

Health Economics as a Tool for Leaders

**David A. Gunnarsson,
C. Selby Smith and H. Zöllner**



WHO Regional Office for Europe

Copenhagen, 2003

Key Words

HEALTH ECONOMICS
DELIVERY OF HEALTH CARE – economics
HEALTH POLICY – economics
SOCIOECONOMIC FACTORS
HEALTH SERVICES ACCESSIBILITY
HEALTH CARE REFORM
COST–BENEFIT ANALYSIS – methods
OUTCOME ASSESSMENT (HEALTH CARE)
PROGRAM EVALUATION – methods
FORECASTING
TEACHING MATERIALS

© World Health Organization, 2003

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Where the designation “country or area” appears in the headlines of tables, it covers countries, territories, cities, or areas. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers’ products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use. The views expressed by authors or editors do not necessarily represent the decisions or the stated policy of the World Health Organization.

Contents

Overview	1
Introduction	3
Theme 1. Economics of health	5
Overview	5
1.1 Interrelationships, and everybody's concern	5
1.2 Reallocation of resources for health	6
1.3 Economic, social and individual determinants of health	6
1.4 A futures orientation	7
Theme 2. Economics of health systems development	8
Overview	8
2.1 Equity and efficiency	8
2.2 Expenditure≡income≡revenue	9
2.3 Implications of financing systems	9
2.4 Privatization issues.....	10
Theme 3. Economics of management and the change process	11
Overview	11
3.1 Policy analysis, bargaining and negotiation.....	12
3.2 Public health: protection, promotion and stewardship.....	12
3.3 Citizens' participation, patients' rights and ethical frameworks	13
Theme 4. Some economic tools	14
Overview	14
4.1 Use of tools in supporting decision-making	14
The target audience.....	15
Tailoring learning materials to the highest level of decision-makers.....	17
Model of a one-day seminar	20
Timing and organization	20
Adapting the model	22
Teaching material: overheads	23
Theme 1. Economics of health.....	24
Theme 2. Economics of health systems development	33
Theme 3. Economics of management and the change process	41
Theme 4. Some economic tools	50
Teaching material: exercises.....	55
Theme 1. Economics of health.....	55
Theme 2. Economics of health systems development	59
Theme 3. Economics of management and the change process	60
Theme 4. Some economic tools	62
Final comments.....	63

Overview

The WHO Regional Office for Europe has published on the Internet the book *Learning to live with health economics* (hereafter known as “the book”), containing 25 health economics study modules, most of which are 15–20 pages long.¹

The book has been prepared to assist the following groups of people to become more familiar with the importance of health economics in health care:

- the highest level of policy-makers
- administrators and managers
- health care professionals
- media commentators, health lobbyists, senior officials in other sectors, etc.

The highest level of health care decision-making comprises ministers of health and their most senior officials. These are the people who establish appropriate parameters for decision-making by practitioners and health care administrators, manage intersectoral relationships and obtain adequate resources for the health sector. They are, however, extremely busy and are most unlikely to work systematically through the full book.

Given the importance of this group and the benefit they could derive from familiarity with health economics concepts, tools and ways of thinking, WHO has produced this abridged version of the book for their use. Entitled *Health economics as a tool for leaders*,² it is organized in two parts:

- part 1: materials for private study
- part 2: materials for tutors to organize a one-day seminar.

The two elements are separate, but it may be that senior decision-makers who have used the materials in part 1 will conclude (at least in some cases) that interaction with colleagues and a high quality resource person would justify subsequent participation in a one-day seminar. For those who are unable to attend a seminar, the learning materials can provide an introduction to health economics. This could be considerably enhanced by recourse to a suitable resource person, either at WHO or elsewhere.

Part 1 consists of an abbreviated version of the materials contained in the full book for use on an individual, private study basis. It includes:

¹ ZÖLLNER, H. ET AL., ED. *Learning to live with health economics*. Copenhagen, WHO Regional Office for Europe, 2003.

² GUNNARSSON, D. ET AL., ED. *Health economics as a tool for leaders*. Copenhagen, WHO Regional Office for Europe, 2003.

- an introduction;
- study material on four themes summarizing the contents of the programme for the one-day seminar.

