

Performance Indicators in Health Care

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Introduction

Under health sector reforms, which are implemented in nearly all European countries, decentralisation and privatisation takes place. This has two effects:

- Health facilities and health care providers have to become self-directing organisations. There is no longer a central level that prescribes in every detail what service providers should do.
- The central government, which is responsible for regulations and financing, needs information from the health facilities to perform its tasks (while being on a distance).

Health sector reforms demand for increased transparency, accountability and information on the quality of health care. Therefore there is a need to monitor the level of performance of health organisations. The organisations themselves monitor internally for better management, and stakeholders (government institutions, insurance companies, consumer organisations) monitor externally to assess whether their interests are properly served. This is one major stimulus for monitoring of quality of care.

The other major stimulus comes from the movement of evidence-based health care. In the 1970s this was initiated by Archie Cochrane and spread gradually to all corners of clinical medicine and public health. Cochrane argued that no longer should “professors’ opinions” guide decision making, but scientific evidence based on (large-scale) comparable research on outcomes of interventions. For finding evidence, information is needed, preferable from as many health institutions as possible.

Monitoring quality of health care is a complicated process, as so many aspects are important. Health outcomes (improvement of the health situation of clients) are the most important, but also efficiency, cost-effectiveness, patient-centred approach, etc. The monitoring process needs to look at all these different aspects. Performance indicators are instruments in the monitoring of quality programmes. Indicators link pieces of information, giving them a meaning. For example the number of vaccinations in a country is of little interest, but when compared to the number of persons who should be vaccinated (the target group) a coverage can be calculated. Epidemiologists know that at least 80% coverage should be reached to achieve herd immunity. Thus, linked pieces of information make sense. Similarly, the number of post-operative wound infections in a hospital is not interesting to know, but when linked to the number of surgical interventions, it becomes relevant information to assess the hygienic standard of a

hospital.

Formulating Indicators

Major attention in the Matra project went to formulating appropriate indicators. This process required extensive consultation and testing.

Indicators must fulfil the following criteria:

- Importance and relevance: the indicator must reflect aspects of functioning that matter to users and are relevant in current healthcare context. Clinical indicators should focus on events that have a high prevalence rate and high burden.
- Potential for use (and abuse) and responsiveness to assessment: health facilities must be able to act upon this indicator if it reveals a problem. Hence, they must have the responsibility, substantial control and ability to implement improvement strategies.
- Reliability: It supposes that the indicator has explicit and detailed specifications for the numerator and denominators. Uniform data collection procedures are understandable and easy to implement.
- Validity: There a consensus among the users and experts that this measure is sufficiently related to the issue it is supposed to assess. Empirical evidence demonstrates it is associated with other measures of performance.

How simple it may seem, it is not easy to formulate indicators which meet all these criteria. Therefore, experimenting and testing was necessary in this project to come to good indicators.

Internal and External Performance Indicators

'Performance indicators' do not constitute a precisely defined category. The classic distinction of 'structure', 'process' and 'outcome' indicators partly overlaps with the category of 'performance indicators'. It is important to distinguish between the internal and external use of indicators. Internal indicators are used by health care providers to monitor and improve the outcomes of their care processes. Professionals and managers can use these data to investigate where potential problems lie, and how they may be approached. On the basis of such analyses, care processes may be redesigned, and the indicators can then be used to monitor the consequences of these improvement attempts. External indicators, on the other hand, are used by governments, patient organisations and payers to assess the quality of care of a health care provider, and to compare that

quality to the performance of other health care providers.

Often, the internal and external uses of indicators are seen as two sides of the same coin: insight in the actual performance of care processes, after all, is important for both improvement activities and for purposes of accountability. Yet the differences in purpose result in some very relevant differences in characteristics of the indicators involved. Failure to take these differences into account, may result in indicators that are unfit for their task.

