

## Part 2

# The Foundation for Introducing Human Resource Performance Indicators

### HR INDICATORS AND HUMAN RESOURCE DEVELOPMENT

What is being addressed through HR performance indicators are issues around the general development and utilization of human resources (HRD). HRD can be defined as the development and integration of procedures, policies and practices to recruit, maintain, develop and use employees to help the organization meet desired goals. The implications for HRD in achieving high levels of health sector performance are in the management of:

- \_\_\_\_\_ staff quality
- \_\_\_\_\_ mix of staff cadres
- \_\_\_\_\_ number of staff
- \_\_\_\_\_ staff distribution
- \_\_\_\_\_ staff costs
- \_\_\_\_\_ staff productivity
- \_\_\_\_\_ education and training
- \_\_\_\_\_ human resources management.

All of these have some part to play in health service organizational performance. However, to engage with these human resource variables will require a systematic management of the changes needed in the workforce condition, management and culture. In other words, the total array of components that constitute the HR system must be considered in a managed process of HRD from which improved organizational performance can emerge. This can be presented under six components, as shown in Table 1 overleaf.

It will be the changes in these components of HRD that will facilitate improvements in individual and organizational performance.

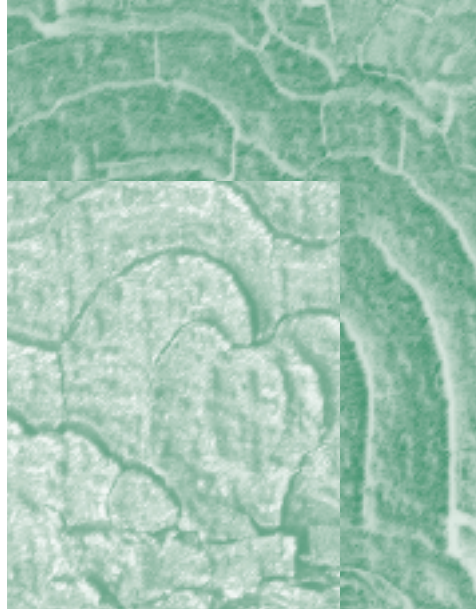
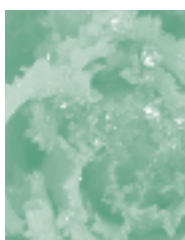




Table I HR COMPONENTS

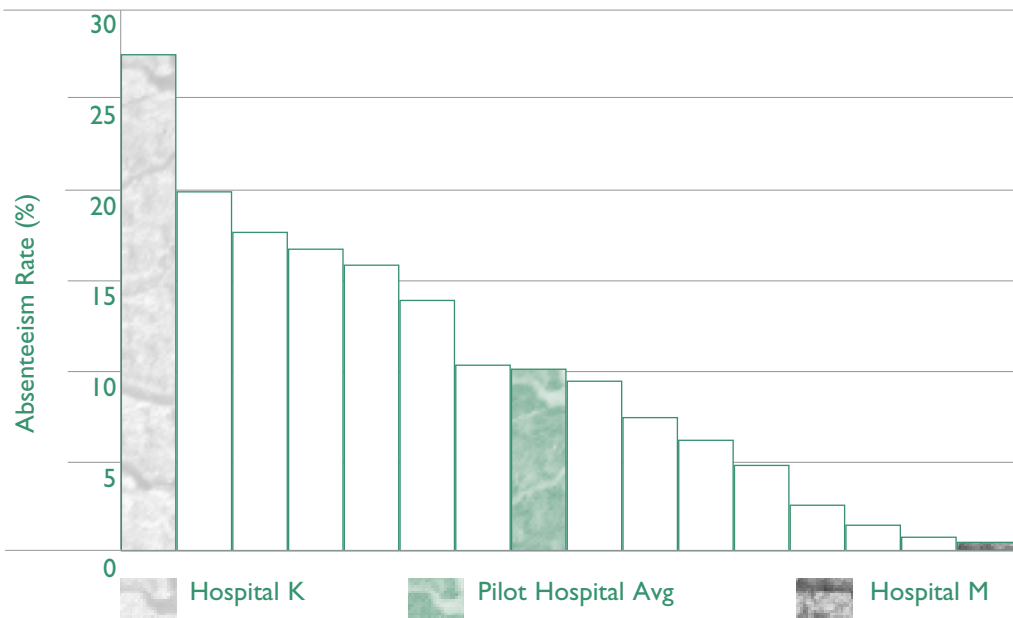
<b>HR Capacity</b> Budget HRD Staff HRD Organization	<b>HR Data</b> Employee Data Computerization of Data Personnel Files
<b>HR Planning</b> Mission and Goals HRD Planning HRD Policy	<b>Performance Management</b> Job Descriptions Supervision Work Planning & Performance Review
<b>Personnel Policy and Practice</b> Job Classification System Compensation & Benefits System Recruitment, Hiring, Transfer & Promotion Orientation Programme Policy Manual Discipline, Termination, Grievance Procedures Other Incentive Systems Union Relationships Compliance with Labour Laws	<b>Training</b> Staff Training Management/Leadership Development Links to External Pre-Service Training

