DEVELOPMENT OF HEALTH ECONOMICS TRAINING

Report on a WHO Study Group

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Note

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The Third Meeting of the Study Group on the Development of Health Economics Training was locally organized in Dubrovnik from 25 to 28 June 1985 by the Zagreb Institute for Organization and Economics of Health Services.

The main task was to consider the five teaching modules that had been prepared following the recommendations of the progress report produced after the Second Meeting of the Study Group held in Madeira in October 1983. In particular, the Group considered whether the topics included and the teaching methods used in the modules were suitable for the key target groups (providers, administrators, policy-makers) and relevant to a range of country contexts in eastern, northern, southern and western Europe. The objectives were to determine how the material presented could be refined and to identify any gaps that would have to be filled.

The Group was aided in its task by a summary paper that explained the similarities and dissimilarities in approach adopted by the five module synthesizers. It also proposed a common framework within which all the modules could be presented: the scope and purpose of the modules, expanding statements, major economic concepts to be conveyed, a list of teaching units, other illustrations and a bibliography of relevant texts and papers. In addition, each of the module synthesizers made a presentation, summarizing the approach used in producing the modules and the key issues that arose. The detailed consideration of the modules was carried out by working groups, which first adopted the role of each of the key target groups and then that of trainers from the different regions of Europe (consideration was also given to the issue of how developing countries could benefit from the material so far produced by the Group).

In addition, the meeting provided the opportunity for a progress report on the survey on education and training programmes in health economics. It was noted

that the survey now covered 20 countries, including 16 from the European Region. The report was welcomed, and members of the Group undertook to assist in verifying existing entries and in compiling new entries for those European countries not yet included.

Comments on the teaching modules by target group

It was clear that, since the interests and training needs of each target group differed, the relevance of particular units within each of the five modules would vary, depending on whether a course was being prepared for providers, administrators or policy-makers. However, at least some part of each module was considered relevant to all groups, and the key issue for trainers was therefore that of giving the appropriate emphasis to sections of the material, depending on the target group in question and the total teaching time available.

The other main point was that different teaching methods might be applicable for each target group, depending on the material being covered, the time available for teaching, and the background level of knowledge of the trainees. It was noted that the module synthesizers had used a range of teaching methods, including lectures, case studies and role-playing exercises. This was welcomed, although it was suggested that trainers might need guidance on the efficacy of alternative approaches to teaching for different target groups.

Application of the teaching modules to different country contexts

It was noted that much of the teaching material had been developed using illustrations from northern and western Europe. However, it was stressed that, even when

using the material in this part of Europe, the modules should be considered only as a guide to teaching and that trainers should be encouraged to experiment both with module content and teaching methods. In addition, it was suggested that more country case studies should be developed and that trainers should be encouraged to share teaching material.

In general, adaptation of the teaching material to the various parts of Europe would pose no major problems as long as trainers appreciated the cultural, social and economic differences between countries. For example, it was pointed out that many southern European countries were in a state of transition, although, of course, within this part of the Region the countries differ. Particular features are the changes in demographic and social trends, technological dependence on other countries, and social inequalities. As to the health care systems in southern European countries, many of these are themselves in transition and are characterized by the existence of powerful provider groups. Finally, it was recognized that there is a scarcity of human resources for teaching in health economics in many southern European countries. All these factors would have to be taken into account when adapting the modular teaching material.

In general, it was felt that the material for this part of Europe was basically adequate, but that the trainer would have to tailor it to his or her own needs. Since the level of education among health administrators may be quite low in some countries, many trainers would be aiming at increasing basic knowledge in their target groups and imparting a few practical skills. It was felt that as health economics is often taught alongside other subjects in this part of the Region, it would be useful if the modules made more reference to planning and hospital management. It was also noted that primary health care had a particularly important role to play in

southern Europe and that perhaps it did not feature enough in the modules.

In using the material in eastern European countries, such topics as the principles of centralized planning and the consideration of specific methods of financing health care in the socialized economy would be very relevant. In addition, the economic consequences of organizational patterns, such as full state responsibility for running health services, inequalities of health and welfare services, and salary-based payment systems, would need to be considered. Finally, in some cases, adaptation of terminology would be required for the material to be acceptable in this part of Europe.

