

APPENDIX 2 SAMPLE OPERATIONS FOR PILOT STUDY

2a SAMPLE PILOT STUDY SCHEDULE OUTLINE

Every Ministry or Department of Health undertaking a performance indicator initiative will need to set up a schedule of events that matches the tempo of a development process appropriate to their development capacity. The schedule that follows is a suggested schedule for a typical performance indicator pilot study - field trial. Some of the steps outlined may overlap in time.

Period	Project step	Purpose	Activities
2 mths	step 1	Project initialization	<ul style="list-style-type: none"> a) Brief senior officers b) Select/agree indicators c) Decide pilot sites d) Prepare recording material e) Agree data collection process f) Agree starting date g) Set up communications hot line h) Send briefing packs & draft performance indicator operational manual to pilot sites i) Hold briefing meeting for participant directors
1 mth	step 2	Set up baseline record	<ul style="list-style-type: none"> a) Pilot sites record data for recording day 1 b) Centre compiles available data c) Pilot sites hold high level copy of data until recording day 2 data is complete
6 mths	step 3	Regularise data collection & processing	<ul style="list-style-type: none"> a) Pilot sites provide mthly raw data b) Centre converts to indicator information c) Centre identifies & solves data collection problems d) Share data with external consultants
1 mth model	step 4	Introduce analytic tools & make initial performance comparisons	<ul style="list-style-type: none"> a) Train staff on computer analytic b) Input data c) Analyse performance profiles d) Prepare progress report
2 mths	step 5	Assess causal factors in performance, determine & implement interventions	<ul style="list-style-type: none"> a) Present to senior officers b) Explore performance causal factors c) Propose corrective actions d) Implement corrective action

4 mths	step 6	Continue data collection and performance monitoring	<ul style="list-style-type: none"> a) Continue activities of step 3 b) Continue computer input of data c) Keep external consultants informed
1 mth	step 7	Evaluate impact of interventions	<ul style="list-style-type: none"> a) Update & review performance profiles b) Determine changes in profiles c) Review with senior officers
1 mth	step 8	Evaluate benefits of using indicators	<ul style="list-style-type: none"> a) Issue questionnaires to site managers b) Review & analyse responses c) Assess overall results with central project staff & senior officers d) Determine costs & benefits
1 mth	step 9	Review indicator development protocol	<ul style="list-style-type: none"> a) Discuss operational difficulties in current protocol with central staff & selected site managers b) Prepare report on desirable changes in procedure
2 mths expand	step 10	Produce fully operational indicator development manual	<ul style="list-style-type: none"> a) Review current manual, edit & in the light of pilot experience b) Obtain comments on document from central unit staff & senior officers to finalise

2b STEPS AND DATA REQUIRED

The data collected will be used to help manage the staff working locally and to help people at regional or national level in the management of human resources for health - doctors, nurses, paramedics and other health-skilled health workers - across the country.

Over the next year the health service will be asked to provide data on human resources. These will be turned into indicators to help both local and regional level see what has been happening with human resources both in the district and in other parts of the region/country, and how the picture is changing over time. An understanding of what happens in different areas of the country can lead to better management of human resources.

There will be 12 recording periods altogether. For each period, it will be necessary to collect data during the period and, on the recording day at the end of each period, fill in the data form with the relevant totals. For periods 2-12 there is one recording day at the end of each

period, but for the first recording period (only) there are 2 recording days; an extra one at the beginning to give us some starting point data, as well as the regular one at the end of the month. The project is asking for the same data for each recording period throughout the pilot project.

Between now and [start date] read these instructions and look at the list of data to be collected. The general idea is to ask only for data that the health service already has.

(If there is anything which is not clear please contact _____
_____ at the Ministry / Department of Health).

Do this on [starting date]...

RECORDING PERIOD ONE Recording Day 1 [DATE]

On the first recording day record the following data. The data entry forms are given in section 2d. It must include only the actual numbers of people present on that day. Please enter XXX if there are data items that do not apply in your situation.

- 1 Actual number of regular staff nurses physically present on recording day 1
- 2 Actual number of regular staff doctors physically present on recording day 1
- 3 Actual number of regular staff paramedics physically present on recording day 1
- 4 Actual number of regular administrative staff physically present on recording day 1
- 5 Actual number of all other regular staff (except casual staff or volunteers) physically present on recording day 1
- 6 Number of regular staff who are absent on the recording day 1
- 7 Number of development staff who are absent on recording day 1
Please do not count casual staff or volunteers
- 8 Actual total number of vacant posts on the first recording day which have been vacant for longer than [28] days. Include all posts (regular and development staff) but not posts for casual staff or volunteers.
- 9 Total number of hospital beds (include beds currently occupied by patients and empty beds available for patients. Do not include any beds that are not usable for patients on that day).

