into account the assessments done prior to September 1993, 54 assessments have been done in total. Table 9 gives comparative results between pre- and post-assessments based on averages. Because there is not always correlation between pre- and post-test results, and because relatively few pre-tests were performed, no real statistical significance tests can be done on these results. Yet, there is a general impression that the training is definitely improving child case management skills in the participants.

Table 9

ASSESSMENT OF INTEGRATED CHILD SURVIVAL TRAINING
Average scores (in %) of pre/post assessments

	Cold chain Managmnt	Immuniz. Session	Growth Monitor. Session	Case Management of child under 5				
				General Care	Diar-rhoea	ARI	Nutri-tion	Immuni-zation
Pre	72	69	47	43	40	46	19	23
Post	78	73	66	59	65	50	39	58

IV. CHALLENGES AND CONSTRAINTS:

Again, we refer the reader to the PCSP final report (1990-1993) for a more in-depth analysis of the challenges, constraints, and lessons learned in the implementation of the integrated child survival training programme. Following are some of the challenges and constraints faced during the extension period:

1. Integrated versus disease specific training

As shown in the five year training plan 1994-1998 (see appendix 9), the investment necessary to provide ICST training to most care providers of first level care facilities is considerable. Yet, several questions related to the effectiveness of the training are still unanswered:

* Can integrated training provide the same case management skills to care providers as separate disease training?
* Is separate disease oriented training more adequate at the referral level and integrated training at the first level?
* Is the duration of training for doctors and paramedics adequate?
* What is the effect of supportive supervision on the long term behaviour of care providers?

As long as these questions persist, managers at the provincial level will remain confused about the training strategy. Although most provincial health departments had opted to provide integrated training to doctors and paramedics of first level care facilities in rural facilities, but vertical training programmes such as ARI training been scheduled during the extension period.

The answer to such questions can only be given through a well planned a scientifically based study. During the extension period neither the time not the funding were available to set up such a study.

2. Lack of supportive supervision after the ICST training

It is obvious that the ICST training course in itself is not sufficient to change attitudes and practices of care providers in child case management. The messages provided during training need to be consolidated through ongoing and supportive supervision based on care provider observation. Yet, as explained under the HMIS component, supportive supervision is not practiced as of today, and this for several reasons: (1) district supervisors are insufficiently trained in supervisory techniques; (2) they lack time and transport means to ensure effective supervision; (3) they are hampered in the exercise of their administrative authority by outside interferences.

3. Ad hoc arrangements for funding of training hamper smooth implementation

UNICEF has kindly agreed to finance on an interim basis all ICST training activities. The administrative procedures for release of funds are rather complex and lengthy: through the provincial offices into government accounts, and then to the CSTUs. The result is that timing for release of funds to the CSTUs is unpredictable and makes scheduling of the training programme often very tedious.

V. ACTIONS FOR SUSTAINABILITY

The Federal Ministry of Health and the Provincial Health Departments have shown acceptance and appreciation of the integrated approach to training in child case management. The ultimate benefit of the programme is obviously for the child and the mother, who eventually will be approached in a more holistic manner by the care provider. But the benefits can also be translated in time and costs savings. Indeed, to call the care providers for nine or twelve days and provide them with a comprehensive training package focusing on the main priority health problems in children seems indeed more effective than to provide separate training for each and every priority health problem as was the case in the past.

As pointed out in the previous section, we consider it as a top priority to set up of a well planned and scientifically based **cost benefit analysis of the ICST package**, so that clarity can be given to provincial decision makers about in-service training programmes on child case management.

As for the institutionalization of the ICST programme, we want to make two main recommendations:

1. Based on the initial efforts by the PCSP/ICST teams to set up Continuing Education Cells in all the provinces, the Provincial Health Departments have identified the Provincial Health Development Centers (PHDCs) of the Family Health Projects as the institutions where in-service training for care providers of first level care facilities will be coordinated. As such the provincial ICST programmes need to be integrated gradually into these PHDCs, ideally before mid 1995.

2. For the ICST programme to have a sustainable effect, the same actions as recommended under the HMIS component related to the supervisory system are required:

2.1. All supervisors need to be trained in supervisory techniques, particularly in supportive supervision. The supervisory checklist developed under HMIS/FLCF can be used as a tool for supportive supervision in child case management.

2.2 As a long term recommendation, the district level supervisory system needs to be carefully reviewed in the following areas:

* Required professional qualifications and job descriptions of the supervisors
* Decision making procedures related to personnel management
* Administrative and financial decentralization

PROJECT ORGANIZATION AND MANAGEMENT

1. PCSP/TA Team

Harvard Institute for International Development (HIID) had been contracted by USAID to implement the previously outlined activities during the extension period. Jaffer Brothers Limited (JBL) was subcontractor to HIID, mostly for personnel management of the national staff.

Under the direction of Dr. Theo Lippeveld as Chief of Party, and of Major (Retd) Javade as JBL Project manager, a team of four professionals and of twelve administrative/support staff (see appendix 2) have given all their efforts in order to reach the objectives of the extension period.

The technical assistance team (TAT) has worked in close collaboration with the Basic Health Services Cell of the Federal MOH. Together they assisted the Provincial Health Departments including AJK and NA particularly in ensuring coordination of all donor projects involved in HMIS and ICST development (see appendix 1).

2. Government Counterparts

A list of the main Government Counterparts with whom the PCSP/TA team has worked during the extension is given in appendix 3.

3. PCSP collaboration with other Basic Health Services Projects

a) Family Health Projects

Under the PCSP extension, extensive discussions have taken place with the Project staff of the Family Health Projects (FHPs) in the four provinces. The FHPs, mostly operating with World Bank loans, all have a common objective of improving the management environment of the health services in their respective provinces, particularly focusing on safe motherhood activities.

The Family Health Projects of the four provinces have agreed to complete HMIS/FLCF implementation in the shortest time possible, and to teach and promote HMIS/FLCF as a tool for planning and management of the basic health services.

The Integrated Child Survival Training Programme will gradually become part of the in-service training programmes provided through the PHDCs and the DHDCs.

b) UNICEF

Since 1992 UNICEF has been closely involved in the development of PCSP activities, both in the HMIS and the ICST components.

UNICEF has been extremely helpful in providing conceptual and financial support where necessary during the HMIS/FLCF design phase and during the early implementation. Under the HMIS extension, UNICEF has continued to provide financial assistance, particularly to the AJK and NAs Health Departments, where no FHPs are operational, but also to the Punjab Health Department, whose training programme is still far from completion. Waiting for FHP to finance the second phase, UNICEF has provided the necessary funds for more than 40 workshops and corresponding stocks of printed supplies to finish implementation of the four divisions of the first phase. They have also ensured printing of additional stocks of MCH cards.

At the end of the extension, it was agreed that UNICEF will provide further assistance to HMIS/FLCF development in the following areas:

* Funding of short term TA in overall HMIS coordination (decision will be made in August 1994);
* Funding of short term TA to the Biostatistics Cell in computerized data processing system development and maintenance;
* Funding of hardware for the Biostatistics Cell (linked to creation of post of computer programmer).
* Further support to AJK and NA;
* Further TA to the Punjab Health Department until December 1994.

As for the ICST component, UNICEF has taken a leading role in promoting the concept of integrated child case management training throughout the country. Before September 1993, UNICEF has funded workshops in the Hyderabad district in Sindh and in printing of training materials.

During the extension UNICEF has funded the services of two training specialists in the BHS Cell and the organization of 62 workshops in all four provinces, AJK and NAs. UNICEF has committed to continue its funding until mid 1995. By that time the ICST programme should be full part of the PHDC training programme.

c) WHO District Level Management Project

Similarly, we have worked closely together with the WHO funded District Level Management Project. This was facilitated by the fact that this project is based in the BHS Cell. Dr. Bile is the WHO technical advisor. As mentioned earlier, our assistance has been mostly in the development of a community based health information system (see under the HMIS component III.5)

d) ODA Health Planning

Funded through ODA, a technical assistance team of Leeds University under the direction of Prof. Colin Thurnhurst is providing assistance to the Federal MOH and the Provincial DOHs in streamlining the health planning process. Emphasis is put on decentralizing the planning and management capability to the district level. Obviously, the development of HMIS/FLCF will be of crucial importance to this process, since one of the main features of the system is to stimulate use of the information at peripheral levels.

During the extension we had several coordination meetings with Prof. Colin Thurnhurst and his team. We participated in some of their training workshops, while they attended our feedback workshops. HMIS/FLCF information is now being used in the preparation of district health plans.

APPENDICES

1. PCSP Administrative Organigram
2. PCSP Technical Assistance and Support Team
3. GOP Counterparts
4. List of Documents Produced during the PCSP Extension Period
5. HMIS/FLCF Printed Supplies Distributed During PCSP
6. HMIS: Status of Computer Centers Established under PCSP
7. HMIS: Computerized Feedback System
8. HMIS: Checklist For Data Recording And Reporting System
9. ICST: Training Plan for 1994-1998

Appendix 1

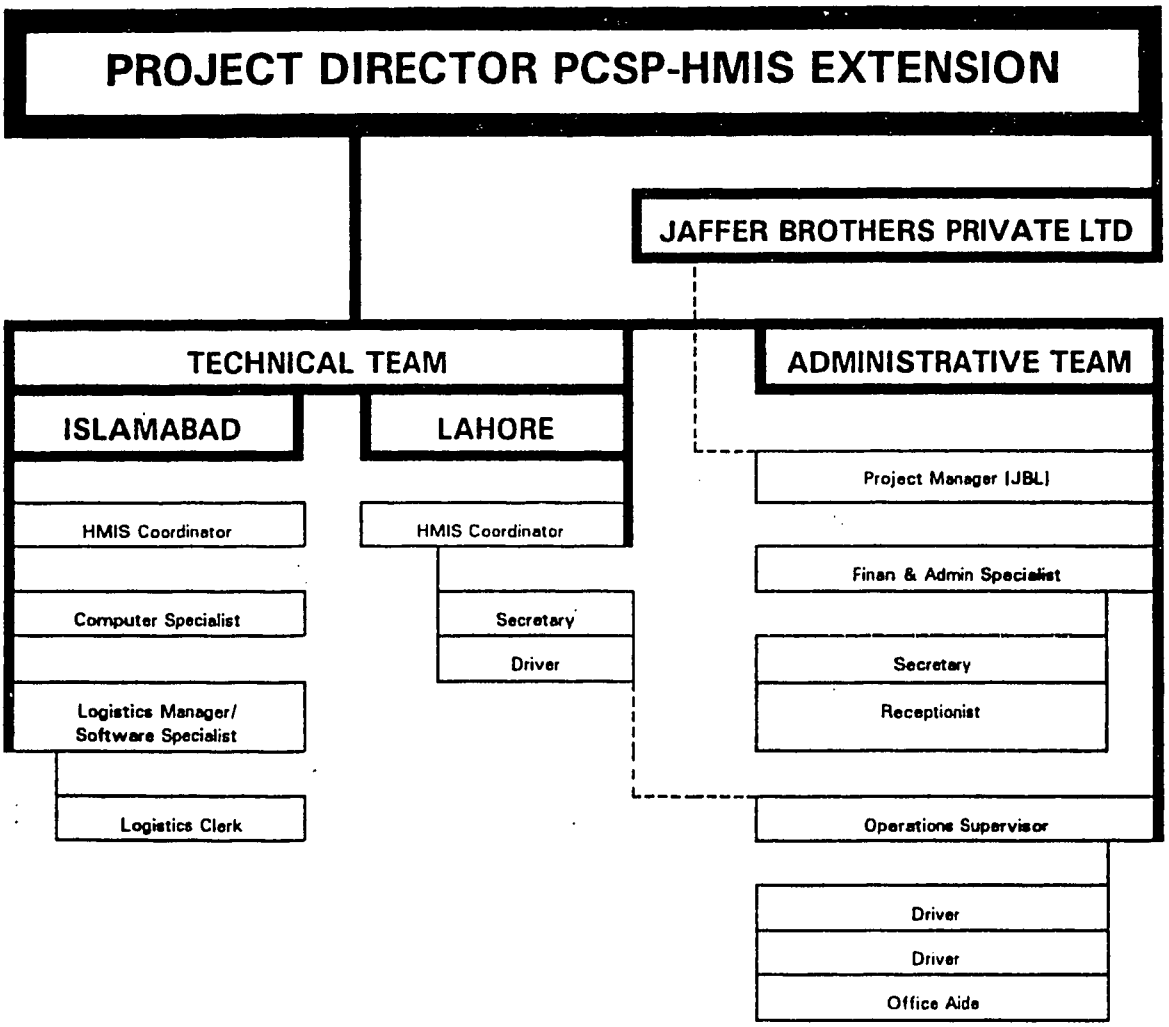
PCSP Administrative Organigram

Annex 1

PCSP Administrative Organigram

PAKISTAN CHILD SURVIVAL PROJECT
HMIS EXTENSION

Organization Chart



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Appendix 2

PCSP Technical Assistance and Support Team

Appendix 2

PCSP Technical Assistance and Support Team

HARVARD INSTITUTE FOR INTERNATIONAL DEVELOPMENT

1. Dr. Theo Lippeveld, Chief of Party/HIS Advisor

UNICEF/USAID

1. Dr. Mohammad Ayub Salariya, Training Education Specialist
2. Dr. Zahida Sultana Mir, Training Education Specialist (Until 12/93)

