

Delivery of Improved Services for Health (DISH) II Project

Training Manual

Workshop on Data Utilisation

Kampala, UGANDA – May 2002

The activities related to these materials were implemented, in collaboration with the Ministry of Health, by the Health Management/Quality Assurance Component of the Delivery of Improved Services (DISH) II Project, funded by the United States Agency for International Development under Cooperative Agreement No. 617-A-00-00-00001-00.

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It served as the basis for two workshops conducted by the Project in August and September 2000 for district level teams from the 12 Project counterpart districts. Further on, these teams, with support from Project staff, conducted similar workshops their respective district for Health Sub-District and facility managers.

The structure and contents of the workshop are best suited for teams of participants sharing interests for a common Health Management Information System. For instance, a district level team may include the Director, District Health Services, the District HMIS Officer (if such position exists), the District Planning Officer and/or one or several HSD heads. Thus the workshop constitutes an opportunity for reviewing and discussing the problems faced by the team in terms of data collection, processing and analysis, and often initiate the first step in solving some of these problems.

Participants should be invited sufficiently in advance that they can prepare and bring some of their own materials (database, reports, review of problems) which can serve the basis for practical exercises or group discussions during the workshop.

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**Agenda for
Health Management Information System (HMIS)
Data Utilization Workshop**

DAY 1

	Topic	Time	Content/Products
Session 1:	Opening and Introductions	9:00- 9.30	---
Session 2:	Key HMIS Concepts	9.30-10.00	---
	Break	TBD	
Session 3:	Defining Management Functions and Tasks	10.00-12:30	Matrix with defined functions and tasks for health management
	Lunch	12:30-14:00	
Session 4:	Defining Data/Information Requirements	14:00-16:45	Matrix with information/data requirements defined
	Wrap-Up	16:45- 17:00	

DAY 2

	Topic	Time	Content/Products
Session 5:	Utilizing Data	9:00-11:00	Exercises to stimulate the analysis of routine case clinic data
	Break	11.00-11.30	
Session 5:	(continued)	11:30-13:00	Plenary on data utilization
	Lunch	13:00-14:00	
Session 6:	Improving Data Management	14:00-16:00	Procedures and standards for improving data capture, collection, checking, processing and quality assurance
	Break	16:00-16.15	
		16:15-17:30	Plenary on improving data management

DAY 3

	Topic	Time	Content/Products
Session 7:	Designing a Reporting Format	9:00-11:00	Draft of a Report Format
	Break	11.00-11.15	
Session 7:	: (continued)	11:15-13:00	Group work (continued)
	Lunch	13:00-14:00	
Session 7:	(continued)	14:00-15:15	Plenary on designing a report format
Session 8:	Action Planning for Improving Data Management and Use	15:15- 16:45	Development of a concrete action plans for improving data management procedures and use of information
	Wrap-Up & Closure	16:45-17:00	

Session Guide
SESSION 1: OPENING AND INTRODUCTIONS

Time	Topic/Activity	Materials	Notes	Facilitator
9:00-9:20	Introduction of facilitators and participants Logistics	Papers/cards with pictures	<ol style="list-style-type: none"> 1. Facilitators <i>introduce</i> themselves. 2. Participants introduce themselves, their titles and interest in this workshop and are asked to name one expectation they have of the workshop or one that they expect to gain from the workshop. 3. Facilitators write expectations on a flip chart and then let participants know which ones will definitely be covered and which may not be due to time constraints. 4. Facilitators allow participants to ask any course logistics questions re: accommodation, per diem, transportation, etc. <p>Optional: If the workshop begins on time, a livelier icebreaker can be done. There are pairs of folded papers with a picture on them. Each person is given a paper. Each person must act out the picture on the paper without speaking. They look for their pair and after they meet, they talk for 2-3 minutes, introducing themselves to the other workshop participant. One question they should ask is what they hope to get out of the workshop. In plenary, each person introduces his or her partner and shares with the group their expectation of the workshop.</p>	
9:20-9:30	Course Objectives & Teaching Methods Handing out of materials	Overhead with Objectives Overhead with Methods Course materials	<ol style="list-style-type: none"> 1. Present the objectives on the overhead 2. Point out that each session will attempt to produce a tangible product. Drafts of some guides and reporting formats will be developed at the workshop and then facilitators will try to produce working documents for use by district based on the workshop. 3. Explain that the workshop is participatory in nature, there will be very little lecture. There will be a lot of small group work. Each participant has different expertise and should therefore feel confident in talking in the small groups and plenary and everyone should get a chance to report out to the plenary. 	