For internal purposes, indicators need to be relevant for the managers and professionals involved: they have to be specific to the care process at stake, aimed at its particular peculiarities and problems, and sufficiently detailed to capture the impacts of (planned or unplanned) changes to that process. To make comparisons between organisations, however, this level of detail and specificity is irrelevant. Such comparisons require a more overall view of the performance of (groups of) professionals or whole institutions: what are the overall outcomes, average waiting times, global costs? Consumers and payers seem to be mainly interested in global patient satisfaction figures, and overall quality indicators such as reputation and accreditation.

External indicators require exhaustive validation. Comparisons have to be fair and real: relevant differences in patient mix, for example, may not be missed. Exhaustive validation is required to prevent perverse effects such as ‘creaming and dumping’ (selecting those patients who will guarantee high scores, and denying service to ‘difficult’ patients to similarly improve the indicator score).

Exhaustive validation, then, means correcting for all the possible relevant differences between the care contexts compared. This requires large amounts of precisely registered and comprehensive data, including all the potentially relevant differentiating variables such as age, sex, gender, ethnicity, socio-economic status, severity and range of complaints, stage of the disease, diagnostic and therapeutic activities undertaken (including the reasons for doing so), and so forth.

Sociologically speaking, internal indicators, jointly working on ‘improvement’, are about trust – in each other’s intentions, in the common purpose of improving the patient’s care, and in the conscientious treatment of ‘soft’ numbers. External indicators, on the other hand, are about formal relations of accountability: mechanical rankings of meticulously processed numbers, whose ‘hardness’ is to form the objective arbiter of ‘good’ versus ‘bad’ performance.

In this project, three categories of external stakeholders were recognised:

- The owners of the institution (in case of hospitals, municipality, regional government, central government)
- The government (represented by the Health Care Surveillance Authority)
- The health insurance companies

Ministry of Health Indicators

Quality indicators are elaborated yearly by the ministry of health in co-operation with health care professionals’ associations, health insurance companies, Surveillance

Authority, published in the Government Decree (§ 7 par. 7 of Health Insurance Companies and Surveillance Authority Act) and elaborated for assessment of the following fields of provided health care:

- accessibility of health care
- cost-effectiveness
- efficiency and adequacy of health care
- perception of provided health care by the patient
- outcomes of health care.

For 2005, the ministry has formulated the following indicators:

The ministry has instructed the National Statistics Office to generate information on these indicators, as far as available from statistics.

International Indicators for Quality of Health

The project decided that it was important to connect the development of indicators to international activities in this area. First of all, this gave the opportunity to learn from experiences from elsewhere. Secondly, the Slovak Republic is joining international organisations and committed to international projects. It would not be wise to develop parallel structures for formulation of indicators.

The project incorporated two international programmes for indicator development: the OECD Health Care Quality Indicator Project and the WHO Performance Assessment Tool for Hospitals.

OECD Health Care Quality Indicators Project

The Organisation for Economic Cooperation and Development (OECD) collects internationally data reflecting the health outcomes and health improvements attributable to medical care delivered in OECD Member countries.

The Health Care Quality Indicators Project (HCQI) is a component of the OECD Health Project and belongs to the component Measuring and Analysing Health Systems Performance.

Many OECD Member countries have already instituted national strategies to begin to collect quality indicators in health care, often for purposes of comparing health organisations in a performance measurement setting. These national activities do not lead, except by accident, to internationally comparable Quality Indicators. That is because there is a lack of international agreement on the most promising indicators and definitions of each indicator that could be adopted. The OECD publishes the Health Data based on country information, but there is, so far, little possibility of international benchmarking of quality of health care. This deprives national policymakers of the opportunity to compare the performance of their health care delivery systems against a peer group.

The HCQI builds on the efforts of several OECD Member countries and two international collaborations in developing indicators of health care quality at the national level.

During 2004 the project collected preliminary data, and examined its international comparability, for an initial set of 17 indicators. In 2005 a preliminary report on the findings was presented.

Slovakia, being part of the OECD, has committed itself to collecting OECD health indicators.