JAFFER BROTHERS (PRIVATE) LIMITED

Technical Team

1. Dr. Nasim Haque, HMIS National Coordinator (until 4/94)
2. Dr. S.M. Mursalin, HMIS Provincial Coordinator [Lahore]
3. Mr. Shafat Sharif, Computer Specialist
4. Mr. Gohar Latif Khilji, Logistics Manager/Software Specialist

Administrative Team

5. Maj. [Retd.] Javade Khwaja, Project Manager [JBL-Islamabad] (until 4/94)
6. Mr. Khalid Mahmood Butt, Financial & Administrative Specialist
7. Mr. Mohammad Naseem Khan, Operations & Admin Supervisor
8. Mr. Kamran Mumtaz, Project Accountant [JBL-Karachi]
9. Mrs. Shahnaz Farooq, Executive Secretary (until 4/94)
10. Mr. Mohammad Sakhi, Secretary [Lahore]
11. Mr. Arif Ullah, Logistics Assistant
12. Mr. Amjad Bhatti, Receptionist
13. Mr. Iftikhar Abbasi, Driver
14. Mr. Saqlain Akhtar, Driver
15. Mr. Amin Khan, Driver [Lahore]
16. Mr. Mohammad Younas, Office Aide

Appendix 3

GOP Counterparts

Appendix 3

List of Government of Pakistan Counterparts

FEDERAL:

Secretary of Health:	Mr. A.R. Siddiqui Commander A.A. Naseem
Director General:	Dr. S. Mohsin Ali Dr. N. M. Sheikh
Director of Operations:	Dr. Mushtaq A. Chaudhry
Project Director (BHS):	Dr. Malik Manzoor A. Khan
ADG Operations (BHS):	Dr. Riaz A. Malik
ADG Training (BHS):	Dr. Talat Rizvi
Health Education Advisor:	Mr. Sattar Chaudhry

PROVINCIAL:

AJK:

Secretary:	Maj. Gen. Abdul Hameed
Director Health Services:	Dr. Syed Asghar Ali Shah
HMIS Coordinator:	Mr. Chaudhry M. Sharif
ICST Coordinator:	Dr. Mushtaq Ghardezi

Balochistan:

Secretary:	Col. M. Hashim Baloch
Director General:	Dr. Abdur Rehman Khan
HMIS Coordinator:	Dr. Mahsood Nowsherwani
ICST Coordinator:	Dr. Ikhlaq Hussain
FHP Director:	Dr. Zahoor Ahmad Khan
PHDC Director:	Dr. Ali Ahmad

Northern Areas

Director Health Services:	Col. Mohammad Nawaz

HMIS Coordinator:	Dr. Sher Wali Khan
ICST Coordinator:	Col. Mohammad Nawaz

NWFP

Secretary:	Dr. Nadir Khan
Director General:	Dr. Mulk
HMIS Coordinator:	Dr. Sharif A. Khan
ICST Coordinator:	Dr. Nasir Idriss
	Dr. Muhammad Zaheen Khan
FHP Director:	Dr. Inam-Ullah
PHDC Director:	Dr. Mohammad Zafar

Punjab

Secretary:	Mr. Tariq Saeed Haroon
	Mr. Bhatti
Director General:	Dr. Abdul Khadir Khan
Executive Director Special Projects:	Dr. Riaz Mustafa Syed
PCSP Director:	Dr. Yacoob Jaffer
HMIS Coordinator:	Dr. Naeem Uddin Mian
ICST Coordinator:	Dr. Mobeen Aslam
	Dr. M. Anwar Janjua
FHP Director:	Dr. Bhutta
PHDC Director:	Dr. Tahir Mir

Sindh

Secretary:	Dr. M. Azim Almani
Director General:	Dr. Ahmad Ali Dombkhi
PCSP Director:	Dr. Abdul Khaliq Mangnejo
HMIS Coordinator:	Dr. M. Bux Bhurgari
ICST Coordinator:	Dr. Abdul Khaliq Mangnejo
FHP Director:	Dr. Nissar Siddiqui
	Dr. Husein Bux Memom
PHDC Director:	Dr. Qayyum Sheikh

Appendix 4

List of Documents Produced during the PCSP Extension Period

Appendix 4

List of Documents and Products Produced During the Extension

Pakistan Child Survival Project Extension: Workplan October 1, 1993 - May 31, 1994.

Minutes of the VIIIth National HMIS Team Meeting, Islamabad, December 20-21, 1993

Minutes of the IXth National HMIS Team Meeting, Islamabad, May 11, 1994

HMIS/FLCF Instruction Manual. Revised version, May 1994

HMIS/FLCF Data Processing System: User's guide. May 1994

HMIS/FLCF Data Processing System: Technical Reference. May 1994

HMIS/FLCF Data processing software (100 sets consisting of four diskettes)

Managing Infectious Diseases Through a Comprehensive Health Management Information System: Paper prepared for the VIth International Conference on Infectious Diseases in Prague, April 26-30, 1994

Health Management Information System for First Level Care Facilities (HMIS/VHW). Document prepared for the Prime Minister's Programme for Family Planning and Primary Health Care. May 1994.

Integrated Child Survival Training Programme: Training Plan for 1994-1998

Pakistan Child Survival Project: Library catalog

Appendix 5

HMIS/FLCF Printed Supplies Distributed During PCSP

APPENDIX 5

Pakistan Child Survival Project
Health Management Information System (HMIS)

PRINTED SUPPLIES DISTRIBUTED DURING PCSP

Prov.	FC1 OPDT	FC2 RF	FC3U MCHC	FC4 FPC	FC5 IRF	FC6 TBFC	FC7 TBPC	FC8 CDFC	FC9 CDPC	FF1 IRF	FF2 MRF	FF3 YRF	LPHP
AJK	39,157	3,784	127,502	164,720	4,368	13,978	13,978	26,860	26,860	611	26,528	2,510	983
Balo	34,340	3,450	112,576	140,844	3,475	7,867	9,815	18,710	18,670	507	19,929	2,090	799
Fed.	1,297	125	6,751	5,751	145	611	611	1,021	1,021	29	1,151	200	70
Misc.	4	4	35,104	4	4	4	4	4	4	4	4	21	10
NAs	17,342	3,348	53,751	68,409	1,742	5,497	5,497	10,867	10,867	242	12,043	680	542
NWFP	71,958	6,914	285,070	269,095	6,866	17,632	18,927	36,338	36,663	1,003	51,825	3,500	1,875
Punj.	127,953	12,255	555,055	506,465	13,013	34,069	35,404	70,856	69,496	1,824	90,860	14,640	3,417
Sindh	68,253	6,722	258,375	266,248	6,722	19,383	18,883	37,262	34,110	1,029	48,650	5,400	1,929
Total	360,304	36,602	1,434,184	1,421,536	36,335	99,041	103,119	201,918	197,691	5,249	250,990	29,041	9,625

Prov.	FR1 OPDR	FR2 AR	FR3 CHR	FR4 MHR	FR5 FPR	FR6 TBR	FR7 IDDR	FR8 LR	FR11 PC	FR12 BR	FR13 SRMS	FR14 SRFEL	FR15 MR	FR16 DER
AJK	1,354	637	460	490	476	389	455	164	1,830	593	586	571	601	601
Balo	1,075	541	349	376	345	325	7	146	1,492	515	500	500	461	500
Fed.	80	39	27	22	27	22	18	9	84	29	29	29	29	29
Misc.	4	4	4	4	4	4	4	4	3	4	4	4	4	4
NAs	571	254	375	339	203	313	219	114	721	252	242	242	242	242
NWFP	2,233	1,121	776	741	679	638	1,279	295	3,012	1,069	1,004	1,054	1,042	1,011
Punj.	3,967	1,804	1,329	1,438	1,295	1,190	0	520	5,320	1,820	1,803	1,807	1,633	1,764
Sindh	2,032	1,024	699	555	637	594	0	345	3,631	984	892	990	980	971
Total	11,316	5,424	4,019	3,965	3,666	3,475	1,982	1,597	16,093	5,266	5,060	5,197	4,992	5,122

Appendix 6

HMIS: Status of Computer Centers Established under PCSP

UNCTIONAL STATUS OF COMPUTER CENTERS
As of May 25, 1994

FEDERAL

Computer Centers	Staffing Status						Status of Software Implementation			Status of Hardware ***			Status of Computer Supplies
	Computer Staff	GT	ST	Work-ing	App	Skill Level*	HID	Mon. Rep	Yrly. Rep	Date Installed	Specification	Comments	
Bio Statistics Cell	1. Mohammad Sharif, St.Off ** 2. Ghulam Mustafa, St.Comp 3. Hamid Yousuf, JTMO 4. Mohammad Din, JTMO	Y Y Y Y	Y Y Y Y	Y Y Y Y	Y Y Y Y	3 3 2 1	complete	Mar.94	No	1987	286 desktop, dot-matrix printer	no maint.	not available
Central Health Establishment (CHE) Karachi	1. Mohammad Nadeem, PA 2. Hafiz Abdur Rashid, H/C	Y Y	Y Y	Y N		1 1	complete		No	Mar.92	386 notebook, dot-matrix printer	no maint.	not available

GT=Generic Training, ST=Specific Training, App = Appointed as Computer Staff

* key for skill level: 1–Poor, 2–Average, 3-Good, 4–Excellent

** Computer Supervisor

*** It is expected that Bio-Statistics Cell will receive following equipment from PCSP after 30th May, 1994:

1. 386 desktop, 320 MB HD, 8 MB RAM Tape drive
2. 386 desktop, 100 MB HD, 4 MB RAM
3. 386 Laptop, 100 MB HD, 4 MB RAM
4. HP Laserjet III printer

FUNCTIONAL STATUS OF COMPUTER CENTERS

As of May 25, 1994

A J K

Computer Centers	Staffing Status						Status of Software Implementation			Status of Hardware			Status of Computer Supplies
	Computer Staff	GT	ST	Work-ing	App	Skill Level*	HID	Mon. Rep	Yrly. Rep	Date Installed	Specification	Comments	
Directorate of Health, AJK	1. Ch.Mohammad Sharif, AD Stat ** 2. Mohammad Hussain, St. Asstt. 3. Mohammad Saeed, Jr. Clerk 4. Mohsin Sharif Qureshi	Y Y Y N	Y Y Y Y	Y N Y Y		2 1 2 3	In-complete	Mar.94	Yes	Mar.92	386 desktop, dot-matrix printer	no maint.	not available
Mirpur District	1. Rukhsar Ahmed, St. Asstt. 2. Mehmood Ahmed, Sanitry.Super.	N N	Y Y	Y N		1 1	In-complete	Mar.94	Yes	Jun.93	386 notebook, dot-matrix printer	- same -	- same -

* key for skill level: 1–Poor, 2–Average, 3–Good, 4–Excellent

** Computer Supervisor

GT=Generic Training, ST=Specific Training, App = Appointed as Computer Staff

FUNCTIONAL STATUS OF COMPUTER CENTERS

As of May 25, 1994

BALOCHISTAN

Computer Centers	Staffing Status						Status of Software Implementation			Status of Hardware			Status of Computer Supplies
	Computer Staff	GT	ST	Working	App	Skill Level*	HID	Mon. Rep	Yrly. Rep	Date Installed	Specification	Comments	
DGHS Balochistan, Quetta	1. Mohammad Rahim, St.Off **	Y	Y	Y		3	In-complete	Mar.94	No	Jan.92	386 desktop, 100MB HD, dot-matrix printer	UPS not working	Acute shortage of supplies
	2. Noor Khan, Comp.Oper	Y	Y	Y	Y	3							
	3. Asghar Khan, Comp.Oper	N	Y	Y	Y	3							
	4. Mohammad Ali, Sr.Clerk	Y	Y	Y		3							
	5. Saeed Anwar, Sr. Clerk	Y	Y	Y		3							
	6. Mohammad Tariq, Jr.Clerk	Y	Y	Y		3							
	7. Wallayat Hussain, Jr.Clerk. EPI	Y	Y	N		2							
Zhob Division	1. Khalid Mehmood, J.Clrk, DHS	Y	Y	N		2	In-complete	Zhob: Feb.94 Loralai: Dec.93	No	Jun.92	386 notebook, 40MB HD, dot-matrix printer		- same -
	2. Mohammad Farooq, J.Clrk,MS	Y	Y	N		1							
** closed **	3. Naimatullah, Jr.Clrk, DHO Loralai	N	Y	N		2							
	4. Mohammad Ali, Comp. Operator	N	N	N	Y	3							
Mekran Division	1. M.Ishaque, Statist., MS Turbat	Y	Y	N		1	In-complete	n/a	No	93	- same -		
	2. Abdul Hameed, AstT.DHS Turbat	Y	Y	N		1							
	3. Abdul Majeed, J/C, DHO Turbat	Y	Y	N		1							
	4. Taj Mohammad, J/C, DHS Turbat	N	N	Y		1							

* key for skill level: 1–Poor, 2–Average, 3–Good, 4–Excellent

** Computer Supervisor

GT=Generic Training, ST=Specific Training, App = Appointed as Computer Staff

FUNCTIONAL STATUS OF COMPUTER CENTERS
As of May 25, 1994

N A s

Computer Centers	Staffing Status						Status of Software Implementation			Status of Hardware			Status of Computer Supplies
	Operators	GT	ST	Work-ing	App	Skill Level*	HID	Mon. Rep	Yrly. Rep	Date Installed	Specification	Comments	
Directorate of Health, NAs, Gilgit	1. Rizwanullah, St.Astt. DHS 2. Nazir Ahmed, St.Astt, DHO Gilgit	Y Y	Y Y	Y Y		2 1	In-complete	Upto Dec.93	?	Feb.92	386 desktop, dot-matrix printer	no maint.	not available