Time	Topic/Activity	Materials	Notes	Facilitator
			<p>4. Also <i>explain</i> that the time slots will be very tight and this requires good in-group facilitation and timekeeping to keep on track. Workshop facilitators may have to cut conversations short at times.</p> <p>5. <i>Point out</i> that the <u>course schedule</u> is in the folder (which can either be handed out prior to starting or at this moment). Each session has a session guide and the objectives of each session will be discussed at the beginning of each session. So there is no need to go in depth here.</p>	

Session Guide
SESSION 2: KEY HMIS CONCEPTS

Time	Topic/Activity	Materials	Notes	Facilitator										
9:30-10:00	Definition of key terms	Overheads— HMIS, data vs. information Handout 2.1. Key HMIS Terms	<p>1. First, facilitator presents overheads on HMIS (Management, Data, Information, Systems)</p> <p>2. Then, the facilitator writes "500 children vaccinated for measles" on the flip chart. The facilitator asks: "Is this data or information?" Participants give their opinion explaining why they think one way or the other.</p> <p>3. The facilitator then asks "Is this good or bad?" Participants are expected to respond: you don't know because there is nothing to compare it with. The facilitator asks what else would you want to know to decide if this is good or bad?</p> <ul style="list-style-type: none"> • Historical data to determine a trend: last month there 430, this month 500 --- good <p>The facilitator draws a small table on a flipchart:</p> <table style="margin-left: 20px;"> <tr><td>May</td><td>430</td></tr> <tr><td>June</td><td>500</td></tr> <tr><td>July</td><td>510</td></tr> <tr><td>Aug</td><td>500</td></tr> <tr><td>Sept.</td><td>550</td></tr> </table> <p>4. Facilitator <i>asks</i> the participants if 500 children vaccinated is good in the month of June? August? The facilitator <i>asks</i> someone to explain the overall trend at this health facility.</p> <p>5. Then the facilitator <i>explains</i> that the target population of the district to determine coverage rates: If the district has 12,000 children in the age group, you would expect average of 1000 per month maximum (12,000/12 months). So 500 would yield 50% coverage for both June and August.</p>	May	430	June	500	July	510	Aug	500	Sept.	550	
May	430													
June	500													
July	510													
Aug	500													
Sept.	550													

Time	Topic/Activity	Materials	Notes	Facilitator
			<p>Still, to know if this 50% is good or not you need to ask some questions:</p> <ul style="list-style-type: none"> • How are services organized? If this is a once a year vaccination campaign or a continuous. In this case vaccination coverage may be less than 5%. • What is access to health services? If only 50% of the population have access (physical or economic) to health services, than you might only expect 500 children per month which would mean that performance of the health centre is good. <p>The point being made here is that data or information alone, without putting it into context, is not very useful. Comparisons of figures between health facilities must be done with consideration of the differences between those facilities in terms of availability of resources and access of the population to services.</p> <p>6. Facilitator <i>presents</i> overheads with the definitions explaining the difference between data and information. Also the overheads explaining what an HMIS is and its components (management, system). Facilitator <i>allows</i> participants to add to the definitions.</p> <p>7. <i>Hand out</i> (or point out if it is already in their possession) the written definitions to key terms and make sure everyone understands them. It might be useful to give another example of coverage, incidence and prevalence on the flip chart.</p>	

Session Guide

Sessions 3: DEFINITION OF MANAGEMENT FUNCTIONS

Time	Topic/Activity	Materials	Notes	Facilitator
10:00-10:05	Session Objectives	Overhead of Objectives Overhead of Management and MIS Cycle	<ol style="list-style-type: none"> 1. Explain briefly the objectives of this particular session, which includes the expected product. 2. To set the context of the session, go over the relationship between the management and information system cycles. Point out the information collection, processing and use is critical for all management functions. 	
10:05 – 10:15	Define Functional Areas of Management and Related Tasks	Overhead with Management Functions listed Handout 3.1. Areas for District Management	<ol style="list-style-type: none"> 1. Ask participants to list management functions that they normally perform at the district/HSD/facility level. 2. Make sure that the participants understand the functions. Some areas such as drug and supply management could fall under more than one area, so the facilitator should help the participants clarify the category under which it falls. 	
10:15-11:30	Group work for Defining Tasks	Page 16-19 of HMIS Manual for Health Units Handout 3.2. Management Functions Matrix	<ol style="list-style-type: none"> 1. Divide participants into 5 groups by having them count off and grouping all the like numbers. These will be mixed groups. Each group should have one in-charge; assure that this happens and mix groups accordingly. 2. Using the session guide, explain that each group will work with one management function and they are supposed to list the major tasks, products expected, frequency and the person(s) responsible for completing the task. 3. Data management is a cross cutting issue—all of the above functions require this. 4. Facilitator tells groups that they have 1 hour, 15 minutes to work so they should pace themselves accordingly. They should first list all the functions in the first column then go back and fill in the other columns 5. There is no formal break built into the morning. Groups should take a short break during their group work. 6. <u>Participants should present on a Flip Chart</u>; this will facilitate the voting process for priority areas. 	

