The Use of Medical Quality Indices as a Performance-Enhancement Tool for Community Clinics

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Key words: quality indices, incentives, primary care, variation, health policy

Abstract

One of the most important issues for a country, its population and doctors is the effective use of its health system. The extensive variation in doctors' performance leads to a tremendous waste of resources. To combat this, and at the same time ensure that medical quality plays a role when making decisions on interventions, it is essential to equip doctors and clinic directors with information on the quality of the medical care they are providing. In order to assist clinic directors in maintaining medical quality, Clalit Health Services has developed comparative medical indices enabling doctors to compare their performance to that of their colleagues, as well as to the standard and their performance over time. The development of an index to evaluate the quality of medical treatment offered in clinics provides doctors and the health system with an essential tool to lessen the existing variation among doctors and to enhance and evaluate performance.

IMAJ 2001;3:947–951

One of the most important issues for a country, its population and doctors is the effective use of its health system. An inefficiently run system leads to wasted resources and, consequently, to fewer opportunities to save lives, prevent pain and complications, and provide medical care for those who need it. Independence is a prominent characteristic of a doctor's work, especially that of a primary care physician. However, in contrast to many other professions, this independence leads to considerable variation in the behavior of different doctors, even if they are practicing in a similar environment and treating a similar population.

The extensive variation in doctors' performance leads to a tremendous waste of resources. In other words, the opportunity to make better use of existing resources is lost due to a lack of tools or routines geared to check the various clinics as well as doctors' performance. This variation and its cost strike a dissonant note in the patient community as well as among policy makers, especially in this era of rapidly mounting healthcare costs. The sharp rise in the demand for medical services versus a much more moderate increase in resources highlights the need to make decisions on resource distribution. This issue emphasizes the need to assess the quality of medical care as well as to address the question whether medical decisions based on "economic" considerations place medical quality at risk.

In order to explore this question and, at the same time, ensure that medical quality is a factor to be contended with when making decisions regarding interventions, it is essential to equip doctors and clinic directors with information regarding the quality of the medical care they are providing. Distributing this feedback to doctors on their performance in terms of the quality of medical care and comparing their performance with that of their colleagues in a similar environment has already been proven to be an effective tool for enhancing medical quality [1–3]. An information tool for medical quality can also pinpoint the leaders of quality in all fields and can serve as standard setters and as "Best Practice." This is the performance level that should be aspired to as an example for colleagues working in similar conditions and environment.

The Clalit Health Services is at the height of an extensive process of developing community clinics as self-managed units (decentralization process) that take responsibility for their performance in the various activity areas. These include quality of service, optimal utilization of resources, and operational efficiency. In order to assist clinic directors in maintaining medical quality, Clalit Health Services has developed medical indices enabling doctors to compare their performance to that of their colleagues as well as to the standard and to their own performance over time.

The considerations for selecting the specific indices include:

- The importance of the index to the physician and to the patient's treatment.
- Its popularity as a quality index in the medical world (e.g., its use as quality index in HEDIS – Health Plan Employer Data and Information Set [4]).

- The existence of sufficient cases at the clinic's level to reach reasonable assessments and reliable conclusions.
- The existence of reliable data enabling index calculations.
- The option of having an impact on the index data leading to performance enhancement.
- The possibility of adapting it to the organizational strategy.
- The attainment of a high cost-benefit ratio through performance enhancement.

Indices from various fields were selected: preventive medicine, chronic disease care, rational drug use and selective drug use.

Preventive medicine

The indices in this area include:

a) The rate of flu vaccination recipients among the population targeted for vaccination
b) The rate of breast cancer screening tests (mammography) in the target population (women aged 50–74)
c) The rate of Pneumovax vaccine recipients in the target population
d) The rate of detection of patients suffering from hypertension in the general population
e) The rate of detection of patients suffering from hypertension in the target population (ages 35–54).

Chronic disease care

The indices here include:

a) The rate of eye examinations for diabetics during the past year
b) The hospitalization rate for chronic lung disease patients
c) The rate of emergency visits for patients suffering from chronic lung disease
d) The rate of patients suffering from hypertensive complications (congestive heart failure, chronic respiratory failure, stroke)
e) The hospitalization rate for hypertensive patients
f) The rate of steroidal inhalers among asthmatics.