These are all the actual data you need to record on recording day 1 on the data sheets. Make one copy of the form to keep and one to send to the Project Coordination at the Ministry or Department of Health, but do not actually send it until the data for recording day 2 has been completed. Then you will send in both sets of forms.

From now onwards you will need to start monitoring the following additional data items so as to complete the form for recording day 2. You do not have to complete any forms for these data at this point.

RECORDING PERIOD 1**Recording day 2****[DATE]**

On this day you should begin by recording the same data items you recorded on the first recording day.

- 1 Actual number of regular staff nurses physically present on recording day 2
- 2 Actual number of regular staff doctors physically present on recording day 2
- 3 Actual number of regular staff paramedics physically present on recording day 2
- 4 Actual number of regular administrative staff physically present on recording day 2
- 5 Actual number of all other regular staff (except casual staff or volunteers) physically present on recording day 2
- 6 Number of regular staff who are absent on the recording day 2
- 7 Number of development staff who are absent on recording day 2
Please do not count casual staff or volunteers
- 8 Actual total number of vacant posts on recording day 2 which have been vacant for longer than [28] days. Include all posts (regular and development staff) but not posts for casual staff or volunteers.
- 9 Total number of hospital beds on recording day 2 (include beds currently occupied by patients and empty beds available for patients. Do not include any beds that are not usable for patients on that day).

Next record the totals of the other data items that have been monitored since the start of the first recording period (see next page).

- 10 Total number of days of absence for any reason at all (including absence for holiday leave, maternity leave, sickness, deputation, leave without pay, temporary transfer to another post and absence without explanation). Separate returns for doctors, nurses, paramedics, administrative and all other health staff. Do not include posts that are vacant, for casual staff, or volunteers.
- 11 Total number of days of absence without a valid reason (do not count people who are absent on holiday leave, maternity leave, sickness, deputation, leave without pay, temporary transfer to another post). Separate returns for doctors, nurses, paramedics, administrative and all other health staff. Do not include posts that are vacant, for casual staff, or volunteers.
- 12 Total number of training days (for each staff type) held at each facility (to the nearest half-day).
- 13 Total number of regular staff (by staff type) who have had training at their base facility in the reporting period.
- 14 Total number of travel authorizations for training for regular staff (by type) at a place away from their base facility (to the nearest half-day).
- 15 Total number of regular staff (by type) who have had training during the recording period away from their regular facility.
- 16 Total number of formal complaints made by staff (by staff type) in the recording period.
- 17 Total number of suggestions made by staff in the recording period.
- 18 Total number of children under 1 year who have been immunized in the recording period

- 19 Total amount of money spent on overtime (by staff type) in the recording period
- 20 Total number of days spent working away from regular post. (Do not count any days spent in deputation at another post, absence for holiday leave, maternity leave, sickness, leave without pay or absence without explanation).
- 21 Total recorded number of live births in the recording period
- 22 Total recorded number of still births in the recording period
- 23 Total recorded number of infant deaths (<1 year old)
- 24 Total number of visits to patients made by all professional staff outside of their regular post
- 25 Total amount of time (to the nearest half-day) spent by all professionals in family planning clinics
- 26 Total number of patient attendances at a PHC facility
- 27 Total number of pregnant women attending ante-natal clinics
- 28 Total number of pregnant women attending ante-natal clinics who have received 2 or more doses of TT

For hospital facilities:

- 29 Total number of deaths and discharges from all departments
- 30 Total number of outpatient attendances in all departments
- 31 Number of major operations
- 32 Number of minor operations
- 33 Number of hours during which operating theatre(s) is/are in use
- 34 Available number of hours in operating theatre(s)

Make a copy of the forms for recording day 2 to keep locally and one for the Ministry/Department of Health. As soon as possible, send the copies of the forms for recording day 1 and recording day 2 to the Project Coordination.

RECORDING PERIOD 2 **Recording day 3**

For recording day 3 at the end of recording period 2 the data requirements and processes are the same as for recording day 2.

When you have completed the form, keep one copy and immediately send one copy to the Ministry/Department of Health.

SUBSEQUENT RECORDING PERIODS 3-13: **Recording days 4-13**

For all other recording days at the end of each recording period, the data requirements and processes are the same as for recording day 2 and recording day 3.

As soon as you complete each set of forms on the recording day, keep one copy and immediately send one copy to the Ministry/Department of Health.

2c STEPS FOR CENTRAL DATA PROCESSING

There are two elements to this pilot project. The main one is to obtain data from districts or regions and construct indicators for managers to use, but another is to note how easy or difficult the process of doing this is; what the problems are in getting data and transferring it to the Ministry or Department of Health. This will help in understanding how future extensions may work.

The following procedures must be followed for each recording period (although it may find needs to make adjustments as the pilot proceeds).