Time	Topic/Activity	Materials	Notes	Facilitator
11:30-12:30	Plenary	Flip Chart from each group	<ol style="list-style-type: none"> 1. Each group should report its results for no more than 10 minutes. Then the rest of the participants can comment on each presentation for about 5 minutes. 2. Time management is extremely crucial. Facilitators should assure that the process moves expediently 	
12:30-14:00	LUNCH and Ranking of Tasks	Stickers	<ol style="list-style-type: none"> 1. During the lunch period, participants walk around to the flip charts developed by the groups with the list of management tasks. For <u>each</u> of the functional areas (5) they put a sticker next to what they believe are the 3 most important tasks. Thus each participant votes with 15 stickers. 	

Session Guide
SESSION 4: DEFINING INFORMATION NEEDS

Time	Topic/Activity	Materials	Notes	Facilitator
14:00-14:10	Ranking of Management Tasks	Flip Charts with voting stickers	1. Facilitator looks at each flip chart that should have many stickers from the votes of the group. He/she then highlights/circles the tasks that have received the most votes. Ideally the maximum to be picked out of this list is 6 tasks per function.	
14:10-14:20	Overview of Session	Overhead with Objectives	1. Facilitator <i>explains</i> the objectives of this session as well as the task of the group work. Maintain the same 5 groups as in the morning session.	
14:20-14:30	Brainstorm on information sources	Flip Chart with “Routine, monthly HMIS” and “Population Surveys” listed already	1. On a Flip Chart, list the first two data sources (Routine (monthly) HMIS and Population Surveys). Then ask the group to list other sources of information. Hopefully they will come up with some of the ones listed below plus others. Make sure that a complete list exists on the flip chart at the end of the brainstorm. 1. Routine HMIS 2. Population Surveys (like DHS) <ul style="list-style-type: none"> • Facility surveys/audits • Disease Notification reports • Sentinel HIV and other disease surveillance systems • Birth/death registrations • Supervision reports • Quality of Care studies (at facilities) • Qualitative studies of community knowledge, attitude and practices 	
14:30-15:45	Defining Information Requirements Group Work	List of possible data sources Facility survey, HMIS & notifiable disease forms, annual reports, registers	1. Facilitator <i>explains</i> that participants have 1 hour, 15 minutes to finish this task and prepare results on a flip chart or overhead transparency to the group. 2. Facilitators <i>answer</i> questions and walk around the room to assure that groups are progressing in the task.	

Time	Topic/Activity	Materials	Notes	Facilitator
		Handout 4.1. Data Requirements Matrix		
15:45-16:00	BREAK			
16:00-16:45	Plenary	Completed flip charts	Each group should report its results for no more than 10 minutes. Then the rest of the participants can comment on each presentation for about 5 minutes. Time management is extremely crucial. Facilitators should assure that the process moves expediently	
16:45-17:00	Wrap up		Facilitator summarizes the day's activities and thanks participants for their hard work. Groups that haven't finished should continue to work in the evening	

Session Guide
SESSION 5: UTILISING DATA

Time	Topic/Activity	Materials	Notes	Facilitator
9:30-9:35	Objectives of Session and	Overhead with Objectives	1. Facilitator <i>explains</i> the objectives of the session.	
9:35-10:00	Short introduction to the Utilization of Data Instructions for Groups	Overheads Handout 5.1. Data Utilisation Exercise Handout 5.2. Managing Information at Naguru FP Clinic	1. Facilitator gives a brief introduction to the importance of data utilisation. 2. Facilitator guides plenary discussion and resolution of Data Utilisation Exercise, as an eye-opener for issues to be raised during the following group work. 3. Facilitator asks a different participant to read the case study at Naguru FP Clinic. 4. Give the participants a few minutes to read over the handout on data utilization at FP clinic.	
10:00-11:00	Group Work		There will be three groups; the first one looking at things health workers have to manage in the course of proving health services. The second group will be looking at the type of recording and reporting instruments and procedures that can be used improve on the management of a health facility with an improved HMIS and the third group will examine the interdependence of different levels of the health system with respect to the use of data. Groups have a series of questions which prompt them to analyze the situation at FP clinic, identify problems, prioritize problems, and develop a concrete plan for solving the problem. Groups will probably need to work into the evening to finish exercise	

MORNING—DAY 3

Time	Topic/Activity	Materials	Notes	Facilitator
11:30-13:00	Plenary		Groups report out, highlighting their analysis of the data and their action plans to the group.	