* key for skill level: 1–Poor, 2–Average, 3–Good, 4–Excellent
** Computer Supervisor

GT=Generic Training, ST=Specific Training, App = Appointed as Computer Staff

FUNCTIONAL STATUS OF COMPUTER CENTERS

N W F P

Computer Centers	Staffing Status						Status of Software Implementation			Status of Hardware			Status of Computer Supplies
	Computer Staff	GT	ST	Work-ing	App	Skill Level*	HID	Mon. Rep	Yrly. Rep	Date Installed	Specification	Comments	
DGHS NWFP, Peshawar	1. Mohammad Niaz, St.Off ** 2. Rehman Gul, Sr. Clerk 3. Hussain Ali, Stat.Asstt. 4. Mohammad Shafiq, Jr. Clerk	Y Y Y Y	Y Y Y Y	Y Y Y Y		3 3 1 2	In-complete	n/a	No	Feb.92	386 desktop, 100MB HD, dot-matrix printer	A/C not working	Shortage of papers
Malakand Division	1. Bilal, Stat.Officer 2. Shah Wali Khan, Stat.Asstt. 3. Khurshid Anwar, Steno 4. Muhib Ullah, Jr.Clerk	Y Y Y N	Y Y Y N	Y Y N Y		2 2 2 3	In-complete	Mar.94	No	Mar.92	386 notebook, 40MB HD, dot-matrix printer		
Swat District	1. Shamsher Ali, Jr. Clerk 2. Mohammad Ali, Jr. Clerk	Y Y	Y Y	Y Y		3 3	complete	Mar.94	No	Mar.92	- same -		
Peshawar Division	1. Mohammad Nisar, Stat. Officer 2. Iftikhar Azam, St.Asstt.	Y Y	Y Y	Y Y		1 4	In-complete	Mar.94	No	Jun.93	- same -		
Abbottabad Division										Jul.93	- same -		
D. I. Khan Division										Jun.93	- same -		

* key for skill level: 1–Poor, 2–Average, 3–Good, 4–Excellent
** Computer Supervisor

GT=Generic Training, ST=Specific Training, App = Appointed as Computer Staff

FUNCTIONAL STATUS OF COMPUTER CENTERS

PUNJAB

Computer Centers	Staffing Status						Status of Software Implementation			Status of Hardware			Status of Computer Supplies
	Computer Staff	GT	ST	Work-ing	App	Skill Level*	HID	Mon. Rep	Yrly. Rep	Date Installed	Specification	Comments	
DGHS Punjab, Lahore	1. Aamir Siddique Butt, DMO **	Y	Y	Y		4	complete	n/a	n/a	Apr.92	386 desktop, 200MB HD, dot-matrix printer		Available
	2. Mohammad Farooq, Comp.Oper	Y	Y	Y	Y	2							
	3. Ashfaq A. Chohan, Comp.Oper	Y	Y	Y	Y	3							
	4. Mohammad Nawaz, RO, PHDC	Y	Y	phdc		3							
	5. S. Mazahar Hussain, St.Astt. EPI	Y	Y	epi		1							
Bahawalpur Division	1. Zaeer Ullah, Stat.Officer	Y	Y	Y		3	complete			Jun.92	386 notebook, inkjet print.		
	2. Yousaf S. Iftikhar, Stat. Asstt	Y	Y	Y		2							
D. G. Khan Division	1. Saleem Ullah Awan, Stat.Asstt.	Y	Y	Y		2	complete			Mar.92	- same -		
Faisalabad Division	1. Mohammad Ijaz, Stat.Officer	Y	Y	Y		2	complete			Apr.92	- same -		
	2. Ahsan Ullah Zaheer, Stat.Asstt.	N	Y	Y		2							
Gujranwala Division	1. Mohammad Ijaz, Stat.Officer	Y	Y	Y		2	complete	Mar.94	No	Jun.92	- same -		
	2. Ahsan Ullah Zaheer, Stat.Asstt.	N	Y	Y		2							
Lahore Division	1. Mohammad Sharif, Stat.Officer	Y	Y	Y		2	complete			May.92	same but dot-matrix printer		
	2. Hafeezullah, Stat.Asstt.	Y	Y	Y		3							
Sheikhupura Dist.	1. Naeem Ullah Khan, Asstt.Ento.	Y	Y	N		?	complete	Feb.94	No	Aug.92	same but dot-matrix printer	Viruses damaged data 3 times	
	2. Shahid Mehmood, Steno	Y	Y	Y		2							
	3. Mchammad Nadeem, Jr. Cierk	N	Y	Y		3							
Multan Division	1. Karam Hussain Malik, Stat.Off.	Y	Y	Y		3	complete	Mar.94	Yes	May.92	- same -		
	2. S. Sadaqat Hussain, Stat.Asstt.	Y	Y	Y		2							
Rawalpindi Division	1. M. Ali Ahsan, Stat.Officer	Y	Y	Y		3	complete	Mar.94	Yes	Mar.92	- same -		
	2. Meharban Khan, Jr. Clerk	Y	Y	Y		3							
Sargodha Division	1. Naeem Akhtar Qureshi, Stat.Off	Y	Y	Y		3	complete			May.92	- same -		
	2. Mohammad Khan, Stat.Asstt.	Y	Y	Y		1							

* key for skill level: 1–Poor, 2–Average, 3–Good, 4–Excellent

** Computer Supervisor

GT=Generic Training, ST=Specific Training, App = Appointed as Computer Staff

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FUNCTIONAL STATUS OF COMPUTER CENTERS

SINDH

Computer Centers	Staffing Status						Status of Software Implementation			Status of Hardware			Status of Computer Supplies
	Computer Staff	GT	ST	Working	App	Skill Level*	HID	Mon. Rep	Yrly. Rep	Date Installed	Specification	Comments	
DGHS Sindh, Hyderabad	1. Anwar Ali Shaikh, St.Off ** 2. Mohammad Adil, Comp.Oper. 3. Shafat Ahmed, Comp.Oper. 4. Qurban Ali Hingoro, St.Asstt.	Y Y N Y	Y Y Y Y	Y Y N N	 Y Y 	2 3 2 1	In-complete	n/a		Jan.92	386 desktop, 100MB HD, dot-matrix ptr.	UPS not working	Acute shortage
Hyderabad Division	1. Samiullah, Comp.Oper 2. Aftab Ahmed, Jr.Clerk	Y Y	Y Y	Y N		3 1	complete	Mar.94	Yes	Mar.92	386 notebook, 40MB HD, dot-matrix printer		- same -
Thatta District	1. Mohammad Jhuman, St.Ast (EPI) 2. Daleep Kumar, Jr.Clerk 3. Abdul Nabi, Sr.Clerk	N Y N	Y Y Y	Y N N		2 2 1	complete	Mar.94		Mar.93	- same -		- same -
Karachi Division	1. Muzammil, Jr.Clerk 2. Ms.Abida Parveen, Comp.Oper 3. Wajihuddin, Stat.Asstt 4. Saeed Ahmed, Jr. Clerk	Y N Y N	Y Y Y Y	N Y N N	 Y 	1 2 1 1	In-complete	-		Feb.92	386 notebook, 40MB HD, ink-matrix printer		- same -
Sukkur Division	1. Mohammad Alam Abro, Cmp.Op 2. Ghulam Shabbir Mehar, St.Asstt.	N Y	Y Y	Y N	Y	2 1	complete	Feb.94	Yes	Jan.92	- same -		- same -
Nawabshah District	1. Nazir Ahmed Tunio, St.Asstt. 2. Mohammad Aslam, Jr.Clerk 3. Mohammad Yahya, Comp.Oper	Y Y N	Y Y Y	Y Y N	 resig	1 1 3	complete	Oct.93		Feb.92	386 notebook, 40MB HD, dot-matrix printer		- same -
Larkana Division	1. Shobdo Mal, St.Asstt. 2. Karamat Ali, Comp.Oper 3. M. Nawaz Abbassi, St.Asstt	Y N Y	Y Y N	N N Y		1 1 1	In-complete	-		Feb.92	386 notebook, 40MB HD, ink-matrix printer		- same -

* key for skill level: 1–Poor, 2–Average, 3–Good, 4–Excellent
** Computer Supervisor
GT=Generic Training, ST=Specific Training, App = Appointed as Computer Staff

Appendix 7

HMIS: Computerized Feedback System

Appendix 7

Development of Health Management Information System
for First Level Care Facilities

Computerized Feedback System

Under the guidance of public health managers of the Federal Ministry and of the Provincial Health departments, the HMIS team of the Pakistan Child Survival Project has developed a set of computerized feedback reports based on the data from the Health Management Information System for First Level Care Facilities (HMIS/FLCF).

Following is a list of all feedback report formats presently available at the computer centers. These formats are based on the data from the Monthly HMIS/FLCF Reports or from the Yearly HMIS/FLCF Reports. Obviously, this list is not meant to be exhaustive, and, based on the required information needs, additional formats can be developed in a near future.

It is the responsibility of the computer centers to disseminate these feedback reports to various users in the health system, according to standard distribution procedures.

Typical examples of some of these feedback reports have been added.

May 5, 1994

List of Feedback Reports
based on HMIS/FLCF Monthly Report data

LEVEL	CODE	TYPE	FREQ
FLCF	F1	Summary Report	Y
DISTRICT			
	DS1	Log Report of Reports	Q/Y
	DS2	Curative Care Report	Q/Y
	DS3	Preventive Care Report for Mother	Q/Y
	DS4	Preventive Care Report for Children (G.M.)	Q/Y
	DS5	Preventive Care Report for Children (Vacc.)	Q/y
	DS6	EPI Vaccination Report	M/Y
	DS7	Epidemic Diseases Report	M/Y
	DS8	Priority Diseases Report	Q/Y
	DS9	Essential Drugs & Supplies Report	Q/Y
	DS10	Family Planning Supplies Report	M/Y
	DS11	Vaccines Stock Report	M/Y
	DS12	Malaria Report	Q/Y
	DS13	Tuberculosis New Cases Report	Q/Y
	DS14	Tuberculosis Follow-up Report	Q/Y
	DS15	Special Health Problems Report	M/Y
	DSG1	Graph on Utilization of Health Centers	Q/Y
DIVISION			
- General	DG1	Reporting Compliance Report	Q/Y
	DG2	Epidemic Diseases Report	M/Y
	DG3	Priority Diseases Report	Q/Y
	DG4	Essential Drugs & Supplies Report	Q/Y
	DG5	Curative Care Report	Q/Y
	DG6	Preventive Care Report for Children (G.M.)	Q/Y
	DG7	Preventive Care Report for Children (Vacc.)	Q/Y
	DG8	Prenatal Care Report	Q/Y
	DG9	Delivery & Postnatal Care Report	Q/Y
	DG10	Provision of Preventive Services Report	Q/Y
	DG11	Special Health Problems Report	M/Y
	DGG1	Graph on Prenatal Indicators	Q/Y
- EPI Program	DE1	EPI Vaccination Report	M/Y
	DE2	Vaccines Stock Report	M/Y
	DE3	Vacc.Status in Immuniz. Childhood Diseases	Q/Y
- ARI Program	DA	ARI Report	Q/Y
- CDD Program	DD	CDD Report	Q/Y
- Malaria Program	DM	Malaria Report	Q/Y
- TB Program	DT	TB Report	Q/Y
- Family Planning	DF1	Family Planning Activities Report	M/Y
	DF2	Family Planning Supplies Report	M/Y

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10/05/94

Health Management Information System for First Level Care Facilities

ANNUAL MANAGEMENT REPORT

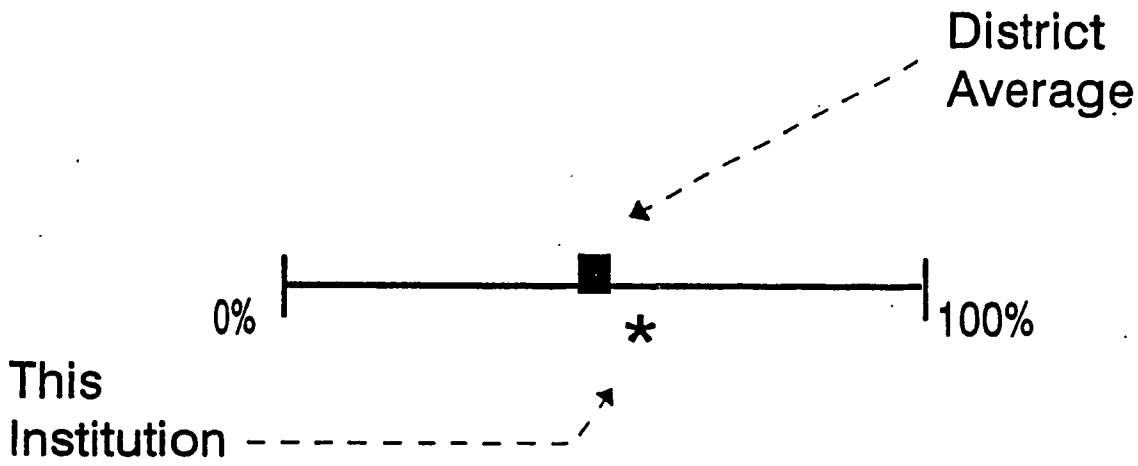
PERIOD: Jan-Dec, 1993

Institution: RHC, MANDRA (ID No. 174094)
Tehsil: GUJAR KHAN
District: RAWALPINDI
Division: RAWALPINDI

