A REVIEW OF PERFORMANCE INDICATORS FOR HOSPITAL SERVICES

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ABSTRACT

The writer intends to review literature to assess the diagnostic value of the performance indicators (P.Is), as traced by historical background and development in the English National Health Services. The dissertation compiles the history of P.Is in an organized form, specifying the role of Inter Authority Comparisons and Consultancy (IACC). It gives comparative analysis of some of the other available choices to measure health performance with P.Is. It concludes that despite enormous criticism P.Is are still the most appropriate diagnostic tool for use in performance assessment itself as well as for other approaches.

INTRODUCTION

In the light of some of the major issues of the hospitals of the Punjab. The writer follows practical approach. Some of the P.Is have been generated, developed and presented. The writer outlines the proposals and recommendations for the introduction, development and testing of more P.Is for this province of Pakistan. This project work is based on the knowledge and experience which have been obtained from such an approach in Britain, which was originated by Inter Authority Comparisons And Consultancy (IACC). This being the pioneer example in Pakistan, will, it is hoped, determine the future of P.Is in the country.

DISCUSSION

In developed as well as developing countries those responsible for health care are primarily concerned that appropriate resources are provided at the right level and in the right place in order to sustain and hopefully, improve the health of the population.

Presently, in Pakistan there is no systematic or scientific method to measure the activities or outcomes, or the extent to which people have benefited from health care contact. It 'is very important to establish some yardstick for the appraisal of health services.

It is a major need of the day to introduce and develop Performance Indicators in health services to evaluate health care activity; this activity must be related to the basic aims, and objectives of the health services. The Performance Indicators will identify problem areas and will help to suggest action plan. This will help to ensure better quality of health services and thus improve the health status of the population.

Indicators were originally developed for examining mental illness and mental handicap hospitals and were used to identify the characteristics of hospitals having the greatest risk of Performance failure (IACC 1980).

A series of indicators are now available on microcomputers in the form of colour diagrams, with text explanations. Three main types of diagrams are used for the presentation of the data, i.e. Histograms, profiles and scattergrams.

The primary aim of the introduction of P.I.s., is to maximize the value of health status from a given allocation of resources, covering quality and quantity of human life. This is an urgent need in a developing country like Pakistan; Pakistan under the resource constraints, can it do more? - With its limited resources. It would have to be acknowledged that P.I. on their own would do nothing. It is only through a combination of circumstances, information, politics and motivation that things will actually happen. There are occasions when a large group of people feel that action is almost certainly necessary, but they are waiting for just one piece of information or one event that will tip the scales in favour of taking that action.

Above all, this is not just an introduction of P.Is., in this part of the world, but the introduction of some developmental change in the culture, ideas and behaviours - as P.Is. are behaviour modifiers. This change will enable health authorities and hospital administrators to tolerate healthy criticism for improvement of their services. P.Is. with their utility

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as planners, assessors, savers, and evaluators offer many potential benefits.

P.Is. will emerge as Problem indentifiers for the hospital services of the Punjab, which would be adaptable and applicable according to the existing conditions and demands. It is essential to devise action Plans to measure the problem. We need some device or meter - *Problem Meter!* Performance Indicators.

The implementation of the developed P.Is. in teaching hospitals of the province will be a 'stepping stone for future research work in this field. Because of its proven success and usefulness in Britain, developing countries like Pakistan can develop indicator packages. This work will be a 'product' which will be of direct use to health service managers for assessing their problems, resource provision and efficiency.

PROFILE OF P.Is.

DEFINITION

What is an Indicator?

Something which acts as a sign and which tells you about its behaviour. It is an instrument or a device which gives you information.

A Performance Indicator, according to the **DHSS**, is supposed to be an information which should enable a manager to assess the efficiency of a service for which he is responsible.

The choice of word "indicator" was deliberate. Indicators are measures of :

- Health status of the community.
- Incidence of deaths and diseases from various causes.
- Resource provision (inputs e.g. finance, staffing, buildings etc.).
- Resource usage by the community.
- Efficiency of resource usage.
- Quality of provision.
- Accessibility of services to the community.
- Equity of resource distribution.

These are usually the ratios between two data items to make these comparable e.g. beds per 1000 population served in patients per nurse. Sometimes there can be a single data item : e.g. number of beds (as a measure of hospital size).

Types of Indicators.

- The indicators fall into three broad categories :
- (a) Input measures.
- (b) Activity measures.

(c) Output and outcome measures.

(a) Input measures.

Inputs are the resources available e.g. revenue, manpower, number beds; and these are commonly used when no other indicator is readily available. They are not adequate indicators of performance but simply tell about the allocation of resources.

(b) Activity measures

These are generally measures of activity defined in terms of treatment or care given to patients. Activity measures are often called process or intermediate outputs. The use of the latter term has been criticized as it may lead to misunderstanding and the misuse of activity measures as true indicators of output.