Time	Topic/Activity	Materials	Notes	Facilitator
	Discussion		1. Facilitators <i>summarize</i> the key lessons of the session on data utilisation. Hopefully what will emerge is the incomplete, poor quality of data makes decision-making very difficult. Thus more emphasis needs to be placed on improved data management at the district levels in order to achieve information-based decision-making	

Session Guide
SESSION 6: IMPROVING DATA MANAGEMENT

Time	Topic/Activity	Materials	Notes	Facilitator
14:00-14:10	Objectives of Session and	Overhead with Objectives	Facilitator presents the objectives of this session.	
14:10-14:30	Brainstorm—what is data management?		<p>Facilitator puts data management terms on a flip chart and facilitates a discussion with the participants to help define key terms such as:</p> <ul style="list-style-type: none"> • Data collection • Data recording • Baseline data • Data cleaning/data quality review • Reporting <p>In session 3, groups have identified challenges to obtaining data. Facilitator must make sure that those key points/challenges are brought back into session 6 discussion and perhaps we need a bit of a brainstorm to discuss problems with the above data management processes.</p>	
14:30-16:00	Group work for standardizing procedures	Handout 6.1. Improving Data Management Matrix	<p>Participants work in-groups hence yielding the same 3 groups from the previous day.</p> <p>Group 1 starts by tackling data capture and when they finish moves on to data collection and so on down the list</p> <p>Group 2 starts by tackling data collection and then moves to data processing and so on down the list</p> <p>Group 3 starts by tackling data processing and then moves to data/cleaning/quality review</p> <p>Ideally, each group will develop a set of standards and procedures for each data management area. However, in the short course of this workshop, it's not possible for each group to cover each area.</p> <p>Another possibility would be for each group to tackle one area first and then choose the one they feel is most weak in their HSD for working on next</p>	

Time	Topic/Activity	Materials	Notes	Facilitator
16:00-16:15	Break			
16.15-17.30	Plenary		Groups present their findings and there is active discussion on the feasibility of procedures. Some procedures will vary by groups. This is OK—the idea is to share good ideas for best practices. It will be up to the facilitators to synthesize the results and try to draw some general conclusions to help guide session 7.	

Session Guide
SESSION 7: DEVELOPING A REPORTING FORMAT

Time	Topic/Activity	Materials	Notes	Facilitator
9:00-9:05	Objectives of Session	Overhead with Objectives	Facilitator goes over the objectives of the session	
9:05-9:40	Properties of Good Indicators Properties of a good report format	Overhead with Properties of Good Indicators Overhead with Immunisation example Overhead & Handout 7.1. Checklist for Examining a Report's Design Overhead that shows various data presentation styles	<ol style="list-style-type: none"> 1. Define an indicator. Facilitator makes general comments about how an indicator is defined with a numerator and denominator. 2. During session 3, some indicators may have been discussed. The facilitator could take one of those indicators and show how it meets these properties (see overhead with DPT immunisation). 3. Facilitator goes over some key points that define a good report format and good presentation. Allow participants to add comments. 	
9:40-11:00	Group Work to Define a report Format	Handout 7.2. Designing a Reporting Format Matrix	<ol style="list-style-type: none"> 1. Facilitator divides participants in a manner that each small group should have no more than 6 participants. 2. Looking at the flip charts that resulted from session 3, the facilitators help to choose the key management issues which have the most data/information requirements as determined by the group. We might expect that these would be: <u>Planning, Resource Allocation, Monitoring and Evaluation of Health Facilities</u> at a minimum 3. Groups are given the task of developing a report format— <i>Explain</i> that they should limit the information to what is <u>absolutely necessary</u> for adequately managing the services in the district/HSD/facility (as prioritized in the previous session). 4. To make sure that each of the key areas are covered by at least one group, have group 1 start working on one functional management area (for example Planning). If the group finishes early, they can start working on another management area. Group 2 should start with a different functional area (for example Resource Allocation) and if they 	

Time	Topic/Activity	Materials	Notes	Facilitator
			<p>finish early, continue working on another area. Group 3 should start with yet a different area (for example Monitoring and Evaluation of Health Facilities) and if the group finishes early, can work on another not covered by another group.</p> <p>Note: Depending on how many groups are formed, you may want to have two groups work separately but on the same area of management. A lot depends on how sessions 2 and 3 work out and how many management areas of given priority.</p> <p>Another thing to consider is the difference in management functions they might emerge at HSD vs facility level. You could consider having a separate group of the facility representatives only who pick a key area like service and disease surveillance, for example.</p> <p>5. Let the groups know they have nearly 3 hours to finish.</p>	
11:00-11:15	Break			
11:15-13:00	Continue Group Work		Facilitators go around and make sure each group is progressing	
13:00-14:00	LUNCH			
14:00-15:15	Plenary		Each group reports their results briefly with comments from others. Facilitators will help assure that everyone understands what is being proposed for the report and allow debate but also control it.	
15:15-15:30			Short break. There is still a lot to cover!	