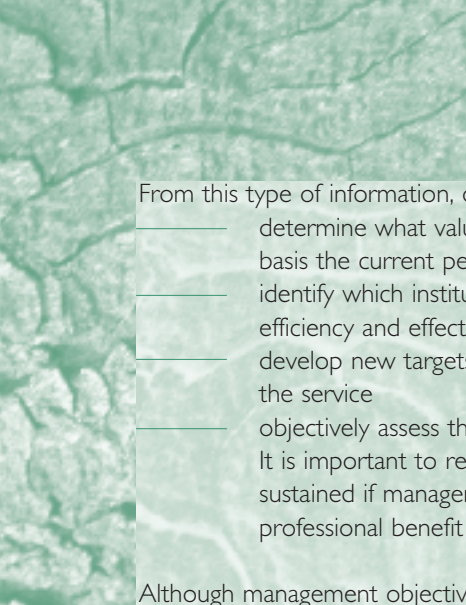
## USING HRH (HUMAN RESOURCES FOR HEALTH) INDICATORS

Performance in relation to targets can only be a relative measure, never an absolute one. A reference point for individual indicator values is required; this often (but does not always) is the average value for all similar organizations. As noted above, individual institutions can compare their indicator values with those of similar institutions. This - known as 'exception reporting' because it identifies differences or exceptions from the norm - is an essential first step in pointing managers to where they need to take action in order to correct problems or to understand why they are doing well, so that others can learn from them.

The principle guiding the use of HRH indicators is that they are serve to record performance in a large number of institutions within the health system simultaneously and at regular intervals. This means that the indicators record not only current achievement but also the range among various institutions of a similar kind (see Figure 2, and further examples in Part 3 of this document.)

Figure 2 ABSENTEEISM RATE (AVERAGE NUMBER OF STAFF ABSENT DIVIDED BY AVERAGE NUMBER OF STAFF EMPLOYED), EXPRESSED IN PERCENTAGES, FOR A SAMPLE OF DISTRICT HOSPITALS





From this type of information, decision makers can:

- \_\_\_\_\_ determine what value is a suitable norm or standard of performance, using as a basis the current performance range
  - \_\_\_\_\_ identify which institutions are demonstrating good and bad practice in terms of efficiency and effectiveness
  - \_\_\_\_\_ develop new targets that can be realistically achieved in future by managers in the service
  - \_\_\_\_\_ objectively assess the performance of managers within the health system.
- It is important to recognize from the outset that the use of indicators will only be sustained if managers at all levels in the health system can see some personal and professional benefit from their use.

Although management objectives (and therefore the specific indicators) will vary from country to country, a number of common themes and classifications are not country-specific and do not change. For example, it is helpful to classify indicators into groups that which characterize the general relationships between HRH and other elements of the health system. At the broadest level, this suggests two categories:

1 HRH indicators directed towards assessing how well the staff are:

- a managed
- b trained
- c motivated
- d appropriately skilled
- e sufficient for the work required
- f supported (working conditions).

2 The connection between the HRH situation and the products of the health system, incorporating indicators to monitor:

- a skills available
- b caseloads
- c type of population and needs
- d morbidity
- e preventable mortality
- f health awareness
- g recurrent illness.

Using several different indicators covering a related topic of interest highlights an area of interest from different angles and provides more leads into understanding how the system is working. Using a single indicator on its own is not sufficient.

Indicators rarely show the precise reasons for local management successes or failures; rather they highlight issues and point to potential causes. More detailed subsequent investigation, beyond the scope of the indicators themselves, is usually necessary to gain a complete understanding of the underlying causes from which appropriate action can be determined. This is discussed in more detail in Part 3.

## A FRAMEWORK FOR INTRODUCING A PERFORMANCE INDICATOR SYSTEM

Previous experience in a developed country (and that gained more recently in developing country pilot projects) shows that there are conditions favouring the successful introduction of a management indicator system.

Specifically, this must be supported by the Ministry or Department of Health and top management, have credibility among users, be well maintained and kept up to date, be used regularly and continue to be developed.

Such a system will:

- \_\_\_\_\_ focus on relative rather than absolute performance
- \_\_\_\_\_ allow for inter-organizational comparisons
- \_\_\_\_\_ have an efficient and effective indicator presentation and distribution system
- \_\_\_\_\_ offer high quality training and support for those using indicators.

With this in mind, the following general principles and stages to introducing HR indicators into a health system are suggested. Management objectives - and administrative or managerial arrangements - will vary from country to country. This will require local adaptation of guidance, but the general principles remain a good starting point for development.