Rational drug use

These indices include:

a) Rational treatment of hypertension (rate of diuretic and beta-blocker use)
b) Rational treatment of patients suffering from dyspepsia (rate of low dose proton pump inhibitors users)
c) Rational treatment of patients suffering from angina pectoris (use of dinitrates vs. mononitrates)
d) Rate of those administered calcium channel blockers among patients receiving hypertension treatment.

Selective drug use

While most of the selected indices refer to the physicians' work, the intention is to add indices that are more linked to nurses' work and to pediatricians' care. Some of the indices are selected on the national level as cross-organizational and are binding for all clinics. Moreover, every clinic can propose additional indices to be incorporated within the scope of its work plan. Every year the organization reconsiders the list of quality indices according to its goals in the specific year. Data concerning medical quality indices are produced once every 3 months and sent to every clinic director, along with comparative data on colleagues' performance in the area, regional and national performance averages, as well as a goal for each index. The goal for each index is set at the level of the American objective (HEDIS) [4] or at the level of the best performance in the leading region for that index (Best Practice).

The data on medical quality indices are sent regularly along with other data on the clinic's economic performance in various fields: personnel, hospitalization, drugs, diagnosis, consultation, infrastructure maintenance, and use of telephones, electricity and water. Furthermore, the clinic receives data on the insured members' anticipated departure from the clinic or the health maintenance organization (sick fund), data on their level of satisfaction as expressed in periodically held surveys, as well as data of their complaints about the medical service they received at the clinic.

The clinic's use of the medical index data

The medical indices data that the clinic receives once every quarter serve as an essential information tool for the clinic's planning and treatment in its main field, namely medical treatment. This is done in several ways:

- By identifying the medical treatment fields in which the clinic's performance is outstandingly different from that of other clinics.
- By designing a yearly work plan. According to the index data, the clinic sets the treatment priorities to enhance the quality of medical performance as part of a yearly comprehensive work plan, which includes the planning of the clinic's overall activities in all areas.
- By an ongoing follow-up of the performance and the capacity to meet the objectives set in the work plan. The data are presented to the clinic's entire staff or during professional meetings of the clinic's physicians. In these forums the data serve as a platform for discussion to investigate the reason for the differences and to plan an intervention specifically designed to enhance the field in which the clinic's performance is poor, as compared to that of colleagues or to the objectives initially set for the clinic.
- By identifying fields in which there are huge differences in performance *within* the clinic. Even in the same environment (similar economic status, similar social conditions, similar mix of patients), the physicians' performance can vary greatly from one physician to the other. The data serve as excellent raw material for pinpointing differences and rationally analyzing the reasons for these differences. The data also provide vital information for planning intervention in a specific unit or for tailoring a specific program for a certain doctor in order to enhance his or her level of patient treatment, diminish the degree of variance at the clinic, and raise the quality of treatment to the desired level.

Assessment and rewarding of clinics

Assessing the clinic's performance in the area of medical quality is part of the periodic overall assessment of its performance. Awarding a grade to the clinic takes the form of an economic incentive for its performance during the work year. Conducting such an assessment and emphasizing medical quality are particularly important when the clinic progresses to self-management status and to counterbalance the evaluation of its economic performance. In the absence of such quality indices, the system on the whole and the clinic in particular are at major risk of being dragged into activities geared only toward the goal of reducing individual expenses without simultaneously evaluating the impact of this activity on the quality of the medicine offered to the insured. Introducing the component of medical quality to the process of the clinic's evaluation causes the clinic staff to pay particular attention to the quality of medical treatment they dispense, if only to meet the clinic's objectives and the economic incentive that will channel additional sources to the clinic. If the latter adheres to its budget, it is then awarded a bonus equivalent to the amount of the savings multiplied by the clinic's grade as a percentage. The grade takes into consideration a number of parameters for quality, including the results of a survey of the customers' level of satisfaction, an evaluation of their managers, an evaluation of medical records, etc. Thirty percent of the grade is determined according to the degree of adherence to the medical quality objectives, which are jointly set by the clinic's management and the regional management in the yearly work plan. A clinic that is not awarded a grade of at least 75% in the evaluation of work quality is not eligible for a bonus, even if it has adhered to its budget. This stipulation was introduced in order to prevent quality from being affected by the desire to save and win bonuses. The clinic is entitled to use the bonus funds for professional literature, staff consolidation and training, improving the clinic's appearance or working conditions, etc., while adhering to the cash limitations. There is no authorization to distribute the bonus as a salary supplement.