Session Guide

SESSION 8: ACTION PLANNING FOR IMPROVING DATA MANAGEMENT AND USE

DAY 3

Time	Topic/Activity	Materials	Notes	Facilitator
15:30-15:40		Overhead with objectives	Introduction to Session 8: Facilitators present objective of session	
15:40-16:45		Guidelines for developing an action plan Handout 8.1. Gant chart (timeline) for Action Planning	Health district/sub-district teams work on developing action plans for improving data management. They chose some key action steps that they plan to take in the next 6 to 12 months to improve data collection, capture, quality, reporting, etc. Participants use a Gant chart to develop timelines. The chart should include an objective and ideally a measurable indicator like “100% reporting of all facilities by December 2000” or “Hold data utilisation workshops for all health facilities by June 2001” but there may not be time to fully develop these. That will be the role of the facilitators over the next several months—to help districts/HSDs develop and implement a concrete plan relating to HMIS.	
16:45-17:00	Closure		Facilitators summarize the results of the workshop and explain the next steps. Facilitators will help to write up workshop reports and produce draft reporting formats and HMIS data management procedures/guidelines, which can be shared for comment with all HSDs in district. Thank participants for their participation.	

Hand Out 2.1. Definitions of Key HMIS Terms

Data: Data are facts that describe entities such as objects or activities. They can be qualitative or quantitative, categorical or continuous.

Information: Information consists of facts or data, which are organised, in a form, which allows conclusions to be drawn, or knowledge to be gained. Inherent in the concept of information is that it be represented in a way that is useful for a specific purpose.

Prevalence: The proportion of the population who are affected by the disease or condition point in time (point prevalence) or during a specified interval (period prevalence). For example, if in area there are 500 people and all of them are tested for HIV and 100 are found to be Zero-positive, then the prevalence of HIV in that area is said to be $(100/500)*100 = 20\%$.

Incidence: The probability that healthy people will develop a disease during a specified period of time; hence the number of new cases of a disease or condition in the population over a specified time period.

Indicators: Indicators are variables that help to measure changes, directly or indirectly. Indicators are used as alarms, to let us know that a situation may have a problem. They include a numerator and a denominator, although some measure a number of events and have only a numerator.

Mortality Rate: The probability of dying of a specific disease or condition in a defined population over a specified period of time.

Coverage rate: the proportion of a target population who receive a specified service within a given period of time; usually expressed as a percent.

Other Terms Used in Linking Data to Planning

Goal: Large, overall expectation such as social improvement.

Objective: health improvement and/or problem reduction, for example reducing immunisable diseases.

Target: desired service performance achievement in terms of output, coverage, quality, efficiency of processes, etc. For example, 1000% of all children to be immunised by the age of 1 year.

Health Problem: disease or health condition, for example measles, maternal death, TB.

Service Problem: inadequate service performance in terms of outputs, coverage, quality, efficiency.

Resource Problem: inadequate resources of various types: budget, staff, facilities, operational equipment, drugs, transportation.

Hand Out 3.1. Areas for District Management

These areas for district management are drawn from the National Health Policy of 1998, the MoH concept paper on HSDs, and the second schedule of LGA of 1997, part 2, and section 2a-j. They include:

1. Provision of overall leadership for the district health services
2. Planning and reporting on district health services
3. Resource Mobilization and Allocation
4. Coordination of health activities within the district and with the Ministry of Health
5. Surveillance, monitoring and evaluation of district health services
6. Health data management
7. Assessing manpower requirements and training needs
8. Developing and maintaining health units in collaboration with the HSD and the sub-county

Hand Out 3.2: Management Functions Matrix

Function:

Tasks	Products	Frequency	Who's responsible

Hand Out 3.3. Management Functions Matrix (example)

Note: tasks in italics have been selected for the next session

Fonction: Human Resources Management					
	Tasks	Products	Frequency	Responsible	Scoring
1	<i>Needs assessment:</i> - <i>human resource needs</i> - <i>training needs</i>	Human resource database	Annual or bi-annual	DDHS	14
2	Recruitment	Training plan Qualified and competent personnel			
3	Training		According to training plan	DDHS	5
4	<i>Ensuring regular payment of salaries and benefits</i>	Staff retention	Monthly	CAO	15
5	<i>Staff appraisal and motivation</i>				8
6	Support supervision	Enhanced staff performance, motivation, capacity building	According to work plan; ideally monthly or quarterly (by level)	DDHS	