Part 2 contains material prepared for tutors, although components could be distributed to participants in the seminar if the tutor thought this appropriate. It consists of:

- a model for a one-day seminar, with a description of what is included from the full set of learning materials and why;
- the suggested organization and timing of the seminar and some other matters for the tutor conducting it; and
- the contents, organized by key themes, including overheads as well as exercises and role-plays to be used during the seminar.

Access to the learning materials and participation in a one-day seminar could be organized through the WHO liaison offices in countries, individual WHO programmes using them or sponsorship of colleagues by an interested senior decision-maker in the WHO European Region or through other interested organizations (such as aid agencies). The materials could also be offered for use in other WHO regions. Users of the materials might also seek further advice from experts in the WHO secretariat, the authors of the modules, the International Economic Association or participation in a formal course.

Part 1

Learning materials for private study

Introduction

Health policy and practice is a large and complex area. It benefits from a range of perspectives, including that of economics. The WHO Regional Office for Europe has developed a set of health economics learning materials, *Learning to live with health economics* (“the book”),¹ organized in 25 modules, with the aim of assisting various potential audiences to benefit from the valuable insights that can be afforded by the discipline of economics.

The highest level of health care decision-makers, comprising ministers of health and their most senior officials, are important potential users of these modules. However, they are extremely busy and unlikely to be able to find the time to work systematically through the full book. In addition, some of the elements in the modules are more relevant than others to very senior decision-makers, for example, ways of thinking as opposed to specific tools of analysis.

This abridged version, entitled *Health economics as a tool for leaders*, has therefore been produced for this group of users to serve as an introduction to the subject. The materials are intended to enable senior decision-makers to:

- make a more extensive and prudent use of health economics;
- judge better what are appropriate or inappropriate circumstances for their application;
- appraise more perceptively the advice they receive from economists.

Value added for senior decision-makers is especially to be found in:

- specific cases where economic input is provided (or should be included);
- the economic way of thinking (e.g. incentives, balancing costs and benefits, marginal analysis, equity and efficiency);
- specific economic tools, concepts and reasoning.

The learning materials can help the user:

- to gain a fuller understanding of where particular economic concepts, approaches or tools can appropriately be used (*appreciation*);
- to make critical assessments of particular studies or uses of health economics in decision-making (*appraisal*);
- to a lesser degree, to apply techniques or tools (*analysis*).

³ Zöllner, H. et al., ed. *Learning to live with health economics*. Copenhagen, WHO Regional Office for Europe, 2003.

Four broad health economics themes are looked at. The material has been organized into a page or so on each theme and selected topics, containing summaries of the major points in the corresponding elements of the full set of health economics modules.

Theme 1. Economics of health

Overview

1. Theme 1 includes:
 - how health is produced
 - how health does not equate to health care
 - how health relates to the broader:
 - economy
 - society.
2. Four aspects are especially important for decision-makers:
 1. the many interacting *influences* on health (such as health care and the environments in which people live, work and play), and thus the wide range of activities and policies which have consequences for health;
 2. issues concerning the possible allocation and reallocation of *resources* for health, including the differing viewpoints of various participants (illustrated by those of health compared to economic ministries);
 3. how the economic, social and other environmental *determinants* of health interact with individual behaviour and public policy and have powerful implications for efficiency and equity in health;
 4. the *complexity* of the situations which decision-makers often face, with particular emphasis on possible futures, how their essential features can be provided in a helpful form, and what implications they have for developments in health policy and practice.

1.1 Interrelationships, and everybody's concern

3. Since health systems and economic systems are interrelated in complex and important ways:
 - health care can be an important influence on health but it is only one of the determinants of health;
 - the environments – social, economic, cultural and physical – in which people live, work and play interact with individual factors (such as genetics) to influence strongly who gets ill;
 - health does not equate to health care, and they need to be analysed separately.

4. Since health policy encompasses much more than merely health care policies (important though those are):
 - many activities and policies outside the health sector nevertheless have important consequences for health;
 - these activities and policies can legitimately be viewed as the subject of health policy;
 - intersectoral collaboration and action are needed to improve health;
 - health should be everybody's concern.