SAMPLE GRAPH
District Average
This institution 0% 100%

No. of reports sent.	12	100 % of expected
Catchment Area Population.	20,477	
BIRTH REGISTRATION:		
Expected Births	819	
Number of Births registered	425	51.9 % of expected
CURATIVE CARE:		
Total New Cases	14,795	
Old Cases	2,153	
Total Visits.	16,948	
Referred.	182	1.2 % of new cases
Feedback from Cases Referred.	68	37.4 % feedback on rfd. cases
TUBERCULOSIS:		
New Cases Started Treatment	1	
Total Number Discharged	0	
Total Number lost as Defaulters	0	0 % of total number disch.
MOTHER HEALTH:		
Pre-Natal Care:		
Expected New Pregnancies.	921	
Mothers Newly Registered.	481	52.2 % of exp. new pregnan.
Newly Regist. during 1st Trimester. . .	65	13.5 % of total newly regist.
No. of Newly Regist. with Hb <10 g. . .	216	44.9 % of total newly regist.
Deliveries:		
Expected Deliveries	819	
Total Deliveries.	45	
No. of Deliveries by Trained Persons. .	45	5.5 % of exp. deliveries
Maternal Deaths	0	
Family Planning:		
Total Visits for FP	31	
Total Male FP visits.	0	
Total Female FP visits.	31	
Total Referred for FP services.	5	
CHILD HEALTH:		
Expected Children under 1 year	778	
Growth Monitoring:		
Newly Registered under 1 year	930	120 % of expected under 1 year
Vaccinations (children <1 year immunized).		
BCG	1,727	222 % of expected under 1 year
DPT3.	1,525	196 % of expected under 1 year
OPV3.	1,525	196 % of expected under 1 year
Measles	2,040	262 % of expected under 1 year

SAMPLE GRAPH



LOG REPORT FOR MONTHLY & YEARLY REPORTS (DS1)

PERIOD: Jan-Dec, 1993

District: MIRPUR
Division: N/A

Inst No	Institution Name	MONTHLY REPORTS													YEARLY REPORTS
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL	
Tehsil:BHIMBER:															
503066	BHU, BANNIAN	.	.	.	.	.	.	.	✓	✓	✓	E	✓	5	✓
503012	BHU, BHARING	.	.	.	.	.	.	✓	✓	✓	✓	✓	✓	6	✓
503143	BHU, CHANEER	.	.	.	.	.	.	.	✓	E	✓	E	E	5	✓
503030	BHU, CHANI THOTHAL	.	.	.	.	.	E	.	E	.	E	E	E	5	✓
503071	BHU, DAHARR	.	.	.	.	.	.	✓	✓	E	✓	E	✓	6	.
503009	BHU, DHAMAWA	.	.	.	.	.	.	.	✓	E	.	E	✓	4	✓
503008	BHU, GORHA KANJHAL	.	.	.	.	.	.	.	✓	E	✓	✓	✓	5	.
503022	BHU, KALRI	.	.	.	.	.	.	E	E	E	.	✓	✓	5	.
503005	BHU, KHAIROWAL	.	.	.	.	.	.	.	.	✓	✓	.	✓	3	✓
503036	BHU, KOTE JAMEL	.	.	.	.	.	.	.	✓	✓	.	✓	E	4	.
503028	BHU, MAGHLOORA	.	.	.	.	.	.	E	.	✓	E	.	E	4	.
503029	BHU, MALOTE	.	.	.	.	.	.	✓	✓	✓	✓	✓	✓	6	✓
503027	BHU, NALI	.	✓	.	.	.	E	.	✓	✓	✓	✓	✓	7	.
503019	BHU, PINDI JHUNJA	.	.	.	.	.	.	E	E	E	.	E	E	5	✓
503015	BHU, SARDARI	.	.	.	.	.	.	E	E	.	✓	.	.	3	✓
503035	BHU, SOKASAN	.	.	.	.	.	.	E	E	.	✓	E	✓	5	✓
503026	CD, KANJLOOR	.	.	.	.	.	.	✓	E	.	.	✓	✓	4	.
503011	CD, KASS DAURA	.	.	.	.	.	E	.	✓	✓	.	✓	E	5	✓
503038	CD, KASS FAKROTE	.	.	.	.	.	.	.	E	✓	✓	✓	✓	5	✓
503114	CD, KHADORA	.	.	.	.	.	.	.	✓	✓	✓	E	✓	5	.
503142	CD, PATNI	.	.	.	.	.	.	✓	✓	E	✓	✓	E	7	✓
503144	CD, PUNJERI	.	.	.	.	.	.	✓	E	.	✓	E	✓	5	.
503020	CD, RANDYAM	.	.	.	.	.	.	✓	.	✓	.	.	✓	3	.
503018	CD, SANGHAR	.	.	.	.	.	.	.	E	✓	.	E	✓	4	✓
503031	CD, THATHI	.	.	.	.	.	E	E	✓	E	✓	E	E	7	.
503024	CD, VATALA	.	.	.	.	.	.	E	✓	✓	.	E	✓	5	✓
503127	FAP, HETHALA	.	.	.	.	.	.	E	.	.	.	.	.	1	.
503134	FAP, ABUWALA (UN APPROVED)	.	.	.	.	.	.	.	E	.	.	.	.	1	.
503037	FAP, BABOOT	.	.	.	.	.	.	E	.	.	.	.	.	1	✓
503136	FAP, DAURA (UN APPROVED)	.	.	.	.	.	.	✓	.	.	.	.	.	1	.
503006	FAP, DHANDER KALAN	.	.	.	.	.	.	E	.	✓	.	E	✓	4	✓
503023	FAP, DHOK CHACHAN	.	.	.	.	.	.	E	.	.	.	.	.	1	✓
503017	FAP, DHOK CHHATTA	.	.	.	.	.	.	✓	.	.	.	.	.	1	.
503025	FAP, GALOTA	.	.	.	.	.	.	.	.	.	.	.	.	0	.
503119	FAP, JABBI	.	.	.	.	.	.	E	.	.	.	.	.	1	.
503013	FAP, JHANDA	.	.	.	.	.	.	.	.	.	.	.	.	0	.
503033	FAP, KADHALLA	.	.	.	.	.	✓	✓	.	.	.	.	.	2	✓
503129	FAP, KASS GOPAL (UN APPROVED)	.	.	.	.	.	.	.	.	.	.	.	.	0	.
503133	FAP, PANTRA (UN APPROVED)	.	.	.	.	.	.	.	.	.	.	.	.	0	.
503007	FAP, PATIAN (UN APPROVED)	.	.	.	.	.	.	.	.	.	.	.	.	0	.
503016	FAP, PITHO RANI	.	.	.	.	.	.	E	.	.	.	.	.	1	✓
503034	FAP, POTHI	.	.	.	.	.	.	✓	.	.	.	.	.	1	✓
503130	FAP, RAHEELA (UN APPROVED)	.	.	.	.	.	.	.	.	.	.	.	.	0	.
503131	FAP, THUB	.	.	.	.	.	✓	E	.	.	.	.	.	2	.
503003	THQ HOSPITAL, BHIMBER	.	.	.	.	.	E	.	.	✓	E	✓	E	5	✓
503093	MCH CTR, KHAIROWAL	.	.	.	.	.	.	.	.	.	.	.	.	0	✓
503094	MCH CTR, MAGHLOORA	.	.	.	.	.	.	.	.	.	.	.	.	0	.
503089	MCH CTR, SOKASAN	.	.	.	.	.	.	.	.	.	.	.	.	0	.
503098	MCH SERVICES, BHIMBER	.	.	.	.	.	.	.	.	.	✓	.	.	1	.

District: MIRPUR
Division: N/A

Inst No	Institution Name	MONTHLY REPORTS													YEARLY REPORTS
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL	
District Total:	Total reports received (class I-III):	4	1	0	0	0	32	74	73	74	67	76	82	483	86
	Total reports received (class I). . :	4	1	0	0	0	32	74	73	74	67	76	82	483	86
	Reports expected . . . (class-I). . :	151	151	151	151	151	151	151	151	151	151	151	151		151
	Reporting Regularity . (class I). . :	2%	0%	0%	0%	0%	21%	49%	48%	49%	44%	50%	54%		56%
	Error Rate . . . . . (class I). . :	0%	0%	0%	0%	0%	62%	44%	45%	43%	20%	43%	32%		

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CURATIVE CARE REPORT (DS2)

PERIOD: Jan-Dec, 1993

District: SWAT
Division: MALAKAND

ID #	Health Institution	No of Rpts.	Total Visits	Total NC	Average New Case per day	REFERRALS % of NC	REFERRALS % F.Back Rec'd	DIARRHOEA & DYSENTERY <5 Severe Dehyd. Cases	DIARRHOEA & DYSENTERY <5 % of NC <5	ARI < 5 Pneumon Cases	ARI < 5 % of NC <5
Tehsil:ALPURI:											
346003	BHU, AMNOVY	10	2,018	2,018	8.0*	0%*	0%	0	0%	2	0%
346027	BHU, DAMORAI	11	3,805	3,723	13.5	0%*	25%	4	1%	109	21%
346005	BHU, KOZ KANA	10	2,447	2,386	9.5*	0%*	0%	13	9%	33	18%
346006	BHU, OLANDAR	9	3,225	3,131	13.9	2%*	0%	40	14%*	106	40%*
346007	BHU, OPAL	11	1,246	1,244	4.5*	0%*	0%	0	0%	20	37%*
346064	CIVIL DISP., AMANKOT	8	7,331	7,206	36.0	0%*	17%	14	3%	74	16%
346060	CIVIL DISP., KOTKAY	1	123	123	4.9*	0%*	0%	0	0%	0	0%
346062	CIVIL DISP., LILONAI	11	3,351	3,239	11.7	0%*	0%	8	9%	81	98%*
346063	CIVIL DISP., SHAHPUR	7	2,395	2,395	13.6	0%*	0%	1	10%	2	10%
346083	CIVIL HOSPITAL, KARORA	11	9,170	9,167	33.3	0%*	0%	2	2%	32	21%
346097	LEPROSY CLINIC, ALPURAI	4	4,889	4,791	47.9	0%*	0%	0	0%	15	4%
Tehsil:BABUZAI:											
346009	BHU, BANJUT	11	7,742	7,500	27.2	0%*	0%	0	0%	41	3%
346010	BHU, BISHBARN	12	4,012	3,668	12.2	0%*	0%	0	0%	33	27%
346012	BHU, MERAGAI	10	4,353	4,234	16.9	0%*	14%	0	0%	20	4%
346014	BHU, UDIGRAM	8	5,217	5,212	26.0	0%*	0%	2	0%	10	2%
346065	CIVIL DISP., CHITAWAR	10	3,606	3,606	14.4	0%*	0%	0	0%	120	34%*
346066	CIVIL DISP., KOKARAI	7	4,568	4,157	23.7	0%*	0%	0	0%	0	0%
346067	CIVIL DISP., RANG MOHALLAH	10	6,050	5,854	23.4	0%*	33%	0	0%	0	0%
346086	CIVIL HOSPITAL, MANGLOR	9	16,424	16,172	71.8	0%*	0%	0	0%	44	1%
346103	MCH CTR, SAIDU SHARIF	4	0	0	0.0*	0%*	0%	0	0%	0	0%
Tehsil:BARIKOT:											
346015	BHU, CHONGAI	11	8,714	7,571	27.5	0%*	50%	8	1%	242	31%*
346016	BHU, MANYAR	11	7,209	7,208	26.2	0%*	0%	1	0%	83	50%*
346017	BHU, TALANG	11	2,412	2,215	8.0*	0%*	0%	0	0%	24	16%
346068	CIVIL DISP., GHALEGAY	10	4,479	4,223	16.8	0%*	0%	0	0%	12	2%
346069	CIVIL DISP., NAWE KALLAY	11	3,897	3,455	12.5	0%*	0%	0	0%	0	0%
346070	CIVIL DISP., PARRAI	11	6,162	5,999	21.8	0%*	0%	0	0%	0	0%
346088	CIVIL HOSPITAL, BARIKOT	11	28,595	27,467	99.8	1%*	47%	1	0%	22	1%
346110	RHC, KHAZANA	12	8,268	7,950	26.5	1%*	2%	3	0%	98	16%
Tehsil:BEHRAIN:											
346018	BHU, BAHRAIN	12	5,341	5,233	17.4	1%*	0%	64	18%*	119	31%*
346019	BHU, CHAIL	9	2,613	2,469	10.9	3%*	0%	69	54%*	124	35%*
346020	BHU, LAIKOT	11	2,404	2,361	8.5*	1%*	27%	69	26%*	124	40%*
346021	BHU, TIRATH	4	904	898	8.9*	0%*	0%	0	0%	0	0%
346071	CIVIL DISP., CHAM	11	5,086	5,086	18.4	0%*	0%	47	9%	207	33%*
346089	CIVIL HOSPITAL, MADYAN	10	28,791	28,039	112.1*	0%*	1%	136	8%	164	10%
Tehsil:BESHAM:											
346022	BHU, GOWANGER	11	2,729	2,714	9.8*	3%*	6%	14	4%	62	16%
* signifies extreme values					< 10 or >100	<5% >20%			> 10%		> 30%

