

2.4 THE ROADMAP

This action plan was drawn up by the North Western Province. It introduces the cost accounting method to the healthcare system in the Province with a view to strengthening financial management of the Provincial Hospitals as a first step to efficient allocation and utilisation of the health resources in the Province. Activities will be undertaken in the tertiary hospitals in the first year and district hospitals in the second year. The total implementation period will be 3 years starting from September 2007.

The following information generated by the pilot studies was used in formulating the Action Plan

- Evidence for the development of new hospital management accounting systems such as appropriate demarcation of cost centres, cost allocation criteria, capital depreciation principles.
- Evidence to link clinical information with managerial accounting information: classification of patients by cost centre, per day costs, cost per treatment procedures etc.
- Results of actual cost accounting by clinical department in the selected hospitals.
- Results of standard cost accounting by treatment procedures in the selected diseases/treatment procedures.
- Guidelines for implementation of cost accounting (focus on practical aspects of cost accounting, reporting structures, administration)

2.4.1 PROFILE OF THE ACTION PLAN

- **Project Title:** Strengthening the Health Financing System of the North Western Province through Cost Accounting
- **Project Duration:** 3 years, starting from September 2007
- **Focal Point:** PDHS, North Western Province
- **Implementing Agencies:** RDHS Offices in Kurunegala/Puttalam
- **Target Areas and Beneficiaries:** Provincial/district hospitals, policy makers, PDHS office, RDHS office in the Puttalam and Kurunegala districts in the North Western Province, and their patients, their families and communities.

2.4.2 JUSTIFICATION

The Ministry of Healthcare and Nutrition (MOH) has identified the need to reorient their strategies to bring about better accountability and cut down the wastage of the limited resources in the existing health care delivery system. The establishment of a good management information system that could measure costs of services is an essential pre-requisite in this context. Evidence-based decision making and appropriate resource allocation are of major importance in this context for which improvement of hospital management through cost accounting becomes vital.

Pilot implementation was successful and left valuable lessons behind, which can be explored in the next stage. Methodologies developed through the pilot study are found to be effective in enhancing not only the hospital's financial management but also in improving cost consciousness among the

patients and health care providers. In this regard, the decision for the provincial-wide implementation as envisaged in this Action Plan is a step forward to build a wider consensus on the cost effectiveness in the health system island wide. The provincial exercise will contribute to that end.

2.4.3 OBJECTIVES, OUTPUTS AND ACTIVITIES

A. OBJECTIVE

This project aims to improve financial management in the Provincial Health System by utilising resources efficiently and effectively through the introduction of managerial cost accounting in hospitals. In the long run, the system will benefit the patients and community at large.

B. EXPECTED OUTPUTS & ACTIVITIES

B.1 OUTPUT 1:

A coordinating mechanism to be established at RDHS/PDHS level to facilitate, guide and monitor the implementation.

B.1.1 ACTIVITY 1: APPOINT ONE COORDINATING OFFICER FROM EACH DISTRICT AND PROVINCIAL OFFICE

A coordinating officer will be appointed by the Provincial Director. An accountant is preferred. He/she will be responsible for ensuring the sustainability of this project by coordinating the following tasks:

- Preparation of the guidelines
- Ensuring that the guidelines are practiced
- Making necessary adjustments for adopting the data entry formats in hospitals
- Planning and organizing regular training programmes for the staff of the hospitals as well as for the accountants of the RDHS offices
- Ensuring a continuous supply of stationary items and other resources
- Conducting frequent reviews and supervisions of the cost accounting system.

B.1.2 ACTIVITY 2: SET UP A DEVELOPMENT COMMITTEE

A Development Committee will be organised by the Coordinating Officers to monitor the progress of the hospital activities, refine and modify the data entry formats, discuss methodological issues, and set benchmarking for the cost-effective treatment among the hospitals.

Members of the Development Committee comprise the Directors of the hospitals, accountants of the RDHS offices and PDHS office, and hospital staff in charge of the Cost Accounting Units.

B.1.3 ACTIVITY 3: PREPARE THE GUIDELINES & REGULATIONS

The Development Committee will meet and work on the preparation of the guidelines and regulations that will facilitate the smooth practice of cost accounting at hospital level.

The guidelines will specify the information requirements that should be included in the regular reports to be prepared by the hospitals, its format and frequency of reporting and the like.

The same members will meet to discuss necessary amendments to the guidelines and regulations if and when the need arises.

