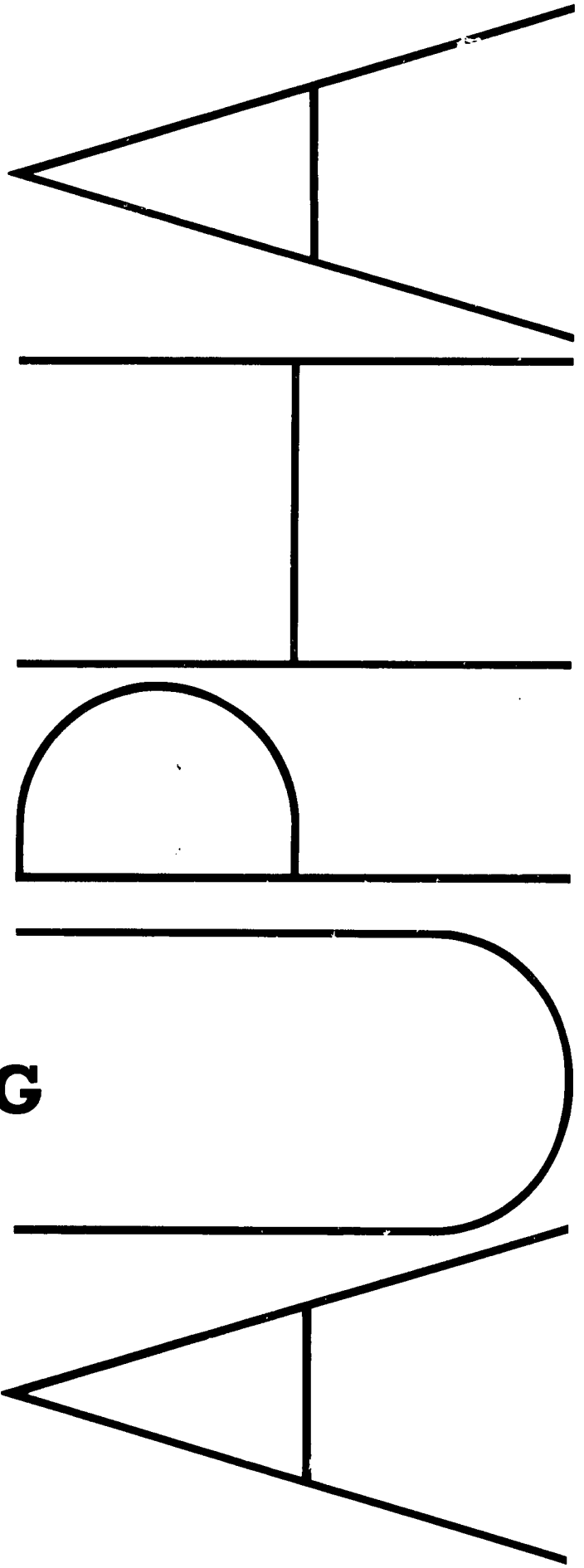
PN-AAJ-998

ASSOCIATION OF UNIVERSITY PROGRAMS IN HEALTH ADMINISTRATION



MAPS

HEALTH MANAGEMENT PROBLEM-SOLVING MODULES

HEALTH MANAGEMENT APPRAISAL METHODS PROGRAM

AUPHA MANAGEMENT PROBLEM-SOLVING (MAPS) MODULE

PERSONNEL AND HUMAN RESOURCES MANAGEMENT

September 1981

AUPHA--THE HEALTH MANAGEMENT EDUCATIONAL CONSORTIUM
Office of International Health Administration Education
One Dupont Circle, NW, Suite 420, Washington, DC 20036, USA
Telex 64148 / Telephone (202) 387-8811 / Cable AUPHA

This module was written by:

Steven Harrison, Peter Cox, M.D.
Carol Barker, Ph.D. and Ned Greenwood

This report was prepared with resources provided
by the Association of University Programs in Health Administration
as part of a continuing program of studies in international health
administration practice and curriculum development in concert with the
worldwide AUPHA network of affiliated health administration educational programs.

Copyright © 1981, Association of University Programs in Health Administration

TABLE OF CONTENTS

		Page
	Preface	v
I.	USER'S GUIDE	1
II.	INTRODUCTION	12
	Identifying and Defining Problems	15
	An Approach to Evaluation	20
III.	ASSESSMENT	21
	A. Assessing Personnel Management Information	21
	"Hard" and "Soft" Information	23
	Data Processing	24
	Basic Personnel Data	25
	B. Assessing Manpower Supply	38
	The Supply of Health Professionals	38
	Recruitment and Selection	43
	The Division of Labor	47
	Training	52
	Attendance	56
	Labor Turnover	59
	C. Assessing Remuneration	63
	The Objectives of Pay	63
	The Pay Structure	66
	D. Assessing Satisfaction	68
	E. Assessing Productivity	73
	Health Outcomes	73
	Quality of Care	75
	Outputs of Service Organizations	76
	Managerial Overload	78
	Investigating Poor Productivity	78
	F. Summarizing the Assessment Process	83
	References	94
	Appendix: W.H.O. Classification of Health Occupations	96

PREFACE TO THE FIRST EDITION

In 1977 officials of the Agency for International Development (AID) approached the Association of University Programs in Health Administration (AUPHA) because AUPHA's mission to promote education in health administration throughout the world seemed appropriate to AID's need for specialized expertise.

A recurring problem was confronting AID in its funding of health, population, and nutrition programs: how could managers programs in host country organizations identify areas of managerial weakness and subsequently improve managerial processes or structures? The AID Office of Rural Development and Development Administration and the AID Office of Health envisioned a project to develop and test methods appropriate for management assessments conducted in developing country health programs, adaptable to the unique circumstances of individual countries.

The Health Management Appraisal Methods Project was designed to make available to developing country and international donor agencies a methodology for self-assessment of the management of health services. The assessment tools are the Management Problem-Solving (MAPS) modules.

The MAPS modules were developed through the worldwide consortium of health management specialists affiliated with AUPHA. Field consultations in Africa, Asia, Latin America, and the Near East over a two-year period were carried out to meet three interrelated project purposes: identification of methodology strengths and weaknesses, identification of management problems and solutions, and training of participants in the appraisal processes. In addition, each of the MAPS modules benefited from a review by an international panel of specialists.

The modules require additional development based upon field experience. This test edition is distributed for field testing. Please send suggestions for revision to AUPHA.

The management assessment modules were prepared as a result of a four-year effort by:

The AUPHA Advisory Committee:

Gordon Brown, Ph.D., Chairman
Gary L. Filerman, Ph.D.
Arnold D. Kaluzny, Ph.D.
Peter Sammond

AUPHA International Office project staff:

Robert Emrey, Project Director
Margaret Dodd Britton, Associate Director (1980 to 1981)
Diane Wilson-Scott, Associate Director (1978 to 1980)

Project work was coordinated at the Agency for International Development by the staff of the Office of Rural Development and Development Administration: Jeanne F. North (1980-1981), Monteze Snyder (1979-80), Dr. Kenneth Kornher (1979), and Dr. Charles Briggs (1978). Their support and encouragement were essential to these efforts.

Other individuals, including many AID and host country health officials, contributed countless hours of work and support on behalf of the project. The collaboration of all these people enriched every aspect of the work and was greatly appreciated by AUPHA.

AUPHA MANAGEMENT PROBLEM-SOLVING (MAPS) MODULE

MATERIALS AND FACILITIES MANAGEMENT

I. USER'S GUIDE

The AUPHA MAPS modules are designed to help health facility administrators, government health officials, and others who seek information for the purpose of strengthening management practices in health service systems.

The modules are intended to be adapted for local use, taking into consideration available health services, local culture, existing administrative practices and their history, the political situation, and so on. Users are encouraged to change the order of sections in the modules, to alter individual questions to better meet their needs, or to omit questions or sections entirely, as appropriate.

The modules are intended to provide information for use in improving management practices in health services organizations of many types. The modules are not a complete management development package in themselves. Where a long term management improvement process is being considered, assistance from management development specialists is recommended, whenever possible, in addition to the study of these modules.

The remainder of this User's Guide contains suggestions on conducting management assessments with these modules. There are six modules, covering various aspects of guidance and support processes of health management. Four basic steps are outlined for users to follow during assessment: arranging for the assessment process, choosing the appropriate Management Problem-Solving (MAPS) module or modules, using the modules, and suggestions for taking action based on assessment results.

Background

Managers of developing country health programs often are faced with a great variety of problems. Many of the most serious problems are outside of their control: epidemics, natural disasters, or shifts in population. The level of resources available is usually a political decision over which the manager has little influence, particularly when funds are being reduced. Managers need skills and energy to respond to the problems which such situations create. Sometimes the administrator must protect the organization, sometimes help the organization adjust to a new reality, and many times do more for the public with fewer resources.

The AUPHA Management Problem-Solving (MAPS) modules were designed to help managers identify situations under their control which may be decreasing the effectiveness of their programs; for example, problems such as supply shortages, operating hours which are unacceptable to workers or clients, or poor supervision of personnel.

What the manager controls, directs, or influences depends upon how the organization works and the type of post the manager holds in the organization. The manager of a private health center probably has control over most functions within the organization. The manager of a government health center, which is part of a national health service or a social security system, may have control over operations but have little decision-making authority. But, both managers carry out the same functions and have similar problems, possibly with different causes and different solutions. In all situations, it is clear that:

- Managers often have more authority, influence, or control over problems within the organization than they realize;
- Managers can often gain more authority, influence, or control if they have very good information; but
- Many times they do not have the information that they need.

The MAPS modules help the health services manager get the information needed to:

- Identify problems;
- Define problems correctly;
- Identify alternative solutions; and
- Determine problem-solving priorities.

If the manager works within a large system, for example, as a district or regional director of health, the manager may initiate solution of a problem by presenting the ministry with complete and accurate documentation describing a problem, the possible solutions, and their feasibility. If the manager has the authority to act, he or she needs the same knowledge in order to act wisely. In either case, the information needed is best produced by an assessment process.

The MAPS modules can be used as the basis for assessing many aspects of management in most health service organizations. However they are used, they must be adapted or revised to respond to the particular needs of the manager and the organization conducting the assessment.

Purposes of the Management Assessment Process

There are several ways in which the management assessment process can be used to improve the management of a health services organization:

- To take a look at the whole organization, identifying management strengths, weaknesses, problems, and solutions, and setting priorities for improvements. This total assessment may be helpful in preparing to combine two health service systems or before a major expansion of a system. It may be used before a new program director is appointed, to help identify the skills which are needed. A new director may use it to set priorities and goals. A donor organization may use it to determine what development is needed in order to use new resources effectively.

- To examine a part of an organization. A district director may want to assess one health center or hospital. The director of an organization can use assessment to determine how to improve functions such as accounting and financial management.

- To clearly identify a specific problem, list possible solutions, and settle upon the best solution. This takes the manager beyond a simple answer which may not solve the real problem. For example, if reports on laboratory specimens from a central laboratory are not reaching rural health posts, the problem may be a breakdown in laboratory equipment,

inadequate purchasing of laboratory supplies, poor vehicle maintenance, or inadequate personnel or financial management. Assessment helps clarify what contributes to the problem.

- To involve many people in the organization in the process of identifying and solving problems. When resources are scarce, competition may result instead of cooperation, so that available resources are not shared and are not used efficiently. The assessment process can bring together people from different parts of the organization to evaluate solutions and set priorities which all will understand and support. It is a course of action which does not itself require additional resources.

- To establish a management development program. Every health service organization can do a better job of serving the public and every health service administrator can do a better job of serving the organization.

- To identify training needs, opportunities, and priorities, and to develop formal training curricula. The assessment process is itself an effective management training device.

- To determine what assistance an organization needs in general or in dealing with a particular problem, by an outside consultant.

Step One: Arranging for Management Assessment

There are a number of points at which an assessment can be started. On the basis of discussions with managers in developing country health programs, the authors suggest that the following situations provide suitable opportunities:

- When activities are to be expanded because of increased budgets or new laws;

- When support from an external (donor) agency requires the development of new projects;

- When evaluation of activities or projects is required by an external (donor) agency;

- When new techniques are to be implemented, such as a change in accounting systems, or computerization;

- When a major natural disaster has changed the organization;

- When budgets are cut; and

- When there is a change in administration or government affecting the agency.

The decision to undertake an assessment is an important one. The process requires the time of employees who are busy with their day to day responsibilities. It may produce fears in employees who may think they are being judged on how they do their jobs. Or, it may be seen as a way to put people out of jobs or to reorganize responsibilities. Such fears can lead to a lack of cooperation.

It is important that everyone in the organization who may be involved in the process or affected by the results fully understand what it is and what it is not. They should be involved in discussion of how an effective process can help everyone do their jobs better. They should understand that it is usually not something imposed on them from outside, using someone else's standards. It is their own process, using their own standards.

The key to a successful assessment process is open communication with everyone who may be interested in or affected by the process.