1.2 Reallocation of resources for health

5. The optimum use of scarce resources to achieve health gains involves continuing consideration of the possibilities for allocating and reallocating resources within the health care sector.
 - This can involve both existing resources and additional resources that become available.
 - Intersectoral collaboration for improving health frequently requires reallocation of resources from one sector to another.
6. Reallocation can be of five main types:
 - among health care activities
 - among non-health care activities within the health system (e.g. seat-belt legislation)
 - between health care and non-health care activities within the health system
 - between the health system and other systems (e.g. education)
 - among other systems.
7. Other important dimensions of resource reallocation are:
 - the type of resource being reallocated (e.g. people, time)
 - different levels of decision-making (e.g. school)
 - the public as compared to the private sector.

1.3 Economic, social and individual determinants of health

8. There are important economic and social influences on health, which interact with genetic endowments and individual behaviour. Five important factors are:
 - genetic endowment
 - life risks
 - the individual's environment
 - behaviour of individuals and their social groups
 - the health care system, including prevention and promotion.
9. There is an apparent health divide in the population between educated and less educated people. These two groups can differ markedly in evaluations of their own health and in their attitudes towards professional health services. These differences can have consequences for their health behaviour, including their use of health care.
10. Nevertheless, individuals can have a considerable influence on their state of health. Economic analysis can be used to understand individual health behaviour and differences in health among people. Many other parties, including families, have incentives for investing in the health status

of an individual, but the extent, ways, possibilities and impact are different. Senior decision-makers help to determine the frameworks within which these decisions are made, and the incentives for particular actions and choices.

11. Public policy measures can improve health: (i) directly through improvements in the environment, or (ii) indirectly through changes in the regulation and incentive structures that influence health behaviour. Population health depends on both the health of its individual inhabitants and its distribution.

1.4 A futures orientation

12. The environment for taking decisions on health has become more complex, more uncertain and more stressful at all levels, even before the threat of increased international terrorism.
13. Futures work goes beyond forecasting and prediction. It is a useful approach to addressing complex issues and coping with the uncertainties of policy-making. It includes the participative development of alternative scenarios and the scanning of developments in the internal and external environments for new opportunities and new threats.
14. The purpose of futures work is not to make predictions but to provide foresight. It explores alternative futures and supports long-term strategic thinking on pressing issues. Both quantitative models and qualitative assessments can contribute. Futures work should not be ad hoc but an integral part of continuing foresight intelligence systems. It embraces significant interlocking dimensions, such as key actors, context and timing.

Theme 2. Economics of health systems development

Overview

1. Theme 2 is concerned with thinking about the development of health systems, with particular reference to countries in the WHO European Region. Aspects of knowledge about the economic approach (often lacking among potential users) are addressed.
2. Economists judge the development of health systems by two key criteria (2.1): (i) equity, thought of as fairness, relating to both processes and outcomes; and (ii) efficiency, including technical efficiency, cost–effectiveness and allocative efficiency.
3. An important aspect of the overall reform of health systems (2.2) is the identity which exists between expenditure, income and revenue, and its implications for senior decision-makers (and other potential users of the learning materials).
4. Two issues are especially important, financing systems and privatization (2.3 and 2.4, respectively).

2.1 Equity and efficiency

5. Equity can be thought of as fairness. A framework is presented for thinking about how to make a fair distribution of the various resources that are available, building on three elements:
 1. certain features of health care mean that it should be distributed differently from other goods and services;
 2. it matters who receives health care goods; and
 3. the process chosen to distribute health care services must be equitable.
6. There is no correct technical answer to a question about the fairness of a given distribution of resources. Values matter. What is acceptable in one jurisdiction may not be acceptable in another.
7. In focusing on efficiency, health care must be distinguished from health and the even broader concept of wellbeing. The three main elements of efficiency are:
 1. technical efficiency (“do not waste resources”);
 2. cost–effectiveness (“produce each output at least cost”); and
 3. allocative efficiency (“produce the types and amounts of output which people value most”).

The first two requirements relate only to production, while the third introduces consumption, thereby bringing together the supply and demand sides.

8. Efficiency does not necessarily imply social desirability, since distribution of the costs and benefits can make an important difference to decision-makers. For almost any use of society's resources, there will be winners and losers. Thus, considerations of equity are often linked inextricably to considerations of efficiency.