B.1.4 ACTIVITY 4: MAKE NECESSARY ADJUSTMENTS ON THE DATA ENTRY FORMATS TO FACILITATE DATA COLLECTION

The formats for data entry may need alteration to suit the functions of the hospitals and their cost centres. The data collection system itself may also need adjustments. The Development Committee will facilitate the process in consultation with the hospital staff member who is appointed to lead the cost accounting unit.

B.1.5 ACTIVITY 5: CONDUCT REGULAR TRAINING FOR THE STAFF

The staff involved in cost accounting will need proper training on a regular basis. Provision of training is even more crucial if relevant staff members are transferred to other hospitals and new staff is assigned to do cost accounting. RDHS officers will ensure that training is arranged soon after the appointment so that the cost accounting system continues smoothly.

B.1.6 ACTIVITY 6: ENSURE CONTINUOUS SUPPLY OF PHYSICAL RESOURCES

Physical resources have to be supplied continuously from the PD/DPD offices to ensure sustainable operations of the project.

B.1.7 ACTIVITY 7: CONDUCT FREQUENT REVIEWS AND SUPERVISION OF THE COST ACCOUNTING SYSTEM

The Coordinating officers at the two RDHS offices will undertake frequent reviews and supervision of the operations of cost accounting in the respective RDHS areas. This will be done in collaboration with the hospital staff.

To this end, coordination officers will visit hospitals on a regular basis and note good and poor practices and systemic constraints that the hospitals encounter. Coordinating Officers will facilitate consensus among the hospitals and RDHS offices regarding adjusting and amending cost accounting systems.

B.1.8 ACTIVITY 8: REGULARLY REVIEW COST DATA TO IMPROVE ACCURACY IN THE HOSPITAL

The hospital working group will be responsible for this task. The data used for cost accounting has to be checked for accuracy. Quality and validity of analysis depends on the accuracy of the cost data. The following three points will be verified:

- Consistency of the number of patients with cost information
- Consistency of the financials account information with costing information
- Values of the cost items in comparison to the previous month

When the information lacks consistency or a different formulation of the cost date is more acceptable, advice should be given to check the ledger and data input sheets, and with the person in charge of cost centre in question. If this check-and-balance mechanism functions in the hospital, accuracy and quality of the cost information will be maintained.

B.1.9 ACTIVITY 9: REQUEST THE LINE MINISTRY TO DO EXTERNAL EVALUATIONS

The Coordinating officers will send regular monitoring reports to the Ministry to update on the progress of the project. Addition, best practices and lessons learnt will be compiled as part of the evaluation report that summarises implementation of cost accounting in the North Western Province.

The Ministry will coordinate with the other Provinces that are interested in cost accounting and undertake induction seminars or workshops. The North Western Province will be introduced as a model province and contribute to the seminars with its own expertise.

B.2 OUTPUT 2

A functioning cost accounting system to collect integrate and analyze data, in all tertiary, secondary care institutions and all District Hospitals.

B.2.1 ACTIVITY 1: SET UP & INSTITUTIONALIZE A WORKING COMMITTEE AT EACH HOSPITAL

A Working Committee will be organized at each hospital. The committee will coordinate with the sections and staff involved to ensure that data can be collected without delay. It comprises Administrative Officer (AO), Accountant, SMO OPD, Pharmacist, MLT, MO planning, Overseer, Matron, 4 nursing officers from the major specialties, one each from cost centres, and MRO. The Committee will examine matters that are relevant to the smooth functioning of the cost accounting system in the hospital.

B.2.2 ACTIVITY 2: IDENTIFY AVAILABLE HUMAN RESOURCES FOR CAPACITY BUILDING & DEVELOP THEIR COMPETENCIES

Human resources need to be developed relating to the 3 stages of the cost accounting methodology: 1) collection and tabulation of basic information, 2) consolidation of information and cost accounting, 3) utilization of cost accounting results. The Annex of the Resource Book I: Cost Accounting, shows key areas of training, target trainees, and training programmes. It is necessary to establish a system that introduces cost accounting in stages. At the initial introduction stage, trainings will target the personnel of the hospital, which is chosen as a model for the others. Eventually, they will instruct the other hospitals once they gain enough knowledge and experience.

B.2.3 ACTIVITY 3: IDENTIFY PHYSICAL RESOURCES- EQUIPMENT, INSTRUMENTS & STATIONERY NEEDS & ESTABLISH A COST ACCOUNTING UNIT AT EACH HOSPITAL

The Provincial Director of Health Service (PDHS) office or central ministry should allocate sufficient financial resources to assist in the setting up of a cost accounting unit at each hospital. Necessary inputs are for:

- Base Hospital: 2 computers & 2 printers,
- District Hospital: 1 computer & 1 printer,
- PDHS/RDHS office: 1 computer & 1 printer,
- All hospitals: 1~2 staff for data input and 1 staff in charge of cost accounting
- All hospitals: allocation of stationery expenses for consumables such as printer toners and copying paper.