Detailed suggestions for each module

Module 1, on the relationship between the health sector and the economy, explored four themes. First, how does the economy affect health? Four teaching units were concerned with this topic and illustrated, respectively, the relatively small influence of medical advances on mortality changes (compared to other influences), the beneficial effects of economic growth on health, the harmful consequences of economic growth on health, and the evidence of a link between unemployment and ill health. Second, how does the economy affect the health care sector? This theme was explored by two teaching units: one examined international comparisons of gross national product and health care expenditure, while the other examined the ways in which general economic policies, e.g. on wage levels, could affect the cost and volume of health services. Third, what impact does the health care sector have on the economy? This was explored by two teaching units: one concerned with hospital closure, illustrating how factors such as employment could influence the decision, and the other with attempts to control prescribing by family physicians and the economic arguments that were made by

those for and against the measures. Fourth, what impact does health have on the economy? This was explored by one teaching unit, which reviewed the evidence on ill health, productivity and income of workers.

In addition, the teaching material in this module was supplemented by a unit developed following a recent WHO meeting on the role other sectors could play in encouraging health-promoting measures. It concerned the efforts made by a health agency to encourage local industry to reduce alcohol consumption among its workers.

The following points were made by the working groups that considered the interests of each target group. First, much of the material may not be considered to be relevant by busy providers and administrators. It was therefore suggested that it might be best to concentrate on the theme of the relationship between the economy and health care expenditure, since this is the major concern of these target groups. Second, it was emphasized that there were a number of methodological controversies surrounding the literature used in some of the teaching units and that the target groups should be made aware of these.

The working group that considered the applicability of module 1 to northern and western Europe felt that it could be taught from a standpoint of either general or partial equilibrium and that the choice of the approach might vary depending on the country.

The whole module was considered to be relevant for southern Europe, but for eastern Europe it was thought that units 1.4 and 1.7 would not be required. Instead, it was suggested that a unit be developed on the impact of new technologies on health and on the economy.

Module 2, on <u>health policy implementation and performance</u>, consisted of one large teaching unit that could be used in different ways, depending on the target

group. Three types of health care system were described: a public system, a mixed (public/private) system, and a largely private system (with a small public sector for the elderly or poor). Some basic data were also given for each of the three systems, and students would be required to answer questions relating to system performance from different perspectives, e.g. a poor patient, a well-off patient, a citizen contributing to health care expenditure, a physician in primary care, a medical specialist and a public official. Data were then made available on the performance of each of the three types of health care system drawn from three countries whose systems best reflected those described. Students could then compare their predictions with these data and discuss any surprising discrepancies. The module concluded with an instructors' manual illustrating how the exercise could be used for different target groups.

The working groups considered that the approach adopted in this module was interesting and that the exercise (or parts of it) was relevant to all groups. They emphasized, however, that it may be difficult to handle from the teacher's point of view and would therefore like to have it experimented with. It was acknowledged that most target groups would not want to work through the whole exercise, and it could therefore be cut down for specific groups. For example, in a country where equity in health care was not an issue of financial barriers, one may not need to explore the poor patient/well-off patient distinction. More specifically, it would be important when adapting the module to different settings to base it on policy debates that were actually taking place in the country concerned. Another issue when translating the module to different settings was that different ideologies may condition the definitions of such terms as effectiveness, efficiency and equity. In addition, it was pointed out that there are a number of ways of using this material for teaching. An alternative approach would be to give data

on performance and then ask the students to infer the type of health care system.

Furthermore, it was noted that there were a number of areas not explored by the module, such as health policy in other sectors of the economy, policies for regulating categories of health care resource, e.g. medical manpower planning, and policy implementation. It was noted that while some material had been prepared on this last area, it had not yet been made available to the Group. It was suggested that the material on policy implementation should address ways of handling conflict and the post-implementation surveillance of policies.

In reviewing relevance to the different parts of Europe, it was considered that the three systems included in the module did not reflect the whole range of existing health care systems, and that a fourth should be added reflecting the kind of health care system existing in a socialist, planned economy, plus a fifth based on self-managing communities of interest. Also, in eastern Europe, there would be advantages in merging with module 5.

Module 3, on harmonization of consumer and provider interests, was concerned with the incentives that health care systems give to consumers, providers, and institutions such as hospitals. The first three teaching units considered incentives to consumers, covering such topics as cost-sharing, prepaid group practice and payment for pharmaceuticals. The next two units considered incentives to providers, covering such topics as physician utility and supplier-induced demand, and the performance of different types of health care system (it was noted that this unit overlapped with module 2 and might be eliminated). The final teaching unit dealt with methods of reimbursing hospitals and the incentives these may give to those institutions.