2.2 Expenditure = income = revenue

9. The national income–expenditure accounting principles that apply to other economic sectors also apply to the health sector. Thus, every item of *expenditure* on health care is also an *income* to someone in the health care industry, and it must be financed through *revenue* of one type or another.
10. An examination of all three dimensions of proposed or actual health care reforms can provide important insights, for example:
- into the redistributive income effects of policy changes
 - into the likely impact on expenditure levels
 - into the real availability of health care services.
11. The identity can be extended in various ways, e.g. by introducing a “health production” function, a “health care production” function, a demand relationship or a capacity relationship.
12. The identity can be used to record and understand *retrospectively* the changes that have occurred, and also to examine *prospectively* the probable consequences of proposed health care reforms.

2.3 Implications of financing systems

13. There are many objectives of health policy, including macroeconomic efficiency, microeconomic efficiency, quality, feasibility, choice and responsiveness. The objectives can also conflict. Thus, various choices can be made in seeking to satisfy objectives.
14. There are various methods of financing health services (general taxation, social insurance, user charges, etc.), of paying providers (such as doctors, hospitals and the providers of pharmaceuticals), and of allocating resources (including budget allocation formulae, a purchaser-provider split and evidence-based approaches).
15. Each method of finance, payment and resource allocation has advantages and disadvantages, is more suitable for some circumstances than others, and generates incentives to act in particular ways. There are also interactions between the method of funding, the purchasing agents and the providers of health care.
16. In all health systems a balance has to be struck which enables three objectives to be achieved, wholly or in part:
1. *allocation*, including the cost-effective production and procurement of appropriate health goods and services;
 2. *distribution*, including fair financing, fair access to health goods and services and fair payment to providers;
 3. *sustainable development* over the longer term, including appropriate incentives for performance and health, policy development and the management of change, and a sustainable resource base.

2.4 Privatization issues

17. The term “privatization” can refer to several different economic functions which occur in health care systems. When using the term it is important to be clear about which function(s) are involved, for example:
 - ownership of facilities and delivery of services
 - financing
 - management and administration
 - regulation
 - provision of information.
18. These functions are only the *means* by which countries attempt to achieve important policy objectives or *ends*, such as:
 - improved health outcomes
 - equity in access to, and payment for, health services
 - efficiency in health service delivery
 - provider and patient satisfaction
 - overall expenditure control.
19. The choice of ends requires that important value judgements are made. These value judgements can differ across societies (and within them). There is no single “best” way to organize and finance health care systems that “wins” on all performance criteria. Proposals to move from one system to another need to be examined for the potential for disadvantages as well as advantages to emerge.
20. The public versus private debate is becoming blurred in health care by the development of new models of joint public-private partnership. Increasingly, it is necessary to conduct analyses at the level of specific proposals, with clearly identified objectives (rather than at the level of stereotypes). Nevertheless, overall stewardship of health care functions remains a core responsibility of the public authorities.

Theme 3. Economics of management and the change process

Overview

1. Theme 3 is concerned with change, a pervasive feature of European health systems (and societies). Change, and how to manage it, is relevant to all stakeholders in the health and health care systems. It also affects their relationships with other sectors, disciplines and stakeholders.
2. The discussion is organized in three parts.

1. An introduction to concepts for health policy analysis (3.1), which is the study of:
 - why groups respond to some health problems or issues and not others;
 - why groups develop some health policies and not others, and
 - why groups implement some health policies and not others.

The decision-makers will develop skills in identifying patterns in agenda-setting, health policy development and health policy implementation, and understanding the reasons for those patterns.

While analysis is a valuable aid for understanding and empowerment, the policy world is, of course, a messy place where the implementation of change generally involves bargaining, negotiation and compromise.

2. The ways in which the political system, in the sense of organized society or civil government rather than in the narrower party political sense, seeks to manage public health (3.2), especially its protection, promotion and stewardship functions. The underlying ethic is that of equity, in the sense of fairness.

The material considers the valuable contribution which can be made by economics and economists to achieving the objectives of health for all; and identifies the key success factors for an effective approach to the political management of health policy and changes in health practice.