District: SWAT
Division: MALAKAND

ID #	Health Institution	No of Rpts.	Total Visits	Total NC	Average New Case per day	REFERRALS % of NC	REFERRALS % F.Back Rec'd	DIARRHOEA & DYSENTERY <5 Severe Dehyd. Cases	DIARRHOEA & DYSENTERY <5 % of NC <5	ARI < 5 Pneumon Cases	ARI < 5 % of NC <5
346023	BHU, MIRA BESHAM	10	2,045	2,045	8.1*	0%*	0%	26	10%	27	57%*
346072	CIVIL DISP., SHUNG	9	10,357	1,273	5.6*	59%*	0%	0	0%	0	0%
346090	CIVIL HOSPITAL, BESHAM	11	8,745	8,301	30.1	1%*	0%	143	28%*	92	42%*
Tehsil:CHAKAISAR:											
346028	BHU, KATKOR	10	1,533	1,521	6.0*	0%*	0%	6	6%	0	0%
346091	CIVIL HOSPITAL, CHAKESER	9	3,568	3,422	15.2	0%*	0%	0	0%	19	2%
Tehsil:CHARBAGH:											
346024	BHU, CHARBAGH	10	7,627	7,424	29.7	0%*	0%	1	0%	58	15%
346025	BHU, GULI BAGH	9	7,673	6,674	29.6	0%*	100%	160	31%*	16	3%
346026	BHU, KISHAWARA	12	5,474	5,390	17.9	0%*	0%	7	3%	110	22%
346073	CIVIL DISP., SOORDIER	11	4,766	4,637	16.8	0%*	0%	0	0%	0	0%
Tehsil:KABAL:											
346029	BHU, BANDAI	10	7,329	7,192	28.7	0%*	0%	0	0%	14	2%
346030	BHU, BARA SAMAI	11	4,163	4,104	14.9	0%*	0%	0	0%	152	37%*
346031	BHU, DEVLAI	11	8,502	8,443	30.7	0%*	0%	0	0%	11	1%
346032	BHU, DHERAI	11	10,379	9,806	35.6	0%*	13%	20	2%	19	2%
346033	BHU, KOSA SAMAI	11	6,970	6,542	23.7	0%*	0%	0	0%	1	0%
346034	BHU, KOTLAI	12	5,125	5,125	17.0	0%*	0%	0	0%	2	0%
346035	BHU, QALAGAY	11	2,568	2,517	9.1*	0%*	0%	1	0%	46	15%
346036	BHU, SIGRAM	9	2,229	2,198	9.7*	0%*	17%	0	0%	7	2%
346037	BHU, TAGHMA	4	1,155	1,155	11.5	0%*	0%	1	3%	9	5%
346075	CIVIL DISP., DADAHARA	10	15,498	13,921	55.6	0%*	5%	23	8%	37	15%
346076	CIVIL DISP., TOTANO BANDAI	10	3,489	3,206	12.8	0%*	0%	1	2%	17	38%*
346092	CIVIL HOSPITAL, KABAL	8	10,865	10,712	53.5	0%*	0%	0	0%	0	0%
346109	MCH CTR, KABAL	5	0	0	0.0*	0%*	0%	0	0%	0	0%
Tehsil:KALAM:											
346093	CIVIL HOSPITAL, KALAM	11	6,939	6,694	24.3	0%*	0%	0	0%	0	0%
Tehsil:KHAWAZAKHELA:											
346039	BHU, FATEHPUR	11	4,487	4,255	15.4	0%*	0%	0	0%	36	8%
346040	BHU, KOTANAI	11	5,328	5,077	18.4	1%*	0%	0	0%	20	3%
346041	BHU, MAINDAM	9	7,629	7,629	33.9	0%*	0%	2	0%	191	16%
346042	BHU, NASHKOMAI	10	3,781	3,616	14.4	0%*	0%	8	3%	44	18%
346043	BHU, SHALPIN	12	3,746	3,675	12.2	0%*	0%	9	4%	62	18%
346094	CIVIL HOSPITAL, KHAWAZAKHELLA	10	30,700	30,290	121.1*	0%*	0%	120	7%	591	37%*
Tehsil:MARTUNG:											
346056	BHU, KABAL GRAM	3	513	480	6.4*	3%*	0%	1	5%	11	18%
346059	BHU, MARTUNG	12	2,983	2,888	9.6*	1%*	0%	79	32%*	12	5%
346057	BHU, TITWALAN	12	2,571	2,356	7.8*	0%*	83%	15	6%	35	17%
Tehsil:MATTA:											
346044	BHU, BAIDARA	11	8,203	7,174	26.0	1%*	20%	0	0%	1	0%
346045	BHU, BAR SHAWAR	12	4,993	4,886	16.2	0%*	0%	1	0%	185	38%*
	* signifies extreme values				< 10 or >100	<5% >20%			> 10%		> 30%

District: SWAT
Division: MALAKAND

ID #	Health Institution	No of Rpts.	Total Visits	Total NC	Average New Case per day	REFERRALS % of NC	REFERRALS % F.Back Rec'd	DIARRHOEA & DYSENTERY <5 Severe Dehyd. Cases	DIARRHOEA & DYSENTERY <5 % of NC <5	ARI < 5 Pneumon Cases	ARI < 5 % of NC <5
346046	BHU, DARMAI	10	3,540	3,527	14.1	1%*	5%	0	0%	9	2%
346047	BHU, DURASHKHELLA	12	13,751	11,663	38.8	0%*	0%	4	0%	101	13%
346048	BHU, GAWALERAI	10	5,344	5,130	20.5	1%*	52%	3	1%	39	9%
346049	BHU, KOZ SHAWAR	12	4,845	4,041	13.4	1%*	0%	1	0%	7	1%
346050	BHU, MIAN KALLAY	11	4,447	4,270	15.5	0%*	0%	1	0%	22	7%
346051	BHU, NAZAR ABAD	11	7,747	7,515	27.3	0%*	8%	0	0%	38	5%
346052	BHU, RAHAT KOT	4	1,162	1,014	10.1	0%*	0%	0	0%	0	0%
346053	BHU, RONYAL	11	4,936	4,936	17.9	0%*	0%	0	0%	0	0%
346054	BHU, SHERPALAM	11	4,074	3,959	14.4	1%*	0%	0	0%	15	6%
346079	CIVIL DISP., PARROW	9	6,198	5,965	26.5	1%*	2%	25	5%	75	9%
346080	CIVIL DISP., SAKHRA	9	3,553	3,481	15.4	0%*	0%	0	0%	5	1%
346095	T.H.Q. HSOPITAL, MATTA	7	43,756	43,442	248.2*	0%*	11%	73	6%	73	5%
346111	RHC, CHUPRIAL	9	10,370	9,939	44.1	0%*	0%	1	0%	72	10%
Tehsil:PURRAN:											
346055	BHU, CHOWGA	10	2,827	2,434	9.7*	16%	0%	0	0%	75	38%*
346058	BHU, TOWA	8	11,671	11,671	58.3	0%*	0%	0	0%	3	1%
346081	CIVIL DISP., SHIKOLAI	10	2,669	2,644	10.5	0%*	0%	12	7%	88	59%*
346096	CIVIL HOSPITAL, PURAN	11	5,600	5,421	19.7	0%*	0%	7	2%	32	18%
	District Total:	833	557,999	528,394	25.7	0%	7%	1,247	4%	4,502	13%

* signifies extreme values

< 10 or >100	<5% >20%	> 10%	> 30%	

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E P I V A C C I N A T I O N R E P O R T (DS6)

MONTH: Nov, 1993

District: ZHOB
Division: ZHOB
No.of FLCFs Reporting: 8
No.of Reports: 8 TARGET POPULATION: 838

CHILDHOOD IMMUNIZATIONS: ---------- Age Groups ----------

Vaccination Type	0 - 11 months	% Cvrg.	12 - 23 months	2 years & over	TOTAL
1. BCG	338	40%	91	0	429
2. DPT-1	314	37%	90	--	404
3. DPT-2	317		116	--	433
4. DPT-3	197	23%	70	--	267
5. DPT Booster	--		--	0	0
6. OPV-Zero.	59		--	--	59
7. OPV-1	314	37%	91	0	405
8. OPV-2	317		116	0	433
9. OPV-3	197	23%	70	0	267
10. OPV Booster	--	•	0	0	0
11. DT-1	0		0	0	0
12. DT-2	0		0	0	0
13. DT Booster.	--		0	0	0
14. Measles	181	22%	87	0	268
15. Fully Immunized Children	181	22%	70	0	251

TETANUS TOXOID VACCINATIONS: DOSE

Target Group	TT-I	TT-II	TT-III	TT-IV	TT-V
16. Pregnant Women . . .	44	33	29	25	30
17. Child Bearing Women.	356	783	257	115	248
TOTALS	400	816	286	140	278

VACCINE STOCK POSITIONS:

Vaccine	Received	Issued	
		For Care	Discarded
BCG	480	449	53
DPT	1,180	1,105	75
OPV	1,240	1,164	76
DT	0	0	0
MEASLES	310	268	41
TT	1,960	1,920	184

EPIDEMIC DISEASES REPORT (DS7)

MONTH: Nov, 1993

(only for institutions reporting at least one case)

District: KOHLU
Division: SIBI

ID No.	Health Institution	No. of Rpts.	NUMBER OF CASES OF EPIDEMIC DISEASES: Suspected Cholera	S.Meningococcal Meningitis	Probable Poliomyelitis	Probable Measles
Tehsil:KOHLU:						
452010	BHU, KILLI KATAL	1	0	0	1	0
452019	BHU, PAZZA	1	0	0	0	13
452020	BHU, SHALWAR	1	0	0	0	4
Tehsil:UNKNOWN:						
452029	CIVIL DISP., GHARIB ABAD	1	0	0	0	3
	District Total:	4	0	0	1	20

ESSENTIAL DRUGS AND SUPPLIES REPORT (DS9)

QUARTER: 3, 1993

(only for institutions reporting stock outs)

District: MALAKAND AGENCY
Division: MALAKAND

ID No	Health Institution	No. of Rpts.	AVERAGE DAYS OUT OF STOCK PER MONTH							
			ORS	Chloroq	Cotrimox	Cotrimox Syrup	Iron Tabs	Folic Acid	Strep-tomyc.	INH
Tehsil:SUM RANIZAI:										
345002	BHU, ASHAKAI	3	0	10	10	0	30	30	20	30
345003	BHU, BRAH	3	10	0	10	0	10	10	10	10
345004	BHU, HARYAN KOT	3	0	0	15	30	15	20	30	30
345005	BHU, KHARKAI DEHRI	3	0	0	20	20	20	20	20	10
345006	BHU, KOT	3	0	20	18	18	0	18	30	30
345007	BHU, SAKHA KOT	3	20	0	30	15	30	30	30	30
345022	CIVIL DISP., SADULLAH KHAN KALAY	3	0	0	7	20	7	20	20	20
Tehsil:SWAT RANIZAI:										
345008	BHU, ALLADAND DEHRI	3	10	0	0	0	30	30	30	30
345009	BHU, GUNYAR	3	0	0	20	30	30	30	30	30
345010	BHU, KHAR	3	10	30	24	30	30	24	30	30
345011	BHU, MEKHBAND	3	0	0	25	30	15	20	20	20
345012	BHU, PALAI	3	18	0	18	18	30	30	30	30
345013	BHU, TOTAI	3	0	30	18	0	18	30	30	30
345024	CIVIL DISP., NULL	2	0	0	15	15	30	30	30	30
345025	DISPENSARY, BAZDARA BALA	3	0	10	13	3	30	30	30	30
345040	CIVIL HOSP., TOTAKAN	3	0	0	20	10	0	31	0	20
345031	CIVIL HOSPITAL, LOE AGRA	3	0	0	20	0	30	30	30	30
345032	CIVIL HOSPITAL, MALAKAND	3	0	10	1	3	0	0	10	0
345036	T.B. HOSPITAL, RANGMALLA	3	0	0	20	0	30	30	0	30
Tehsil:UNKNOWN:										
345014	BHU, GARIUSMANI KHEL	3	10	0	30	30	30	30	20	30
345015	BHU, MURA BANDA	3	8	8	8	0	20	20	20	20
345016	BHU, NARI UBO	3	17	0	17	17	20	30	30	30
345017	BHU, PIR KHEL	3	0	10	20	20	30	30	30	30
345018	BHU, SHINGRAI	3	0	0	18	0	18	20	30	30
345019	BHU, TAND GHOUND	3	0	0	30	18	18	30	30	30
345020	BHU, WARTAIR	3	0	19	19	19	30	30	30	30
345026	CIVIL DISP., BADRAGA	3	0	0	30	1	30	30	30	30
345027	CIVIL DISP., HERO SHAH	3	0	0	20	20	30	30	30	30
345028	CIVIL DISP., SELAI PATAE MANZARI BA	3	20	0	0	0	0	20	20	20
345029	CIVIL DISP., ZALAM KOT	3	30	30	10	30	0	0	0	0
345030	DISPENSARY, JALALA	3	30	30	10	10	0	0	0	0
345033	CIVIL HOSPITAL, DARGAI	3	0	10	17	11	30	30	30	30
345034	CIVIL HOSPITAL, THANA	3	0	0	10	10	30	30	0	30
345035	RHC, DHERI JULAGRAM	2	0	0	0	0	30	30	30	30
	Number of reports with stock outs:	100	33	36	92	71	82	91	85	91
	Total reports and % of stock out reports:	103	32%	35%	89%	69%	80%	88%	83%	88%
	Average duration of stock outs/month:		17	18	17	18	25	27	26	27