Step Two: Choosing the MAPS Modules That Fit Your Needs

There are six MAPS modules now available, with additional ones to be completed in new areas. The modules cover activities identified by practicing health service managers in developing countries as being of great significance and offering strong possibilities for improvements in their organizations. MAPS modules available can be used to assess the following functions:

Support Functions:

- Materials and Facilities Management: How the materials and supplies logistics system and facilities operations support the overall delivery of health services by the organization.
- Personnel and Human Resources Management: How employees (or potential employees) are contributing to the operation of the organization.
- Patient Services: How well the health services meet patients' needs, and how and whether patient expectations about health services differ from those of the organization.

- Financial Management: How flows of money are controlled for operation of current and future programs.

Guidance Functions:

- Organizational Design: How organizational units and work groups function and how various parts of the organization are coordinated.

- Community and External Relations: How the organization relates to outside institutions, the services it provides to the community, and external factors which constrain the organization's performance.

Each of the modules is unique in style and approach. This reflects the different situations a manager will find him/herself in within the various management functions, the level of information available on the particular subject, as well as differences in authors' approaches. In each case, it is important to note that these modules can only help you organize ideas and potential that already exist in your organization and are not intended to serve as master plans for restructuring an entire organization.

Any combination of the modules may be used. It may be best to start with the one which appears to deal directly with the most important problem and then go on to use the others as they may be helpful. It is possible that more than one of the MAPS modules will be needed for you to clarify your current situation and then to establish a workable plan of action for making changes.

There are many other approaches to management development in your organization in addition to the use of MAPS modules. The greatest benefit of this assessment will result from combining use of the modules with one or more of these other activities. While there is not enough space here to give a long description of all the other approaches, a few of the more important ones can be suggested: use of in-service training programs to expose staff to new ideas about health services management; use of outside management specialists; and, perhaps most importantly, encouraging managers to give special attention to the way they supervise their employees.

Supervision in health programs in most parts of the world involves a combination of regulation and education (a police function and a teacher function). It is seldom possible for the same manager to be effective in both types of supervision. The educator-type supervisor is more likely to benefit from the use and discussion of the MAPS modules than is the regulator-type supervisor.

Step Three: Using the MAPS Modules

The MAPS modules guide managers' thinking and raise sensitive questions which can result in strengthening management practices. The modules are designed to encourage involvement by a variety of knowledgeable people, but could conceivably be used profitably by an individual manager operating entirely alone in considering ways in which the organization operates.

A typical module contains the following elements:

- Problem examples and issues;
- Introductory explanations of management practices;
- Guidance for setting criteria against which to judge current practice;
- Directions for gathering information and discussing the current practice in a given management area; and
- Questions which focus on particular activities or practices of importance in many countries and which are believed to be of value to the user.

The module user gets an opportunity to follow along familiar lines of thought, and also to raise new questions and see new perspectives on program operations.

The expected outcomes from the use of MAPS modules include the following:

- Consideration of objectives and criteria for particular management activities;

- Diagnosis of problem or particular management situations with information available to managers working in particular management areas;
- Inventory of actual problems and solutions;
- Recognition of areas which are not operating well and require more detailed problem analysis; and
- Indication of other management areas which may be causing problems (such as are covered in other MAPS modules).

In using the modules you should not expect that long-standing problems can be changed in a short period of time. Instead, expect that most problems will be handled gradually--of course, you should watch for chances to take rapid action when opportunities present themselves.

Selecting the participants: In organizing the effort to use modules and consider possibilities for problem-solving, you should be careful to select participants who have a diversity of relevant experience. Many module users recommend using a team approach. Neither single individuals nor large numbers of people are excluded from using these materials, but groups of three to five participants have been found very effective.

The various groups asked to participate or contribute should include, if possible, representatives from all levels in the organization's hierarchy who are affected by the management practices under study. The more broad the involvement, the more effective the assessment will be. To achieve greatest support for the follow-up results, all participants' ideas should be taken seriously. Top management support for the effort and knowledge of the use of the materials are essential to the success of the effort.

Defining objectives and timetables: Clear working objectives should be set for the effort. It is important that expectations and objectives be established in practical terms at the outset. A timetable is also important since many different people are likely to be involved in answering questions through interviews or directing attention to sources of data. It is helpful to decide who will be involved in the total

assessment process and who will be involved only in collecting the information specified by the module.

Reviewing the module: The teams then review the module they are working with. Each participant should have the opportunity to review the complete module to see how the section they are working on fits into the total assessment. Many chapters or subsections of modules begin with a general statement. The team must decide if the statement is appropriate for the organization. If it is not, the team may change the statement or write a new one which describes how the function would work if it adequately met the needs of the organization.

Adapting the module: The team then examines the questions in the subsection. The questions are not a checklist of good or necessary practices, rather they help identify what is being done now and what might be appropriate. Remember that the modules must be adapted to meet your needs. The printed forms cover what experienced health managers in many countries recommend should be included in an assessment--but only as a starting point. Modules should be modified to fit both the purpose of the assessment and the organization. The team may decide to rewrite the questions, selecting some to use and some to change. Some questions may be too detailed, and others may not be detailed enough. Some of the subsections include issues for the team to consider. The team needs several hours together for reviewing the subsection and reshaping it if necessary before beginning to collect information.

Conducting the assessment: The team then collects the information. When all the information has been assembled, the team meets to decide if any important information has been left out. That is, is the description complete?

When the team members are sure that they have developed a complete profile, they begin answering the assessment questions in part III of the module. Each module section ends by asking how adequate the section is to the needs of the organization as stated in the opening. If the group concludes that the management function adequately meets the needs of the organization, there are probably not many important management problems. If the conclusion is that the function does not

come close to meeting the standard in the opening statement, there are probably major management problems.

The team then decides what is the most serious problem, and defines it as clearly as possible. For that problem, the team then lists all of the solutions they can think of. For each of the solutions the team develops a cost estimate. The estimate should be well done, but you should not spend a lot of time developing detailed cost information.

Interpreting the results: At the end of each support function module (that is, all but the Organizational Design and Community and External Relations modules), there is a list of all of the management subfunctions. Each team identifies what it considers to be the most serious problem, solutions, and the cost of each solution. All of the teams come together and report so that everyone participating in the asessment process has the opportunity to learn what the other teams think are important problems.

The assessment teams together, or perhaps a coordinating committee, study each important problem, the solutions identified, and the possibilities of implementing them. Each of the solutions is then evaluated and given a score as follows:

1. = Very possible.
The organization has all of the necessary resources and the authority to implement the solution.

2. = Possible.
Some of the resources are available or they can be easily obtained.

3. = Questionable.
It is not certain that the necessary resources can be obtained. Or, the authority is not clear.

4. = Probably not possible.
The organization is not likely to be able to obtain the resources necessary, or, it may not have much chance to obtain the authority. Or, the solution may be possible, but it would take too long to implement it.

5. = Impossible.
The solution cannot be seriously considered.

Step Four: From Assessment to Action

In making plans for resolving problems identified through using the module, the following general stages should be considered:

- Identifying alternative solutions to problems;
- Examinining resources for each alternative;
- Examining constraints;
- Ranking the alternatives and determining which alternative best meets the agency's needs; and
- Designing a work plan for that particular alternative.

Involve the individuals who are likely to be affected in the evaluation of the solutions in deciding which is most important for the organization. These people will then be more likely to help achieve the solution selected.

Another action plan is to use additional management assessment modules to examine other units or functions. If you started with Materials and Facilities Management, it may be appropriate to use the Personnel or Finance modules for the next step.

The experiences of other managers in making changes to strengthen management practices in organizations like yours can also be of great value. Innovations in management practice are known to be passed from person to person. Practicing managers should keep attuned to the work of others and consider the possibility of adopting the established practices of other agencies for doing work described in these module area.

AUPHA MANAGEMENT PROBLEM-SOLVING (MAPS) MODULE

PERSONNEL AND HUMAN RESOURCES MANAGEMENT

II. INTRODUCTION

The concept of personnel management used in this module is much broader than the scope of a specialist staff adviser, as used in Great Britain and some other countries. The definition of personnel management used in this module is the management of human resources in a health organization--synonymous with the idea of management as "getting things done through people" [Thomason, 1978, p. 13].

All health resources are important, but there are three human resources characteristics which make their management of particular significance:

- People are not a passive resource: they have ideas, values and interests of their own which may well be at odds with the views and wishes of managers and planners [Harrison, 1981, p. 83];
- Health services, however organized and financed, are labor intensive: there is a definite limit to the extent to which capital can be substituted for labor; and
- The output and design of health services are largely the product of the type and mix of health workers employed [Harrison, 1981, p. 82].

It is therefore important for all health service managers to constantly monitor how they are making use of their human resources within their scope of responsibility. This is not always easy; for many managers, so much time is taken up by daily tasks and urgent problems that they cannot adequately assess staff performance. There are two dangers to such an approach:

- A decline in performance can go unnoticed for long periods, while attention is given to issues which, although presented as urgent, have little effect on performance; and

- Particular problems are dismissed as temporary and various ad hoc solutions devised, when in reality the issues come from a deeper and longer-running problem [Child, 1977, p. 193].

This assessment module is intended to promote precisely this process of thoughtful assessment on the use of human resources within a health care organization. Assessment does not require a great deal of the manager's time, only a systematic approach and brief pause in daily pressures; the present module is intended to provide the framework for such a systematic approach.

This module is not intended to be seen as a kind of programmed text on how to manage human resources; to offer such a text would suggest that health care organizations have a universal and mechanical character, something which is clearly not the case. The aim of this module is to help you as a manager see how you are doing, rather than to tell you what to do.

The authors' intentions for the module's users are much more ambitious. Little distinction is made between issues for consideration at different management levels or functions, by self-taught or administratively trained managers, by managers in ministries of health or in field agencies, in rural or urban areas, or in primary or institutional care settings. In short, the user can be any health service manager who feels his/her performance (and that of the staff) may benefit from using this material. Certainly not all the contents of the module are equally appropriate for levels and types of management. Users will be able to decide for themselves which sections are most relevant, and in addition the text contains occasional suggestions to direct the users.

The material contained in this module is for you to use as you wish; although some suggestions are made below, you can easily create modifications or entirely new uses for our suggestions. Indeed, we certainly encourage you to adapt these materials so they are your own. Such adaptation can help make the materials more relevant to your particular circumstances and thus increase motivation. Possible ways of using the Personnel and Human Resources Management Module include the following:

- By an individual manager as a check on human resources within his/her own area of responsibility;
- By a manager requiring his/her staff to assess their own use of resources and to generate comparative data;
- By "self-help" groups of managers wishing jointly to improve the management of human resources;
- By ministry of health advisers or inspectors as an aid to making judgements about the services subject to their inspection; or
- By training officers or educational institutions as an aid to management education and training.

The following section explains the authors' underlying approach to the preparation of this material. The user is advised to resist the temptation to skip this, since it draws attention to some of the unavoidable limitations of modules such as this, and more importantly, because it discusses the fundamental issue of the definition and identification of problems.

Identifying and Defining Problems

This section is concerned with that part of any manager's job which can be the most time-consuming, frustrating, difficult, and yet, ultimately, satisfying--the consideration and resolution of staffing problems. The following approach separates and considers the elements of the problem-solving process, and is intended to ensure that the solution of difficult issues is approached in a logical way. This in itself will not, of course, automatically lead to a successful solution on every occasion, but will assist managers in asking the right questions of the right people at the right time.

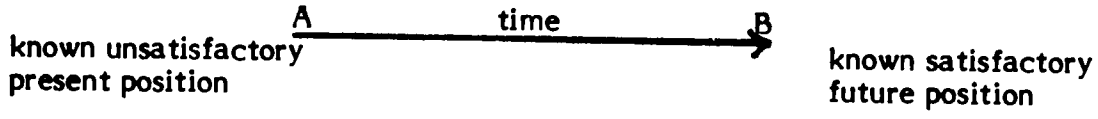
What is a problem?

Rather than providing one simple definition of a problem, it may be more useful to suggest that any problem contains in varying degrees some or all of the following characteristics:

- an element of complexity;
- a lack of prior experience in how to solve it;
- a number of possible solutions;
- an element of uncertainty as to the cause of the problem and the desired outcome;
- an importance which is capable of being weighed differently;
- a "felt need" for its resolution;
- serious consequences if not resolved; and
- a realization that a situation fails to meet expectations and needs changing (Greenwood et al, 1981).