B.2.4 ACTIVITY 4: COLLECT DATA & ANALYZE AT HOSPITAL

Information required is not only for financial accounting but also information that explains allocation of budget to the respective departments of the hospital such as personnel costs, material costs, running costs, etc. In addition, clinical information such as number of patients, number of operations, co-medical information for absorption, etc, and other non-clinical information (floor area, consumption of electricity and water, laundry, repairs and maintenance etc.) are also essential.

Data collected at respective cost centres will be integrated into a computer at the Cost Accounting Unit of the hospital. Analysis of costs will be done by the Unit itself.

B.2.5 ACTIVITY 5: ESTABLISH INTERNAL EVALUATION SYSTEM AT THE HOSPITAL

The Hospital Working Committee will regularly monitor the activity reports prepared by the hospital. The reporting mechanism will be reviewed and improved so that a regular reporting system is ensured. Accuracy of activity information will be evaluated. If not acceptable, measures will be taken to revise the system to maintain accuracy of data collection and input.

B.3 OUTPUT 3

A provincial statute is developed and practiced to run a cost accounting system parallel to the accounting system currently available

- Summary of the Planned Activities

An appropriate provincial policy will be developed to ensure the sustainability of the project. Local politicians will get involved in the approval process. An advocacy programme will be undertaken, targeting politicians, trade unions, and other interested parties to propagate the project purpose and address the need for policy and regulations.

Subsequently a series of workshops will be held to develop the policy paper that states the objective and strategies.

Finally, the policy will be presented to the provincial cabinet for an approval. An appropriate mechanism to introduce, implement, and monitor the enforcement of the policy should be developed.

B.4 OUTPUT 4

The analysed information are disseminated and shared for better decision making.

B.4.1 ACTIVITY 1: ESTABLISH A STEERING COMMITTEE AT THE PROVINCIAL LEVEL

A Steering Committee will be established with the PD, RD, heads of institutions (MS/DMO) accountants and staff in charge of cost accounting. The members will meet quarterly at the RDHS level and at PDHS level once in every 6 months. The purpose of this committee is to use information obtained through cost accounting for various decision making activities at the provincial and district levels. Discussions will take place on the following issues:

- Preparing institutional budget for the following year based on evidence
- Diversion of resources prioritized by need
- Efficient and equitable budget allocation between units or institutions
- Distribution of equipments based on the activity rate
- Improvement of cost awareness of the patients regarding medical services, etc.

B.4.2 ACTIVITY 2: REVIEW AND COMPARE THE COST DATA

The Development Committee will meet on a quarterly or 6 monthly basis to review the progress of activities among the hospitals. In addition to evaluating information on the numbers of in-patients, surgical operations and deliveries, cost information will be also shared and discussed. Regular meetings are intended to stimulate hospital management through their exposure to other hospitals' performance.

B.4.3 ACTIVITY 3: UNDERTAKE DISEASE-MANAGEMENT COSTING, USING THE COST DATA OBTAINED FROM THE HOSPITALS.

Dr. Anuradhani Kasturirathne, Faculty of Medicine, the University of Kelaniya, analysed the costs involved in the management of selected diseases under the EBM Study. The study identified methodological constraints, based on which ways to improve the method were identified. In the third year of the project, the Development Committee will implement a study with the collaboration of University of Kelaniya to estimate the treatment cost of selected diseases, which pose a heavy financial burden on the health system of the North Western Province.

B.4.4 ACTIVITY 4: MAKE DECISIONS TO DIVERT RESOURCES TO MORE NEEDY PLACES IN THE HOSPITAL

Using the activity-based cost information that is generated at each unit, the hospitals can make better decisions on the distribution of resources based on cost efficiency. A mechanism needs to be set up at each hospital to facilitate decision making.

B.4.5 ACTIVITY 5: FORWARD SUGGESTIONS TO FINANCIAL AUTHORITIES

Lastly, the cost information and its analysis will be used for the formulation of financial/investment plans and other policy decisions at the district, provincial and national levels.

Such suggestions can be forwarded to the relevant agencies of the financial authorities such as the finance commission, the Treasury, Finance Department of the Ministry of Health, Provincial Secretariat, and others who have influence on the health care delivery and financing of the province.