3. Citizens' participation, patients' rights and ethical frameworks (3.3). These topics are often inadequately considered in health economics textbooks, and traditional economic theories based on individual preferences do not adequately describe the full set of conditions that influence demand in health care markets. In fact, a knowledge of theoretical frameworks of ethics and rights and the possible strategies for their implementation are of great importance for senior decision-makers, as they can regulate or otherwise influence the market and the behaviour of participants on both the supply side and the demand side. Furthermore, citizens' participation, patients' rights and consumers' rights are widely expected to play an increasingly important role in health care markets in the future.

3.1 Policy analysis, bargaining and negotiation

3. Identifying patterns in agenda-setting, health policy development and health policy implementation, as well as understanding the reasons for these patterns, are important skills.
 - Why are some health problems or issues included on the agenda for discussion (and not others)?
 - Why are some health policies developed to achieve particular objectives, using particular policy tools (and not others)?
 - Why are some health policies acted upon by people in the field (and not others)?
4. Health policy can be considered at each level of decision-making. Senior decision-makers are particularly important in relation to agenda-setting, the development and determination of policy, and setting the parameters within which implementation occurs (e.g. resourcing, timing).
5. Three factors are typically cited to explain action or inaction in policy development at the most senior levels:
 - interests – who wins and who loses
 - institutions – the rules for decision-making
 - ideas – both values and research.
6. Policies are more likely to be developed when:
 - the benefits are concentrated among more influential groups (and the costs across less influential groups);
 - decision-making structures concentrate influence at the same level of policy-making;
 - policies are less visible (especially to those who have costs imposed on them); and
 - both values and empirically tested “facts” support the policy.
7. The insights can be used to:
 - assess the feasibility of change; and
 - establish a strategy for bringing about change, when it appears to be feasible.
8. Strategy is likely to include the following steps:
 - start with a stakeholder analysis:
 - determine who wins and who loses
 - what this means for the political feasibility of the proposal;
 - set a framework for change:
 - determine the rules for decision-making, and
 - whether values and empirically tested “facts” support the policy;
 - establish political strategies for improving the chances that the policy will be adopted:
 - bargaining and negotiating
 - strengthening the position of supporters (and weakening the position of opponents)
 - mobilizing unorganized supporters (and deterring organized opponents).

3.2 Public health: protection, promotion and stewardship

9. Public health approaches can be narrowly or more broadly focused, covering the organized efforts of society to protect and promote the population’s health, prevent and control disease, mitigate the effects of disability and handicap, and ensure the wellbeing and care of those with

chronic health problems and the terminally sick.

10. Primary health care (as advocated originally by WHO) provides a set of principles and identifies actors to be involved and ways of mobilizing resources. The underlying ethic is equity, in the sense of fairness.
11. Public health management makes use of economic concepts and reasoning (such as substitution, pricing, utility, knowledge, costs and benefits, timing, distribution, incentives, returns to scale) and of economists as advisers. However, it is aware of the limits of their frame of reference, the assumptions they make, and the questions they cannot answer.
12. The health for all agenda distinguishes between the:
 - musts, e.g. ensuring a safe environment, minimizing hazards;
 - choices, e.g. creating alternatives that reflect social and individual preferences;
 - challenges, e.g. developing appropriate policy responses to acknowledged social problems with health consequences.

Note that practical responses, not rhetoric alone, are the test. This includes effective and sustainable implementation. Top leadership needs to be combined with widespread community participation. There are various potential outputs, including political, activity and health outputs.

3.3 Citizens' participation, patients' rights and ethical frameworks

13. A knowledge of theoretical frameworks of ethics and rights, as well as strategies for their implementation, are of great importance for senior decision-makers, as these factors can regulate or influence the market. Traditional economic theories of individual preference need not adequately describe the patterns of demand in health care markets, since they can also be influenced by providers and public health interventions.
14. Citizens' participation, patients' rights and consumer' rights are likely to play increasingly important roles in the overall health care market in the future. Strategies for the implementation of these concepts range from advocacy models through implicit legal reinforcement to explicit charters of health rights. These changes are significant for the work of senior decision-makers in all health care systems.
15. Utilization frameworks of assessment, such as cost-effectiveness analyses, are likely to be supplemented increasingly with approaches that are sensitive to health rights in discussions on, for example, rationing and priority-setting. The legally based and economically based approaches to decision-making in health care can be competitive or complementary.
16. Senior decision-makers are becoming more accountable and responsible, to a broad range of individuals, groups and institutions, for health care outcomes and processes. This trend is likely to continue; with more emphasis on positive as compared to negative rights.

