## **Health Policies and Knowledge Management**

"There is nothing a government hates more than to be well-informed; for it makes the process of arriving at decisions much more complicated and difficult."

J. M. KEYNES

In the health care policy and practice, knowing what is appropriate is not easy. There have been attempts to explain the concept of appropriate use from different points of view. Experts in health economics have defined what is appropriate as something that is technically possible, socially acceptable and economically viable.

In this regard, it would only be appropriate to apply the medical procedure with enough development to be applied after its experimental verification, which society accepted as being part of the care or for a patient in particular, and which society was willing to pay for with resources available for that purpose.

These insights from economy are very useful because they trigger thinking; however, it is difficult to transform them into tools that help know what is appropriate or inappropriate for each patient.

From the clinical standpoint, which does not exclude an ethical basis, it is also difficult to define what is appropriate in medicine, so it has been proposed to define what is inappropriate, and then presume that the rest will be appropriate. In this scenario, several reasons regarding why the use of a technology or a procedure may be inappropriate have been proposed. When it is unnecessary, i.e. when the desired goal can be achieved through simpler means. When it is useless, because the patient is in a very severe situation to respond to treatment. When it is unsafe, because its complications outweigh the probable benefits. When it is harsh, because the quality of life offered is not good enough to justify intervention. When it is foolish, because it uses resources from other activities that might be more beneficial. This reasoning may be useful for many clinicians in their individual decisions with their patients, but insufficient if it is not accompanied by adequate information and updated knowledge of every medical issue, in order to develop standards of appropriate use that can be systematically helpful in taking decisions for each patient.

Finally, it cannot be ignored that health care and services are provided in a certain social, political, economic, and cultural context that constitutes the setting, and in an organizational context that is the health system itself. Services offered to citizens should have certain characteristics to help improve health outcomes in the individual and in the population. The Institute of Medicine of the United States has proposed six aims for providing health service: it must be safe, effective, patient-centered, timely, efficient, and equitable.

Safe service refers to the risk or likelihood that a patient has an undesirable effect when receiving a diagnosis or treatment procedure, within the probability supported by scientific knowledge, and that the expected outcome outweighs the expected risks. It is important that no risks from medical errors are added to the expected risks for each procedure (patient safety). Therefore, the final decision should be the one with the most favorable balance in terms of risk/benefit.

Effective service refers to the relevant health benefit produced by the decision to implement an intervention in a patient or a population. It involves a diagnostic procedure that helps confirm or rule out a disease, take therapeutic decisions or establish a prognosis, or a therapeutic intervention that cures or relieves the disease. Knowledge of the effectiveness of different alternatives should be based on the best available scientific evidence (one's own or another's). Effective procedures should be applied to all patients who need them.

Patient-centered service means personal, coordinated and comprehensive care, providing physical comfort and emotional support, and respectful of individual preferences, needs and values. The patient should be provided with information, communication, and education. It is different from the care focused on the disease, the organ, the physician, the facility, or on technology.

Timely service means providing care when patient health outcomes are maximized. Waits and delays should be reduced, which at times contribute to patient worsening.

Efficient service means that the health outcomes obtained as a result of the care provided are worth the costs demanded. Efficiency can be improved by taking the decisions that produce the best results and, if possible, by reducing the financial costs of service and avoiding unnecessary procedures.

Equitable service means that the access to quality health service must be similar for patients with a similar need, with no personal variations due to gender, ethnicity, geographic location, or socio-economic status.

It would therefore be of great importance that those who are responsible for health care support their decisions with well-founded evidences. The evidence-based approach to provide health care services allows a new management model whose main features are: the adoption of strategies to increase the ratio between cost and harm, acceleration and promotion of changes in clinical practice, and research promotion.

In 1991, the Ministry of Health of the United Kingdom created a research and development program with five major functions:

- Find out the knowledge needed by those responsible for taking decisions in the National Health System.
- 2. Ensure that such knowledge is obtained.
- 3. Make that knowledge readily available to those responsible for taking decisions.
- 4. Promote the application of the results of research and development.
- 5. Promote a culture of assessment.

To complement this activity, the Secretary of State for Health later launched an initiative of Clinical Effectiveness, simple and easy to understand, which included three major aspects: informing, changing, and monitoring.

This view of change in the English system originated from the simple observation of how the interest for productivity and quality —which had dominated health care management in recent decades— had not resulted in evidence-based policies or in the application of knowledge derived from research to enhance the efficacy, safety, acceptance, and cost-effectiveness relationship in health care.

In our public and private systems, each hospital should develop an area of scientific production in which management of effective knowledge can be carried out, based on suitable computing structure, virtual library, operating rules, program of activities, coordinated projects, and available time for specific tasks of research and patient records management, performed by a trained and paid human resource.

Knowledge management in health services involves different objectives. First of all, the creation of knowledge bases from the progressive management of scientific information. These knowledge stores are enriched with the external production, the internal structured knowledge (research reports, evaluation of technology innovations), and with the internal informal knowledge (models and algorithms for decision-making). Secondly, the improvement of the systems of access and transmission of knowledge with the creation of thematic cooperative networks in areas that are key to health

organization, as well as groups of experts. In the third place, promoting an environmental culture for the creation and appropriate use of knowledge, encouraging proactive attitudes and incentives for enterpreneurial initiatives. Finally, assessing knowledge as an asset, through annual audits of the intellectual capital (relevant maps of scientific knowledge production).

The impact of such actions on the health organizations has increased the professional skills and the experience of functional units in many hospitals. In that context, knowledge management has materialized in health care processes through different forms of standarizations (clinical guidelines), indicators for health quality management and assessment of health outcomes, under the watchful eye of the clinical control of the services.

The biggest challenge is the expansion of scientific production areas outside hospitals, almost at the first level of care, which encourages research in epidemiology and prevention of cardiovascular diseases.

The National State must encourage the creation of scientific production areas in all the public system throughout the country, with a strong financial support through scholarships and grants for national research that allow us to estimate the prevalence, distribution and trends of cardiovascular diseases and risk factors. The assessment of this epidemiologic phenomenon as burden of disease will allow to design and implement public policies that improve the health of our patients. All the national health system must be transformed into a huge research laboratory, coordinated from the State by networks of experts.

The Argentine Society of Cardiology and its 37 Regional Districts will contribute to the development of an evidence-based health care policy that integrates knowledge management with health policies that progressively improve our outcomes in cardiovascular medicine.

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