IMPACT OF THE STUDIES OF ECONOMIC EVALUATION IN THE HEALTH CARE DECISION-MAKING

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INTRODUCTION AND OBJECTIVES

One of the purposes of these XX Jornadas de Economía de la Salud is reviewing the achievements and the impact of this scientific specialisation. Generally, the review papers introduced in these sessions have studied more at length the application of the economic methods in the health sector and the objects of study on the different areas: public financing, drugs, efficiency of the management of the establishments, etc. However, in this paper, we try to measure the use of the economic evaluation instruments and of some of their results -as publications on specific technologies- by health managers.

The economic evaluation of health technologies was studied specifically in one of the former meetings of AES. To be precise, the X Jornadas, that took place in Pamplona in 1990, dealt monographically with the economic evaluation. Since then, and even before, this part of the use of the economy in the field of health has occupied a space in each annual session of the AES and has constantly grown as for the research works published. The paper by Anna García Altés, also published in this book, analyses thoroughly the studies accomplished to date.

In this order of ideas, it makes sense to study the practical use of economic evaluation, in view of the fact that it began to be elaborated with the basic aim of facilitating its practical use. Note that one of 38 general health goals of the strategy “Health For All in the year 2000” of the WHO for Europe was exactly ensuring that, by the year 1990, the health systems would already have a formal mechanism of evaluation of the health techniques -considering as a specific class of evaluation the economic one-.

On the other hand, Drummond (1997) was a pioneer in verifying if the use of the economic evaluation was more a desire than a reality, since he tried to measure its use by some professional groups. Afterwards, during the years 1998-1999, a European project, i.e. "Euromet", within the program Biomed, directed by Prof. Mathias Graaf von der Schulenburg of the University of Hannover, checked the use of the evaluation studies by part of the health managers in several European countries. His conclusions can be found in von der Schulenburg (2000). As a consequence of this European project, a national one (FIS 98/1543), co-ordinated by Fernando Antoñanzas, tried to measure more accurately the use of these evaluation instruments by a wide range of health managers -according to the recent classification in macro, meso and micro-management- through

various techniques of social qualitative research. Precisely, part of the results of this last research project is summarised in this document.

METHOD

The measurement of the use of the economic evaluation in the different areas of health management was tackled through several social research instruments: mail questionnaires, personal individual interviews and other semi-structured interviews held with groups of health managers, namely "focus group". In order to facilitate the comparison with the results obtained in other countries, the mail questionnaires used were similar to the ones used in the project Euromet; the personal interviews were based on a short script, and the interviewee was free to express his opinion on several aspects that were attracting his attention in his area of work; the interviews with the "focus group" were also based on a short script for the attendants to express their opinions -and sometimes some conflicting opinions could be found among them, what enriched the view of the issue-. In this last group, a consensus of opinions was not sought, on the contrary, different opinions were allowed. Afterwards, a summary of the points dealt with was sent to the attendants, who had to show their level of agreement in a scale prepared for such end. The number of participants in these meetings was of about ten.

The researchers classified the opinions according to the groups interviewed, and especially tried to analyse the barriers that were preventing the extension of the use of the economic evaluation, taking the answers of the interviewees as a starting point. Finally, a series of measures of different nature were proposed, namely, administrative, technical or practical measures in order to facilitate the use of this management instrument.

In the first of the areas of classification of the decision-makers, the macro-management, two interviews with "focus group" were carried out, one with the General Board of Pharmacy and another one with the Work Group of the Inter-regional Council (Consejo Interterritorial) for the evaluation of health technologies. As for the meso-management, two large executive groups of our health system have been included: managers of the area of Primary Care and of Specialised Care. In this level, a third group was included, that of hospital pharmacists, given their role in the incorporation of new drugs in the hospitals. In these three cases, the consultation was accomplished through "focus group", reinforced by a mail survey concerning the Hospital Pharmacists. In the area of micro-management, the doctors who take the daily decisions the hospital specialists and the

specialists of sanitary area and the primary care physicians were included, as well as a third group, that of the primary care pharmacists, who basically play an advisory role in connection with the use of the drugs, for the physicians of that level of care. The consultation of the hospital specialists was reinforced with a mail survey addressed to the same group. Besides, a focus group meeting with professionals of pharmaceutical industry was held. The table 1 includes a set of decision-makers interviewed thorough the different methods above mentioned. Furthermore, several personal interviews using a semi-structured questionnaire, similar to the one used with the "focus group", were carried out with the heads of the regional health plans, of the pharmaceutical services in a region and with doctors at the two levels of care.