Work experience with indices

My experience gained during the past two years of working regularly with the information tools on medical indices at the clinics' disposal shows that:

- The medical staff is thirsty for such information, and the mere conveying of this information to the clinics brings about processes of self-enhancement and awareness of this important area of the quality of medical performance.
- The information serves professional meetings on topics of intra-clinic treatment policy and independent consolidation of treatment directives in the various professional fields.
- The rate of adherence to intra-clinic directives is immeasurably higher than to nationwide or international directives. The response level is high when the staff further develops the directives to a comprehensive discussion in which the entire staff – or most of it – is involved. Thus, the directives are not perceived as being dictated from above but rather as an internal decision that must be obeyed.
- The adherence to medical objectives set by the clinic itself by relying on the medical index data is impressive. There are countless examples of self-managed clinics that by adhering to medical goals have succeeded in fields where national goals have existed for years but were not even remotely attainable. An excellent illustration of this is breast cancer detection screening through mammography. For years, the clinics failed to exceed testing rates of 15–20% of the target population. During the two years since the clinics themselves set objectives, it is not rare to find testing rates of 60–75% and even over 90% of subjects in the target population in the same clinics performing mammography, where, under the veteran directives, such goals were far from being met. Once the clinic itself decides that such tests are part of its priorities, it plans action suited to attaining the objective. Using the medical indices to follow the progress toward attaining the goal, and carrying out interventions and corrections increase the clinic's chances of attaining its goal. In other words, the clinic has a much better chance of actually attaining the goals it has set for itself.
- Incorporating measurement within the organizational process appears to be a vital element for the three listed above. This involves receiving comparative information and the option of self-management. It also involves tailoring the effort to enhance quality in the clinic's work and management routines as part of the process of designing a yearly work plan, follow-up of partial implementation of the plan, and providing monetary incentives for those adhering to the plan's objectives. With regard to all quality indices, the work plan includes: a quantitative objective, the steps taken to meet the objective, milestones, and selecting the team member in charge of meeting the objective.

Experience shows that a centralist approach to quality enhancement is doomed to fail since it assumes that the center knows better [5]. Such an approach is perceived as enforced and therefore arouses opposition; it depletes the medical team's strength in the field and does very little to encourage the good team members to improve. In fact, the approach of empowering the primary clinics and decentralizing responsibility and authority holds a better chance of success. The clinics reveal a sense of creativity in finding specific methods suited to their unique environment in order to reach the goals they set for themselves. What remains to be done is to supply them with the tools and information they require to rationally manage their resources and the quality they offer their patients. Moreover, the chance of collecting information locally is greater when the responsibility for setting and meeting goals is brought down to the level of the clinic rather than dictated from above.

Nonetheless, care should be taken to avoid an overabundance of indices. In this case, the saying "Grasp all, lose all" is all the more applicable. One must bear in mind that the clinic's staff is quite limited, and when the clinic is provided with too

many indices the result is an inability to focus on the issue at hand.