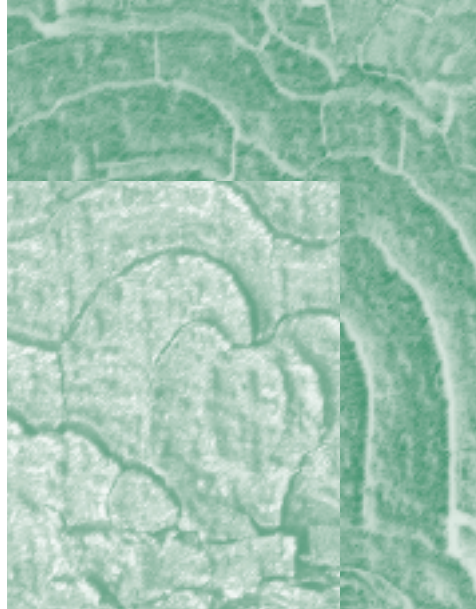
The introduction of indicators must follow a basic set of principles that both minimizes the impact of the initiative on resources and is consistent with managerial attitudes and practice. Thus, indicators ideally should:

- \_\_\_\_\_ be drawn on available or easily obtained data to the maximum extent possible
- \_\_\_\_\_ be useful to - and used by -those who provide the data
- \_\_\_\_\_ be integrated with current information systems
- \_\_\_\_\_ be driven by the management development agenda and governed by a clear specification of service objectives
- \_\_\_\_\_ be seen as a part of - and interpreted within - the broad range of health service information.

The process must start with a clear and specific intention to improve management in the health system and a clear understanding of the role that that HR indicators have to play in this improvement. High-level support and recognition for this role is crucial if HR indicators are going to be introduced across the health system ; their use will only be sustained if managers in the health system also see that they bring personal and professional benefits.

To that end the introduction of HR indicators must be accompanied by other developments such as:

- \_\_\_\_\_ an organizational culture that encourages managers and staff to take the initiative in
- \_\_\_\_\_ improving performance and accepting the attendant risks
- \_\_\_\_\_ a career and reward system that rewards managers for reaching higher levels of achievement



- a specification of health service objectives that includes targets for managerial efficiency and effectiveness
- devolution of sufficient control over to local managers so they can realistically achieve their performance targets
- an information system that can sustain rapid movement and processing of data between field managers and central processing.

Given these general philosophical underpinnings, practical steps to make indicators operational can be built, as follows:

### 1 Establishing the objectives to be achieved using indicators

This is fundamental to the successful introduction of any indicators. In designing indicators, it has to be clear who wants the information and for what reason; for example, whether it is primarily for monitoring health service performance by the national or regional levels, or for local operational health management purposes, or a combination thereof. The activity of NGOs or of the private sector may also be important to monitor. Finally, it is important to consider how the information produced by the indicator system will relate to current or future planning and budgeting cycles.

### 2 Appraising current lines of accountability

The assessment of accountability is closely linked to step 1 above, since this will determine the structural and administrative arrangements for the development and use of the indicators. With the introduction of health sector reform in many countries, accountability has become more complex. Such an appraisal will help to highlight any apparent 'gaps' in management accountability and whether this, in turn, may cause problems in the future.

### 3 Establishing managerial levels at which the indicators are to be used

It is important to establish, early in the process of indicator development, the different levels to be involved, since indicators must be timely and relevant to the managers making use of them. Establishing this will also help determine which indicators are appropriate for given management levels and how frequently data must be collected or the indicators be disseminated.

### 4 Describing the required indicators

This is the stage at which the actual indicators are defined. Part 3 includes an initial list of HR indicators derived from workshops and field experience. This serves only as a guide and starting point and must be adapted as required for a given country and its indicator system objectives. This will mean extending, reducing or redefining indicators as required. The temptation when developing indicators to produce too many of them must be resisted both because of the difficulty in managing large volumes of data and because of the complexity of interpreting the resultant indicators.

### 5 Identifying current/required data sources

There will inevitably be a need to compromise between being able to obtain the 'ideal' data for a set of indicators and having to 'make do' with what is already available or straightforward to measure. The basic set of HR indicators in Part 3 has been established in the light of experience in using data systems in developing countries. Nevertheless, identifying data requirements and sources is an important early undertaking in setting up an indicator system.

## 6 Establishing data collection and processing procedures

If the indicators do require new data sources, we must consider how this is to be achieved (in the light of current mechanisms for data collection). A decision also must be made as to the level in the health system at which data must be collated and where the indicators themselves are to be constructed. Protocols for data collection must be set out for managers and staff working in the field.

## 7 Developing an indicator distribution network

A time scale for the collation and processing of data and for the development of the indicator sets must be set and should not conflict with current schedules for local planning, budgeting and review cycles. It is also necessary to decide in what format indicators must be presented (and whether with or without any supporting analysis); how and how often they are to be distributed; whom they must be given to; and what subsequent actions are to be taken by recipients.