TABLE 1

TECHNICAL DECISION-MAKERS	FOCUS GROUP	MAIL QUESTIONNAIRE
MACRO-MANAGEMENT		
A General Board of Pharmacy	**X**	
B Work Group of the Inter-regional Council "Consejo Interterritorial" for the evaluation of health technologies	**X**	
MESO-MANAGEMENT		
C Primary Care Managers	**X**	
D Specialised Care Managers	**X**	
E Hospital Pharmacists	**X**	**X**
MICRO-MANAGEMENT		
F Primary Care Doctors	**X**	
G Specialised Care Doctors	**X**	**X**
H Primary Care Pharmacists	**X**	**X**
OTHERS		
I Professionals from the pharmaceutical industry	**X**	

The problems highlighted through both techniques were aimed at finding out the decisions of assignment of resources interviewee each one and the criteria used in making such decisions and more precisely, if they were introducing the economic evaluation concept in these processes, their use and, if it was not used, which were the barriers or reasons for it.

To select to the interviewees, we relied on the corresponding professional associations and on the primary and specialised care sub-bureaux of the INSALUD. No stratification was used in the sample but the geographical accessibility criterion was applied, when necessary, to hold the meetings -taking advantage of the attendance of the interviewees to congresses, courses or work meetings- or we tried to cover all the population in the census of the group studied -for instance, in the case of the primary care pharmacists-.

RESULTS: BARRIERS TO THE USE OF THE ECONOMIC EVALUATION

These meetings, interviews and surveys allowed the identification of a series of barriers or factors which tend to demotivate the use of the economic evaluation by the decision-makers. They can be classified in three groups: administrative barriers, barriers related to the method and practical or application barriers.

? *ADMINISTRATIVE BARRIERS*

The main barriers identified within this first group are summarised in table 1 and have to do basically with the administrative structure which governs the provision of health cares -fundamentally due to their character of public services and the consequent regulation-; to be precise, they have to do with structure and budgetary dynamics, and with the absence of a legal requirement to carry out studies or their link with other administrative problems that are not found operative.

TABLE 2

ADMINISTRATIVE BARRIERS	**DECISION-MAKING GROUPS THAT IDENTIFIED THE BARRIERS**
Problems to change the resources from one item of the budget to a new one	Primary and Specialised Care Doctors and Pharmacists: Professionals of the Pharmaceutical Sector
The budgets are so tight that it is impossible to free resources to adopt new therapies	Specialised Care Doctors and Pharmacists
The control of the expenses is more important than the ratio cost-effectiveness	Specialised Care Doctors and Pharmacists; Primary Care Pharmacist, General Board of Pharmacy.
The economic studies are not needed or required at an administrative level.	Primary and Specialised Care Doctors, Primary Care Pharmacists
The use of the economic evaluation conditions the financing of the establishment based on the payment by process	Primary Care Pharmacists
The economic evaluation has a strong link with quality control and the introduction of changes is thus limited	Personal interviews, Primary and Specialised Care Doctors
Few concern about the increases of the expEnses in other budgetary issues	Professionals of the Pharmaceutical Sector

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? *BARRIERS RELATIVE TO THE METHOD*

As far as the barriers relative to the method are concerned, summarised in table 3, they are linked to two main aspects. Firstly, those which have to do with the method itself, such as an

excessive number of hypothesis, the lack of comparability of the studies given the variability of the care costs or the lack of standardisation of the method itself. Secondly, we could find barriers related to the understanding of the technique and its results -that could be related to the specific training level on the technique of the decision-makers consulted-, such as those related to the sophistication and difficult reading of the studies or to the consideration of excessive theoretical components or lack of reality of the results of the studies.

TABLE 3

BARRIERS LINKED TO THE METHOD	**DECISION-MAKING GROUPS THAT IDENTIFIED THE BARRIERS**
The economic evaluation studies are sophisticated and difficult to read and understand	Primary and Specialised Care Pharmacists, Primary Care Managers
The saving shown in the studies is theoretical but not real	Primary and Specialised Care Pharmacists; Specialised Care Doctors
There is a wide range of care costs which make the comparison of the studies difficult	Specialised Care Pharmacists and Group of the Inter-regional Council (Consejo Interterritorial)
The economic studies need too many work hypothesis for their results to can be applied in the real world.	Primary and Specialised Care Pharmacists; Specialised Care Managers, Group of the "Consejo Interterritorial"
Lack of standardisation of the methods of economic evaluation	General Board of Pharmacy, Personal Interviews