All the working groups noted that this module contained good material, but that a small part of it was too technical for the target groups concerned. Nevertheless, it was considered that this could easily be rectified by making changes in presentation and by giving a clearer indication of the relevant reading material for each target group. For administrators and policy-makers, the most important point would be to explain the main messages. For example, physicians play a crucial role in determining the demand for their own services. In addition, it was thought that for policy-makers the material ought to be broadened out from its technical focus to include discussion of political bargaining and the influence of pressure groups from both inside and outside the health care sector.

Moreover, it was noted that there were a number of other areas that could be covered in the module. For example, in the teaching unit on prepaid group practice, it might be useful to distinguish between intermediate and final health outputs, and in the unit on hospital reimbursement there should be some mention of diagnostic-related groups. Other areas that might be covered by teaching units include quality assurance, clinical budgeting, physician awareness of cost, assessment of consumer interests, health education, and consumer participation in health care.

It was felt that some sections of the module could be used in all parts of Europe, but that for eastern Europe both the scope and the terminology would need to be changed. For those countries with strong consumer involvement in health care, it might be worth while developing a unit on consumerism. Again depending on the countries concerned, it might be worth while developing a unit dealing with negotiation between the key actors in the health care system.

Module 4, on <u>priority-setting and strategy selection</u>, consisted of eight teaching units. The first

unit, which was concerned with how to assess an economic evaluation, could be adapted to any target group, depending on the topic chosen. The next two units considered, respectively, priority-setting for health and health care at the national level and at the level of care for a particular client group (the elderly). The fourth unit concerned the selection of screening strategies for four diseases, and the fifth considered the appraisal of options for the development of hospital services. The next unit considered the use of economic evaluation in the assessment of new medical technologies, while the final two units were targeted at providers and dealt, respectively, with methods for undertaking an economic evaluation of treatment alternatives and the use of economic concepts in clinical decision-making.

In general, the working groups concluded that the module contained good case study material that could be used selectively, depending on the target group. Given the length of the module and the technical nature of some of the units, trainers would need to choose particular units, but there was no point in reducing the size of the module.

The working groups, particularly those considering the needs of administrators and policy-makers, identified three areas for improvement. First, the emphasis on good evaluation methodology may give the impression that more modest pieces of analysis, undertaken quickly with the best available data, have no useful role. Second, there should be more discussion of the broader social, political and economic context in which resource allocation decisions are made and priorities set. In particular, it was noted that the concerns of policy-makers may lead to decisions based on criteria quite different from those implicit in economic evaluation. Therefore, if this target group were to be encouraged to use these economic approaches, there should be more recognition of the other factors that need to be taken into account in making difficult decisions in the

health care field. Third, it was suggested that the module would be strengthened if there were some discussion of robustness and portfolio analysis.

In reviewing the application of the module to different regions of Europe, it was noted that not all countries had shown an equal interest in evaluation techniques, and it was therefore important that trainers in different regions selected exercises from the module that would be considered relevant by particular target groups in their own country.

Module 5, on equity, equality and reduction of status differentials, consisted of 11 teaching units. Not all of these were case studies because of the relative lack of good empirical work in this area. It was also important that the target groups first had some grasp of these difficult concepts before going on to discuss them. Some lecture material was therefore included. The first unit considered ways of defining equity, and the second the value judgements implicit in particular ideologies or theories of justice. The third unit considered the measurement of inequality, while the fourth considered the impact of the type of health care system on equity. The fifth unit considered the issue of geographical equity in the distribution of health care resources to regions inside countries, and the sixth considered equity in the supply of particular health service resources, such as physicians, pharmaceutical products and blood. The seventh, eighth and ninth units considered various aspects of the trade-off between equity and efficiency. The examples chosen were, respectively, the number and location of resources, the provision of outpatient antenatal care, and general health policy measures such as establishment of a publicly financed health service, cost-sharing, giving priority to educational and preventive measures, and paying higher wages to health personnel working in rural districts and other areas with a lower density of population (it was recognized that some of this material

overlapped with module 2). The tenth unit considered cost-sharing in more detail and included a discussion and a role-playing exercise (it overlapped slightly with part of module 3). The final unit considered equity by social class in the incidence of ill health and consumption of health services.