Steps to follow at the end of each recording period:

- 1 Record the date on which you receive the data from each pilot district.
- 2 If there are any missing data items, (and the pilot district gives no reasons for this), try to check with the district staff if they can give you either the data or a reason (but do not spend too much effort in trying to get every item correct).
- 3 There may also be difficulties in transferring the data from a pilot district/region to the Ministry or Department of Health, and this may cause problems - such as late or missing data for the central records. It would be helpful to try and contact the pilot district to identify the problem and to record this alongside the item/ district.
- 4 If there are still any missing data that cannot be obtained, enter XXX in the appropriate box.

Enter the raw data from the data forms onto the central summary form:

- include zero values in the spreadsheet
- if a value on a data form has 'X' after it, do not enter the X on the spreadsheet
- if the value is missing (XXX), leave the entry blank on the spreadsheet. Only enter zero if that is the correct value for the item

- 5 Enter the data from the summary form onto the central summary spreadsheet. The computer will automatically calculate some totals and averages from the data. Make a very brief note about any particular problems that districts have themselves reported in collecting the data or that you have experienced in the Ministry.

Please include:

- the name of the pilot district
- the particular data item(s) giving a problem, and why
- any other problems reported
- the type of problems in transferring data from a particular pilot district to the Ministry/Department of Health.

- 6 Transfer a copy of the summary spreadsheet (and any other notes/ comments about problems encountered) to the Project Coordination (by email or fax).
- 7 For each pilot district, send them back a copy of their data together with:
 - the average values for the district (central summary spreadsheet calculates these)
 - the processed data totals and averages (central summary spreadsheet calculates these)
 - the average for all pilot districts

As the pilot progresses, methods of analysis and ways of presenting the data will be developed.

2d DATA COLLECTION FORM

This appendix contains the data sheets for use at the pilot district or region level to record the HR data requested for the indicators. Every pilot district or region must return one completed set for each of the 13 recording days of the project. They are likely to undergo modification during the field trial.

Recording day no.

District Name

Facility Name

Date of Report

HUMAN RESOURCE PERFORMANCE - PILOT STUDY

Data to be filled in on all reporting days:

(1) Total number of staff physically present on the recording day =

Serial No.	Staff	Number
1	Nurses	
2	Non-specialist doctors	
3	Specialists	
4	Paramedics	
5	Administrative staff	
6	Other non-casual staff	

(2) Number of staff absent on the recording day =

Serial No.	Staff	Number
7	Nurses	
8	Non-specialist doctors	
9	Specialists	
10	Paramedics	
11	Administrative staff	
12	Other non-casual staff	

(3) Total number of days absent by staff =

Serial No.	Staff	Number
13	Nurses	
14	Non-specialist doctors	
15	Specialists	
16	Paramedics	
17	Administrative staff	
18	Other non-casual staff	

(4) Total number of vacant posts =

Serial No.	Staff	No. of Vacant Posts
19	Nurses	
20	Non-specialist doctors	
21	Specialists	
22	Paramedics	
23	Administrative staff	
24	Other non-casual staff	

(5) Total number of vacant posts (>28 days) =

Serial No.	Staff	No. of Vacant Posts (>28 days)
25	Nurses	
26	Non-specialist doctors	
27	Specialists	
28	Paramedics	
29	Administrative staff	
30	Other non-casual staff	

Data to be filled in on all but first reporting day

6 Total number of staff reviews completed during this period = _____
(nurses, doctors, paramedics, administration, other non-casual) (Serial no. 31)

7 Total number of staff who are to be reviewed = _____
(nurses, doctors, paramedics, administration, other non-casual) (Serial no. 32)

8 Total expenditure on local purchase drugs = _____
(Serial no. 33)

9 Total number of staff leaving =

Serial No.	Staff	Number
34	Nurses	
35	Doctors (including specialists)	
36	Paramedics	
37	Administrative staff	
38	Other non-casual staff	

(10) Total number of days of absence without prior approval = _____
(nurses, doctors, paramedics, administration, other non-casual) (Serial no. 39)

(11) Total number of training days off the job (outside the hospital) = _____
(Serial no. 40)

Staff	Days
Nurses	
Doctors (including specialists)	
Paramedics	
Administrative staff	
Other non-casual staff	

12 Total number of training days (both inside and outside the hospital) =

Serial No.	Staff	Days
41	Nurses	
42	Doctors (including specialist)	
43	Paramedics	
44	Administrative staff	
45	Other non-casual staff	

13 Total number of staff receiving training (both inside and outside the hospital) =

Serial No.	Staff	Number
46	Nurses	
47	Doctors (including specialists)	
48	Paramedics	
49	Administrative staff	
50	Other non-casual staff	