? *PRACTICAL AND APPLICATION BARRIERS*

The last group of barriers has to do with practical limits of various kinds. Several groups outpointed their concerns with how the sponsorship of the economic evaluation studies could introduce a bias in the final results (mainly those funded by drug industry). Some of these barriers are due to the little interest in efficiency existing in the health system since their main use –according to the interviewees- is highlighted when discussing the price (drugs), as well as the existence of other criteria more worrying. There are also found barriers related to the shortage of resources for the accomplishment of the studies by the own administration, as well as to apply their results encouraging a new orientation of prescription. To conclude, we would like to emphasise, the scarcity of studies, in connection with their practical usefulness, and the lack of knowledge of the economic implications of the use of drugs.

TABLE 4

PRACTICAL AND APPLICATION BARRIERS	**DECISION-MAKING GROUPS THAT IDENTIFIED THE BARRIERS**
The sponsorship of the studies (pharmaceutical industry) can influence the results	Primary and Specialised Care Doctors and Pharmacists, General Board of Pharmacy; Personal Interviews
Lack of studies on the economic evaluation of the actual	Specialised Care Pharmacists, Personal Interviews

daily problems	
The economic evaluation is used to justify the price, but not to discuss efficiency	Professionals of the Pharmaceutical Industry
They do not consider the importance of the economic evaluation, they have more worrying criteria	Primary Care Doctors
Lack of resources to carry out economic evaluation studies	Specialised Care Managers
Lack of resources to encourage a new orientation of prescription.	Primary Care Managers
Lack of knowledge of the economic implications	Primary Care Managers

RECOMMENDATIONS TO EXTEND THE USE OF ECONOMIC EVALUATION

The future development of the economic evaluation will require various measures to can go beyond these barriers. Therefore, it seems advisable to express some recommendations in this regard that they can be classified according to their nature and which, in our opinion, can be more easily included into our health system given the current context.

There would be, on the one hand, some recommendations of administrative nature which would concern the health authorities; among them, we would like to emphasise the following:

- editing a standardisation of the methodology to serve as a guide for the analysts and managers -easily viable-,
- establishing that the economic evaluation studies must also include the foreseeable impact in the budgets -easily viable-,
- fixing that the studies will be audited,
- facilitating the flexibility of the public budgets,
- encouraging the use of the economic evaluation,
- beginning to assess the most standardised interventions whose impact on the health will be easier to measure -easily viable-,
- introducing experts in economic evaluation in the groups which elaborate the practical clinical guides -easily viable-.

The role of the economic evaluation depends on the will on the organisations taking financing and price-fixing decisions or on any element affecting the use of the resources. The generalisation of the use of the evaluation in decision-making implies determining in a explicit way if, for the one side, the presentation of a study is compulsory for a given administrative decision, or if at least it will be an element taken into account, though its submission is voluntary.

In this same line, it would be advisable to establish methodological standards, that is to say, make explicit the procedures and analytical techniques that have to be applied in the studies submitted for the consideration of the administration -no matter their nature. The methodological standardisation facilitates and cheapens the accomplishment and use of the evaluations and reduces the biases in the analysis, ensuring that all the parts are going to be treated equally and, therefore,

improving the credibility of the studies. The need of incorporating technical values and hypothesis that can not be solved with strictly scientific bases in the studies reinforces the need of the methodological standardisation, since it allows adjusting the studies to the needs and hypothesis of the decision-makers. Thus, for example, given the existing concern about the budgetary impact of the new technologies, it seems logical to establish that the studies have to include estimates of the budgetary impact due to their introduction and not only the evaluation of the ratio cost-efficiency.

Additionally to the standardisation, it could be established or be advised that the studies be audited by independent analysts -duly certified- who would check the validity and quality of the studies, so that the decision-makers could concentrate on the impact of the results of their decisions.

On the other hand, the budgetary structure leads to segmenting the assignments of resources for expense and the responsibility for the decisions falling on different managers. This fact limits substantially the incentives to an efficient assignment of the resources when they imply some kind of redistribution of the resources among different establishments and units; as a rule, when the resources available do not correspond to the same body that adopted the decision. This is also related to the type of objectives assigned to the managers, that usually are mere objectives of the expenses and do not take into account efficiency. If the structure does not encourage the new assignment of resources to improve efficiency, or even demotivates it, it is logical that the economic evaluation studies awake little interest among decision-makers. Encouraging efficiency would imply, for example, assigning global budgets to decision-makers and controlling the fulfilment of the quantitative and quality objectives.