The working group that considered the interests of providers believed this material was relevant but would not give it as much emphasis as some of the other modules. In addition, the group thought it would be useful to include some discussion of medical ethics and how these might or might not run counter to economic efficiency. The working group that considered the interest of administrators also thought that some mention of quality-adjusted life-years could be introduced into a debate on the distribution of resources to different clinical conditions (although this might also be handled in module 4). It was also recognized that the method of presenting teaching material in this unit would be easy to follow. As far as the needs of policy-makers were concerned, it was again noted that the approach used was somewhat technical and that it was important to focus on issues that policy-makers thought were relevant. Thus, it was considered that some examples should be included in the first two units and that the third unit was not particularly relevant to this target group. It was suggested that the unit on distributing resources for regional equity was a topic that policy-makers in many countries could grasp; this unit could serve as an introduction.

It was considered that equality in health and health care was an important topic in all parts of Europe and that the 11 teaching units provided a good menu from which trainers could choose, depending on their own country context.

Relevance of the teaching material to developing countries

The Group recognized that the health of the population in developing countries depended greatly on economic development and the associated social development. Therefore, initiatives in the areas of basic education, housing, nutrition and sanitation would continue to have prominence for some time to come. It was further recognized that the development of the health care sector itself depended on economic development, and it was therefore important to reconsider the teaching material in the light of these issues of a macro-economic nature, stressing the interrelationship between health, health care and the economy.

However, within the health care systems of developing countries, the problems were not too dissimilar to those in developed countries which were discussed in the teaching material. In addition, it was considered that, given the need to strengthen planning in developing countries, health economics training could be usefully directed at planners at a number of levels.

In considering the teaching modules in more detail, the Group felt that modules 1 and 2 were most important. In particular, it was noted that issues of financing health care had to be considered, since finance is often a major constraint on health services development. Parts of modules 4 and 5 were also considered relevant; it was thought that the discussion of geographical equity in module 5 could usefully be adapted to reflect the problems of achieving equality between rural and urban areas in developing countries.

The Group also suggested that health economics training projects in developing countries should take account of these priority areas. More generally, it was

considered that the important task of producing training material relevant to developing countries might be facilitated by building on the process that had been followed in Europe and that there might be benefits from a joint initiative with other WHO offices. This could take the form of a joint meeting including representatives from Europe (especially southern Europe) and developing countries, which would consider the main economic concepts relevant to developing countries and select practical examples on which teaching material could be based. It was further suggested that the Centre for Health Cooperation with Non-Aligned and Developing Countries in Zagreb could act as a clearing-house for such teaching material.

Steps required to complete the study

The Group considered that the priorities were to finalize the teaching modules in the light of the comments made during the meeting, to disseminate the material widely, and to evaluate its use in practice.

The finalization of the teaching modules would require both modification and the commissioning of new material to fill the main gaps. It was urged that this be carried out as quickly as possible to minimize delays in issuing the material. Whatever method of dissemination were chosen, WHO should ensure that the existence of the teaching material was widely known, perhaps by issuing a circular letter.

The Group discussed the structure of the final publication and considered that most of the recommendations made in the progress report produced after its second meeting in Madeira still applied. In particular, the publication should include, in addition to the teaching modules themselves, an introduction outlining WHO's interest in this field and the importance of training health professionals in health economics; a

section on how to use the book, outlining the ways in which the teaching material could and should be adapted to the needs of different target groups and local contexts; and an introduction to the teaching modules as a group, outlining the rationale for the five modules and the key concepts introduced in each. In addition, it was emphasized that the publication should contain practical advice to trainers on teaching methods and on combining the modular material for particular courses.

Finally, it was noted that the survey on education and training programmes in health economics would probably best be published separately, since it was nearly finalized and its value would be reduced if publication were delayed further.

It was noted that attempts should be made to evaluate systematically the use and usefulness of the training material. A number of ideas were discussed. For example, an evaluation form could be included in the final publication so that feedback could be obtained from trainers. In addition, it would be advantageous to convene another meeting of the Study Group two or three years after publication of the material to pool experience on the usefulness of the modules and to refine them further. The other main follow-up activity identified was to establish a clearing-house for training material in health economics in Europe at the SACO Research Institute for Health Service Organization in Milan and Florence. It was felt that now the basic teaching modules had been developed, this would be a stimulus to trainers to share their material with others. More generally, it was believed that WHO should place more emphasis on training the trainers in health economics and on supporting them in their activities. This was particularly important in the case of southern Europe.

Annex 1

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