14 Total number of hours worked by staff =

Serial No.	Staff	Hours
51	Nurses	
52	Doctors (including specialists)	
53	Paramedics	
54	Administrative staff	
55	Other non-casual staff	

15 Total number of full-time equivalent (FTE) staff working hours =

Serial No.	Staff	FTE Working Hours
56	Nurses	
57	Doctors (including specialists)	
58	Paramedics	

16 Number of formal complaints made by staff = _____
 (nurses, doctors, paramedics, admin, other non-casual staff) (Serial no. 59)

17 Number of inpatient admissions = _____
 (Serial no. 60)

- 18 Total number of inpatient deaths = _____
(Serial no. 61)
- 19 Total number of deaths within 24 hours = _____
(Serial no. 62)
- 20 Number of patients attending outpatient's specialist clinics = _____
(Serial no. 63)
- 21 Total number of outpatient attendance = _____
(Serial no. 64)
- 22 Total number of doctors (including specialists), AMOs,
RMOs attending the OPD clinics = _____
(Serial no. 65)
- 23 Amount of money spent on overtime for all staff = _____
(Serial no. 66)
- 24 Amount of money spent on staff salary excluding overtime
payment = _____
(Serial no. 67)
- 25 Number of infant deaths (<1 year) = _____
(Serial no. 68)
- 26 Total number of live births = _____
(Serial no. 69)
- 27 Total number of stillbirths = _____
(Serial no. 70)
- 28 Total number of perinatal deaths = _____
(Serial no. 71)
- 29 Number of cross infections (all patients) = _____
(Serial no. 72)
- 30 Total number of hospital patients = _____
(Serial no. 73)
- 31 Total number of Caesarean deliveries = _____
(Serial no. 74)
- 32 Total deliveries = _____
(Serial no. 75)

- 33 Number of operations performed:
 Major Operations = _____
 (Serial no. 76)
- Minor Operations = _____
 (Serial no. 77)
- 34 Total surgical cases admitted = _____
 (Serial no. 78)
- 35 Amount of theatre time used = _____
 (Serial no. 79)
- 36 Total available theatre time = _____
 (Serial no. 80)
- 37 Total population = _____
 (Serial no. 81)
- 38 Total number of:
 Deaths = _____
 (Serial no. 82)
- Discharges = _____
 (Serial no.83)

2e MODEL FOR SCHEDULE REPORT

Period No.	Reporting Days	Period Dates	Date for Receipt at Centre	Date for Processing	Date for Feedback to Units
1	1 and 2	1-31 May	15 Jun	25 Jun	XX
2	3	1-30 Jun	15 Jul	25 Jul	30 Jul
3	4	1-31 Jul	15 Aug	25 Aug	31 Aug
4	5	1-31 Aug	15 Sept	25 Sept	30 Sept
5	6	1-30 Sept	15 Oct	25 Oct	31 Oct
6	7	1-31 Oct	15 Nov	25 Nov	XX
7	8	1-30 Nov	15 Dec	10 Dec	10 Jan
8	9	1-31 Dec	20 Jan	5 Jan	31 Jan
9	10	1-31 Jan	15 Feb	25 Feb	28 Feb
10	11	1-31 Feb	15 Mar	25 Mar	31 Mar
11	12	1-31 Mar	15 Apr	10 Apr	XX
12	13	1-30 Apr	15 May	25 May	31 May

2f CHECKLIST FOR DATA COLLECTION

This checklist is designed to support the indicator data collection process. It acts as a 'quality control' mechanism to help managers in collecting and preparing data.

- _____ Have you supplied a data value for every item where possible?
- _____ If a data item is missing or not known, or not relevant for a particular type of facility, have you entered XXX in the appropriate box? (You should only enter '0' in a box if that is the correct value for a data item)
- _____ If you are unsure about a data value, have you entered the number followed by 'X'?
- _____ Have you made a brief note of any particular problems in obtaining data (from a particular facility or of a particular type)?
- _____ Have you written the date of completion on the form before sending it to the Ministry?

2g BASIC TABLE OF DEFINITIONS

This table lists some definitions of terms used in this manual. This is an initial list that will be expanded to deal with uncertainties about the meaning of terms as they are reported. The list will in all likelihood be further developed during the pilot-field trials.

Regular staff	Staff working from the health facility, whether originally posted there or working on deputation more than one day. Includes any development staff, but excludes casual or volunteer staff.
Professional staff	Includes doctors, nurses, paramedics. Does not include administrative or other staff with very basic training.
Absence for any reason	Includes staff on leave of any type or deputed elsewhere. Does not include vacancies.
Hospital beds	Includes those occupied by patients as well as those unoccupied but usable by patients.
Time spent working away from regular post	This is time spent working away from the regular posted facility during the week, but for work based from that facility. It does not include time spent when deputed to posts at other facilities.