The motivation to use the economic evaluation studies implies a more active role of the authorities than could be set, for example, by means of creating or financing boards and bureaux specialised in the economic evaluation or linked with the activities of technology evaluation. This is related besides to the need of ensuring the diffusion of the studies among the final audiences and with the need of incorporating experts in economic evaluation in some decision-making processes, such as the elaboration of the practical clinical guides.

The determinant role in the diffusion of the economic evaluation falls on health authorities, as the final responsible for the efficient management of health resources. If these rely on a commitment with a criterion of efficiency and the use of the analytical and management instruments that promote it, the rest of the actors within the health sector must incorporate those analysts in their performance.

In this sense, we could begin by assessing the most standardised actions whose impact on health is easier to measure.

We could also make some administrative recommendations that would excess the health spectrum and would correspond to the educational authorities:

- the incorporation of the economic evaluation in the curricula of health qualifications -easily viable.

The incorporation of the efficiency criterion into daily decisions demands a specific training in economic evaluation and in other economic and management disciplines of the actors within the system which take decisions of assignment of resources. Because of this, in addition to the incorporation of these matters into the offer of the health authorities in the continuous training and the retraining of their staff, it would be particularly relevant that the authorities and academic institutions facilitate the incorporation of the economic evaluation and other economic issues in the training of the health professionals who later on will develop functions implying substantial decisions of assignment of resources.

A last group of measures would have a practical or technical nature; among those the following can be highlighted:

- including a clear and concise summary which facilitates the reading of the evaluations or simplifies their presentation -easily viable-,
- facilitating the access to the studies through their publication in magazines with a wide diffusion -easily viable-
- beginning to create databases of costs to facilitate the development of the studies -easily viable-
- promoting the use of similar measurements of the impact on the health in the studies -easily viable-

Both manufacturers of medical technologies and analysts, through their scientific bodies, can take the initiative in some of these aspects, as for example, the establishment of consensus standards that improve the comparability and credibility of the studies. These standards would have to do with formal aspects such as the incorporation of clear and concise summaries in evaluation studies or with methodological problems such as the use of similar measures of the impact that facilitate the comparison. In connection with these aspects, it seems advisable to have data on the costs that any analysts can use, through easily accessible databases, what would reinforce their comparability, as well as facilitate the accomplishment of the studies, thus avoiding double searches. On the other

hand, the problem of the potential biases in the elaboration of the studies would also have to be taken into account. For this reason, for example, protocols on the type of appropriate contractual relationship between the financing sources of the studies and the people who carry them out could be established, what would include aspects such as the right to publish of the results, intellectual property, confidentiality of the information, etc., that can be critical for the transparency and credibility of the studies.

FUTURE PROSPECT OF ECONOMIC EVALUATION

It seems reasonable to assert that, in the future, there will be a growing concern about the efficiency criterion in health decisions and that, therefore, the economic evaluation will play an increasingly relevant role in the decision-making processes on health. The contribution of the two macro-management groups consulted highlighted this fact. Thus, in the area of drugs, a broader use of the economic evaluation is anticipated, even though this will imply changing certain procedures, such as those which regulate price fixing and public financing of drugs, and the effective development of the recommendations set out with respect to the existence of standardised instruments to facilitate the validation of the results. Nevertheless, we should point out that the growing importance of the economic evaluation will be probably translated into a slow and progressive process; everything will come, but not overnight.

The determinant factors of public nature of our health system, and therefore, the administrative regulation of its operation, are probably the most relevant factors related to the practical introduction of the efficiency criterion. Thus, the future use of the economic evaluation will be greater and its development will remain conditioned to the changes in the budgetary structure that reduce the current segmentation among the establishments and the care areas, and their level of pertinence will depend on the relationship with the financing plans of the establishments implemented at the time. The scarce use of the efficiency criterion in micro-management decisions will be surpassed in the future even though we must recall that their main purpose will be fulfilling the need of information when taking a decision. As for the manufacturers of technologies, in particular the pharmaceutical industry, we consider that in the future a greater need of using the efficiency criterion before their potential clients will be expressed, what will imply an extensive use of the economic evaluation, thus generating an internal demand within the companies, guided by its use for the decisions of design of their competitive position.

Finally, given the economic evaluation as a product with its own market, we consider that its future development will depend both on its quality and credibility. Therefore, it seems particularly important that all the parties implied increase their efforts to improve it. This is the reason why the future will be conditioned by the methodological standardisation, by the greater scope of practical application -since it deals with relevant health issues-, thus reinforcing its validity and comparability and clarifying its use within the health system.

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