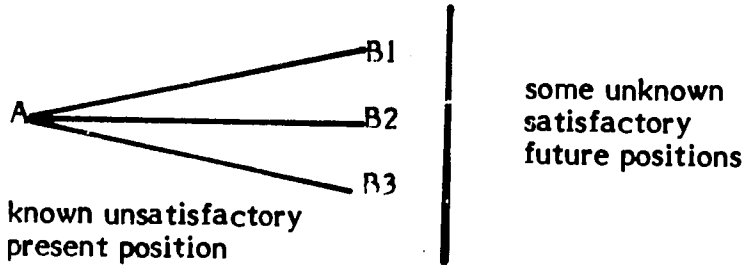
Raybould and Minter (1971) identify five main types of problems as follows:

(1) Improvement



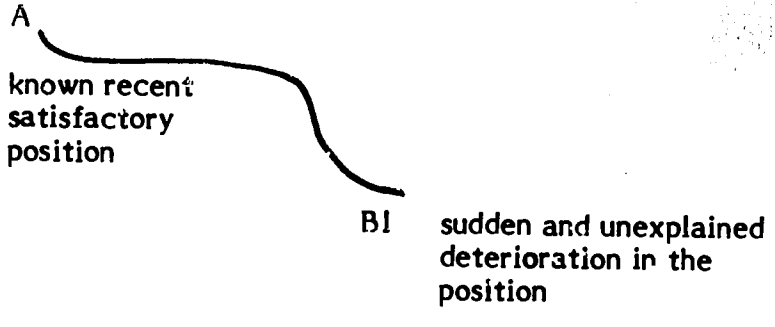
Here the "problem" is to devise and implement a plan to reach B most efficiently (that is, most effectively at least cost).

(2) Objective



In this case the "problem" is both to define the satisfactory future position (the objective) and then make and implement a plan to reach it.

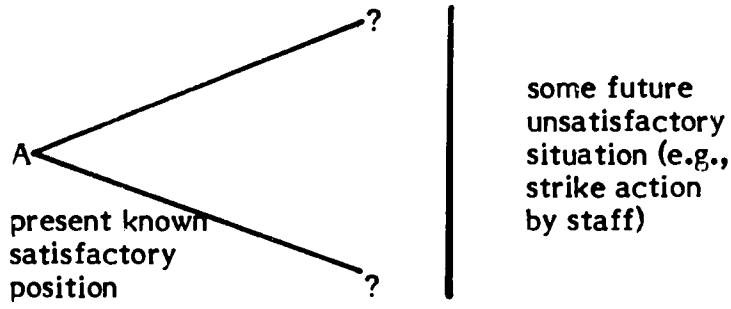
(3) Deviation



The "problem" here is to identify and understand the causes of the deterioriation, decide if the new position is so serious as to warrant the taking of action and, having decided action is necessary, plan and implement action to return to A or, at least, to a tolerable new situation.

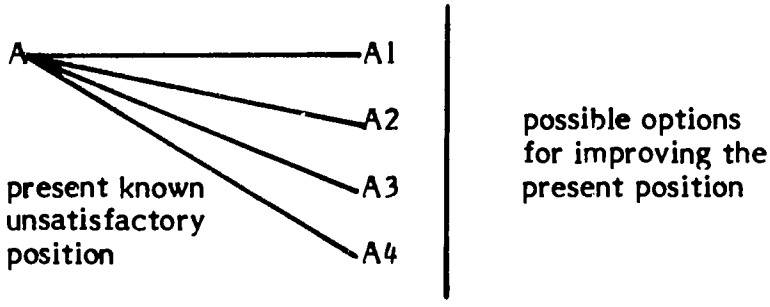
In the same way, a sudden improvement will require understanding and the taking of action for its maintenance--a more pleasant "problem."

(4) Potential



This will involve planning today to cope with the effects of a possible deterioration of standards or service in the future. This is also called "contingency planning" and may involve making plans to lessen the likelihood of this future unsatisfactory position occurring.

(5) Evaluation



In this case the "problem" is to decide among competing suggestions/solutions and may involve the use of techniques such as "cost-benefit" analysis.

How do problems come to the manager's attention?

The relative importance to a manager of a particular problem may, in certain circumstances, be conditioned by the way in which it reaches him or her. The problem may come to the manager's attention:

- by a member of his/her own department
  more junior in rank;
  more senior in rank.
- by a member of staff of another department
  more junior in rank/status;
  more senior in rank/status.
- by someone outside the organization.

In these cases the importance of the problem may be conditioned by the relative position of the originator rather than the actual nature of the problem itself.

- by his/her own realization.

A second consideration is the method of communication used to bring the matter to the manager's attention. This can be by:

- written communication, for example by letter or report;
- verbal communication, for example by telephone or personal meeting.

In this case the importance of the problem should not be confused by its actual method of communication, that is, the medium of communication should not necessarily condition the relative importance of the message.

The importance of how problems come to the manager's attention can be best illustrated by answering the question, "relative to other important work to be done am I likely to give more priority to resolving a problem when:

- my boss calls me into his office and tells me to deal with the problem; or
- when the same "problem" is brought to my attention in a letter from a person outside the organization who is unknown to me?"

It seems likely that there would be a distinct possibility of over-reacting to the problem in the first case, and under-reacting in the second--yet logically the nature of the problem itself should be the only determining factor.

An Approach to Evaluation

Organizations, especially large ones, are complex, and as a result of the wide range of occupations employed in them, health service organizations may well be among the most complex of all. This means that human resource management skills, and the criteria by which those skills are judged, are likely to be many-sided and equally complex. Therefore, evaluation tools such as this module do not claim to provide a comprehensive range of criteria for assessing personnel management performance. This means that you should develop additional criteria for your own use whenever necessary.

A second feature of organizations is that they are characterized by incomplete agreement about their objectives (Lindblom, 1959), and about the means to be used to attain objectives. Therefore, it is unlikely that complete agreement exists within an organization about what exactly good personnel management performance is. As a result of this, the authors of this module have tried as far as possible to select measures of performance which seem likely to be relatively agreeable. It is always possible for organizations to seek a concensus view on what constitutes good management, by use of such techniques as the Delphi study (see Dalkey and Helmer, 1963).

A third feature of organizations, especially of large ones, is that generalization is dangerous; different parts of it may be performing in highly contrasting ways, a fact which can remain unnoticed if performance is merely examined at the overall level. Thus, evaluation of any practice in any organization should ideally take place at the smallest level, that is after a close and specific examination of who is doing what, with what resources, and under what constraints. Such an approach is clearly impracticable for the present module which is written for as general an audience as possible. The approach adopted therefore is one of a more general analysis of the organization, as a guide for the user to decide which sections of it are worthy of analysis of smaller units of the organization. It cannot be overemphasized that you must bear in mind the need to make your own detailed analysis beyond that suggested in the module.

AUPHA MANAGEMENT PROBLEM-SOLVING (MAPS) MODULE

PERSONNEL AND HUMAN RESOURCES MANAGEMENT

III. ASSESSMENT

A. ASSESSING PERSONNEL MANAGEMENT INFORMATION

Because the basic tool of analysis used in this module is trend observation, it follows that the information used in the analysis must be collected over time, since otherwise there is no observable trend. Clearly this offers the user alternative approaches. The method of proceeding is set out below.

Identify what relevant personnel data is already available, and obtain a historical statement of this over what seems to be a reasonable period (at least two years is suggested) if possible. You may want to list your sources of personnel data and refer back to it as you answer other questions.

What personnel records do you keep?

- Attendance?
- Salary information?
- Productivity?
- Fringe benefits?
- Length of employment?
- Employee's personal health?
- Other?

What records do you keep on potential employees (applicants)?

What records, if any, do you keep on employees who stop working for you?

- Reason(s) for leaving?
- Type of new job the person would be taking?

Begin recording any data desired but which is not historically available. Once you make a complete listing of all the types of personnel data you presently collect, you

may see some areas in which you are collecting no personnel data. Before you collect the desirable data, there are several basic decisions to make:

What data do you need to collect?

Who should collect the data and how often? (Can the employee fill out a form?)

What form should the reporting take?

- oral;
- in a notebook; or
- on a government form.

Who should receive the information? (Who needs to know this information for personnel decisions?) This may include one or several people.

Trends can be analyzed using historical data where available, or at periodic intervals as newly collected data become available. Where historical data are available, information on the same trends should continue to be collected into the future.

"Hard" and Soft" Information

Collecting and putting together "hard" numerical data is a relatively routine matter, once a format has been decided (some advice on this is given below). However, the following questions are relevant:

Are your data collectors aware of the likely use of the personnel data?

- If they are not aware, they might not be careful in their data collection; and
- If they are aware, they may have the opportunity to filter data for their own reasons, or they may concentrate only on the area of their job for which data is being collected, instead of doing their regular jobs.

Note that you must make a decision on this question on the basis of your own assessment of the relative balance of the positive aspects of collecting data against the negative ones.

The collection of "soft" (that is, qualitative) information is much harder to collect routinely. Records can be kept on matters such as complaints, but it is likely that the assessment of unnecessary bureaucracy will have to be made by the module user him or herself, or at least by a staff officer reporting directly to the user.

Data Processing

A great deal of relevant quantitative personnel information can be stored and analyzed by computer. This module does not attempt to examine systematically the arguments connected with a decision to use computers; however, the following points should be borne in mind:

- Computer storage of infrequently used data can be extremely expensive;
- Data processing has a "mystifying effect"; staff may be reluctant to use data processed in a way which they do not understand;
- It is often wise to collect and process information manually for a period before computerizing, so as to ensure the value and effectiveness of the process; and
- Given country-wide health priorities as stated in Five Year Health Plans, computers may be considered an inappropriate use of resources.

Basic Personnel Data

Does the organization have information about the individuals who are employed by it?

A fairly basic list of categories needed to provide complete personnel data would be:

- Name;
- Occupation/post held (note the need for standard terminology here);
- Location of employment;
- Approximate year of birth;
- Date employment began (also dates of job changes);
- Qualifications;
- Duties specification or job description; and
- Rate of pay or salary.

Does the module user have relevant "contextual information" about the organization? Examples of such information are:

- Legal and other regulations applying to the employment;
- Pay scales and pay systems;
- Other conditions of employment;
- Local knowledge of the local customs and culture; and
- The technology used by the organization;

Appendix A is an expanded version of the WHO (1972) classification of health occupations.

Staff Numbers:

What numbers of staff are employed by the organization in each occupational category?

What "Full-time Equivalent" staff numbers are employed?

Full-time equivalents (FTEs) of actual staff employed are calculated as the proportion of the normal full-time hours worked by a particular member of staff. Thus someone working 30 hours where the normal full-time hours were 40 per week would equate to 0.75 FTE. Group FTEs can be arrived at by adding up the total hours of work which a group of staff is contracted to work, and dividing by the full-time hours. (Hence a group of five staff, two of whom work the full-time 40

hours and three of whom work 30 hours, equate to:

$$\frac{40 + 40 + 30 + 30 + 30}{40} = \frac{170}{40} = 4.25 \text{ FTE}$$

At what locations in the organization are staff based? A simple matrix can be devised:

	Location 1	Location 2	Location 3	Location n
Occupation A	_____	_____	_____	_____
Occupation B	_____	_____	_____	_____
Occupation C	_____	_____	_____	_____
etc.	_____	_____	_____	_____

Where a staff member is allocated between more than one location his/her FTE can be divided accordingly (though it will need to be remembered that for some purposes, such as pay administration, he/she will be regarded as having just one base.)

The Formal Organization:

Are you aware of the formal organization hierarchy; that is, the structure of managerial responsibility for staff?

___Yes ___No

Are you aware of the duties of staff under you?

___Yes ___No

Job descriptions and other written information may help in answering the above two questions, but it should be remembered that such information is often allowed to become outdated. It may therefore be necessary to find out how current the information really is.

What staffing standards or approved staffing ratios are relevant to the staff of the organization?

_____

_____

_____

It is difficult to generalize about such standards, for they can be in a variety of forms from simple rules of thumb to complex calculations based on work study or operations research.

Leavers and Starters:

Do you have records of the numbers, occupations, and locations of employees leaving the organization in particular administrative periods (usually months or quarters)?

___Yes ___No

Are records kept of either the leavers' destination or reason for leaving?

___Yes ___No

Are records kept of the ratio of job applicants to vacancies advertised? (An alternative might be to examine the ratio of qualified applicants to vacancies.)

___Yes ___No

Are records kept of the number of employees who fail to complete probation or training successfully?

___Yes ___No

Such records are of value in evaluating both selection and training.

Attendance:

Are records kept of absence from work, and can these be put together to give a total picture? It is often useful to record the different kinds of absence, for example for:

- certified sickness;
- uncertified sickness;
- official holiday or leave (this may be subdivided into other categories in accordance with local regulations);
- authorized absence, for training for example; or
- unauthorized absence.

Are records kept of punctuality or time spent at work?

___Yes ___No

The above two questions are discussed at greater length in the next chapter, B. ASSESSING MANPOWER SUPPLY.

Earnings:

List below the categories of employees your organization uses. In the pay of each category of employee, what is the relative importance of:

- basic pay?
- conditions payments?
- merit payments?
- weightings?
- cost-of-living allowances?
- bonuses or incentive payments?

Employee Categories	Grade or Level	Annual Earnings

What are the average total earnings for each category and grade of staff?

