INFORMATION SYSTEM FOR EFFECTIVE MANAGEMENT, MONITORING AND EVALUATION

Dr. Hans Limburg
Chief Adviser, DANPCB

Monitoring and evaluation is one way of finding out whether we are on the right path, whether our health programmes and activities are meeting the needs for which they were designed.

It provides necessary information for effective decision making. Monitoring and evaluation are essential for planning of future health activities.

COMPONENTS OF MIS

On the process of Monitoring and Evaluation, three components are to be distinguished; Information Collection, Data Flow and Analysis & Evaluation.

I. Information Collection

It has to be decided WHAT information is to be collected, WHY, WHO will collect it, from WHERE, which reporting units and WHEN, at which time intervals. The data collected has to be appropriate and relevant to provide answers to the problems posed, it has to be accurate and of good quality, and it should be feasible to collect these data, without too many efforts or costs.

The temptation is great to ask much and detailed information from the reporting units. This often results in incomplete and inaccurate reporting, delays in data flow and even more delays in data analysis, evaluation and feedback. When the amount of data is too large, analysis and evaluation becomes impossible. The Management Information System, which purpose is to translate information into action, has then been reduced to a mere Information Collection System.

At present, only data pertaining to cataract surgery are collected from the districts. Some districts do provide a differential performance for each unit, NGOs and Private Practitioners providing surgical services. Type of surgery, outcome of surgery, etc, are not given.
The World Bank Cataract Blindness Control Project intends to collect much more data to enable adequate monitoring, evaluation and management of all aspects of the project. Part of these data will come from a regular monthly MIS. Other data will be collected through surveys, rapid assessment or special studies.

2. Flow of Information

The data have to go to a central point for analysis and evaluation. The Data Flow has to be timely, without any delays, and as complete as possible. With the minimum- required data collected, delays in data flow will be least.

Today, every district in India is linked with the State headquarters and the Centre through electronic media, NICNET. The MIS for the NPCB could be linked with the National Health Management Information Centre for fast and safe data transfer.

3. Analysis & Evaluation

Finally, analysis and evaluation has to be carried out. Here again the questions arise WHAT to evaluate and WHY. WHO will do it, WHERE, at the district, State or National level, and WHEN, how frequently.

LEVELS OF MIS

It is important to realize that the requirements for monitoring, evaluation and efficient management are different at all these three levels. Therefore, the level at which monitoring evaluation is done will determine the type of data collected, the reporting units, intervals, etc.

Performing Units (MIS level 1)

Data would be generated at the level of RIO, Medical College, District Hospital, Camps, CHC, NGOs and private institutions and practitioners. Information is to be collected monthly from performing units.

District Level (MIS level 2)

At district level, one would like to know who is providing eye care services in the district and to what extend. Is all manpower and infrastructure well utilized? Are there any constraints in manpower or infrastructure in the district? Are all taluka's covered equally or are any area's neglected. How is the turn out of patients at the camps. Are there any seasonal trends? If yes, what are the reasons for that.

State Level (MIS level 3)

At State level, one would be more interested in the performance of the individual districts and the trends over the last few years. The state may like to monitor which district may need additional manpower or infrastructure to cater for the eye care needs. The state may like to know which type of eye care unit, hospitals, mobile units, NGO's or Private Practitioners, are delivering eye care in and efficient and effective way.

National Level (MIS level 3)

At National level, the programme managers may like to know how the individual states are performing. Which strategies are effective in increasing the output of the programme and which are not effective. Whether the number of sight restoring cataract operations is enough to reduce the backlog of cataract blindness in the country. With the central supply of ophthalmic equipment and vehicles, they would like to have yearly updates on the status of equipment and vehicles.

Current status and future Needs

Today, several components of the MIS are already operational. Information on the availability and working condition of ophthalmic equipment is collected once per year since 1991. Information

on DBCS, its composition, posting of DPMs, financial status, is processed systematically. A detailed MIS including components on manpower, infrastructure and performance is operational on trial basis in Maharashtra state and will soon be available for implementation in other states as well. Rapid assessments to measure the coverage of cataract surgical services have been conducted in three districts on a trial basis.

With more emphasis on the district as the nucleus for the delivery of eye care services, the appointment of a District Programme Manager in each district and the authority and funding through the District Blindness Control Society, the need to monitor, analyze and evaluate the NPCB activities in the district itself becomes imperative. During their training, the DPMs are provided with a simple system to monitor and evaluate cataract surgical services in their districts. At present, it is all done by hand.

It would be possible to enter these district data in a computer at the district itself. Reports on the status of NPCB activities and even the analysis can be then be produced in the district. This would increase the accuracy of the data, provide the DBCS with information essential for management and planning and reduce the workload on data entry at state level sheet on data flow.

In general, there is a need to revise the indicators used in the NPCB. The number of cataract operations alone is a poor indicator. By relating this figure to the surgical unit, we can have a better impression of the efficiency and effectiveness of these units. By relating the number of cataract operations to the population in the district or state, we can have a better idea of case finding and the impact and coverage of the surgical services. By relating it to the number of operating eye surgeons and the ophthalmic beds it informs us on the workload and utilization of manpower and infrastructure.

The coverage of cataract surgical services has so far not been monitored under the NPCB. We do not know whether the increase in cataract operations in the last 3 years was equal throughout India, or mainly resulted from the urban population seeking earlier surgery with IOLs.

With the commitment under the World Bank project to ensure adequate eye care services to the poor and under served, there is a definite need to measure this. A simple method to monitor taluka wise cataract surgery has been introduced in the District Programme Manager's training course.

Lastly, the most important aspect of cataract surgery is the outcome, sight restoration. This is not routinely measured today. We do not know whether the increase in cataract operations from 1.2 to 2 million has resulted in a similar reduction in cataract blind persons. A methodology has to be developed to monitor the number of sight restoring surgeries. This will not only provide an indicator to measure the quality of surgery, but also enable us to measure the impact of surgery on the total backlog of cataract blindness in India.