LEVEL	CODE	TYPE	FREQ
PROVINCE			
- General	PG1	Reporting Compliance Report	Q/Y
	PG2	Epidemic Diseases Report	M/Y
	PG3	Priority Diseases Report	Q/Y
	PG4	Essential Drugs & Supplies Report	Q/Y
	PG5	Curative Care Report	Q/Y
	PG6	Preventive Care Report for Children (G.M.)	Q/Y
	PG7	Preventive Care Report for Children (Vacc.)	Q/Y
	PG8	Prenatal Care Report	Q/Y
	PG9	Delivery & Postnatal Care Report	Q/Y
	PG10	Provision of Preventive Services Report	Q/Y
	PG11	Special Health Problems Report	M/Y
	PGG1	Graph on Prenatal Indicators	Q/Y
- EPI Program	PE1	EPI Vaccination Report	M/Y
	PE2	Vaccines Stock Report	M/Y
	PE3	Vacc.Status in Immuniz. Childhood Diseases	Q/Y
- ARI Program	PA	ARI Report	Q/Y
- CDD Program	PD	CDD Report	Q/Y
- Malaria Program	PM	Malaria Report	Q/Y
- TB Program	PT	TB Report	Q/Y
- Family Planning	PF1	Family Planning Activities Report	M/Y
	PF2	Family Planning Supplies Report	M/Y
FEDERAL			
- General	FG1	Reporting Compliance Report	Q/Y
	FG2	Epidemic Diseases Report	M/Y
	FG3	Priority Diseases Report	Q/Y
	FG4	Essential Drugs & Supplies Report	Q/Y
	FG5	Curative Care Report	Q/Y
	FG6	Preventive Care Report for Children (G.M.)	Q/Y
	FG7	Preventive Care Report for Children (Vacc.)	Q/Y
	FG8	Prenatal Care Report	Q/Y
	FG9	Delivery & Postnatal Care Report	Q/Y
	FG10	Provision of Preventive Services Report	Q/Y
	FG11	Special Health Problems Report	M/Y
	FGG1	Graph on Prenatal Indicators	Q/Y
- EPI Program	FE1	EPI Vaccination Report	M/Y
	FE2	Vaccines Stock Report	M/Y
	FE3	Vacc.Status in Immuniz. Childhood Diseases	Q/Y
- ARI Program	FA	ARI Report	Q/Y
- CDD Program	FD	CDD Report	Q/Y
- Malaria Program	FM	Malaria Report	Q/Y
- TB Program	FT	TB Report	Q/Y
- Family Planning	FF1	Family Planning Activities Report	M/Y
	FF2	Family Planning Supplies Report	M/Y

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Health Management Information System for First Level Care Facilities

R E P O R T I N G C O M P L I A N C E R E P O R T (DG1)

PERIOD: Jan-Dec, 1993

(only for class I institutions)

Province: NWFP

Division	District	Expected Reports	Reports Received	% Regularity of Reporting	Error Reports	% Error Rate
MALAKAND						
	- BAJAUR AGENCY	420	279	66%	64	23%
	- BUNER	408	227	56%	145	64%
	- DIR	1,380	347	25%	97	28%
	- MALAKAND AGENCY	432	278	64%	66	24%
	- SWAT	1,164	846	73%	445	53%
	Division Total:	3,804	1,977	52%	817	41%
MARDAN						
	- SWABI	684	41	6%	23	56%
	Division Total:	684	41	6%	23	56%
PESHAWAR						
	- CHARSADDA	708	234	33%	124	53%
	Division Total:	708	234	33%	124	53%

Health Management Information System for First Level Care Facilities

PRENATAL CARE REPORT (DGB)

PERIOD: Jan-Dec, 1993

Province: NWFP

Division District	Reptng. Rate	Expected Pregnan.	NEWLY REGISTERED No. Newly Regist.	NEWLY REGISTERED % of Expected	DURING 1ST TRIMESTER No. Newly Registered	DURING 1ST TRIMESTER % of New Reg.	Hb LEVEL No. with Hb <10 g%	Hb LEVEL % of New Reg.
MALAKAND								
- BAJAUR AGENCY	8%	18,876	36	0.2%	8	22.2%	0	0.0%
- BUNER	42%	21,059	1,125	5.3%	318	28.3%	132	11.7%
- DIR	9%	51,214	818	1.6%	118	14.4%	51	6.2%
- MALAKAND AGENCY	29%	17,204	1,371	8.0%	534	38.9%	21	1.5%
- SWAT	56%	61,228	5,632	9.2%	1,097	19.5%	452	8.0%
Division Total:	29%	169,581	8,982	5.3%	2,075	23.1%	656	7.3%
MARDAN								
- SWABI	5%	37,863	524	1.4%	64	12.2%	51	9.7%
Division Total:	5%	37,863	524	1.4%	64	12.2%	51	9.7%
PESHAWAR								
- CHARSADDA	27%	43,376	1,528	3.5%	389	25.5%	47	3.1%
Division Total:	27%	43,376	1,528	3.5%	389	25.5%	47	3.1%

PRIORITY DISEASES REPORT (FG3)

PERIOD: Jan-Dec, 1993

PAKISTAN (35 districts) Total Number of Reports: 10168

HEALTH PROBLEMS (Priority Diseases)	CASES UNDER 5				CASES 5 & OVER	TOTAL	
	Under 1	1-4	Total < 5	% of Total NC <5		Cases	% of Total NC
				NC<5=1,044,019			NC=4,914,521
101. Diarrhoea	69,427	113,437	182,864	17.5%	128,787	311,651	6.34%
102. Dysentery	21,051	44,514	65,565	6.28%	101,313	166,878	3.40%
103. Acute Respiratory Infections	99,563	216,346	315,909	30.3%	680,668	996,577	20.28%
104. Fever (Clinical Malaria)	21,128	72,137	93,265	8.93%	326,166	419,431	8.53%
105. Cough more than 2 weeks	2,810	5,124	7,934	0.76%	28,019	35,953	0.73%
106. Suspected Cholera	155	339	494	0.05%	835	1,329	0.03%
107. Suspected Meningococcal Meningitis.	25	84	109	0.01%	255	364	0.01%
108. Poliomyelitis	82	159	241	0.02%	40	281	0.01%
109. Measles	372	998	1,370	0.13%	532	1,902	0.04%
110. Neonatal Tetanus	170	--	170	0.02%	--	170	0.00%
111. Diphtheria	49	63	112	0.01%	54	166	0.00%
112. Whooping Cough	357	938	1,295	0.12%	1,175	2,470	0.05%
113. Goiter	165	622	787	0.08%	8,386	9,173	0.19%
114. Suspected Viral Hepatitis	700	1,626	2,326	0.22%	8,026	10,352	0.21%
115. Suspected Aids	5	10	15	0.00%	70	85	0.00%
116. Snake bite with signs of poisoning.	10	57	67	0.01%	1,615	1,682	0.03%
117. Dog bite	136	1,337	1,473	0.14%	8,659	10,132	0.21%
118. Scabies	12,750	35,257	48,007	4.60%	126,088	174,095	3.54%
TOTALS (Priority Diseases):	228,906	493,048	721,954	69%	1,420,688	2,142,642	44%

Annual Analysis Reports
based on HMIS/FLCF Yearly and Monthly Report data

Name of Report	Type	Data Source
HEALTH RESOURCES:		
1. Three Most Frequent Diseases (Diarr/Dyse., ARI, Fever)	Graph	MR
2. EPI Diseases Report	Graph	MR
3. ARI Seasonal Report	Graph	MR
4. Diarrhoea/Dysentery Seasonal Report	Graph	MR
5. Any Priority Disease Report	Graph	MR
6. Any Priority Disease Report	Map	MR
HEALTH SERVICES:		
1. Curative Care Report	Graph	MR
2. Preventive Care Services Report	Graph	MR
3. Prenatal Care Report	Map	MR
4. Deliveries by Trained Staff	Map	MR
5. Vaccination for DPT3	Map	MR
6. Vaccination for Measles	Map	MR
7. Vaccination for BCG	Map	MR
8. Vaccination for OPV3	Map	MR
9. Growth Monitoring Report	Map	MR
HEALTH RESOURCES:		
1. Electricity Supply in Health Institutions	Text	YR
2. Electricity Supply in RHCs/BHUs	Map	YR
3. Piped Water Supply in Health Institutions	Text	YR
4. Piped Water Supply in RHCs/BHUs	Map	YR
5. Essential Equipment for Clinical/Diagnosis	Text	YR
6. Essential Equipment for Mother Care	Text	YR
7. Essential Equipment for Child Care	Text	YR
8. Weighing Scale in Health Institutions	Text	YR
9. Weighing Scale for RHCs/BHUs	Map	YR
10. Health Institutions Utilization & Electricity Supply	Text	YR, MR
11. Health Institutions Utilization & Electricity Supply	Graph	YR, MR

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FUNCTIONAL ELECTRICITY SUPPLY IN FIRST LEVEL CARE FACILITIES (YR1)
(from yearly reports)

Province: PUNJAB

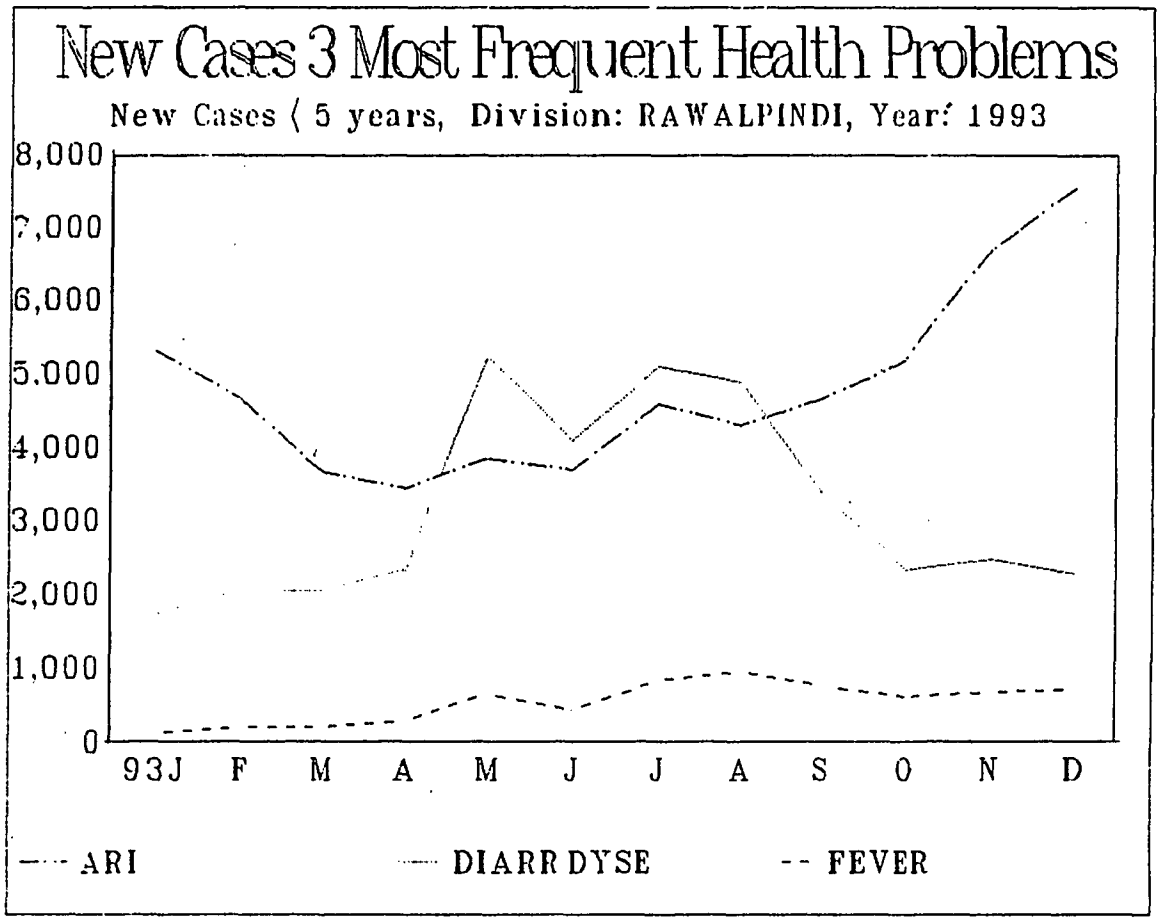
Division / District	RHC			BHU			MCHC			OTHER (excluding hosp.)		
	No. Tot.	No. W.Elec	%	No. Tot.	No. W.Elec	%	No. Tot.	No. W.Elec	%	No. Tot.	No. W.Elec	%
MULTAN												
· PAKPATTAN	1	0	0%	11	6	54%	1	1	100%	0	0	0%
· SAHIWAL	5	4	80%	11	8	72%	0	0	0%	1	0	.00%
Division Total:	6	4	66%	22	14	63%	1	1	100%	1	0	0%
RAWALPINDI												
· ATTOCK	5	4	80%	50	31	62%	0	0	0%	4	2	50%
· JHELUM	6	5	83%	42	20	47%	4	3	75%	11	7	64%
· RAWALPINDI	5	3	60%	51	27	52%	8	7	87%	1	0	.00%
Division Total:	16	12	75%	143	78	54%	12	10	83%	16	9	56%

ESSENTIAL EQUIPMENT (MOTHER CARE) IN BHUs/RHCs
(from yearly reports)