_____

What are the ratios of the total average earnings of each category of staff?

_____

Complaints:

Are there records of complaints by members of the public?

___Yes ___No

Are there records of complaints by members of staff?

___Yes ___No

Demographic and Population Information:

What is the population of the area for which your organization is responsible?

_____

What are the populations of any sub-areas or districts into which the above is divided?

(1) _____
(2) _____
(3) _____
(4) _____
(5) _____

What percent of the total population is:

- male? ___%
- female? ___%

What relevant ethnic, religious, linguistic, or tribal divisions exist in the population and what percent fall into each of these?

Group	Percent
	%
	%
	%
	%
	%
	%

What is the age structure of the population? (give total numbers in each category):

	Male	Female	Children under 5 years old	Women of Childbearing Age
Less than 1 year old	_____	_____	_____	_____
2 - 4 years	_____	_____	_____	_____
5 - 9 years	_____	_____	_____	_____
10-14 years	_____	_____	_____	_____
15-19 years	_____	_____	_____	_____
20-24 years	_____	_____	_____	_____
25-29 years	_____	_____	_____	_____
30-34 years	_____	_____	_____	_____
35-39 years	_____	_____	_____	_____
40-44 years	_____	_____	_____	_____
45 years and over	_____	_____	_____	_____

The key age/sex groups for planning purposes are indicated by the boxes.

What are the (estimated) numbers of births per annum?

- In hospital: _____
- In the whole area: _____

What are the numbers of deaths per annum?

- In hospital: _____
- In the whole area: _____

- By age group:

	Male	Female
Less than 1 year old	____	____
2 - 4 years old	____	____
5 - 9 years old	____	____
10 - 14 years old	____	____
15 - 19 years old	____	____
20 - 24 years old	____	____
25 - 29 years old	____	____
30 - 34 years old	____	____
35 - 39 years old	____	____
40 - 44 years old	____	____
45 years and over	____	____

What diseases are endemic? How often do they occur in the population?

_____

_____

_____

_____

Finance:

Are there historic accounts showing the breakdown of expenditure in your area of responsibility?

A breakdown from different angles may be most helpful, for example:

- by care group;
- by type of service;
- by administrative or geographical division; or
- by patient treated.

Often, however, it will be practical only to use one of these. If possible, use the one in which official health priorities are expressed.

How have total earnings of staff increased relative to increases in pay rates?

Utilization and Productivity:

List the organization's most important resources and (where appropriate) its capacity.

- Hospital(s): Number

  Total beds _____

  Patients treated per year _____

  Outpatients per year:
  Family planning _____

  Maternal and child health _____

  Eye _____

  Occupancy of beds _____

  Average lengths of stay _____

- Hospital Pathology Services: number of tests per annum?

  _____

- Hospital Radiology: number of tests per annum?

  _____

- Hospital Pharmacy: number of items dispensed per annum?

  _____

- Theatre (operating room): number of operations per annum?

  _____

- Sterile supply department: number of items per annum?

  _____

- Physiotherapy: number of attendances per annum?

  _____

- Other relevant hospital departments:

  _____
  _____
  _____
  _____

Health Centers:	Number	Measure of Use
Beds	_____	_____
Deliveries	_____	_____
Maternal/child health sessions	_____	_____
Family planning attendances	_____	_____
General outpatient attendances	_____	_____
Vehicles	_____	_____

Dispensaries:		
Beds (if any)	_____	_____
General outpatient attendances	_____	_____
Other clinic sessions	_____	_____
Family planning attendances	_____	_____

What other important resources are within your control?

What are the uses made of the above resources (for example how many patients treated per bed per year, miles travelled per vehicle, etc.)? List them along side the above two sections.

You should beware of taking too simple a view of the use of resources. For instance, one radiological examination could be either a miniature chest X-ray or a barium meal examination. The workload difference between the two kinds of tests is very great. Some countries may have official guidelines for "weighing" the different activities. If these do not exist, you should discuss it with relevant specialist heads of department.

What are the waiting lists and average lengths of wait for:

- Admission to hospital as an inpatient?

  _____

- Attendance as an outpatient?

  _____

- Are there records of work done by each employee?

  ___Yes ___No

Do the questions and answers correctly describe personnel management information? If not, add the important missing information.

How adequate is the personnel management information for the needs of the organization?

Not Adequate	1	2	3	4	5	Very Adequate

B. ASSESSING MANPOWER SUPPLY

The concept of manpower supply used in this module is broad, and includes all aspects of supply and labor power, rather than simply recruitment.

The Supply of Health Professionals

The supply of health professionals is crucial in determining the nature and standard of services provided by health care organizations. In many countries the assessment of the adequacy of the supply of health professionals will be a matter for managers at the most senior levels (political and organizational). Managers at more junior levels could, however, use the questions in this section of the module as the basis of reports or requests to senior officers.

What are the geographical distributions of health professionals in your country?

_____

_____

_____

If there are significant maldistributions, what factors do you think are affecting where your health professionals work? Typical maldistributions would be towards urban areas, toward more desirable areas (capital city), or towards teaching centers.

_____

_____

_____

To what extent are there maldistributions of doctors between medical specialties?

_____

_____

_____

Some of the policy options for correcting maldistribution may be summarized as follows:

POLICY OPTIONS TO CHANGE DISTRIBUTION
OF HEALTH PROFESSIONALS

	Positive Controls	Negative Controls
Indirect Controls		Redistribution of resources to health agencies so as to equalize distribution of professionals away from better-served and into under-served areas.
Direct Controls	Incentives to attract professionals to shortage areas, or administrative requirements that new staff practice in a shortage area for a minimum period.	Administrative controls to prevent additional professionals from practicing in areas considered to have sufficient supply.

It should be noted that none of the above options are likely to equalize the distribution of quality of manpower as opposed to quantity. Indeed only a quasi-military system of distribution of professionals is likely to achieve the latter.

What government policies are in effect now which are designed to affect the distribution of health professionals? How will (do) these policies affect your organization?

_____

_____

To what extent are your health plans constrained by an overall shortage of professional manpower?

_____

_____

To what extent is any manpower shortage the product of emigration?

_____

_____

Is emigration increasing or decreasing and to what countries are your health professionals going?

_____

_____

Policy options for stopping excessive emigration include measures like the two kinds of direct controls described above. Another option is structuring the training of health professionals to ensure that they are not fully qualified to practice overseas.

To what extent is any manpower shortage the result of inadequate control over training and licensing on the part of the health agency or government?

_____

_____

Investigation into this area is likely to be time-consuming, but must nevertheless be attempted before policy alternatives can be considered. Analysis should be completed for each separate category of employee.

What other institutions and agencies are involved in:

Selecting student professionals?

_____

_____

Determining how many students shall be admitted to training?

_____

_____

Approving training institutions?

_____

_____

Approving training courses and syllabi?

_____

_____

Approving teachers?

_____

_____

Recognizing health care institutions and agencies as suitable for practical student experience?

_____

_____

Approving postgraduate training?

_____

_____

Approving the establishment of posts for fully trained professionals?

_____

_____

What are the precise relationships between these institutions and your health agency?

(1)_____

(2)_____

(3)_____

(4)_____

(5)_____

(6)_____

Are the actual relationships different from those which formally apply, and, if so, to what effect and in which direction is the trend moving?

(1)_____

(2)_____

(3)_____

(4)_____

(5)_____

(6)_____

The policy options which may arise as a result of the above analysis will depend on the detailed findings of the analysis. However, it can be said that options will fall into two categories: those aimed at improving communications and liaison between various institutions; and those aimed at changing the status quo. It need hardly be said that the latter are likely to cause some arguments, as well as be politically sensitive (Hall and Klezkowski, 1978).

Recruitment and Selection

Since the pattern of health services is largely determined by the pattern of health professionals employed, the quality of health services will depend largely on the quality of employees recruited for both professional and non-professional positions. In spite of this, many large organizations don't have a recruitment policy, or have policies which are long outdated.

What is the ratio of job applicants to appointees, and how has this changed over time?

_____

_____

This information needs to be carefully considered, since the level of applications will be affected by outside factors such as the national economic situation. Nevertheless, a situation of having fewer applicants to choose from is not good.

To what extent is any such decrease in number of applicants due to the unattractiveness of the organization or its salary levels?

_____

_____

What percent of employees is unsuccessful in completing their probation period and what is the direction of that trend?

_____

_____

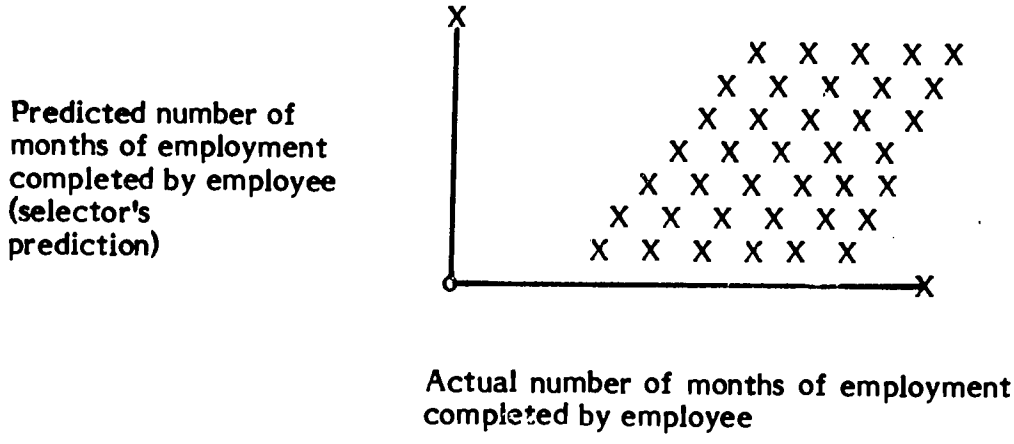
To what extent is any current recruitment failure (or perhaps a rising trend of failure) the product of unsatisfactory basic or on-the-job training?

_____

_____

Where there are grounds for suspecting that selection may be at fault, it is possible to check the performance of people who select employees by using the following graph, which should be prepared for each selector in the organization (Thomason, 1978, p.190).

RELATIONSHIP OF PREDICTED TO ACTUAL
NUMBER OF MONTHS OF EMPLOYMENT



The length of stay of each past employee can then be plotted on the graph in the form of a cross. (Existing employees--who have not completed their service--will bias the data; if it is desired to include present employees, a variation would be to cut the period covered by the axes of the graph to the period in which recruitment costs have been recovered by the organization.) A pattern of crosses resembling that shown on the example above represents a close fit between the selector's assessment and actual events. A wide scatter would indicate a poorer fit. Similar graphs can be constructed to measure the fit between selector's perceptions of any aspect of employee performance against experience. Thomason (1978, p. 192) gives a simple formula for the conversion of such graphs into coefficients of correlation.

What is the contribution made by other features of the selection process, such as making up "short lists" on the basis of application forms, medical examination, educational qualifications, selection tests, etc.?

_____

_____

Are job applicants being screened out by the use of standards which have no established connection with success or failure in the job?

_____

_____

If the selection process consists of successive "hurdles," each of which has to be cleared before the candidate is offered employment, have the "hurdles" been assembled in the order which places the most valid (that is, that with the strongest relationship to job success) first, and so on, in order of validity?

_____

_____

In many cases, it will be up to selectors to vary their approaches in line with whatever information comes from the above analysis; in a few cases, however, higher level decisions may be required in order to vary minimum educational requirements. (Beach, 1980, p. 224-225 gives a comprehensive check list for the evaluation of recruitment and selection procedures.)

Are the selection methods and policies which you use acceptable to the local population? If not, what parts are unacceptable?

_____

_____

The Declaration of Alma Ata (WHO, 1978) stresses the importance of community participation and the acceptability to the consumer of the form of primary health care provided. Hence, it follows that employees of health agencies must also be acceptable to the population. However, there is the possiblity of conflict between organizational policies and the views of the population. An example of such conflict would be where selection policy required young well-educated females to be recruited as new midwives, whereas a rural population might well prefer to be attended by older women from their own locality who have themselves raised a family.

Selection committees should always be made up of professional staff, local administrators, and local people, who will show the tribal or local preference and often provide personal, family information that would otherwise be quite unknown to the outsider.

The Division of Labor

The formal division of labor in large organizations tends to be a strategic issue in the sense that it is often irreversible, especially in organizations in the health care field which employ several different categories of professionals. Nevertheless, in the delivery of services as complex as or even as routine as health care, some division of labor is necessary to allow a degree of specialization and expertise. The optimum division of labor is therefore an appropriate balance between cost-effectiveness, flexibility, and clarity. Such a judgement can only be made by someone with a reasonably thorough knowledge of your particular organization. (See also the AUPHA Module on Organizational Design.)

As suggested above, it may well be impossible to make formal changes in the division of labor, or that changes can be made only at a very senior level in the organization or after much negotiation with employee organizations. Nevertheless, it is often quite possible for local variations to be made; an alternative local strategy is to vary the grouping of occupations into managerial entities.