Medical treatment indices in conflict with physicians

In processes involving the clinic's self-management or programs like managed care, there is a known phenomenon of conflict among the team members with regard to preferences. This is seen particularly among doctors in two areas: a) medical ethics, which promotes any possible and existing medical treatment to "heal" the patient; and b) weighing economic considerations in decision-making. This conflict leads to fears among the doctors that the quality of the treatment offered to their patients may be affected. There are reports – primarily on the American healthcare system – that weighing such economic considerations leads to intense opposition among physicians and even to phenomena of depression, as reflected in some doctors abandoning their profession. This is how some physicians' react to the sense of loss of independence in medical decision-making, which in turn leads them to feel that they may harm their patients [6]. Providing ongoing data on *the quality of medicine* being offered together with data on economic performance affords doctors with a revision tool. It can also serve as a means to significantly allay their fears of affecting the quality or treatment offered to their patients. Furthermore it provides doctors with a vital instrument to address the conflict between the wish to please their patients and the wish to please their employers – alongside their desire to be true to themselves and faithful to their professional conscience that they did everything to ensure that their patients receive optimal and quality medical treatment.

On the national level

For the first time, the development of tools to measure the quality of medicine also provides information on regional performance. Furthermore, these data serve as an important component in the yearly selection process of the outstanding region in the provision of Clalit Health Services.

What does the future hold?

The existence of this tool provides the option of initiating a system for comparing the performance of the various HMOs in Israel – not only with regard to economic performance indices, the insured members' degree of satisfaction, and data on patient leaving and joining – but, for the first time, also between the quality of medicine offered and the option of cost-benefit calculations in the various HMOs. There is still a long way to go until these data are made available to the public at large to be used as a tool for selecting an HMO, a clinic, or a specific doctor who will provide the patient with the desired medical treatment. First, the indices must be uniform and accepted, and standardization must be achieved for data banks, clinical diagnoses, interventions, and effects. Moreover, the quality of the data will have to be ascertained in order to compare the data obtained from various information systems regarding the same medical quality indices. In the absence of these essential steps, it will not be possible to verify the impact of the various performances and interventions on the effects.

Moreover, the various HMOs are not prepared to disclose these data on medical performance to the public. Opposition to revealing the level of specific doctors and allowing the public at large to judge doctors according to these indices is also anticipated from the professional unions. However, it is only a matter of time until the public will demand comparative information; and the visibility that developed in many service fields such as telecommunications will no doubt also permeate the area of medical treatment. It is likely that comparative tables on doctors' performance in various treatment fields will also be published in Israel, like in the USA. This information will be available to the public at large and, specifically, to the insured member when selecting his or her medical caregiver, family doctor, and specific experts for any consultation.

The existence of information on treatment quality offers the potential for cost-benefit calculations and comparisons between different treatment options for various clinical diagnoses, such as decisions on who should treat diabetics – primary healthcare physicians in the community, professional community doctors, or perhaps the hospitals? Whereas, to date, there were only comparative economic data, the development of comparative data on the quality of the process and the treatment effects is a step up in the rational analysis of such alternatives.

For this purpose, there is still a need to enhance and expand the information. For example, there is a need to make a connection between the medical information provided by primary medicine with that provided by hospital facilities. One of the most prominent current deficiencies in the information at the disposal of physicians attempting to enhance medical quality and decide between various treatment options is data on diagnoses at hospital discharge and on mortality.

It is accepted in other industries that evaluating the cost per outcome unit at a reasonable degree of accuracy is essential. This may be more difficult in a health system, but the absence of such an option will make it difficult to achieve efficiency in the system, because without data on output and its quality it will be impossible to know or judge who provides the more efficient treatment or which treatment is more efficacious.

Summary

An index tool is necessary to evaluate the quality of medical treatment offered in clinics in the fields of preventive medicine; treatment of chronic patients; the prevention of complications; and the rational use of drugs, diagnosis and consultation. Such a tool is essential to lessen the existing variation among doctors, enhance and evaluate performance in this area, and

HMO = health maintenance organization (sick fund)

provide an incentive for improvement. In the future, the public could be equipped with a tool that provides them with information according to which they will choose the HMO they wish to join, the doctor in whom they wish to place their trust and to whom they will entrust their bodies for treatment of their ailments. The health system and its decision makers will have at their disposal a more comprehensive tool that will enable the comparison of treatment alternatives in various fields, cost-benefit calculations, and informed decision-making regarding the distribution of resources in the system. This is conditional upon improvement as well as on the standardization and expansion of the information at the disposal of those addressing health in Israel.

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