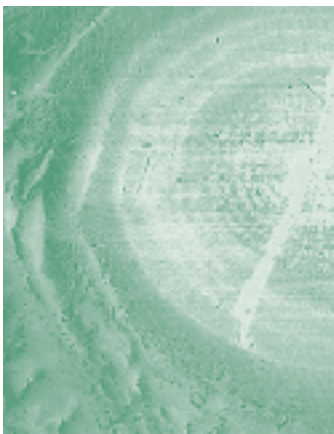
## 8 Setting up training and education in the use of indicators

This vital component is required from an early stage in setting up an indicator system and must encompass aspects such as:

- explaining why indicators are being introduced - it is important for managers at all levels to understand 'what is in it for them' and why they are being asked for their co-operation
- showing how managers can (and should) interpret indicators
- showing how they may actively use the raw data collected for indicators locally and even develop their own indicators for local use
- developing a reward system for local initiative in the use of indicators.

## 9 Designing overall monitoring and feedback arrangements for the indicator system

Some 'indicators of the indicators' can be helpful at higher management levels in the system to assess how the indicators themselves contribute to management performance and whether any adjustment is needed. This central overview is important even where decentralization of management to lower levels in the system is a primary health service management objective.



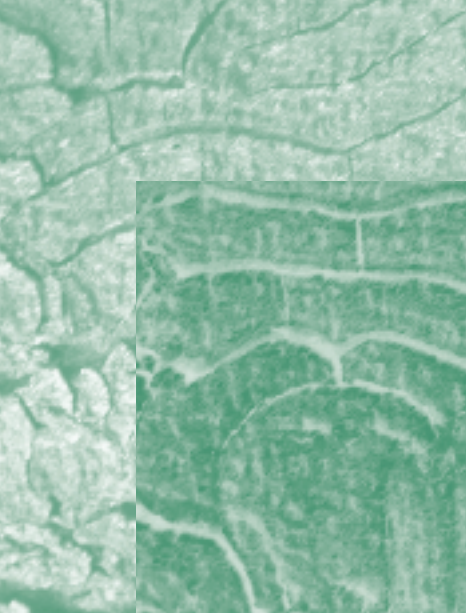


Table 2 POTENTIAL MANAGEMENT USE OF HR INDICATORS AT DIFFERENT LEVELS OF THE HEALTH SYSTEM

MANAGEMENT LEVEL	PURPOSES
Local health district	<p>Comparisons of HR performance with that of other districts; learning from the experience of other managers</p> <p>General understanding of HR management issues and general management development</p> <p>Providing purpose for the management of HR in the system through the collection of HR data</p> <p>Monitoring changes over time in HR issues within the district</p> <p>Negotiation with the region or centre for additional or different HR resources</p> <p>Allocation of resources to specific HR projects</p>
Regional level	<p>Review of performance of districts across region</p> <p>Indication of where regional action may be required in terms of management development or wider HR development issues</p> <p>Use for negotiations with districts/ centre over use of HR resources</p> <p>Regional HR policy setting and resource allocation</p>
National level	<p>National review of HR in health services</p> <p>National HR policy-setting and resource allocation</p>

## DEVELOPMENT STAGES IN THE ESTABLISHMENT OF AN INDICATOR SYSTEM FOR HR

Introducing any new practice into an organization invariably requires establishing a set of development 'building blocks'. These enable the organization to review progress in the new practice and to determine how - or whether - to proceed further. The steps presented here in the introduction of an HR indicator system suggest an overall cascade of training and development from national to regional and district levels.

### Phase 1 Achieving Commitment

The focus of this phase is to provide briefings to senior staff (usually involving central and regional officers) through a national workshop. The purpose of the briefings is to describe the use and potential benefits of HR indicators and to allow discussion on the wider practical implications of introducing indicators.

Successive objectives for this phase are:

- 1 A shared understanding among senior staff of the purpose and intention for using HR indicators.
- 2 Identification of the initial focus for efficiency and/or effectiveness improvements.
- 3 Agreement on the selection of key indicators.
- 4 Of appropriate reward strategies concerning the achievement of efficiency and effectiveness improvements.
- 5 Determination of an outline of staffing and resource requirements to support the initiative.
- 6 Agreement to proceed to the next phase and determination of an outline specification of field trial locations.

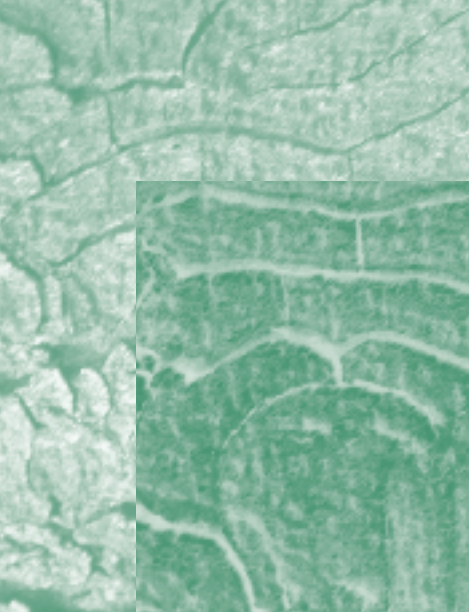
This period may take up to six months. Specific activities in this phase include:

- clarifying priorities for HR and performance issues
- producing a provisional set of appropriate HR indicators
- holding a workshop to include the preparation of presentation materials on HR indicators and on the objectives defined above
- identifying funds for the project and assembling a project team.