List major duties and responsibilities of each category of staff within your control. Could any of these be satisfactorily and legally performed by another grade of staff? If so, which ones?

Staff Category	Responsibilities

What are the costs of the various possible substitution arrangements and how do they compare with the present costs?

_____

_____

It may be that enough information is available for a more detailed cost-effectiveness analysis; in such a case the following sequence of questions should be answered:

What is the objective of the work carried out by the particular category of staff?

_____

_____

- What alternative staffing patterns could you use to meet that objective?
  (1)_____
  (2)_____
  (3)_____

- What are the costs of the various alternatives? Include both actual costs and opportunity costs. (Opportunity costs involve use of resources in one area so that you are prevented from using these resources for other purposes.)

  List <u>all</u> inputs (wages, materials, etc.) for each alternative listed above.
  (1)_____
  (2)_____
  (3)_____

  Estimate the costs of these inputs.
  (1)_____
  (2)_____
  (3)_____

Adjust the cost to take account of social costs where appropriate, including loss of productive time by patients having to travel greater distances.

(1)_____

(2)_____

(3)_____

Assess the extent to which objectives are achieved by each alternative.

(1)_____

(2)_____

(3)_____

Compare the ratio of costs to achievement for each alternative, including the present arrangement.

(1)_____

(2)_____

(3)_____

Alternative methods may occasionally involve the substitution of capital for labor. It is clear that with the increasing pace of change in the world generally and hence increased difficulty with effective long-term planning, organizations will need to use more flexible and adaptable arrangements.

What problems have occurred in the last year which would have been avoided by an employee breaking or varying a rule or procedure, or operating outside official job description?

_____

_____

_____

_____

What suggestions for changes in work methods or practices have you received from subordinates, and how many of these have been acted upon?

_____

_____

_____

_____

Has the formal division of labor become so strict that each occupation delegates its unskilled duties to a class of "helpers," with each class of helpers performing similar duties but uncoordinated because of their responsibility to different "bosses?"

_____

_____

Is whatever technology that is used appropriate for those who operate it?

_____

_____

In spite of the need for flexibility, employees need to have some idea of what contribution they are supposed to make to the organization's activities.

Do all employees have jobs descriptions or similar documents, and do they have access to them?

___Yes ___No

Do these documents state what the employee is expected to achieve?

___Yes ___No

How rigidly do the documents state <u>how</u> the achievement is to be attained?

_____

Has there been any discussion with employees (or their representatives) either at interview or later stage, about the content of job roles?

___Yes ___No

One way of striking a balance between rigidity and clarity is to use job descriptions which specify what is to be achieved and with what resources, rather than precisely how the results are to be obtained. The concept of "grouping" activities in an organization refers to the way in which different occupations are organized into managerial units (for example, by function, process, product, time, or geography.

Does the grouping of occupations in your organization make it difficult to provide coordinated service for a particular client group because responsibility for doing so is fragmented? (For example, are hospital and community services for maternal and child health well integrated?)

_____

_____

In rural areas, does such a lack of integration lead to duplication of effort and (particularly) of traveling time, as a location or client is visited by several different health professionals?

_____

_____

Are the work roles of health workers acceptable to the client? Do clients prefer a generalist or a range of specialists?

_____

_____

Training

In the previous section we have assumed that the job responsibilities of any one grade of staff will be fixed in relation to the knowledge and training of that staff category. If there are no legal or professional constraints, there are situations in which job descriptions, and thus the entire division of labor, can be altered by a relatively small training input.

In other cases, training needs might be identified in fields quite different from those in which the staff are qualified, but essential to the job they already do. A pharmacy assistant may have been taught nothing about stock control; or a nurse handling cases of malnutrition in children and expected to advise their mothers may know nothing about nutrition education.

Whatever the educational background of staff in their various categories, there are likely to be situations in which on-the-job or short-course training is called for.

Identification of Training Needs:

Boydell (1971) points out the need to identify training needs in a systematic fashion, and to distinguish what type of needs there are. The type of needs with which we are concerned at this point are organizational training needs, that is, needs which exist when systematic training will serve to overcome a particular weakness in the organization.

Such needs are different from occupational training needs, which refer to the basic training requirement for a particular occupation or profession. Needs in this area must be referred back to the institution responsible for such training.

Individual training needs are another separate concern involving the deficiencies/knowledge/aspirations of individuals.

Here is an example of types of training needs. You find that on a particular hospital ward the cost level for drug prescriptions is very high, and you identify the problem

as being that injections are often administered when the same drug could often be given as effectively in cheaper tablet form. You might see this problem as:

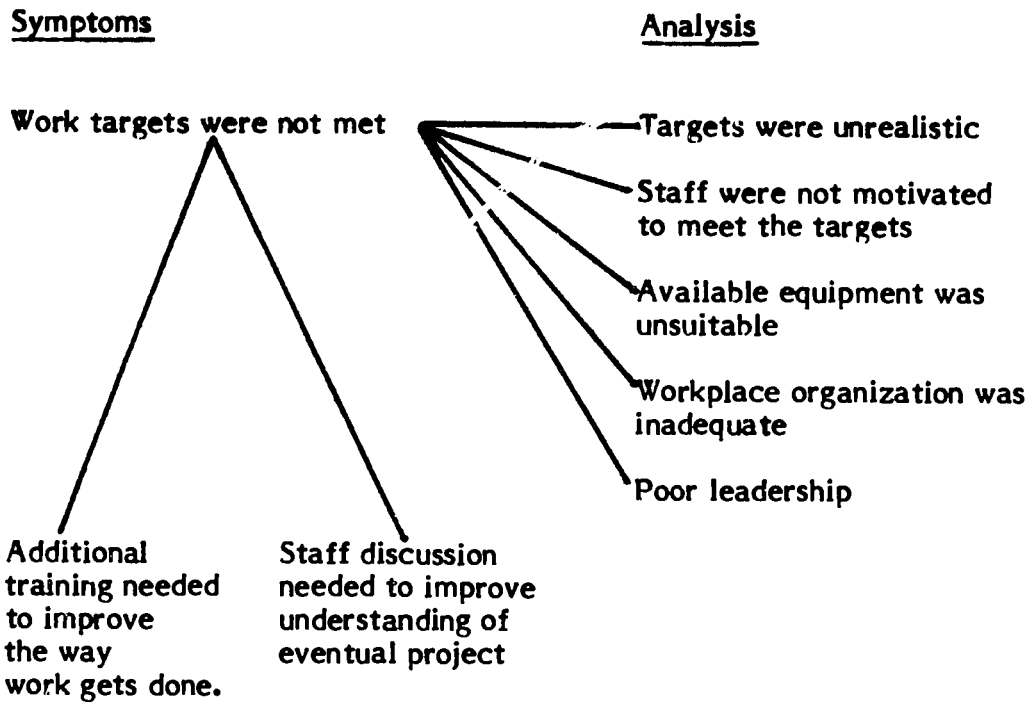
- An organizational training need: staff on this ward need to be taught the importance of cost-consciousness in prescribing an occupational training need; cost-effective prescribing should be taught to all medical and nursing students as a matter of course; or
- An individual training need: the particular doctor in charge of this ward needs to gain an understanding of cost-consciousness.

To suggest that we can identify training needs implies, of course, that there are organizational objectives against which we can compare achievement.

Training or Other Needs?

All sorts of symptoms may be identified to warn us that we may be falling short of our objectives, that there may be a problem of some sort to be tackled. It is clearly of great importance that we verify when a problem really does merit a solution involving training. All faults are not put right by training programs. We must analyze the problem in as detailed a way as possible.

Thus, for example, in the following cases we would need to study which alternative analysis might be correct:



We see that additional training is only one of a series of possible solutions, and only with more information would we be able to choose the appropriate action to take.

Who Does the Training?

Once a training need is identified, care must be taken in consulting the right people to find out what precisely needs to be learned. Get advice from the most qualified people available in the particular field. They should, if possible, have the chance to discuss the precise nature of the training needs with the potential pupils.

These best-qualified advisers who determine the training content may not always be those who can best do the teaching. There are many arguments for why the teaching is best done by others who are educationally/socially/culturally/linguistically closer to those being taught.

When to Do It:

Once training needs have been defined, someone must think out carefully when the training sessions can be held. There may be educational and/or organizational considerations involved--can a certain worker be spared to go off on a two-week course? Can the learning usefully be achieved in short once-weekly sessions? There may be practical, social and/or political considerations to be taken into account in deciding if training time comes out of the working day or is done out of working hours.

Attendance

A poor attendance record on the part of an individual worker may be a very complex issue. Let us try to imagine some of the facts which may lead a worker to absent himself from his job at various times. Possible causes of absenteeism might include:

- High illness rate: by worker among (close family) dependents;
- High level of other commitments which must be fulfilled during working time (for example personal, legal, and bureaucratic business, waiting in line for food during shortages, looking after children when alternative arrangements fail);
- High level of other commitments outside working hours (for example night-school, family) may mean the person is over-stretched;
- Demands of a second job or means of subsistence (for example worker prolongs holiday in order to sow/harvest his crops, or to build a new house); or
- Social/family demands (for example city worker having to return to area of birthplace for family weddings/funerals).

The problem about such a list, for the manager, is that where such reasons are genuine, there may be little or nothing the manager can do to alter the worker's situation. It may, however, be possible to affect the rates, patterns of work, and so on which could ease the effects of the absences by changing the work to match more closely the worker's ability to attend. If this is impractical then the manager must consider how far the worker's absences interfere with the smooth running of the organization. At the extreme position this could result in accepting the worker's absence or dismissing the worker in favor of another person more able to fulfill the demands of the job.

It is nevertheless important that the manager tries to understand the demands made upon workers from other directions and, whenever possible, to cooperate in searching for ways to ease the problem.

Equally, it is important that the manager look out for other factors which may be involved, for example:

- Lack of motivation to work;
- Lack of incentives for better attendance;
- Quiet, passive resistance on the part of the worker against the employer; or
- Perceived unattractiveness of work compared with leisure.

A sample attendance recording form is reproduced on the following page. It could of course be adopted for more appropriate local use.

Name________________________

STAFF ATTENDANCE RECORD SHEET 198__

Dept.________________________

JANUARY			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
FEBRUARY						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			
MARCH						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
APRIL		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
MAY				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
JUNE							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
JULY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
AUGUST					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
SEPTEMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						
OCTOBER			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
NOVEMBER						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
DECEMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
	Th	Fri	Sat	Sun	Mon	Tu	Wed	Th	Fri	Sat	Sun	Mon	Tu	Wed	Th	Fri	Sat	Sun	Mon	Tu	Wed	Th	Fri	Sat	Sun	Mon	Tu	Wed	Th	Fri	Sat	Sun	Mon	Tu	Wed	Th

S = Sickness notified by Phone
Sc = Certified Sickness
A = Authorized Absence

D = Day Off
R = Rest Day
P = Publi_ Holiday Nct Worked

(e.g.) 8 = No. of hours worked
LP = Day in Lieu of Public Holiday
L = Annual Leave

Labor Turnover

Labor turnover (or employee separation) rates are usually calculated by the following formula, and expressed as a percentage:

$$\text{Labor Turnover} = \frac{\text{Number of leavers in a period X 100}}{\text{Number of employees on the job at the end of the same period, plus the number of leavers in the period}}$$

For example, in a one-year period:

Your total number of employees at the end of the year = 350, and your number of "leavers" = 50 during the year

$$\text{Labor Turnover} = \frac{50 \times 100}{50 + 350} = \frac{5000}{400} = 12.5\%.$$

What are the present and historical turnover rates for particular groups of staff in your organization? What is the direction of trend, increasing or decreasing turnover?

_____

_____

It is conventional to consider a rising trend of labor turnover to be a problem, and this is no doubt generally justified. However, it is only evidence of a problem and you would need to carry out further investigations.

How did you define "leaver" for the above calculation? Does your definition of "leaver" include only persons who leave the organization completely or does it include transfers and promotions to other departments or sections outside the scope of the original statistics?

_____

_____

If your "leavers" include promotions and transfers, some degree of high turnover may be welcomed. A major element of the high turnover is that of training and the time taken by a new employee to become competent. Thus the costs of turnover in routine and simple jobs will be lower than in more complex ones; though, of course, the very routine of some jobs may actually contribute to high turnover in some circumstances.

How did you group your work force for the purpose of obtaining the turnover statistics?

_____

_____

A number of different aspects of turnover (and stability) can be used, and examined separately. Examples of those commonly used are:

- Occupation;
- Length of service;
- Full or part-time;
- Age;
- Sex;
- Distance from home to work;
- Workplace location; and
- Level of education.

How stable are each of the sections of your work force?

_____

_____

_____

_____

The simple turnover figure can be misleading when high percentages are produced by very rapid turnover of a very small section of the work force. (Hence a department of 75 persons, 74 of whom have been working throughout the year, but where the 75th job has changed hands every two weeks will produce an annual turnover rate of about 25%.)