Fonction: Planning and Budgeting					
	Tasks	Products	Frequency	Responsible	Scoring
1	<i>Situation analysis</i>	District Health Profile	Annually	DDHS	17
2	<i>Set objectives</i>	District objectives	Annually/5 years	DDHS	7
3	<i>Set targets</i>	District targets	Annually	DDHS	2
4	Identification of resources	Resources identified	Annually	DDHS	4
5	Organize planning meetings to develop work plans	District plans	Annually/quarterly	DDHS, HSD I/c	
6	Costing activities	Cost known	Annually	DDHS, HSD I/c	3
7	<i>Allocation of resources</i>	Budget	Annually/quarterly	DDHS, HSD I/c	8
8	Organize work plan review meetings	Work plan reviewed	Annually/quarterly	DDHS, HSD I/c	2

Hand Out 4.1: Data Requirements Matrix

Tasks	Data/Information Required	Source	Challenges

Hand Out 4.2. Data Requirement Matrix (example)

Function: Human Resource Management

Task	Data/Information Required	Source	Challenges
1. Needs assessment	Number of cadres/vacancies; staff qualifications; available resources	Approved staff structures; staff lists; personnel files; training records	The recommended and approved staff structures may differ due to financial constraints. Poor records and personnel files may have wrong information.
4. Ensuring regular payment of salaries and benefits	Number of employees, salaries and benefits, mode of payment (check or cash), employment terms, documentation of timeliness of payment and knowledge of the process of accessing payroll.	Staff lists, salary section reports, payroll and pay slips	Some staff are employed illegally; administrative weakness, inaccurate records; lack of logistical support.
5. Staff appraisal and motivation	Roles and responsibilities of staff; job descriptions; responsible authority; current remuneration.	Files/records; supervisors	Lack of feedback, poor record keeping

Function: Planning and Budgeting

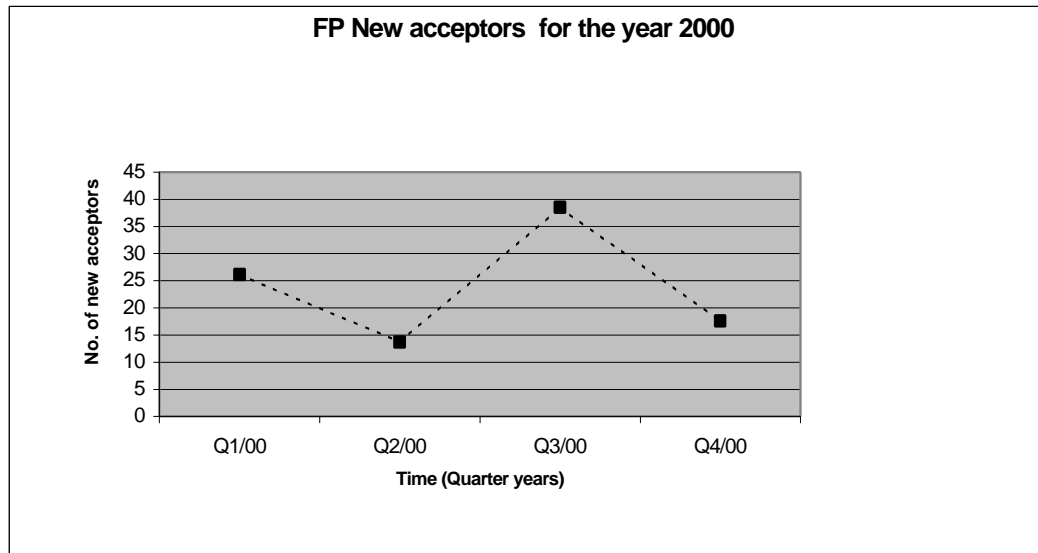
Task	Data/Information Required	Source	Challenges
1. Situation analysis	Demographic data Morbidity and mortality data	HMIS, facility records, Planning Department	Validity of the data
	Drugs and supply logistics	Inventory and stock cards	Records not available; irregular supply of stock cards
	Financial resources	Treasury records	Difficult access
	Human resources	Staff database, support visits	Staff database is never updated
2. Setting objectives	Data on priorities and targets	Situation analysis and work plan	Data might not be representative
7. Allocation of resources	Activity distribution	Work plan	Bottom-up approach not used; timeliness
	Staff distribution	Staff lists	
	Distribution of drugs and other logistics supplies	Store records	Store management