### Phase 2 Pre-Pilot Study - Field Trial Preparation

This phase is concerned with the preparatory arrangements for introducing HR indicators on a pilot study/ field trial basis. Some elements of Phase 2 may begin prior to the completion of Phase 1 activities. The objectives for Phase 2 are:

- 1 Creating a core project team comprising relevant expertise and skills (see Part 1, Costs and Benefits).
- 2 Determining the scale of the field trial and the locations of districts and/or organizational entities to be involved (eg health districts or hospitals). The number of locations must be sufficiently large that performance comparisons between units of the health service overcome variations because of different local circumstances.
- 3 Deciding in more detail, from the outline conclusions of Phase 1, the level of funding that may be required to support targeted performance improvements determined in Phase 1.
- 4 Securing the resources required to implement the field trial phase of the programme, with particular emphasis on costs for staff, training, data collection materials, data processing and follow-up investigations.



- 5 Specifying the implications for policy change that must be introduced to provide incentives for local managers in order to achieve performance improvements.
- 6 Identifying data sources of data, preparing proformas for data collection, collation and analysis, as well as testing the analytic tools and formats for presentation of results to be used during the field trial.
- 7 Preparing training materials and providing training in the preparation of data returns and in data processing to relevant staff in the regions and test sites.
- 8 Reviewing with local, district and regional managers their role in the collection and analysis of data and how the information can be used to identify and implement performance improvement.

This second phase may take a further six months.

### Phase 3 Pilot Study - Field Trials

The purpose of a pilot study of field trials is to develop:

- \_\_\_\_\_ processes for information collection, collation and processing, with a special
- \_\_\_\_\_ emphasis on developing techniques for managing data errors and nil returns.
- \_\_\_\_\_ skills in the analysis and presentation of the data and in producing comments on the results as well as identifying shortfalls in the information the indicators provide
- \_\_\_\_\_ management mechanisms to enable local and regional corrections to be made in the operational situation of the field site locations in order to improve HR performance
- \_\_\_\_\_ a baseline for HR performance standards.

Activities in this phase will include:

- 1 The distribution, collection and processing of data from the field test sites (at monthly intervals if possible) over a period of one year.
- 2 An evaluation of the collection and analysis process and the development and testing of corrections to these processes.
- 3 Visits to field trial locations to investigate the causes of identified high and low performance and to determine and implement subsequent actions needed (by the centre, regions and site locations) to improve performance.
- 4 The development of model analyses of data and of methods of analysis -in the form of operational manuals for use by managers across the health system.
- 5 The identification - from the results of the field trials - of a preliminary set of HR performance standards or performance change to be introduced across the country (if there is a decision to proceed into the fourth and final phase of this development process, q.v.).
- 6 A review and evaluation of the trial outcomes in terms of their performance, efficiency and effectiveness. The review will also include an assessment of the costs and cost effectiveness of the initiative as a whole.
- 7 The development of action proposals to expand the use of HR indicators across the country and integrate it with the normal health planning processes.
- 8 The training of trainers for providing training to district-level staff managers.

The successful conclusion of this phase leads directly to the introduction of HR indicators as a routine activity in the annual cycle of events in the health system. Phase 3 will probably require a minimum of eighteen months to complete.

#### Phase 4 Whole Sector Roll-out

During this phase the production of HR indicators will be put on a regular basis and become part of the annual review and planning process.

The use of HR indicators can be expanded:

- in one step across the country
- on a step-by-step geographic basis, region by region
- by type of institution, eg all districts or hospitals.

This will depend on factors such as:

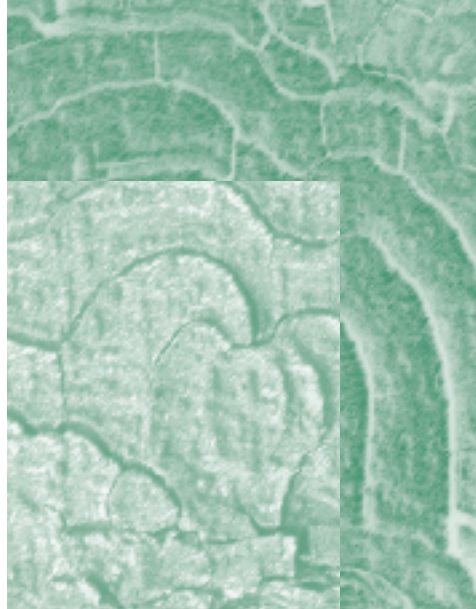
- priorities for performance improvement that influence the type and distribution of institutions selected as priorities.
- the need to have a large number of institutions involved, where this is possible, in order to provide a basis for comparison between institutions that overcomes individual variations in local circumstances
- requirements that HR indicators be applied to similar types of institutions (eg whole districts, hospitals, primary care facilities)
- capacity of the administrative system to differentiate between those elements of the health system not involved with the HR indicator system and those that are.