What other possibilities are worth investigation as possible explanations for turnover? Possible examples include:

- Work roles becoming routine and/or formalized;
- Discrepancies between employee education levels (and therefore expectations) and the content of jobs available in the organization; and
- Migrant workers who may be expected to leave and return to their own villages, an occurrence over which you as a manager have little control. (It may be worth investigating what factors may be associated with the eventual return of such former employees.)

What reasons are given by leavers for their resignations?

_____

_____

_____

_____

Investigations of reasons for leaving are often unprofitable, since data collected may be suspect. Even if leavers are interviewed and give honest accounts of their feelings surrounding their decisions to leave, it is difficult to compile such information into other than an arbitrary framework. Investigation of the leaver's "destination" (for example to retirement, promotion inside the organization, to another health agency) should produce some objective data and help to separate destinations which you consider desirable from those you feel mean there are problems worthy of further investigation.

How do turnover rates in your department or organization compare with other relevant departments?

_____

_____

How do rates of pay and conditions of employment compare with those offered by other organizations in the same labor market?

_____

_____

What relationships are there between labor turnover in your organization and other trends which might express employee dissatisfaction? Areas for investigation might include:

- Absence levels;
- Lateness;
- Strikes; or
- Sabotage.

Policy options for dealing with labor turnover difficulties will be many and various, depending on the nature of evidence uncovered by your investigation. Great care should be taken however, to avoid uncalled for consequences. For example you might reduce turnover by recruiting a less-qualified laborer who was perhaps unable to obtain or hold other jobs.

Please note that many of the issues discussed in B. ASSESSING MANPOWER SUPPLY are treated much more comprehensively in Hornby, et. al. (WHO, 1980).

Do the questions and answers correctly describe manpower supply? If not, add the important missing information.

How adequate is the manpower supply for the needs of the organization?

Not Adequate	1	2	3	4	5	Very Adequate

C. ASSESSING REMUNERATION

This section of the module, for the sake of clarity and convenience, concentrates on the discussion of pay (that is, wages and salaries). It is true that in many organizations there are significant non-pay elements of remuneration ranging from paid holidays and sick leave to cars or houses. However, the same analytical criteria which are listed below are applicable without much difficulty to forms of remuneration other than pay.

The Objectives of Pay

The commonplace observation that few people are prepared to work in an organization other than for material reward tends to discourage examination of the issue of exactly what a salary is intended to recognize. It is not part of the purpose of this module to suggest to you what you should recognize in this respect. The module will indicate which characteristics can be rewarded by different kinds of pay systems. Therefore you will be in a position to assess whether your pay structure rewards the things which you value and want to reward.

Do you see a pay system as a means of attracting and retaining employees within your organization?

It is a principle of labor economics that the pay rate required to attract someone to a job is higher than the rate needed to keep him or her in it. Thus if these are the purposes for which a payments system is valued, emphasis will need to be given to:

- Discretionary starting salaries, that is flexibility to allow new employees to be attracted to the organization;

- Comparability of salaries paid by the organization with those paid by comparable organizations for comparable occupations; and

- Payments to induce employees to enter particular areas of their occupation (for example, psychiatric nursing in Britain) or particularly needy geographical areas.

Do you see a pay system as a means of recognizing employees needs, either individually or in a generalized sense?

In practice, few organizations design pay structures to meet individual needs, for this would lead to higher pay for those with more children, dependent relatives, etc. It is more common to meet needs in a more generalized way by such devices as:

- Geographical weightings for working in certain locations where housing or living costs are higher, or where it is not possible to combine farming with a health service occupation; or

- Cost of living allowances calculated in accordance with rises in the national index of retail prices. (Note that in some places such payments are considered to be inflationary in themselves.)

Do you see a pay system as a reward for the physical and mental skills, efforts, and other tributes which employees bring to a job?

There are, of course, a wide range of such inputs which one might value, and a corresponding range of methods of rewarding these. They include:

- Merit payments--usually granted on vague (and occasionally arbitrary) criteria at management discretion. The concept of "merit" is difficult to put into practice (especially where collective bargaining with trade unions is involved) and such payments tend to form a very small component of total pay, or else to be very similar for most of the employees;

- Conditions payments--usually centered around some "input" to the job which is considered unpleasant or beyond what might normally be expected (common examples are overtime payments at multiple rates, shiftwork bonuses, higher pay for high risk jobs);

- Hierarchical status--it is assumed that supervisors will receive more pay than subordinates; and

- Occupational status--it is assumed that there are certain customary differences or a customary order of ranking among occupations (physicians, nurses, laboratory technicians, primary health workers).

Hierarchical and occupational status are reflected in basic pay rates or salaries for jobs. Length of service is rewarded either by means of salary scales with annual increments or by long-service payments.

The Pay Structure

In practice, many organizations use several of the above methods of determining pay and thus, by implication, place a high value on several of the characteristics listed.

Does the relative weight given to characteristics used in determining total pay match the relative values each is seen to have? (Many organizations claim to value achievement most, but have pay structures which overwhelmingly reward length of service.)

Are there factors involved in total pay of different employees that go against some other organizational policy objective? For example:

- Is there a financial disincentive to promotion?
  ___Yes ___No

- Do your employees feel your pay structure is unfair? If yes, in what areas?
  ___Yes ___No
  _____
  _____

- What is the ratio of the highest salary to the lowest salary in your organization? How well does this ratio reflect the contributions made by the individuals who earn these salaries?
  _____

- Has the pay structure been distorted by government income policies or other outside rules?

The ability to modify total pay structures usually lies only at the highest levels of large organizations. Nevertherless, the above analysis should help middle managers to understand the likely effects of current salary arrangements, and to be able to

suggest changes to their superiors. In addition, there may be some local ways in which the manager's own valued objectives for pay systems can be exercised.

It needs to be remembered that it is extremely unlikely that pay is the only factor which motivates employees. Other factors may include conditions of service such as non-monetary benefits, and less tangible factors such as status or job security. It is also possible that the factors which keep an employee in a job may not be the same as those that motivate him or her to work well.

Do the questions and answers correctly describe the remuneration process? If not, add the important missing information.

How adequate is the remuneration process for the needs of the organization?

	1	2	3	4	5	
Not Adequate						Very Adequate

D. ASSESSING SATISFACTION

The degree of employees' satisfaction with work is a complex variable, dependent upon, among other things:

- The meaning of work for the employee;
- The stage in the employee's work career;
- The type of organization, for example autocratic/democratic;
- The professional nature of the employee's role;
- The extent to which an employee has autonomy in determining his/her work role and pattern; and
- The alternative employment possibilities open to an employee, that is, the extent to which his/her skills/knowledge are transferable between different employees.

The above range of variables demonstrates the complex nature of the subject. Further, care must be taken by the manager to avoid the danger of assuming that, given the same set of circumstances, all employees will show the same degree of satisfaction. Research, together with a manager's personal experiences, clearly shows that employees, both individually and in work groups, exhibit different degrees of satisfaction. Although any manager may attempt to create a working environment which will promote a high level of motivation among their staff, care must be taken to consider each employee individually.

It is clearly important for the efficient working of an organization or department for a manager to be aware of his/her staff's satisfaction and to initiate steps to improve it when possible.

Indicators which may be used by a manager to assess satisfaction fall into three main groups as follows: individual employee satisfaction, complaints and structural deficiencies.

Individual employee satisfaction

The number of grievances reported may be used by managers to assess the satisfaction of an individual or related group of staff. Both the quantity and degree of grievance are important, but the manager will always need to exercise managerial judgement as to whether he or she should initiate a response.

An employee's satisfaction with his/her job will vary between extreme positions. These "boundary" positions will be "totally satisfied" and "totally dissatisfied." In order to assess where an employee lies on this scale, the manager will need to be aware of the true meaning of an individual employee's behavior. Managers should, therefore, develop a model to suit their own circumstances based upon the pattern of the one shown below.

Degree of Satisfaction with Job	Totally Dissatisfied	Dissatisfied	Neither Satisfied nor Dissatisfied	Satisfied	Totally Satisfied
Possible behavior exhibited by an employee.	Leaves employment when alternative employment required but not obtained. High level of absenteeism. Low output. Articulates a large number of grievances to the manager.	Leaves employment when alternative employment required and obtained. Some degree of absenteeism. Low output. Articulates some grievances to the manager.	Sees employment as necessary and performs at an acceptable but not high level. Alternative employment may be pursued.	Performs at more than acceptable level, seeks advancement and sees work as an important part of "life" career.	Performs at a high level, patterns being committed and motivated in the job. Actively seeks advancement and sees work as an integral part of "life" career.

Complaints articulated to the manager by others on employee's, or work group's, performance

Both the number and degree of these complaints either from within the organization or from consumers, can provide the manager with some indicators of satisfaction. As with employee satisfaction, care must be taken to avoid making over-generalizations from these complaints but, clearly, in certain circumstances it will be the manager's duty to investigate the complaint thoroughly and take corrective action.

Both these types of indicators can be seen in terms of a manager reacting to either behavior patterns displaye ' by the employee, or complaints made by others.

Structural deficiencies

As indicated by Child (1977) these indicators are less easy to quantify and rely upon a manager's degree of insight and his willingness to initiate corrective action before the situation becomes too complex and acute. The indicators include:

- Overload. This can be manifested by the working of excessive overtime (paid or unpaid) and the slowing down of work as a employee becomes over-stretched. The manager's response may include job assessment together with investigating areas such as delegation of responsibility and the need for training activities for those employees whose overload is a function of their own competence.

- Conflict of interest between departments. This may well be a function of the organization structure, as well as personalities. Careful attention will need to be given to both the communication and need for integration between departments.

- Lack of innovation. A manager's role will be to assess the main reasons for this and then to take measures to ensure that the climate within the organization ensures that new ideas are both generated and viewed in a receptive manner. These measures may include such things as suggestion schemes, possibly with financial incentives, and a good communication system throughout the organization.

- Role clarification. Over time the strict adherence to formal statements of objectives, job descriptions, procedure manuals, and so on, may well be bad for efficient performance. A manager must ensure that regular assessment is made of the relevance of these formal documents or working practices, and that changes are made in them as situations change. In order to increase the possibility of employee satisfaction, these changes are better undertaken together by the manager and the employee or related groups of employees.

A further need of the manager is to ensure that employees are not only clear about how and why they perform their duties but also how well they are actually performing them. Some form of appraisal is, therefore, necessary. No one method is universally correct, but the following should be given some consideration:

- How often should appraisal take place?

  _____

- How formal/informal should the appraisal be?

  _____

- Are objective standards of performance available against which to compare an employee's actual performance?

  _____

- Should appraisal take place in only exceptional circumstances, that is when an employee's standard of performance is well below that expected?

  _____

In conclusion, it can be seen that satisfaction, both in its assessment and in its maintenance or improvement, is not easy to analyze. The manager's judgemental skill, insight, and own authority will clearly be of major importance in the development of a satisfied work force. The very complexity of assessing satisfaction should not be a reason to avoid it. By considering the fundamental questions outlined above, a manager can begin to understand the behavior of his/her

staff, assess the need to take action and then, in a considered way, initiate action to improve the effectiveness of the staff he or she manages.

Do the questions and answers correctly describe employee satisfaction? If not, add the important missing information.

How adequate is satisfaction for the needs of the organization?

	1	2	3	4	5	
Not Adequate						Very Adequate

E. ASSESSING PRODUCTIVITY

As stated in the module overview, the performance of those who manage human resources in health services is particularly important in the light of the high labor-intensity of health agencies. It is therefore clear that the performance of the human resources themselves is crucial, and it is on this area that the present section focuses. You should note that although the usual concept of "productivity" refers only to the ratio of labor input to output, this section covers a somewhat broader range of issues. This is because the "product" of health care agencies is not easy to define and is subject to debate.

Health Outcomes

Outcomes of the activities of health workers in terms of the health status of patients and clients are difficult to assess. This is partly because of lack of concensus about the precise objectives of these activities, but more particularly because of two other factors. First, there is difficulty putting into operation the concept of health status in a large scale sense, beyond the use of mortality statistics. Second, there is difficulty in establishing a cause and effect link between the activities of health workers and the health status of populations. Although research in epidemiology and other disciplines is advancing in all these areas, it has not as yet provided tools to be used by the average health organization manager. Hence, the examination of health outcomes as a measure of employee performance seems at the moment to be a rather limited prospect. This does not mean to say that managers should not keep the issue in mind, and the following two questions may help to do this.

Where there are groups of workers in your organization with the responsibility of tackling particular diseases, has the incidence of these diseases declined? What factors other than the workers' efforts need to be taken into account in assessing the trend?

_____

_____

_____

_____

Does your agency have any arrangements for the examination or review of the effectiveness of the efforts of health workers? (For example, professional standards review committees, peer review, therapeutics committees, etc.?)