Hand Out 4.3. Sources of information

	Routine	Non Routine
Hard data (quantitative)	HMIS 105 Store cards/inventory Disease Surveillance System Vehicle Logbook Budget Payroll Final accounts Bank statements Civil registers (if functional)	Administrative reports (CAO, DPO) DHS Census Inventory/stock taking Surveys
Soft data (qualitative)	Supervision reports Staff files Meeting minutes	Administrative reports Audit reports LC reports Qualitative studies Focus group studies

Hand Out 5.1. Data Utilisation Exercise

- (a) Given below is a graph showing new acceptors in the year 2000 in Masaka district. Examine the possible causes responsible for this trend
- (b) State possible actions you would take as a manager



(a) Possible Interpretation

- Potential clients may not have learnt of your FP services
- Long waiting time or other factors may have led to clients complaining to friends, relatives and neighbors
- Clients have not received good counseling
- Charges for services have been introduced which have made them less affordable
- Competition from other clinics
- Medical complications associated to the methods could have led to clients complaining

(b) Possible Actions to Take

- Conduct promotional campaigns in the surrounding communities
- Conduct a survey to see why people have stopped coming before assuming it is due to long waiting
- Interview clients and dropouts to determine whether they received good counseling on contraceptive methods
- Find whether and why clients are going elsewhere by conducting a survey in your community
- Evaluate the number of complications from the methods

Hand Out 5.2. Managing Information at Naguru FP Clinic.

Mrs. Habib, a nurse midwife at Naguru Family Planning clinic, is discouraged. Today, she saw 25 clients at her clinic, while yesterday she only had three. She is very tired. She had to turn away three clients who came to get their contraceptive pills re-supply because when she went to her stock room, she discovered that the whole unopened box of pills on her shelf had expired.

Tomorrow doesn't look very promising either. Mrs. Habib has scheduled appointments with clients who need injectable contraceptives, but she has run out of this product as well. She has no idea of how much to order so that she isn't always faced with stockouts.

Furthermore, she just had a visit from the DHT supervisor, Mr. Mukasa. Mr. Mukasa came because he had only received 3 monthly activity reports from Mrs. Habib in the last year. This causes a lot of problems for the supervisor, because without reports, he can't estimate correctly the quantity of contraceptive products that his clinics throughout district need for the next year. This means he might have to start rationing (controlling carefully) contraceptives given to each clinic because his own stock could become low. Mr. Mukasa even had a letter from the DDHS, Dr. Mubiru who explained that he had been having a difficult time justifying his requests to donors, because he does not have accurate data on the number of contraceptive users to justify the quantities ordered.

The DHT supervisor also asked Mrs. Habib what her coverage rate was for family planning services and whether there had been any change in the number of users since last year. Mrs. Habib has a family planning services register that she fills out daily, but she never knew she could analyze the information in it herself. She was waiting for the DDHS office to send her a feedback report.

Finally, Mr. Mukasa asked her if she could achieve her service targets, and if she felt she was delivering quality services to her community. She responded that she didn't know anything about targets, but that she comes to work every day and she is always nice to her clients.

Assignment sheet:

1. Think about different things health workers have to manage in the course of providing health services. List some of the problems that exist at Naguru FP Clinic
2. In an improved health management information system, what type of recording and reporting instruments and procedures would help Mrs. Habib avoid some of these problems?
3. In what ways does this case illustrate the interdependence of different levels of the health system with respect to the use of data?

Managing Information at Naguru FP Clinic

Answers to Questions

1. Think about different things health workers have to manage in the course of providing health services. List some of the problems that exist at FP Clinic.

Time management:

- Patient Scheduling- Mrs. Habib is receiving 25 clients in one day, and only 3 on another day.

Stock Management:

- Mrs. Habib is not aware of how much stock she has
- She has expired stock that should be destroyed
- She does not know how to calculate quantities to order

Program Management

- Mrs. Habib has not set targets for her program
- She is not monitoring or evaluating her progress towards these objectives

Information Management

- Mrs. Habib collects data but doesn't use it to analyze her situation locally
- She doesn't routinely prepare her monthly report to send to Mr. Mukasa's office.

Quality Management

- Mrs. Habib has not defined any indicators to measure service quality. If indicators have been defined by DDHS office, she has not become aware of and start to monitor them.

2. In an improved health management information system, what type of recording and reporting instruments and procedures would help Mrs. Habib avoid some of these problems?