(c) Output and outcome measures.

An output measure should be causally related to a particular activity. For ex

hospital revenue, and activity is occupied bed days, output could be say, satisfactorily repaired hernias. So if the input is equal but one surgeon has a greater length of stay for his patients, his output will be lower in terms of numbers of operations performed and higher in terms of cost per unit case. This is not, however an outcome measure, which may be defined as a total change in health seen in an individual patient or population. Outcome may be affected by a number of activities, not all related directly to the efforts of a hospital stay or treatment pattern, and is thus more difficult to measure.

At what levels are they calculated?

They may be calculated for many levels : e.g.

- World Health Organization regions.
- each country or state.
- provinces, regions, counties etc. within a country.
- districts within a country.
- hospitals within a country.
- particular services within a country.
- individual clinical consultants.

What are they for?

- Comparing your own situation with others.
- Monitoring services overtime.
- Monitoring health status.
- Monitoring health problems.
- Monitoring health needs.
- Monitoring health care demands.

- Setting targets.
- Accountability.
- Modifying behaviour.
- Promoting efficiency.
- Monitoring accessibility of services.
- Resource allocation.
- Monitoring equity of resource distribution.
- Resource allocation.
- Planning services.
- Evaluation of services.
- Performance review of subordinate bodies by superior bodies.
- Diagnosis of hospital problems.
- Suggesting possible remedies.
- Measuring achievement of organizational objectives.
- Informing the dialogue between different professions and organizations that contribute the same goals.
- Giving a broad view of health needs, services and key issues.
- Monitoring of trends over time.
- Measuring variation in needs, provision, quality and efficiency.
- Setting standards.
- Bringing together data from different sources to allow problems to be looked at in different ways. Making information widely available.
- Helping managers to choose the right actions.
- Helping to promote standardization of data definitions.

Criteria of Indicators

Bailey has made a study into the criteria for judgements of performance measurement methods. She recommends that every method should have a criterion against which it is measured.

The criteria for P.Is. are as follows :

- Relevant to the objectives of National Health Policy.
- Accurately reflect what they are said to measure.
- Appropriate.
- Specific.
- Unambiguous.
- Reliable.
- Consistent and stable through time and changing circumstances.
- Sensitive, will reflect significant change.
- Simple and inexpensive to obtain and administer.
- Cost effective.
- Comparable, can be standardized.

Comparative Indicators versus simple data measures

Comparative indicators are used to compare similar organization or service. For instance, we can compare their levels of resource provision or efficiency. It is important to ensure that the indicators really are comparable, for instance, it is no good comparing simply the number of hospital beds provided in districts. One must also take into account the size of the population, being served by those beds. They indicators must be the number of beds provided per capita of population served.

Non-comparative indicators can be used to look a the same service over a period of time, without reference to what is happening elsewhere. For instance, an organization may want to monitor and reduce its staff sickness and absence rates overtime. This can be done without external comparative data. However, it would be argued that it would be better to know what typical sickness and absence rates are experienced in other places, to give us an idea of whether our own values are relatively low or relatively high.

REFERENCES

- Harley, M. J., "The measurement of health services activity and standards", *Oxford Text Book of Public Health*, edited by Holland, W., Vol. 3 Second Edition, Oxford University Press, 1991.
- Mullen, P.M., "Performance Indicators Is anything new?", *Hospital and Health Services Review*, Vol. 81, No. 4, July 1985.
- Robson, J. R., "Performance Measurement in the NHS", (IACC), Unpublished Paper, Jan 1991.
- Allen, D.; Harley, M. & Makinson, G.T., "Performance Indicators in the National Health Service", Social Policy and Administration, Vol. 21, No. 1, Spring 1987.
- Birch, S. and Maynard, A., "Performance Indicators and Performance Assessment in the UK National Health Service : Implications for Management and Planning", *Interntional Journal of Health Planning* and Management, Vol. 1, No. 2, pp 143-56, Jan-Mar. 1986.
- 6. The 1st. National Package of Performance Indicators for the *NHS press release*. *DHSS*, 22 Sep. 1983.
- Riggs, D.G., "An Introduction to Quality Assurance", *Hospital Engineering*, Vol. 43, No. 8, pp 13-15, Oct. 1989.
- White, D. K., "Analysis of Hospital Services", (Hand Out), HSMC Overseas Unit, University of Birmingham, Feb, 1991.

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- 9. Report of *The Royal Commission on the NHS* Cmnd 7615, HMSO, 1979.
- Pollitt, C., "Blunt Tools" *Performance Measurement in Polices in Health Care*, Omega Vol. 2, No. 2, July 1983.
- 11. Performance Indicators : *The National Summary for* 1981 DHSS, London, 1983.
- 12. Bailey, C. T., *The Measurement of Job Performance*, Gower, 1983.