Dieter Ahrens, Dr. PH, MPH, Innsbruck, Austria
Bernhard J.Güntert, Prof. Dr. oec., MHA, Innsbruck, Austria

Health Economics – Need and Limits

Nowadays health care systems consume more than 10 % of the GDP in European countries with health insurance systems and between 7 and 9 % in countries with state-run health care. Thus health care has become one of the most important economic branches for many countries. Many health professionals (physicians, nursing personnel, therapists, etc.) are suspicious about analysing and steering health care systems from an economic point of view. Considering the economic relevance of the field, its public funding and the increasing scarcity of the financial resources, however, this is of utmost importance. For this reason the field of health economics has seen a major upsurge in the past few years and has become an integral component of all courses of study in the fields of public health and health care management. On top of that, issues of health economics and health policies are gradually gaining access to the basic training of health professionals.

Areas of study of health economics

The health care system forms part of the economy. The quantity and the quality of health care depend on the capacities of the respective economy and on the funding mechanisms it uses. Economics generally assume that the available funds are never sufficient to meet all the demands (the doctrine of the management of scarce resources). This is also valid for health care systems. It is therefore the task of health economics to deliver recommendations about how to allocate the scarce means in health care most efficiently.
The first step (microeconomics) is thus to analyse the behaviour of people involved in the „market“ (i.e. patients on the demand side and health professionals on the supply side) from an economic perspective. Here it becomes immediately clear that the market situation in the health sector is a special one. Besides demand and supply we have a third party, namely the sponsor of the services. In state-run systems this is the state proper, nowadays mostly appearing as the buyer of services in the different regions instead of being the owner of the service providers, as it was the case in earlier times. In insurance-based systems the insurance companies have only little direct influence (any more) on the delivery of health care services. The special market situation is not only characterised by this triangular relationship but also by the fact that the patients depend on the service providers. This dependence is a

consequence of the particular demand situation often influenced by the patients' pain and fears and on the other hand a result of the patients' lack of knowledge about illness, therapies, etc. In health economics this phenomenon is called an „asymmetry of information" between patients and health professionals. In order to oppose this dependence, while maintaining a possibly normal market allocation, there are several economically reasonable strategies. The first one would be to empower the patient to take decisions on the demand side, i.e. to educate and inform patients so that they can take responsible decisions. Another strategy would be to simplify the market structures, i.e. to merge the fund suppliers and the service providers in a so-called „managed care organisation". Such structural changes were successfully implemented in the USA and partly in Switzerland, but hardly in other countries. As an alternative economics apply the "principal-agent theory", which can be used if there is a major divide of information between the members of the supply side and those of the demand side. The patient as principal is led through the health care system by the agent. The agent acts in the interest of the patient and cares for the delivery of necessary services. Traditionally this role is taken by the family doctor. From an economic point of view, however, this role is disputed because the doctor him/herself is also offering services and therefore to a certain extent, depending on the funding system, also considers his/her own interests. For this reason several other models have recently been proposed (case management by national health insurers or third parties, disease management programmes, evidence-based medicine or guidelines which restrict the economic leeway of health professionals).

Furthermore health economics examine the consequences of funding systems on the behaviour of demanders and suppliers. Currently many European countries are testing contributive systems on the demand side (surgery fees or deductibles). As far as reimbursements are concerned there is a trend away from pure resource steering towards service-oriented systems, i.e. prospectively determined, clearly defined service fees (e.g. service-oriented hospital financing [LKF] in Austria or Diagnosis Related Groups [DRG] in Germany and Switzerland). It has, however, turned out that economically rational behaviour of service providers and demanders can also lead to sub-optimisations. The suppliers do not focus on the patients' entire development but only on the period characterised by their care and treatment. The demanders mainly consider the short-term benefits of their decision. Besides the asymmetry of information the health care market is also characterised by many external factors and by the problem of future goods. Therefore experts often speak of a market failure.