Time Management/Patient Scheduling

- Use of clinic agenda and client record filing system were records are filed in order of date of the next appointment (tickler files)

Stock Management:

- Stock cards
- Training on how to calculate the stock she has to order
- Avoiding drugs expiring

Program Management/Information Management

- She should analyze information in her registers herself without waiting for feedback from the supervisor
- She should consistently report to DDHS office – reporting forms
- She should set targets for service performance and coverage

Quality Management

- Well-designed HMIS should provide indicators that measure quality of care. (Monitoring a dropout rate over time is a good indication of quality of service)

3. In what ways does this case illustrate the interdependence of different levels of the health system with respect to the use of data?

- The supervisor needs complete data from all health facilities in the district to accurately estimate future contraceptive needs.
- Inaccurate clinic estimates result in shortage and thus stock outs
- Missing reports from clinics, or anomalies reported in monthly reports should trigger supervisory visits.
- DDHS office staff have a hard time justifying requests to donors

Hand Out 6.1: Improving Data Management

Area of Data Management:

Challenges/Areas to be improved	Procedures/Norms/Standards to address challenges

Hand Out 7.1. Checklist for examining a report's design

Consider the Decision Makers' Needs

- Does the content of the report seem to meet the needs of its intended user(s)?
- Are administrative units taken into account? For example: Is performance shown by clinic, unit or district appropriate to the user's needs?
- Does the report convey some information about the possible source of problems and/or progress?
- Is it possible to draw tentative conclusions based on the report?
- Is the report comprehensive enough? That is, if a table will generate an immediate follow-up question, is another table provided to answer that question?

Consider the Organization and Presentation of the Information

- Are the following clearly displayed: report title, reporting unit(s), period covered?
- Are the data sorted in the most useful order?
- Is the level of detail/disaggregation appropriate for the intended user?
- Is the frequency of the report appropriate given the user's needs and the variability in the information?
- Are graphs used to display data visually where helpful?

Ensure the Report Permits Comparison

- Does the report group units in a way that facilitates just comparisons?
- Does the report show progress over time (e.g., from last period)?
- Does the report allow performance to be compared to the target?

Examine the Numbers, Outliers, Totals

- Are numbers and percentages (or both) used appropriately?
- Do anomalies jump out? Are exceptions clearly shown?
- Does the report indicate when totals are incomplete (e.g., based on a partial set of reports)?

Determine the Appropriateness of the Calculations Used

- Is the target population indicated?
- (If appropriate:) Is the source used to estimate the target population listed?
- (If appropriate:) Is the method of calculation for coverage rates listed?

Hand Out 7.2: Designing a Report Format Matrix

Monthly Information/indicator Requirements	Specific Definition of Indicator and comparison requirements (e.g. trend data, monthly cases only, etc.)	Format for Presentation

Hand Out 7.3. Designing a Report Form Matrix (example)

Area	Monthly data/information requirement	Specific definition of indicator and comparison requirements (e.g., trend data, nonthly cases only, etc...)	Format for presentation
OPD	Total OPD cases	Total OPD attendance	Graph
Attendance	Attendance in <5yrs	Attendance to OPD by children , 5 years of age	Monthly trend/graph
Maternity	Institutional deliveries	% of expected mothers who have delivered in a health unit	Monthly trend/graph
	Maternal deaths	Number of maternal deaths among deliveries occurring in the health units	Monthly trend/graph
Child Health	Child nutritional status	% of weighed children with less than 75% W/A (underweight)	Monthly trend; cumulative; graph
ANC	ANC Attendance	% of expected pregnancies actually attending ANC	Monthly trend; cumulative; graph
OPD Diagnoses	Notifiable diseases	Number of cases of AFP, cholera, dysentery, Guinea worm, meningitis, plague, rabies, tetanus, typhoid, yellow fever, AIDS, TB, malaria, measles	Monthly trend/graph
HMIS reporting	Completeness/timeliness of HMIS report	% of facilities submitting HMIS 105 on time	Monthly trend; graph
Expenditures	PHC funds	Amount disbursed and amount spent on a monthly basis	Table/graph
Immunization	Number vaccinated	Children less than one year immunized against measles and DPT (3rd dose)	Monthly trend; cumulative; graph
Family Planning	New acceptors	Number of new acceptors (by gender)	Cumulative figures; graph
	Client load	Total number of clients in the age group 15-49	Cumulative figures; graph
	LTPM	Number of clients for Long Term/Permanent Methods (TL, vasectomy, Norplant)	Graph by method

Hand Out 8.1: Gant Chart (Timeline) for Action Planning

ACTIVITY	Aug '00	Sept	Oct	Nov	Dec	Jan '01	Feb	Mar	Apr	May	Jun	July	Indicator of Progress
Attend HMIS Workshop and produce drafts of report formats and procedures for data management													Participation in Workshop draft formats and procedures completed