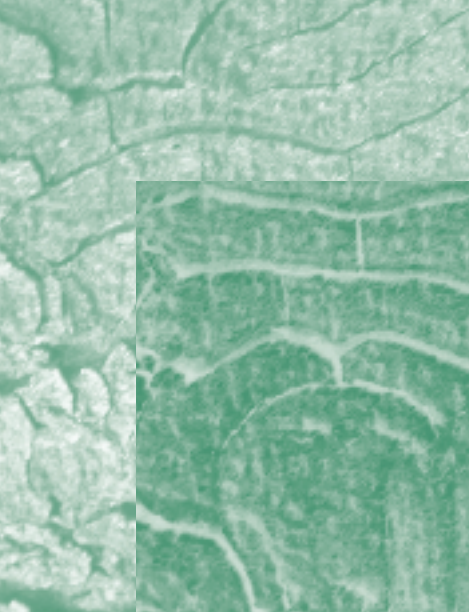
How to expand coverage of the indicators will depend on the capacity of the health system as a whole to produce, process and analyse HR indicators and the extent to which managers in the health system are committed to achieving the performance changes desired. Phases 2 and 3 of the development project must provide sufficient insights into issues of managing the use of HR indicators and the resource implications of changing performance to guide decisions on the expansion process.

Ultimately, however, the successful introduction of HR indicators lies in the level of commitment and resources for action within the health system.

Key activities in this phase are to:

- 1 Establish procedures for the regular collection, processing and reporting of data
- 2 Revise administrative mechanisms to facilitate HR management review and improve control of action processes needed to support required changes in operational situations.
- 3 Introduce new policies relating to institutional and individual rewards and incentives to mark achievements in performance improvement.
- 4 Set measurable targets in HR management performance by the central and regional levels of the health system.
- 5 Prepare an action plan to institute the use of indicators more widely, introduce any

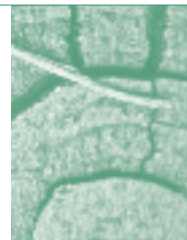




necessary changes in administrative procedures, train relevant staff and allocate financial resources to support the development process.

6 Incorporate the indicator pilot project team into a regular department or organization of the health system.

## PROMOTING INTEREST IN PARTICIPATING IN THE PILOT - FIELD TRIAL PHASE OF PERFORMANCE INDICATOR DEVELOPMENT



There are two aspects to this promotion:

- 1 One directed towards decision makers who authorized a performance indicator initiative in the first instance
- 2 One directed towards potential participants.

To deal with the first aspect, it is likely that the senior decision-makers will have a sufficient understanding of the principles involved in the use of performance indicators to allow them to approve a performance indicator initiative. However, they may have limited appreciation of the role they need to fulfil if the introduction of performance indicators is to be a success.

The role of senior decision-makers is twofold. First, they need to demonstrate their commitment to the initiative through active participation in briefings for participants in the initiative. Secondly, they need to identify specific outcomes in organizational performance that they would wish to achieve. Where possible, they will also need to support the initiative through re-direction of resources in order to strengthen performance where needed. If these roles are to be fulfilled, top decision-makers will need regular and substantial briefing on progress, problems and achievements. Initially these briefings will concentrate on:

- Identifying issues relating to reporting rates, collation and processing of data returns, for which further assistance from the senior decision makers may be required
- highlighting single indicators that demonstrate variability in organizational performance between reporting units, and exploring possible actions in order to raise performance towards that of high-level achievers.

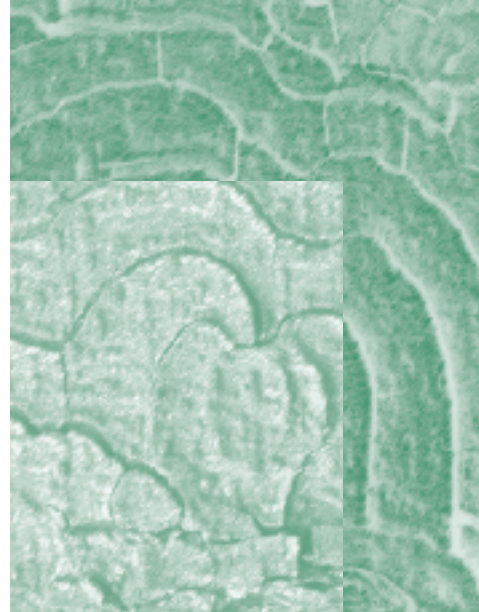
Over time, these briefings will change as computerization of the data returns becomes fully established (see next section on sample schedule for an eighteen-month pilot study). With full computerization, it will now become possible to provide more complex arrays of indicators. It is at this stage that the decision makers will have an opportunity to examine and initiate possible actions to address a wider array of performance issues through policy changes and resourcing.

Promoting interest among likely participants is a two phase process. The first phase of this promotion will concentrate in part on educating the participants on performance indicators, in part on reassuring them that the data requirements will not constitute an additional data collection process beyond that which normally occurs and in part on reviewing possible indicators with them and, where necessary, amending the indicators to conform to the practicalities of the current situation. It is imperative in this initial briefing that the central agency which will be responsible for managing the pilot study confirm that the immediate benefit participants will obtain is a continuous feedback of comparative information on those participating.