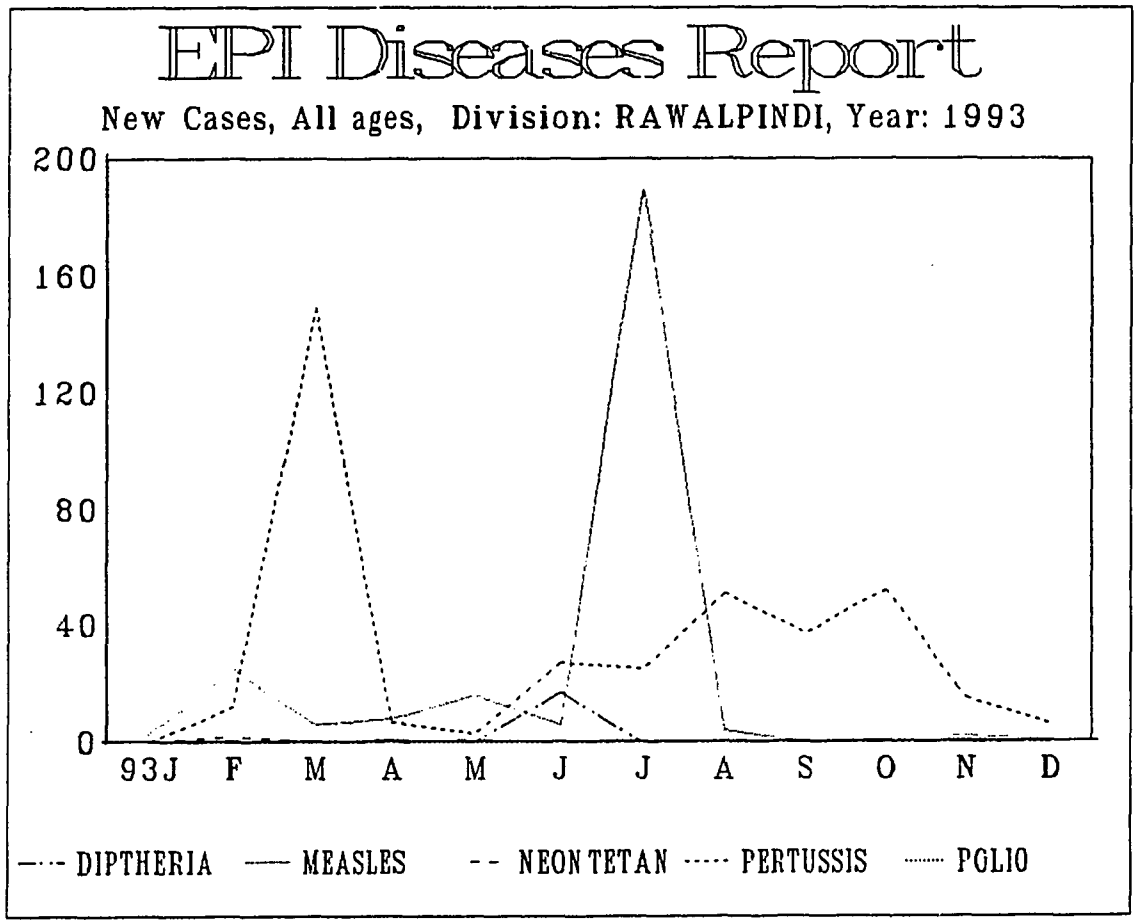
Province: PUNJAB

Division / District	Total Rptng. Inst.	Bathroom Weigh.Scale No.of Inst.	%	Stethoscope No.of Inst.	%	Sphygmo-manometer No.of Inst.	%	Fetoscope No.of Inst.	%	Vaginal Speculum No.of Inst.	%	Fem.Metal Catheter No.of Inst.	%	Delivery Table No.of Inst.	%	Hemoglobino meter No.of Inst.	%
MULTAN																	
PAKPATTAN	12	5	42%	7	58%	8	67%	8	67%	6	50%	7	58%	5	42%	5	42%
SAHIWAL	16	9	56%	11	69%	12	75%	12	75%	8	50%	12	75%	9	56%	10	63%
Division Total:	28	14	50%	18	64%	20	71%	20	71%	14	50%	19	68%	14	50%	15	54%
RAWALPINDI																	
ATTOCK	55	26	47%	26	47%	27	49%	28	51%	29	53%	21	38%	22	40%	24	44%
JHELUM	48	26	54%	41	85%	38	79%	40	83%	21	44%	31	65%	24	50%	38	79%
RAWALPINDI	56	13	23%	12	21%	14	25%	15	27%	11	20%	10	18%	14	25%	15	27%
Division Total:	159	65	41%	79	50%	79	50%	83	52%	61	38%	62	39%	60	38%	77	48%

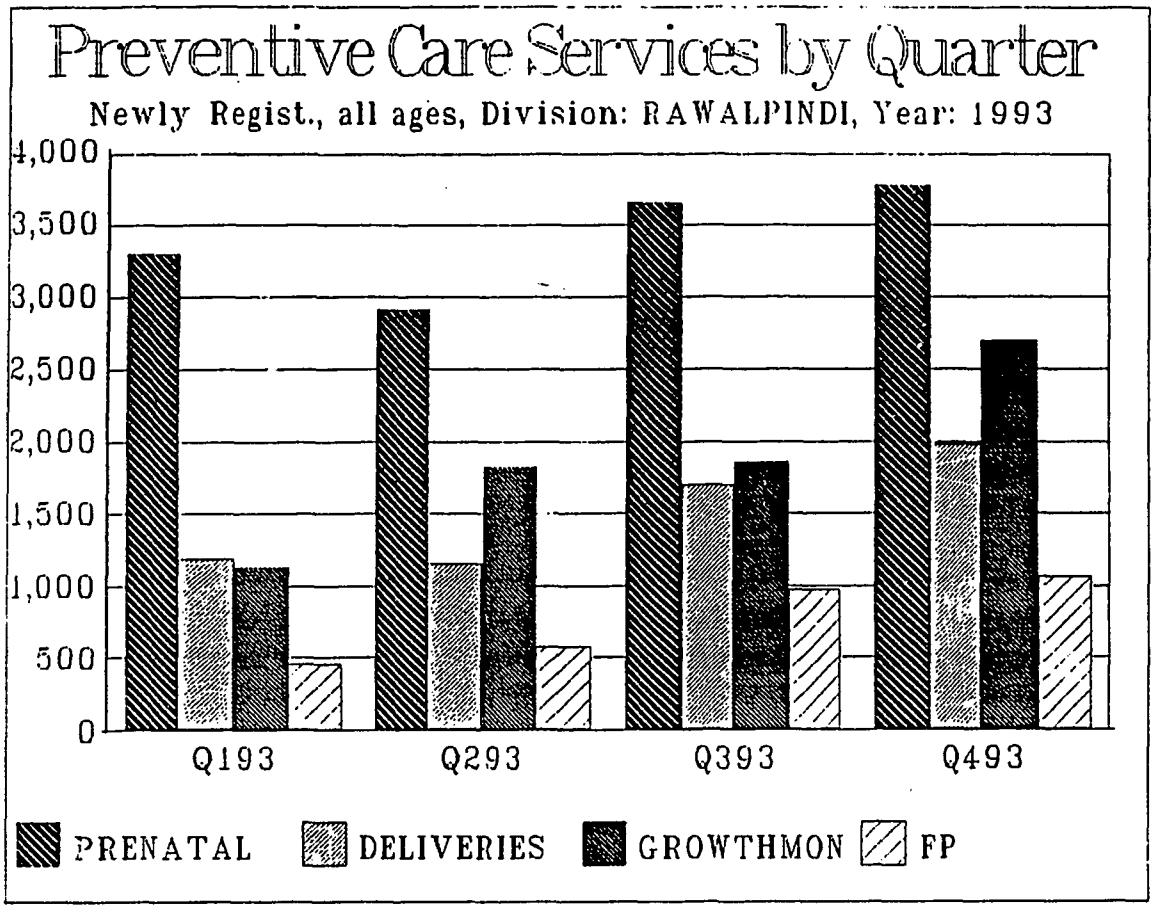
83


New Cases 3 Most Frequent Health Problems
New Cases ⟨ 5 years, Division: RAWALPINDI, Year: 1993
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
93J
F
M
A
M
J
J
A
S
O
N
D
ARI
DIARR DYSE
FEVER

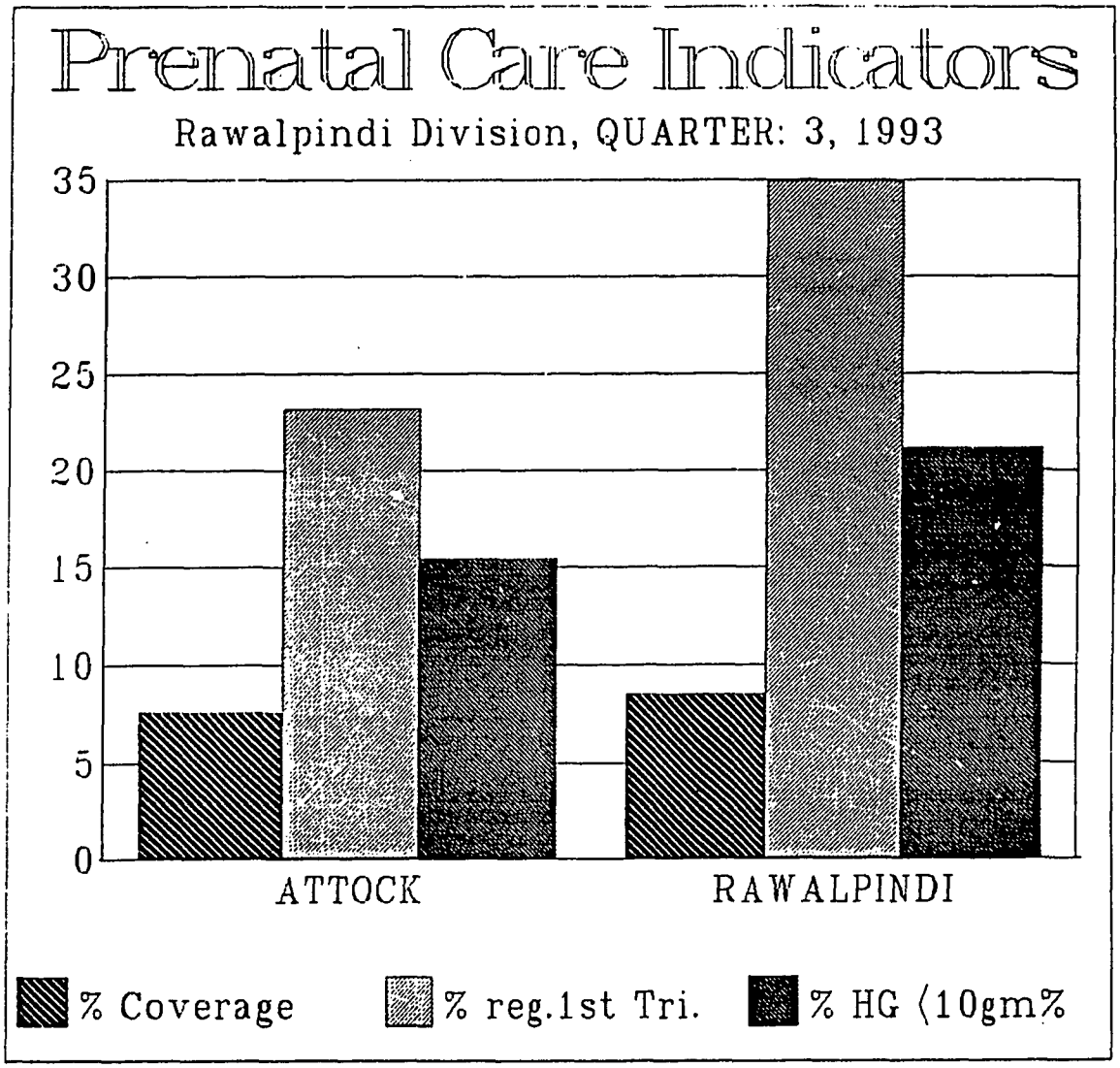
84


EPI Diseases Report
New Cases, All ages, Division: RAWALPINDI, Year: 1993
200
160
120
80
40
0
93J F M A M J J A S O N D
DIPTHERIA
MEASLES
NEON TETAN
PERTUSSIS
POLIO

45


Preventive Care Services by Quarter
Newly Regist., all ages, Division: RAWALPINDI, Year: 1993
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Q193
Q293
Q393
Q493
PRENATAL
DELIVERIES
GROWTHMON
FP

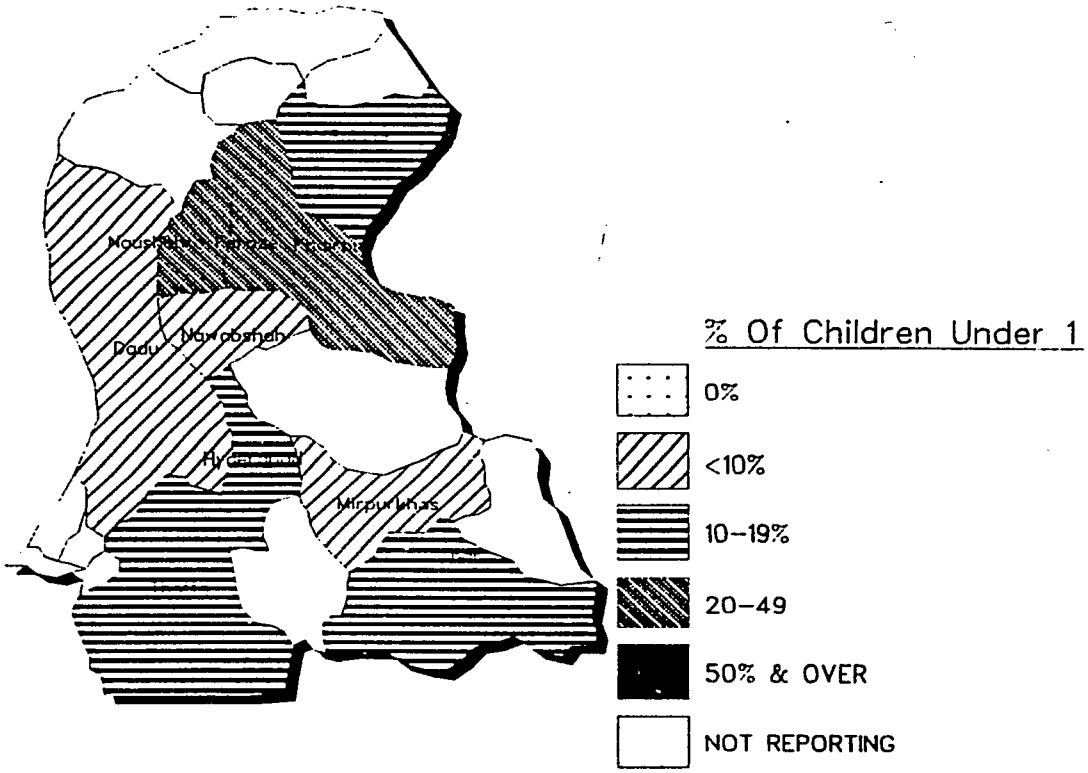
86


Prenatal Care Indicators
Rawalpindi Division, QUARTER: 3, 1993
35
30
25
20
15
10
5
0
ATTOCK
RAWALPINDI
% Coverage
% reg.1st Tri.
% HG (10gm%