2.4.4 IMPLEMENTATION STRUCTURE

The project will be coordinated at the three levels: At the institutional level, the Hospital Working Committee will be formed to regularly check the validity and accuracy of the cost data.

At the District level, the Development Committee will be created with the RDHS office coordinators and the representatives of the hospitals to share the progress of activities among the hospitals. In the second year, cost accounting will be introduced to the district hospitals as well. Development Committees will be organised for Puttalam and Kurunegala Districts separately.



FIGURE 2- 12: IMPLEMENTATION STRUCTURE

The Steering Committee will be organised at the Provincial level, headed by the Provincial Director of Health Services and meet regularly to discuss budgeting and resource allocation based on cost analysis information.

2.5 POLICY CONSIDERATIONS

2.5.1 POLICY ISSUES CAPTURED BY THE ACTION PLAN

A. A SYSTEMATIC MANAGEMENT ACCOUNTING PROCESS

The purpose of hospital department-based cost accounting is not merely the gaining of final unit cost results but the fact that the implementation of a systematic management accounting process itself will result in improved efficiency. Three important points are worth noting in this regard.

- It is necessary to utilize information obtained from cost accounting, not only for the running of hospitals but also for the formulation of plans and policy making at each level of district, province and nation. At the level of a site where cost accounting is implemented, correct and precise recording of data is sought. Continuous utilization of information for budget-making and the preparation of an activity plan become an incentive for the staff in charge of the site, to carry on the cost accounting system and data recording in a systematic manner.
- It is necessary to institutionalize department-based cost accounting at hospitals, and to establish a system where accounting information flows continuously like the present financial accounting system. As a result of institutionalization, it is then possible for the central government to gather cost accounting results calculated using the same methodology from hospitals throughout the country. This will facilitate better planning, budgeting and decision making at the central level.
- It is necessary for the cost accounting results to be fed into economic decision making, and for feedback to be provided to the cost accounting departments regarding the data needs of the country so that continuous improvements can be made in the data collection – evidence based decision making loop. Disease-based costing as well as hospital based costing is of importance for economic and managerial decision making and since the former draws on the latter it is of great importance that both these forms of costing go on simultaneously.

2.5.2 POLICY ISSUES: NEED TO ADDRESS

A. MANAGEMENT OF DRUG SUPPLY

Attention will be paid to improving the current drug/material management and accounting system at the provincial and hospital level. Technical support to improve drug estimation procedures in particular should be adopted in order to improve the efficiency of the pharmaceutical sector.

Poor budgeting practices often lead to the need for furnishing of supplementary budgets. Unsystematic budget pruning, that result from budgetary constraints, is often also carried out in an ad hoc

manner, on the implicit assumption that the budgeting process itself has been widely ad hoc. Denying access to drugs is ethically unacceptable and the proper management of the hospital system depends on the availability of sufficient drug stocks to support medical care services.

Epidemiological and demographic transition will necessarily increase pharmaceutical expenditure in the future necessitating greater budgetary allocations. Better information systems however are a core necessity for improving the pharmaceutical system in Sri Lanka. To ensure that all hospital, special regional drug needs are fully taken account of, the following should be undertaken: Training staff, maintaining proper stocks at MSD and RMSD level, good stock keeping at the stores to prevent wastage, proper schemes for equitable and efficient drug distribution and good accounting and stock recording processes within the hospitals.

B. MANAGEMENT OF MEDICAL EQUIPMENT

Management information on the hospital's fixed assets such as medical equipment, buildings, and facilities should be maintained and streamlined. If such information is available, depreciation costs can easily be obtained, which in turn could also contribute to the systematic formulation of an equipment investment plan.

C. UTILIZATION OF SALARY CALCULATION SYSTEM

The computerised Government Payroll System (GPS) does not fully trace payment records especially when the personnel are transferred to other institutions. It is necessary to develop a mechanism through which human resource-related information can be consolidated at the district office or can be retrievable at the hospitals.

D. HUMAN RESOURCE DEVELOPMENT FOR COST ACCOUNTING

Knowledge and skills should be pooled at the District Level. Awareness and induction training relating to computer skills and cost accounting, guidance during the implementation of the process to ensure accurate data collection and analysis of cost information are some of the areas where systematic programmes are required. A coordinator should be appointed at each District Office who can link available resources to the hospitals needs assistance. Once such resources are established within the District, ripple effects of transferring knowledge/skills can be expected and scaling up will become easier.