_____

_____

The general point to be made here is that a questioning attitude should be maintained towards the organization's activities, and that there should be constant expert review (at the lowest level) of these concerns.

Quality of Care

The quality of health care is also an area where this assessment module is able to contribute relatively little, for it is not easily dealt with at the generalized level. (If you wish to investigate the area further you should consult the substantial literature which is becoming available; much of this is referenced in McLachlan, 1976.) In spite of these difficulties, there is one extremely important point which managers should bear in mind. Quality needs to be considered as a control when examining trends in output (that is, quantity). Thus:

> Are there any trends of increasing output at the expense of the quality of health care being provided by your organization?
>
> _____
>
> _____
>
> _____
>
> If so, is the new level of quality acceptable, bearing in mind available health resources and their distribution?
>
> _____
>
> _____
>
> _____

You should bear in mind that in some cases quantity may be preferable to quality. If a service level can be considerably increased by, say, the use of less-trained levels of staff, there may be some complaint about lower quality, but not from those who now receive a service which was previously unavailable to them.

Outputs of Service Organizations

It is therefore in the examination of outputs of health service workers where most effort is likely to be devoted. Two points should be borne in mind throughout:

- Measurement of output assumes that the activity or product being measured is worthwhile; and
- If employees are judged on a particular measurement of output, they will often react by concentrating on this output. However, problems may occur if the activities being measured represent only part of the activities which the employee is expected to perform, since concentrating on the measured activities is likely to be at the expense of the unmeasured ones (Gouldner, 1955).

Do trends in health service outputs match the organization's (or government's) priorities? Such trends can be measured in terms of the following:

- Resources devoted to particular care groups;
- Resources devoted to particular services; and
- Whether increased resources are being used to treat additional numbers of patients/clients or to deal with existing ones more intensively in terms of treatment or diagnosis.

A failure to follow priorities set at the higher level should provoke an examination of the decision-making and management structures in the organization.

What trends are there on the utilization rates of health care facilities? Such trends can be measured in terms of:

- Patients per bed per year;
- Bed occupancy (percentage of days occupied in one year); and
- Patients' average lengths of stay in hospital for particular specialties or diagnosis categories.

Similar measures can be used for the utilization of other facilities such as equipment, operating theatres (rooms), clinics, etc. In examining utilization it should be remembered that trends may be affected by demand levels.

What changes have there been in units produced per employee or per unit of time? Units of output will be self-evident in some cases, for example:

- Vaccinations given;
- Quantity of linen laundered;
- Number of outpatients seen; or
- Floor area cleaned.

_____

_____

_____

_____

Remember that, even if expressed as output per employee, it is usually the work of groups that is being examined.

To what extent are employees meeting the demand for health services? For instance, what are the trends in the size of waiting lists and the length of waiting times?

_____

_____

This last measure needs to be treated with some caution if evaluation of staff is to be based upon it. On one hand staff should be expected to have some regard for levels of demand, but on the other hand there is some evidence that waiting lines are independent of level of service provided. Indeed, like waiting lines for the cinema, they may be a mark of success.

Managerial Overload

Are managers in your organization spending excessive hours at work? Hard work is not necessarily a sign of good management; excessive hours may well result in a lower quality of decision making and slower communications (Child, 1977). Clearly the causes of any trends towards poorer productivity are likely to be complex and can in any event be identified only at the lowest level situation. However, the following checklist (which is adapted from Boydell, 1971) will to be helpful in the identification process. Poor "productivity" may be due to one or more of the following:

- Incorrect setting of targets: Have unrealistic targets been set?
- Lack of organizational plans and objectives;
- Lack of employee competence;
- Lack of motivation of employees;
- Unsuitable equipment or materials;
- Inappropriate methods of work;
- Poor physical working environment;
- Poor management of leadership;
- Poor information about the relationships and activities of other relevant sections of the organization; or
- Group norms among employees: Are they in opposition to management intentions and standards?

Investigating Poor Productivity

In some ways the remaining sections of this module constitute suggestions for the investigation of poor productivity, but productivity is not the sole criteria by which health agencies should be judged, and for this reason the module goes beyond it. It is perhaps helpful, however, to suggest at this point some of the factors potentially associated with poor productivity.

Are production targets or expectations realistic?

This can be assessed in many cases by looking at trends (whether the target has previously been attained) or relevant comparisons (whether the target is being attained elsewhere).

Are employees competent?

If not, it may be a problem of recruitment, design of jobs, or training.

Are employees motivated to produce?

There are a large number of differing approaches to motivation, some of which may be more applicable in certain contexts and cultures than others. The module user who feels that remuneration may be the problem should refer to C. ASSESSING REMUNERATION. The user who wishes to familiarize himself with the many factors which can affect motivation should consult Thomason (1978) or Beach (1980).

How suitable are equipment, methods, and materials used in the organization?

Unsuitable equipment etc., can lead directly to low productivity or poor quality, or indirectly by affecting motivation.

How good is the working environment?

Excessively hot or cold temperatures, dirt, lack of space, poor lighting or ventilation, and other factors can make efficient working impossible, and may also affect motivation adversely.

How well are employees aware of rules, procedures and the roles and contributions of other parts of the organization in relation to their own part?

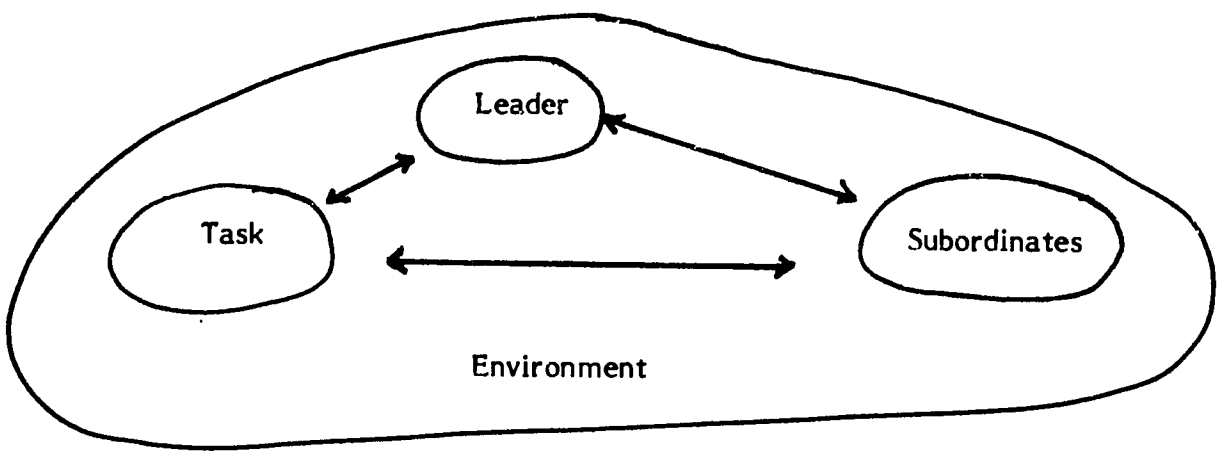
How close are work group standards to management or official expectations?

For some employees, status and satisfaction is obtained from sources other than those which contribute to productivity. It is difficult to generalize cross-culturally, but examples might include:

- approval by co-workers; or
- preference for sociability with co-workers.

How well-managed or well-supervised are the employees?

There exist numerous criteria by which good leadership is judged; it seems unlikely that any of these alone is the key to success. Perhaps the best generalization which can be offered is the assertion that the success of leadership is likely to be determined by how well the following four factors fit together:



It is not possible to generalize about what combinations are the best in given circumstances, but module users pursuing these investigations should consider the following characteristics of the four factors.

The Leader

- His/her value system--what does he/she believe in? What is his/her view of the world?
- Confidence in his/her subordinates--are they technically competent?
- His/her "habitual" style--the most comfortable way of operating.
- Assessment of personal contribution--how vital is his/her contribution?
- Need for certainty--his/her tolerance of ambiguity and level of risk-taking.
- Degree of stress and tension--a higher degree of stress leads to a "tighter" style.
- Age--older people tend to be more structuring.

Subordinates

- Their estimate of their own intelligence and competence--the more competent and professional they feel, the more control they will want over the work.
- Interest in the problem--who wants involvement in trivia?
- Tolerance of ambiguity--and their need for structure.
- Past experience--are they used to involvement, or to working closely together? Do they respect each other's competence?
- Cultural factors--younger staff tend to want more involvement. People in creative jobs want more responsibility for their own work.
- Whether there is some channel for the leader to hear subordinates' views.
- Subordinates' experiences of the leader's reactions to their views and ideas.

Task

- Kind of task--does the task require initiative or obedience? Is it a routine or creative task? Is it an open-ended or finite problem?
- Time-scale--participation takes time.
- Complexity--complex or simple.
- Do mistakes matter?--are we trying to avoid error? What degree of success is needed?
- Importance of task--unimportant tasks don't merit a lot of time and attention.

Environment

- Leader's organizational power--based on position, expertise, etc.
- Leader/group relationship--"credits" or "debits" based on past experience limit room for maneuver.
- Organization norms--the "culture"--hours of work, dress, degree of informality.
- Organizational structure--is the organization centralized or decentralized?
- Variety of tasks--some may be simple or complex, short- or long-term, tangible or intangible.
- Variety of subordinates--workgroups change--career development implies movement.

Do the questions and answers correctly describe productivity? If not, add the important missing information.

How adequate is productivity for the needs of the organization?

Not Adequate	1	2	3	4	5	Very Adequate

F. SUMMARIZING THE ASSESSMENT PROCESS

1. This module has helped you collect information on the following subfunctions or parts of the management process:

Personnel Management Information
Manpower Supply
Remuneration
Satisfaction
Productivity

2. Using the adequacy scales you marked at the end of each section of the module, make a list of problems your organization has for each subfunction. Record your answers in Table I. which follows. Table I. will become a list of problems which are keeping your organization from performing effectively or meeting its goals.

3. Your assessment team should decide which is the most serious--or priority--problem for each subfunction. Record these answers also in Table I.

4. For each priority problem stated in Table I, list as many solutions as you can think of. Record these in Table II.

5. Using the scale below, decide which solution for your priority problems will make the most difference to your organization. Record the scores in Table III.

#1 A lot of impact
#2
#3
#4
#5 Very little impact

6. Estimate the ease of implementation for each solution. How feasible will it be to carry out this solution in your organization? Record these scores in Table III.

#1 Very easy to implement; very possible
#2
#3
#4
#5 Very difficult to implement; impossible

If you give a solution a #1, all of the necessary resources and authority are available. If you give a solution a #2, some of the necessary resources and authority are available and the rest can be easily obtained. A #3 means that the solution is questionable. It may not be possible to obtain the necessary resources and authority. A #4 will probably not work. A #5 is out of the question.

TABLE I.

PROBLEMS

Subfunction: _____

Problems: _____
_____
_____
_____
_____

Priority Problem:
(The most serious of these problems) _____

Subfunction: _____

Problems: _____
_____
_____
_____
_____

Priority Problem:
(The most serious of these problems) _____

TABLE I, continued

Subfunction: _____

Problems: _____
_____
_____
_____
_____

Priority Problem:
(The most serious of these problems) _____

Subfunction: _____

Problems: _____
_____
_____
_____
_____

Priority Problem:
(The most serious of these problems) _____

TABLE I, continued

Subfunction: _____

Problems: _____
_____
_____
_____
_____

Priority Problem:
(The most serious of these problems) _____

Subfunction: _____

Problems: _____
_____
_____
_____
_____

Priority Problem:
(The most serious of these problems) _____

TABLE II.

SOLUTIONS FOR PRIORITY PROBLEMS

Priority Problem: _____

Solutions _____
_____
_____
_____
_____

Priority Problem: _____

Solutions _____
_____
_____
_____
_____

Priority Problem: _____

Solutions _____
_____
_____
_____
_____

TABLE II., continued

Priority Problem: _____

Solutions _____
_____
_____
_____
_____

Priority Problem: _____

Solutions _____
_____
_____
_____
_____

Priority Problem: _____

Solutions _____
_____
_____
_____
_____

TABLE III.

ANALYSIS OF SOLUTIONS

Priority problem: _____

Solutions	Estimated Impact	Ease of Implementation

Priority problem: _____

Solutions	Estimated Impact	Ease of Implementation

Priority problem: _____

Solutions	Estimated Impact	Ease of Implementation

TABLE III, continued

Priority problem: _____

Solutions	Estimated Impact	Ease of Implementation

Priority problem: _____

Solutions	Estimated Impact	Ease of Implementation

Priority problem: _____

Solutions	Estimated Impact	Ease of Implementation

Problem Analysis Suggestions

Moving from problem identification to problem solution is a very difficult task. Many solutions fail because they were not carefully analyzed before being tried; for example, required resources were not anticipated, staffing estimations were too low, work stages were not properly ordered, etc.