87

Vaccination Coverage for Measles in SINDH

Year: 1993



DATA SOURCE: HMIS/FLCF MONTHLY REPORTS

88

Appendix 8

HMIS: Checklist For Data Recording And Reporting System

HEALTH MANAGEMENT INFORMATION SYSTEM FOR FIRST LEVEL CARE FACILITIES

Checklist For Data Recording And Reporting System

Institution Name:	Name(s) of Supervisor(s):
Division:	
District:	Date of Visit: / /
Tehsil/Taluka	Y N
Incharge Name:	Baby Weighing Scale (functional): ☐ ☐

Note: This checklist has been developed for district supervisors and other technical staff in charge of the implementation of the new Health Management Information System for First Level Care Facilities (HMIS/FLCF). It should help them in monitoring the use of various data collection instruments in health facilities whose personnel has been trained recently during one of the 4-day district workshops.

1. HMIS/FLCF Implementation

1.1. Date of training / /

1.2. Date of delivery of printed supplies / /

1.3. FLCF staff trained *(Fill in number)* ☐ MOIC ☐ MO ☐ WMO ☐ LHV ☐ FHT ☐ MHT ☐ Dispenser ☐ Other:_____

2. Instruction Manual available:

	Y	N
English	☐	☐
Urdu	☐	☐

3. Patient/Client Records

(Answer by Y, N or NA)

	In Stock	In Use	Filled in Appropriately	Comments
• FC1—OPD Ticket	☐	☐	☐	
• FC2—Referral Form	☐	☐	☐	
• FC3—Mother and Child Health Card	☐	☐	☐	
• FC4—Family Planning Card	☐	☐	☐	
• FC5—Investigation Request Form	☐	☐	☐	
• FC6—TB Facility Card	☐	☐	☐	
• FC7—TB Patient Card	☐	☐	☐	
• FC8—Chronic Disease Facility Card	☐	☐	☐	
• FC9—Chronic Disease Patient Card	☐	☐	☐	

	In Stock	In Use	Filled in Appropriately	Comments
4. Facility Records and Registers				
• FR1—OPD Register *(verify coding of Health Problems, Recording of Nutritional Status & of Old Cases/New Cases)*	☐	☐	☐	
• FR2—Abstract Register	☐	☐	☐	
• FR3—Child Health Register	☐	☐	☐	
• FR4—Mother Health Register	☐	☐	☐	
• FR5—Family Planning Register	☐	☐	☐	
• FR6—TB Register	☐	☐	☐	
• FR7—IDD Register	☐	☐	☐	
• FR8—Laboratory Register	☐	☐	☐	
• FR11—Population Chart	☐	☐	☐	
• FR12—Birth Register	☐	☐	☐	
• FR13—Stock Register: M/S	☐	☐	☐	
• FR14—Stock Register: E/F/L	☐	☐	☐	
• FR15—Meeting Register	☐	☐	☐	
• FR16—Daily Expense Register	☐	☐	☐	
5. Facility Reports				
• FF1—Immediate Report *(verify if copies of Immediate Reports are available)*	☐	☐	☐	
• FF2—Monthly Report *(verify if copies of Monthly Reports are available)*	☐	☐	☐	

SUMMARY OF COMMENTS:

Appendix 9

ICST: Training Plan for 1994-1998

INTEGRATED CHILD SURVIVAL TRAINING PROGRAMME

TRAINING PLAN FOR 1994 TO 1998

INTRODUCTION

The overall goal of the Integrated Child Survival Training (ICST) Programme is to improve child health services through the provision of integrated child health services to any child coming to first level care health facilities. In order to reach this goal,the Pakistan Child Survival Project(PCSP) developed job specific training courses in integrated child case management for different type of health personnel. A training package was developed for two levels of health service providers: medical officers and paramedics. In addition, a training package on supportive supervision of child health services was also developed for the supervising officers.

The training is implemented at sites designated as Child Survival Training Units (CSTUs) in each of the four provinces, AJK and Northern Areas. The decentralization of training from Medical Colleges to District head-quarter hospitals was an essential step in creating a sustainable training infrastructure.

OBJECTIVES

1. To implement training through the establishment of CSTUs in Teaching and District Headquarter Hospitals, which later work as Continuing Education Units for their catchment areas.

2 To assist Provincial Health Departments to strengthen their supervisory systems

3. To finalize training curriculum in integrated case management of under-five children for

    - Medical Officers
    - Paramedics
    - Supervisors

TRAINING STRATEGY

Training in provision of child health services can be defined as follows:

First, child survival intervention areas are taught as part of an integrated system of health promotion, illness prevention and disease treatment.Focus is on following four interventions:-

Diarrhoea
Acute respiratory infections
Immunizable diseases
Nutrition

Second, provision of service is integrated in that it involves the combined team efforts of health service providers and mothers (or primary caretakers of children) to keep them well, minimize their suffering, and to help them recover when ill.

The supervising officers are also seen as part of this team and equally responsible for providing adequate and appropriate health care for children through supportive supervision.

Integrated case management guidelines are developed by combining case management principles from the four child survival interventions to promote integrated child health services at first level care facilities.

The training package is Job-specific and includes separate training manuals and programs for medical officers, paramedics, and their supervising officers. During training, all three categories of staff receive an overview of each others' training, in order to better understand individual responsibilities of each type of provider or supervisor in the delivery of health care services.

Briefly, medical officer training emphasizes diagnosis and treatment of conditions, stressing the necessary involvement of the mother, and clarifying the role of the health care facility staff, as well as the family's responsibility in maintaining a healthy child.

The paramedic training focuses more on screening and other preventive health procedures as well as counseling techniques and how to teach mothers to properly care for their children, so that they grow and develop to their maximum potential, with minimal suffering from illness.

The supervisor training stresses the importance of providing supportive supervision which includes: essential materials and manpower; monitoring and evaluating the pre and post training performance of paramedics and MOs; and the development of materials to support the implementation of in service integrated child survival training.

TRAINING MATERIAL

Under PCSP, the following ten training manuals were developed for four target groups: medical officers, paramedics, supervisors and trainers in order to teach the concepts of integrated case management of children under 5. The manuals use existing WHO materials on diarrhea, EPI, and acute respiratory infections (ARI). A special module on interpersonal communications is included in the ICST course.

1) Nutrition Manual for Primary Health Care Workers - Participant's Manual

2) Nutrition Manual for Primary Health Care Workers - Trainer's Manual

3) Nutrition Manual for Primary Health Care Workers - Readings

4) Integrated Child Survival Training Course For Medical Officers of First Level Care Facilities - Participant's Manual

5) Integrated Child Survival Training Course For Medical Officers of First Level Care Facilities - Trainer's Manual

6) Integrated Child Survival Training Course For Paramedics of First Level Care Facilities - Participant's Manual

7) Integrated Child Survival Training Course For Paramedics of First Level Care Facilities - Trainer's Manual

8) Integrated Supervision Training Course For Supervisors of First Level Care Facilities - Participant's Manual

9) Integrated Supervision Training Course For Supervisors of First Level Care Facilities - Trainer's Manual

10) Training Methodology

In addition to these manuals, existing WHO manuals on diarrhea, acute respiratory infections (ARI) and immunizations are being utilized.

TRAINING ACTIVITIES DURING '91 - '93

The training activities for MOs (FLCF) were initiated after completion of the MO training manuals in December 1991. These manuals were presented to all the National Child Survival Program Coordinators, DTU Directors, the Director Generals, Health of all four provinces, and the PCSP Project Directors at an ICST "Orientation Meeting" in December 1991.

Next, field testing of the training materials for medical officers was conducted, and appropriate revisions made. This was followed by the training of a core group of "master" trainers from each of the provinces (between January and April 1992). From May 1992, the provinces began training additional trainers for their CSTUs and soon after, initiated medical officer (FLCF) training.

While the training of CSTU trainers and medical officers (FLCF) was taking place at the provincial levels, the federal PCSP training team was supervising and monitoring training activities at the provinces, and working on the manuals for paramedics and supervisors. Hence, training of supervisors was not initiated until February 1993, and paramedics until April 1993.

Between January 1992 and December 1993, 28 CSTUs were established and 159 workshops were organized with funding of USAID and UNICEF. In total 1971 persons were trained (see table 1 for a breakdown per province and per professional category).

TABLE 1: SUMMARY OF PERSONS TRAINED UP TO DEC 1993

LOCATION	TRAINER	MO/WMO	PARAMED	SUPERVISOR	TOTAL
Federal Level	70	21	-	18	109
Baluchistan	28	85	56	20	189
NWFP	44	145	165	17	371
Punjab	86	285	210	17	598
Sindh	95	367	100	20	582
AJK	-	53	61	8	122
TOTAL	323	956	592	100	1971

ASSUMPTIONS

In providing estimates for the training programme, following assumptions were made

A. Staff to be trained

UNIT	NO. OF MO /UNIT	NO. OF PARA MED/ UNIT
Hospital	5	4
RHC	2	2
BHU	1	1
Disp/Sub HC/MCHC	-	1

B.

Type of Workshop	Duration	Estimated No. of Participants
TOT	13 Days	12
MO	12 Days	12
Paramedics	9 Days	15
Supervisors	6 Days	20

C. Cost Per Workshop
(Based on averages of the training activities, 1991 - 1993)

Supervisors	Rs. 148,130
Medical Officers	Rs. 59,420
Paramedics	Rs. 38,944

D. Cost of equipment per CSTU

Average amount to fill in deficiencies: Rs 50 000

E. Cost of printed material per trainee:

Medical officer	Rs. 700
Paramedics	Rs. 500
Supervisors	Rs. 1000

F. Number of Health Institutions

The Health Institutions Database (HID) 1994 has been used for calculations.

INTEGRATED CHILD SURVIVAL TRAINING PROGRAMME
TRAINING PLAN FOR 1994-1998

BUDGET WORKSHEET

Workshop	Cost per wksp.	Particip. per wksp.	Number of Workshops Required							TOTAL FUNDS REQUIRED
			AJK	Balo.	NAs	NWFP	Punjab	Sindh	TOTAL	
Supervisors	148,130	20	1	6	2	7	9	4	29	4,295,770
Medical Officers	59,420	12	18	53	10	114	257	58	510	30,304,200
Paramedics	38,944	15	21	81	13	123	264	76	578	22,509,632
			40	140	25	244	530	138	1,117	Rs. 57,109,602

Cost of Openning CSTUs (Refurbishment):				Rs.	50,000	x	51	=	Rs. 2,550,000
Cost of Training material (printed):	Supervisors:	29	x		20	x Rs.	1,000	= Rs. 580,000	
	MOs:	510	x		12	x Rs.	700	= Rs. 4,284,000	
	Paramedics:	578	x		15	x Rs.	500	= Rs. 4,335,000	
Total Cost of Training Material:									Rs. 9,199,000

TOTAL COST OF TRAINING PLAN 1994-98 Rs. 68,858,602

INTEGRATED CHILD SURVIVAL TRAINING PROGRAMME
TRAINING PLAN FOR 1994 – 1996

YEAR-WISE IMPLEMENTATION PLAN

NUMBER OF WORKSHOPS

Province	1994			1995			1996			1997			TOTAL
	Sup	MOs	Param	Sup	MOs	Param	Sup	MOs	Param	Sup	MOs	Param	
AJK	1	15	16	–	3	5	–	–		–	–	–	40
Balochistan	2	20	20	4	30	30	–	4	30	–	–		140
NAs	2	5	5	–	5	8	–	–	–	–	–	–	25
NWFP	3	20	20	4	40	40	–	40	40	–	14	23	244
Punjab	3	30	30	4	60	60	2	100	100	–	67	74	530
Sindh	2	20	20	3	30	30	–	9	24	–	–	–	138

OPENNING OF CSTUs

Province	Existing	1994	1995	1996	1997	TOTAL
AJK	2	2	–	–	–	4
Balochistan	2 + 1	1	3	–	–	6 + 1
NAs	1	2	–	–	–	3
NWFP	3 + 3	2 + 1	6	–	–	11 + 3
Punjab	3 + 6	4 + 2	10	10	–	27 + 8
Sindh	2 + 5	2	6	–	–	10 + 5
TOTAL:	13 + 15	13 + 3	25	10		61 + 18

Total CSTUs: 79 – 28 = 51