The second phase of this promotion is a workshop involving participants, together with their information officers, to work through the data forms they will need to complete, and to agree on schedules for providing returns.

In a fully operational system, it is likely that returns will be no more frequent than once every three months. However, for the pilot field trials, more frequent returns will be required, probably on a monthly basis. This is generally consistent with current practice - most countries require monthly data collection of certain statistics.

There will be a continuing need to promote this initiative, not only to maintain general interest in participating, but also to stimulate those participants who may, for one reason or another, have difficulty in assembling data on time and with sufficient accuracy. Figure 3 shows something of the variability in response times for a pilot study. The reasons for the delays were various but the pilot scheme coordinator had to follow up on delays and provide both support and pressure to those participants not providing returns on time.



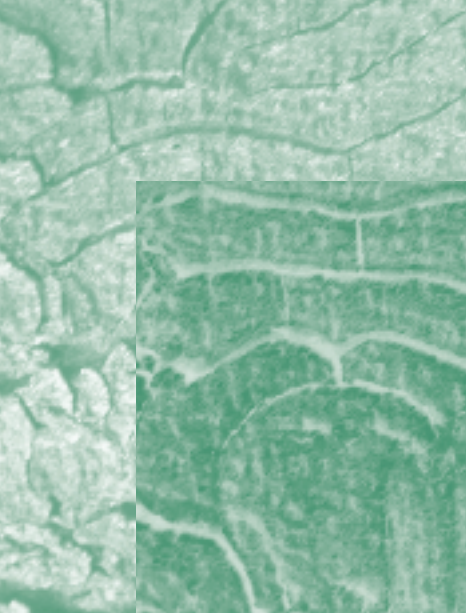


Figure 3 A PILOT STUDY REPORTING PATTERN

No. of days early (-) or late from the date on which district report should be delivered to the centre.

District Identity Number	Monthly Report No.											
	1	2	3	4	5	6	7	8	9	10	11	12
107	6	6	5	2	1	3	2	4	18	21		
108	-34						34	33	3	21	26	39
111	-26											
215	5	5	24	45	15	5	7	4	7	1	4	3
309	-1	-1	-3	-4	1	1	13	47	17	1	4	12
303	43	8	4	1	17	0	0	4	3	3	18	2
413	1	1	36	6	24	74	44	4	30	0	45	15
412	7	7	3	1	1	3	1	4	3	1	11	2
504	-35	-1	3	1	0	3	7	5	31	1	47	17
602							7	4	37	44	28	
714	13	13	36	6	-3	31	1	32	7	-3	8	18
805	13	13	57	27	24	-6	26	27	23			
801	-30	51										
806	1	1	4	6	5	8	13	12	4	4	9	15
816	0	0	31	1	1	5	0	-1	1	-3	5	5
810	41	41	11		59	29	77	47	71	41		

Legend

- On Time Return
- Late Return
- No Return

The production of a monthly newsletter highlighting key outcomes from the indicators, as well as reporting performance on providing data, can be particularly useful, since it may lead to participants feeling some degree of peer pressure to perform as well as their colleagues.

## WHAT TRAINING AND EDUCATION IS NEEDED?

The introduction of indicators from a higher level in an organization can often be seen as a threat to the local managers. An all-important dimension in introducing indicators is that it must be done in a non-threatening way. Part of this lies in educating people - including those who administer it from higher levels of the organization - so that everyone has a role to play in interpreting and using the indicators. This approach gives a more positive image to the indicator concept and encourages people to take a proactive rather than a reactive position in their response to the indicators. This can be seen on at least two levels:

- 1 Immediate training on the interpretation and use of the indicator set.
- 2 Addressing wider issues of management in which the indicators play a part.

On the first of these issues, local users must be introduced to the following concepts:

- \_\_\_\_\_ basic management principles and where indicators fit into this
- \_\_\_\_\_ definitions of the indicators and what data sources they are based on
- \_\_\_\_\_ how the indicators can be interpreted
- \_\_\_\_\_ the use of indicators in comparing performance over time and across districts
- \_\_\_\_\_ how indicators can be used as part of the management process.

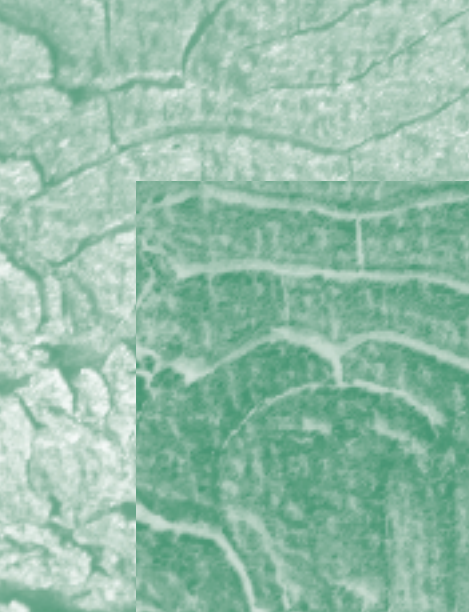
A mixture of workshops and distance learning packs will help here, each general distribution of the indicator set including some form of comment on what they indicate across the country or region and for the specific district. However, it is important to leave scope for local management initiatives and restrict prescriptive advice on local management action.