Once problems have been identified, it is helpful to classify problems. Is it a people problem or a technical problem? Is the cause of the problem inside your organization or outside it? Does the solution of the problem lie within your organization or outside? These answers will help you later as you analyze the difficulties with implementing each of these solutions.

A very important aspect of problem solving is how important the problem is to your organization. What impact will solving the particular problem have on the overall performance of the organization?

What are the strengths which you have in the organization which you can mobilize to help solve the problem?

The MAPS modules stop short of problem analysis. It is a very complex and important process which cannot be accomplished by writing down a few scores. There are several references which might be helpful to you in your analysis of problems solutions--weighing alternative solutions, analyzing constraints, assessing political influence necessary for implementation, etc.:

Abramson, Robert. An Integrated Approach to Organization Development and Performance Improvement Planning: Experiences from America, Asia, & Africa. West Hartford, Conn.: Kumarian Press, 1978.

Abramson, Robert, & W. Halset. Planning for Improved Enterprise Performance: A Guide for Managers and Consultants. Geneva: International Labour Office, 1979. (Management Development Series, No. 15)

Bainbridge, J., & S. Sapirie. Health Project Management: A Manual of Procedures for Formulating and Implementing Health Projects. Geneva: World Health Organization, 1974.

Brown, Gordon, A. Kaluzny, & H. Feirman. Options Analysis and Implementation in Management Assessment. Washington, D.C.: Association of University Programs in Health Administration, 1981.

Delp, Peter, A. Thesen, J. Motiwalla, & N. Seshadri. Systems Tools for Project Planning. Bloomington: International Development Institute, Indiana University, 1977.

Harari, Denyse. The Role of the Technical Assistance Expert. Paris: Development Center, Organization for Economic Cooperation and Development, 1974.

Mayo-Smith, Ian. Planning a Performance Improvement Project. West Hartford: Kumarian Press, 1980.

REFERENCES

It is recognized by the authors of this module that users may have difficulty both in obtaining management textbooks and finding the time to study them. Hence, references have been kept to a minimum, as explained previously, and use of the module is not dependent on other sources. It may be, however, that some managers will wish to pursue certain aspects of the module in more detail.

The provision of a wide range of references for each section of the module has been thought to be impractical both because of the widely differing stances adopted by authors, the tendency to cultural specificity of such writing, and because any list would quickly become outdated. The authors therefore suggest that any User wishing to go further adopts one of the following alternatives:

- consult any convenient educational institution which operates in the management field;
- consult any good personnel management basic textbook (the authors recommend Thomason 1978 or Beach 1980) which will contain a range of references on any area of this module; or
- Write to one of the authors of this Module (the address is on the inside front cover), who although unable to give detailed advice on specific problems are willing to advise on further reading.

Beach, D. S. (1980) Personnel: the Management of People at Work. (New York and London, Collier-Macmillan, 4th Edition).

Boydell, T. H. (1971) "The Identification of Training Needs" Journal of the British Association for Commercial and Industrial Education, June.

Child, J. (1977) Organizations: a Guide to Problems and Practice. (London and New York, Harper and Row).

Dalkey, N. and Helmer, O. (1963) "An Experimental Application of the Delphi Method to the Use of Experts" Management Science, Vol. 9, No. 3, pp. 458-467.

Greenwood, E. H. et al. (1981 forthcoming) Problem Solving Matters--Case Studies in NHS Administration. (London, Institute of Health Service Administrators).

Hall, T. L. and Kleczkowski, M. (1978) "Manpower Planning and the Political Process" in (eds) Hall, T.L. and Meijia, A. Health Manpower Planning: Principles, Issues, Methods. (Geneva, World Health Organization).

Harrison, S. R. (1981) "The Politics of Health Manpower" in (eds) Long, A.F. and Mercer, G. Manpower Planning in the National Health Service. (London, Gower Press).

Hornby, P., Ray, D. K., Shipp, P. J. and Hall, T. L. (1980) Guidelines for Health Manpower Planning. (Geneva, World Health Organization).

Lammers, C. J. and Hickson, D. J. (1979) Organizations Alike and Unlike. (London and Boston, Routledge and Kegan Paul).

Lindblom, C. E. (1959) "The Science of Muddling Through" Public Administration Review, Vol. 19, No. 2.

Maynard, A. and Ludbrook, A (1980) "What's Wrong with the National Health Service?" Lloyd's Bank Review, October.

McLachlan, G. (ed.) (1976) A Question of Quality: Roads to Assurance in Medical Care. (London and New York, Nuffield Provincial Hospitals Trust/Oxford University Press).

Raybould, E. and Minter, A. (1971) Problem Solving for Management. (London, Management Publications Ltd.).

Thomason, G. F. (1978) A Textbook of Personnel Management. (London, Institute of Personnel Management, 3rd Edition).

World Health Organization (1978) Report on the International Conference on Primary Health Care, Alma Ata, USSR 6-12 September. (Geneva, World Health Organization).

World Health Organization (1976) Statistics for 1972. Volume III (Geneva, World Health Organization).

Appendix

W.H.O. CLASSIFICATION OF HEALTH OCCUPATIONS

(1972)

OCCUPATION & LEVEL OF EDUCATION	PERSONNEL TO BE INCLUDED IN THE DATA
1. Physicians High (university) level	All graduates of a medical school or faculty actually working in your country in any medical field (practice, teaching, administration, research, laboratory, etc.) Have undergone 5 or 6 years training at university level and has gained a degree in medicine and surgery. This varies from "MD" in most of Europe and the USA to "MB," "BS" (or the equivalent) in the British and Commonwealth areas, where MD is reserved for those who complete a thesis equivalent to a Ph.D.
2. Medical assistants Middle level	Personnel performing duties ranging from simple curative procedures for common diseases, to wider medical care that may include a variety of diagnostic, curative and preventive practices. These personnel have no medical education of university level or equivalent. Usually they have a background of 3 years nursing plus an extra year of diagnostic and therapeutic training. Occasionally recruited directly and given the equivalent training.
3. Multipurpose health auxiliaries Basic level	Personnel who may have no more than elementary general education and a few months of in-service training, and who provide basic health services at the village level.
4. Dentists/Dental surgeons (a) High (university)level	(a) All graduates of a dental school (or faculty of odontology or stomatology) actually working in your country in any dental field.
(b) Middle (non-university) level	(b) Personnel qualified from a dental school of non-university level and licensed to practice dentistry in your country.

OCCUPATION & LEVEL OF EDUCATION	PERSONNEL TO BE INCLUDED IN THE DATA
5. Dental operating auxiliaries	Personnel performing a limited range of diagnostic, preventive, and curative services in dentistry. These personnel usually do not have complete dental education of university level or equivalent.
6. Dental non-operating auxiliaries (a) Dental laboratory technicians (b) Dental chairside	Dental non-operating auxiliaries who assist dentists and dental operating auxiliaries in their clinical work but who don't carry out any independent intra-oral procedures. These dental personnel usually have technical training either in formal courses or by apprenticeship.
7. Pharmacists/ Chemists High (University) level	All graduates of a faculty or school of pharmacy actually working in your country in pharmacies, hospitals, laboratories, etc.
8. Pharmaceutical assistants Middle level	Personnel assisting in pharmacies, hospitals or dispensaries to make and dispense medicaments, under the supervision of a pharmacist. These personnel do not have pharmaceutical education of a university level or equivalent.
9. Veterinarians/ Veterinary surgeons High (university) level	All graduates of a faculty or school of veterinary medicine actually working in your country in any field of veterinary activity, including teaching and public health.

OCCUPATION & LEVEL OF EDUCATION	PERSONNEL TO BE INCLUDED IN THE DATA
10. Animal Health assistants Middle level	Personnel carrying out limited diagnostic, preventive and curative veterinary services. These personnel have no veterinary education at university level.
11. Professional Midwives High level (a) Non-nurse midwives (b) Nurse-midwives	All graduates of a midwifery school actually working in your country in any field of midwifery (practice in institutions and community health services, teaching, administration, private practice, etc.).
12. Assistant midwives/ auxiliary midwives Middle level	Personnel carrying out midwifery duties in normal obstetrics, in institutions and other health services, in principle under the supervision of a professional midwife. These personnel do not have the full education and training of a professional midwife.
13. Auxiliary Nurse-midwives Middle level	Personnel performing certain nursing duties and midwifery duties in normal obstetrics, in principle under the supervision of a professional nurse or midwife. These personnel have simpler education and training in nursing and midwifery than the professional nurse-midwife.

OCCUPATION & LEVEL OF EDUCATION	PERSONNEL TO BE INCLUDED IN THE DATA
14. Professional Nurses High level	All graduates of a nursing school in your country in any nursing field (general nursing, specialized clinical nursing services in mental health, pediatrics, cardiovascular diseases, public health or occupational health, teaching, administration, research, etc.). These personnel are qualified and authorized to provide the most responsible and competent professional nursing service. Usually called Registered Nurses (RN) qualifying from a nursing school. Form the bulk of the "Charge Nurses," "Ward Sisters" and "Nursing Officers" in charge of hospitals, and all senior ranks in the hierarchy.
15. Assistant nurses/ auxiliary nurses Middle level	Personnel providing general patient care of a less complex nature in hospitals and other health services, in principle under the supervision of a professional nurse. These personnel do not have the full education and training of a professional nurse, though they start with a lower academic background and have similar training to the RN. Form the bulk of the ward nursing strength. In some countries they go to do courses in midwifery and health visiting (EN). In some countries (e.g., Kenya) there is a wide category of community nurses; ENs are now put through all 3 disciplines together, i.e. general nursing, midwifery and community health. Auxiliary nurses (basic level) have little or no formal training and minimal educational background.
16. Nursing and midwifery aides Basic level	Personnel performing specified non-technical tasks in institutions or community health services under nursing supervision. These personnel usually have on-the-job or short training and little or no educational background.

OCCUPATION & LEVEL OF EDUCATION	PERSONNEL TO BE INCLUDED IN THE DATA
17. Physiotherapist/ Physical therapists	Professional personnel treating patients by exercise, physical means, and massage, usually prescribed by a physician.
18. Medical Laboratory technicians High level technicians	Professionals who have graduated from a school for laboratory technicians and work under the responsibility of a scientific or medical specialist. They also participate in the supervision, teaching and training of subordinate technical personnel.
19. Assistant medical laboratory technicians Middle-level technicians	Auxiliary technical laboratory personnel working under the supervision of a professional laboratory technologist or technician. These auxiliary personnel do not have the full training and theoretical knowledge of the professional.
20. Medical physicists High (university) level	All graduates of a university or faculty of natural science with qualifications in physics and mathematics, and special education and training in the field of medical physics.
21. Medical radiological technicians High level technicians	Professionals who have graduated from a school for radiological technicians and work under the general responsibility of a specialist or a physician in the field of radiology. If possible, indicate the distribution of medical radiological technicians according to their field of activity: (a) TMR (General) (b) MRT (Diagnosis) (c) MRT (Therapy)

OCCUPATION & LEVEL OF EDUCATION	PERSONNEL TO BE INCLUDED IN THE DATA
22. Assistant medical radiological technicians Middle level technicians	Auxiliary medical radiological personnel working under the direct supervision of a medical radiological technician or under a specialist or physician.
23. Sanitary engineers High (university) level	Professionally qualified engineers specialized in the prevention, control, and management of environmental factors that influence man's health adversely, e.g. in the design and operation of facilities for water supply, waste disposal, and air quality control and the planning and administration of environmental health programs.
24. Sanitarians High level technicians	Professional personnel other than physicians inspecting the environment, promoting measures to restore or improve sanitary conditions (food inspection, inspection of public premises, etc.) and supervising the implementation of these measures.
25. Auxiliary sanitarians Middle level technicians	Personnel who perform to a limited extent the functions of a professional sanitarian but do not have the full training and theoretical knowledge of the professional.

OCCUPATION & LEVEL OF EDUCATION	PERSONNEL TO BE INCLUDED IN THE DATA
26. Other scientific or professional personnel Examples: Biochemists Biologists Entomologists Psychologists Nutritionists Dieticians Occupational therapists Speech therapists Other special therapists Health educators Health statisticians Medical record librarians	Scientific (university) or professional personnel working in the health field, but not classifiable under previous items (e.g. excluding physicians).
27. Other technical personnel Examples: Cardiology technicians Encephalographers Opticians Orthpaedic technicians Hearing aid technicians Health statistical technicians Medical record technicians	Technical personnel in the health field not classifiable under previous items.

OCCUPATION & LEVEL OF EDUCATION	PERSONNEL TO BE INCLUDED IN THE DATA
28. Other health auxiliaries and aides Examples: Microscopists Laboratory aides Dark-room assistants	Health auxiliaries not classifiable under previous items, who generally have not more than primary education and an elementary technical training by apprenticeship or in-service training.
29. Practitioners of traditional medicine/ midwifery Examples: Herb doctors Ayurvedic doctors Lay medical practitioners Medicine men Acupuncturists Traditional birth attendants	