Indicators

The main objectives of a leprosy control programme are to cure people with leprosy, to stop the transmission of the infection, and to prevent disabilities. Quality services are accessible, patient-centered and competent in each aspect of patient management. Such services depend on the availability of the necessary staff, facilities and supplies, appropriate training, regular supervision, monitoring of key indicators and motivated staff.

An indicator ([1]) is "a quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect changes connected to an intervention, or to help assess the performance of a development actor".

Health indicators are measures (mostly quantitative) aimed at summarizing the health situation and the performance of the health system, measuring and monitoring progress towards the achievement of objectives, and facilitating the evaluation of policies and initiatives undertaken by the leprosy control program. Indicators should be easy to measure and should directly show how far a result or objective is being achieved.

Indicators have two main functions:

- To indicate progress towards reaching objectives.
- To indicate problems which may prevent the achievement of objectives;

Indicators of quality are of three types (Proxy, Process and Direct)

1. Proxy indicators

A proxy indicator is an indirect measure that approximates or represents a phenomenon in the absence of a direct measure or that is difficult to measure directly. Cost, complexity and/or timeliness of data collection may prevent a result from being measured directly. For example new case detection (NCD) is in the proxy indicator commonly used for incidence (see section, Basic Epidemilogical Indicators for Monitoring Leprosy). Proxy indicators may reveal epidemiological or performance trends and make managers aware of potential problems ([2]).

A proxy indicator is a single-item measurement which gives clues about the overall quality of the program. A proxy indicator on its own is not reliable as an indicator of quality, as there may be serious flaws in other parts of the program not reflected in this indicator.

Proxy indicators of quality in leprosy programs include for example:

- *The treatment completion rate*. It measures whether patients have attended for treatment as required (but this does not mean that the patient also took his treatment as prescribed); it is simple to measure and is closely correlated with the cure of the disease (however, there is no direct measurement of cure – bacteriological - in leprosy; and even after completion of treatment the patient may develop immunological reactions).
- *The proportion of Disability Grade 2 amongst new cases* is a well-established indicator of case-finding efficiency. If patients report late to or are diagnosed late by the health services, a greater proportion will have impairments at the time of diagnosis.
- *Proportion of new cases correctly diagnosed*. Those not diagnosed correctly are so-called false-positives. More difficult to measure (and actually even more important) are the false-negatives: leprosy patients who present themselves to the health services, but are not diagnosed by the health services as suffering from leprosy.
- *The proportion of contacts examined.* Could be an important indicator if implemented properly. In most programmes contact examination does not get the attention it deserves. Especially in declining endemicity, more new patients will be from contacts and fewer from the general population. Contact examination is also an important health education tool: it sensitizes the patient's family to understand the disease and support the patient. Contact examination should not be restricted to the persons within the household, but include the households in the direct neighborhood. Declining endemicity contact examination could assume greater importance as part of a chemoprophylaxis program (including BCG re-vaccination).
- *Gender:* equality of access is not easy to measure, but the gender balance in new case detection should be monitored. One could estimate what should be the male/female ratio from well-run programmes in the area. One could also implement a Health Systems Research study in health seeking behavior of new leprosy (male and female) patients. In general, males dominate in the MB group, and as such we see more disabilities among male patients. However, the disabled (poor, non-educated, single) female patients are the most (socially) disadvantaged.

2. Process indicators

Process indicators measure how well the planned activities are implemented. By definition, process indicators do not look at outcomes, so they do not show, for example, whether the training or supervision activities lead to better care. For example:

- The proportion of training sessions that took place among those planned;
- The proportion of supervision visits that took place among those planned;
- The existence of a schedule and checklists for supervision.

Instead of measuring how many training sessions were organized or how many trainees participated (**activity indicator**), one could measure how many of the trainees of the previous years are presently involved in leprosy control activities (**outcome indicator**). An outcome indicator indicates how well your planned interventions are accomplishing their intended results. For example: if trained health staff are working in a leprosy program, properly diagnose and treat patients, are involved in contact examinations and health education to the public, it is more likely that patients will be diagnosed earlier and the number of new patients with disabilities will be reduced (outcome indicator after staff being trained in leprosy).

3. Direct indicators of quality

These indicators directly pinpoint the subject of interest. For example, measuring a health outcome in the population being served. In leprosy, it is not easy to measure, directly, a health outcome like reduced incidence, or to have evidence that patients, soon after a lesion appears, report to a health unit and are diagnosed. As mentioned above, proxy indicators are more usually used, with all their limitations in most programs.

The three most important indicators of quality

The top priority is to promote the three most important indicators of quality which are also included in the W.H.O. Enhanced Global Strategy and Operational Guidelines (2011 – 2015); considerable effort will be required to get them reported reliably and comprehensively:

- The treatment completion rate;
- The proportion of Disability Grade 2 amongst new cases;
- The proportion of patients who develop new/additional disability during MDT and after release from treatment

Additional indicators which will give very useful information about quality without being too onerous to collect every year are for example:

- The existence of a checklist for supervision, supervision report and whether recommendations from a previous visit have been implemented.
- Assessing the views of a sample of patients: regarding their health seeking behavior and their expressed opinions about the quality of the leprosy services offered.

Logical Framework Matrix – How to plan and define a leprosy control project

A plan for a leprosy control project or program can be worked out in a logical framework matrix. A distinction is made between the Logical Framework Approach (LFA) and the logical framework matrix (LFM). The approach involves problem analysis, stakeholder analysis, developing a hierarchy of objectives and selecting a preferred implementation strategy. The product of this analytical approach is the logical framework matrix, which summarizes what the project intends to do and how it would be attained, what the key assumptions are, and how outputs and outcomes will be monitored and evaluated. The activities implemented lead to a result; several (positive) results lead to reaching an objective. Objectives reached can lead to the goal of a world without leprosy.

Project Description	**Indicators**	**Means of verification (*)**	**Assumptions**
Goal	Indicators	MOVs	Assumptions
Objectives	Indicators	MOVs	Assumptions
Results	Indicators	MOVs	Assumptions
Activities	Indicators, activity schedules and who implements (them)	Work plan, including cost calculations	Assumptions

(*) Means of verification (MOVs) explains where the data for calculating the indicators are to be found.

References

([1]) DAC Glossary of Key Terms in Evaluation, May 2002

([2]) MDF-Training & Consultancy, Ede, the Netherlands.