The permanent scarcity of resources is also the reason for the increasing spread of microeconomic evaluations of health-related interventions. The badly functioning weighing of costs and benefits of health services on the part of the user (e.g. the patient) – described above as market failure – is being replaced by scientific evaluation. Thus the evaluation through health economics can replace the former cost-benefit analysis and poses a basis for decision-making processes for resource allocation in the welfare system (Greß et al. 2004). A central task for health economics is the development of adequate evaluation methods. This is on the one hand supported by the service providers (especially the pharmaceuticals industries). On the other hand we can detect a growing awareness on part of political decision-makers who increasingly consider the efficiency of services an essential element of decision-making. Unfortunately many health professionals equate health economics with a purely economic evaluation (Maynard & Kanavos 2000) and thus reject it.
Health economic evaluation tries to find out how much added benefit can be created with a certain increase in costs. Ideally such reflections result in monetary figures, so that non-experts, as political decision-makers, can easily comprehend it. It must, however, be underlined that the evaluation in terms of money of health related factors (such as a longer life expectancy, higher quality of life, etc.) is methodically and ethically difficult. This fact led to the development of different types of scientific studies, and each measures the result of health-related interventions in natural units, express the use of resources in terms of money and thus compare the costs and benefits of different policies. Apart from the traditional cost-benefit analysis it was especially Michael Drummond to indicate that health-related interventions on different levels lead to positive (desired) as well as to negative (undesired) results. For this phenomenon he introduced the concept of cost-consequences analysis (Drummond 1997).

Criticism of health economics

Health economics is not only criticised by health professionals. More and more it turns out that things that appear logical and consistent from an economic point of view are not feasible in real circumstances. Politicians as well as managers of health institutions choose policies that differ from the rationalisation and rationing recommendations of health economists. It is not only due to political reasons that such recommendations (e.g. rationing models, closing of hospitals) are not realised. One reason for criticism is certainly rooted in the theoretical fundamentals of economics. Today’s health economics is broadly based on (neo-) classical

economics and is strongly focused on medicine. Especially when it comes to health and disease, pain and fear, life and death, it turns out, however, that economic rationality concentrating on price and market mechanisms, the concentration of economic benefits, coordination of financial activities, etc. is too myopic. The relation of (neo-) classical economics with the social circumstances is reduced mainly to the labour market and can thus hardly reflect all the complex social relations. Therefore the demand for a careful integration of market economics into its natural surroundings, social conditions, politics and economics of supply is voiced ever more frequently (Biesecker/Kesting 2003, Thiele 2004). Several authors have increasingly shown that additional points of view in a broad understanding of health economics can contribute to better explanations and more sustainable solutions in the fields of institutional economics, supply economics, nursing and social work.

Further reading:

Biesecker A, Kesting S (2003): Mikroökonomik. Eine Einführung aus sozial-ökologischer Perspektive, R. Oldenbourg Verlag, München, Wien

Drummond M, O'Brien B, Stoddard G, Torrance G (1997): Methods for the economic evaluation of health care programmes. Oxford: Oxford University Press

Greß S, Buchner F, Wasem J, Hessel F (2004): Grundbegriffe, Fragestellungen und Vorgehensweisen in der gesundheitsökonomischen Analyse. In: Vogel H & Wasem J (Hrsg.): Gesundheitsökonomie in Psychotherapie und Psychiatrie. Stuttgart, Schattauer, S.7-20

Güntert BJ (2003): Ökonomie und Gesundheit. In: Berchtold P, Michel-Alder E (Hrsg.): Die Umarmung des Hippokrates. Systemintegration im Gesundheitswesen, EMH Schweizer Ärzteverlag, Basel, S.121–159

Jochimsen, Maren A (2003a): Careful Economics. Integrating Caring Activities and Economic Science. Boston, Dordrecht, London

Leidl R (2003): Die Ausgaben für Gesundheit und ihre Finanzierung. In: Schwartz FW, Badura B, Busse R, Leidl R, Raspe H, Siegrist J, Walter U (Hrsg.): Public Health. Gesundheit und Gesundheitswesen, Urban & Fischer, München, Jena, S.349-366

Maynard A & Kanavos P (2000): Health economics: an evolving paradigm. Health Economics, 9: p.183-190

Thiele G (2004): Ökonomik des Pflegesystems, Economica Verlag, Heidelberg