WHO indicators (PATH)

After having been developed in 2003 within a WHO project, Performance Assessment Tool for Hospitals (PATH) is piloted in six countries in Europe (Belgium, Denmark, France, Lithuania, Poland, and Slovakia) and two countries outside the European Region (Canada and South Africa). The purpose of the pilot implementation – which runs between March 2004 and March 2005 – was to evaluate the usefulness of the tool as a whole (especially its assessment strategies), the burden of data collection and its potential

for being spread out across Europe.

Participants from Slovakia work only with the first subgroup. The team of the MATRA project joined this initiative because it perfectly matches the projects aims. It provides verified information on availability, relevance, and usefulness for hospital management as well as for inter-institutional benchmarking with the country. The indicators in the project follow the methodology of PATH.

Indicators are divided in several categories.

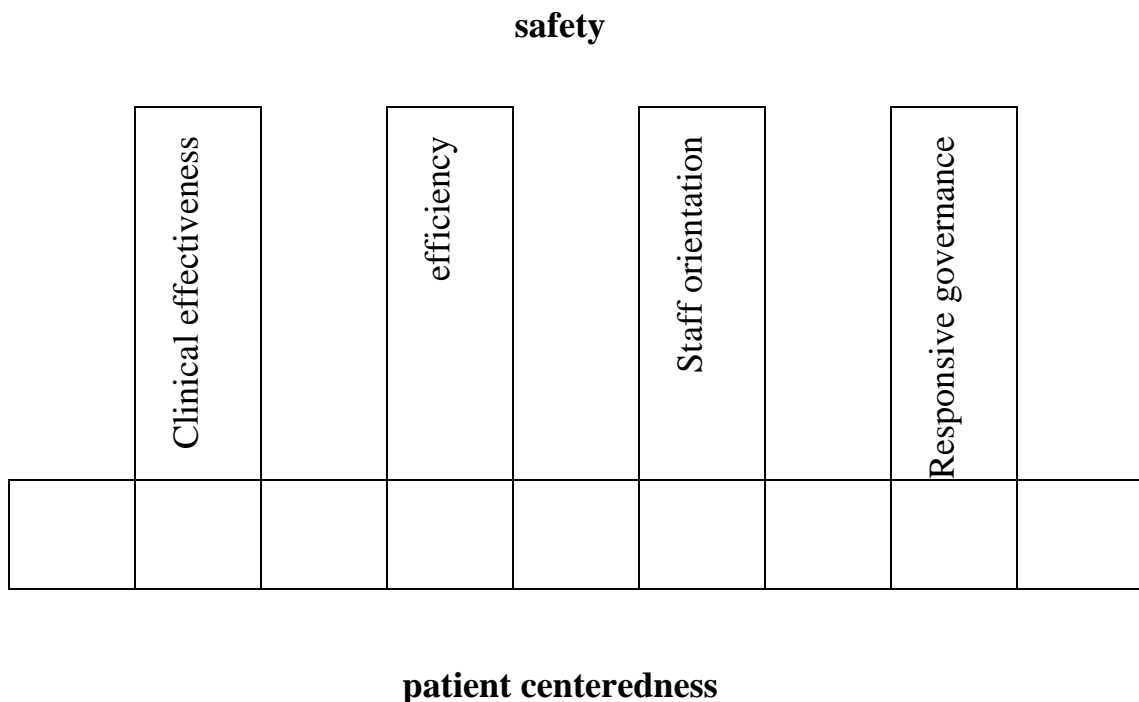
The categories are:

- Clinical effectiveness
- Efficiency
- Staff orientation
- Responsive governance

Cross cutting themes are:

- Safety
- Patient-centeredness

Each category is then subdivided into core indicators and tailored ones.



The following table shows examples of categories and dimensions formulated for these categories.

Category	Dimensions
Clinical effectiveness	- No specific sub-dimension
Efficiency	- Appropriateness - Input related to outputs of care - Maximal use of available technology for best possible care
Staff orientation	- Practice environment - Perspectives and recognition of individual needs - Health promotion activities and safety initiatives - Behavioural responses and health status
Responsive governance	- System / Community integration - Public health orientation
Safety	- Patient safety - Staff safety - Environment safety
Patient centeredness	- Client orientation - Respect for patients