With respect to the second issue, indicator workshops can start to address wider management concerns such as:

- \_\_\_\_\_ how to implement management action on the basis of the indicator information
- \_\_\_\_\_ how to improve data collection and accuracy
- \_\_\_\_\_ how to construct additional local indicators as required
- \_\_\_\_\_ how to involve local staff in their use (cascade training where appropriate)
- \_\_\_\_\_ how to provide feedback and interact with different levels of administration.

There are advantages in having managers develop local indicators. At one level, the national indicators may indicate a local 'problem area of resource use' for which there may well be additional local data. These data, in turn, can be used either directly or as a local indicator to focus on the problem area, perhaps by being recorded more frequently than the data for the national set and used specifically to address one particular issue. When that issue has been resolved, the local indicator can be discontinued (this discontinuation may need some encouragement).

The development of local indicators may occur in conjunction with that of any established 'national' set and not appear to replace or downgrade them. The idea of local indicators is to aid decentralization by empowering local managers - within clear national frameworks - to develop their local resource management skills. This is one way of enhancing their capability. Training and education, apart from addressing basic data collection, processing and interpretation skills, must also focus on encouraging local managers to use the idea of indicators on their initiative locally where a management issue or specific data may exist.



There are at least four different elements to this training:

1 Training in the management of data production (and this includes training in preparation of data forms, form filling, preparation of summary tables, processing data). This will involve the training of local staff and their managers and, in the early stages, will require testing of the data forms to ensure that they are comprehensible to those completing the forms. It is also necessary to determine the best sources of data with local staff. Managers at all levels will need some training in reviewing completed forms in order to test the accuracy and consistency of the data.

2 Training in concepts and principles of indicators, including training on indicator selection, interpretation of indicators, investigative research. This is primarily for senior managers at region and centre, although it will also include HR indicator development staff who will be particularly concerned with interpretation and investigative research.

3 Training in the management of the HR indicator development process, including training in project planning and implementation, including the issues surrounding change management. This training is specifically concerned with project staff at centre and region to enhance their knowledge and skills in managing a development process directed at introducing considerable change in management practice.

4 Training in data presentation, interpretation of indicators and data verification. Because the members of the project team will be totally responsible for the effective implementation of this initiative, they must have a comprehensive understanding of how data can best be presented and verified and of how the results of the indicator analysis can best be interpreted in a way that can be understood by health managers.

In Phases 1 and 2 of the development process, training must be on a participative basis in the form of workshops that enable participants to contribute to the training intentions. At the conclusion of the pilot field trials, the central project coordinating team is expected to produce - possibly with external assistance - an operations manual covering data production, processing, analysis and interpretation. This manual can be retained for use by local managers for self-learning and in order to train their staff.

This level of training will obviously require a central trainer or trainers who are fully conversant with all aspects of the application and use of indicators. However, the volume of training is likely to be such that some form of 'cascade training' will be needed in which the central team train regional staff who in turn train district staff in those aspects of the process for which specific skills are required.

## EVALUATING OUTCOMES

There are many reasons for investing in HR indicators. At one level, they assist in improving quality control for the services provided to the public. At another, their purpose is to support the development of a more cost-effective and cost-efficient health service. Health authorities will clearly have to decide what their objective is - in all likelihood a mix of improved efficiency/ effectiveness and reduced costs. In several countries the use of indicators has led to significant service-to-cost benefits. There are substantial gains to be realized through investing in performance indicators and the supporting change activities.



During Phase 2 of the development process, it will be necessary to draw up a dual-purpose evaluation protocol:

- 1 Monitoring the HR indicator development process in terms of resolving operational problems and identifying opportunities to improve the efficiency of HR indicator collection, analysis and use.
- 2 Monitoring the capital and revenue costs of introducing and maintaining the HR indicator process and determining whether the gains achieved justify the costs involved.

The issues to be monitored in the development process are:

- \_\_\_\_\_ the mechanics of distribution and collection of raw data
- \_\_\_\_\_ the quality of the raw data and the effectiveness of data checks
- \_\_\_\_\_ the comprehensibility of the HR indicators
- \_\_\_\_\_ the speed and accuracy of indicator interpretation
- \_\_\_\_\_ the extent to which indicators led to changes in performance
- \_\_\_\_\_ the cost benefit achieved as a result of the use of HR indicators.

To undertake this evaluation, it will be necessary early on to design a means of costing the initial phases of the development programme and to monitor actual costs against those forecast. As described in Part I of this manual, the bulk of the costs, other than those directed at making performance improvements, will inevitably come from the human resources involved, both as part of the project team and in terms of managerial and staff time spent preparing for and implementing the application of indicators. This ultimately must be compared with the achievements actually realized.