Theme 4. Some economic tools

Overview

1. Some of the tools available are:
 - (i) health outcome measurement
 - (ii) costing
 - (iii) economic evaluation
 - (iv) development and diffusion of health technology
 - (v) economic modelling and forecasting.
2. The emphasis is on when the tool is useful and on elements requiring critical assessment. There is detailed information about each tool in the full set of learning materials. A range of other tools, e.g. human resource management, are available elsewhere.

4.1 Use of tools in supporting decision-making

3. You can judge for yourself when economic tools can be helpful in your decision-making, although the production of economic information requires expert knowledge.
4. The information is not an end in itself, and can be presented in more or less helpful ways. For example, in assessing economic evaluations the following ten-point check list would be useful.
 - (i) Was a well defined question posed in answerable form?
 - (ii) Was a comprehensive description of the competing alternatives given?
 - (iii) Was effectiveness of the programme services established?
 - (iv) Were all the important and relevant costs and consequences identified for each alternative?
 - (v) Were costs and consequences measured accurately in appropriate physical units?
 - (vi) Were costs and consequences valued credibly?
 - (vii) Were costs and consequences adjusted for differential timing?
 - (viii) Was an incremental analysis of costs and consequences of the alternatives performed?
 - (ix) Was allowance made for uncertainty in the estimates of costs and consequences?
 - (x) Did the presentation and discussion of study results include all issues of concern to users?

Do not let the perfect become the enemy of the merely good.

Part 2

Materials for tutors to organize a one-day seminar

The target audience

The WHO Regional Office for Europe has developed a set of health economics learning materials, *Learning to live with health economics* (“the book”),⁴ organized in 25 modules. The purpose of this book is to assist various potential audiences to benefit from the valuable insights that can be afforded by the discipline of economics, broadly defined. The material is complementary to other material on health economics that is already available.

The modules in the book are concerned with a broad range of matters. They should enable the various potential users to make a more extensive and prudent use of economic concepts and tools, to be better equipped to judge what are appropriate or inappropriate circumstances, and to appraise more perceptively the quality and relevance of the advice they receive from economists.

Health policy and practice is a large and complex area. It can benefit from a range of perspectives, including that of economics, which is particularly useful for decision-makers since resource limitations and financial constraints apply in all health systems and at all levels. There are always more useful activities competing for priority than can be resourced, and this has significant implications for resource allocation decisions, health outcomes and equity.

The economic approach fits particularly well with the public health view of the issues, problems and possible solutions included in WHO’s overall health for all strategy, and specifically HEALTH21, the health for all policy framework approved by the WHO Regional Committee for Europe in 1998.

There are various potential users, as discussed in the introduction to the book. Some of the most important are policy-makers for health at the highest level, including ministers, their advisers, concerned members of parliament and the most senior officials, such as the heads of countries’ health agencies. Such people are extremely influential in relation to health policy, the framework within which health practice occurs, and the relationships with other important players such as the finance ministry, other ministers, the private sector or the media. Their decisions also affect significantly the context in which other potential users (such as managers and practitioners) operate, the incentives they face, and the decisions they make.

For the benefit of policy-makers at the highest level, WHO has also produced this abridged version of the book entitled *Health economics as a tool for leaders*.² Part 2 of this book, aimed at

⁴ ZÖLLNER, H. ET AL., ED. *Learning to live with health economics*. Copenhagen, WHO Regional Office for Europe, 2003.

⁵ GUNNARSSON, D. ET AL., ED. *Health economics as a tool for leaders*. Copenhagen, WHO Regional Office for Europe, 2003.

tutors, (i) shows how the full set of learning materials can be tailored to decision-makers at the highest level, (ii) suggests a specific learning approach (a one-day seminar) to meet their particular needs, and (iii) provides tutoring material to help prepare overheads and exercises.

The material is based on the book. No additional modules have been developed, although no doubt this could be done at a later stage to meet the special interests of particular groups of senior decision-makers.

Tailoring learning materials to the highest level of decision-makers

It is emphasized in the book that the learning modules need to be carefully customized for the different groups of users, taking account of their particular interests and experience. The most senior policy-makers at the political and official levels in health care establish appropriate parameters for decision-making by practitioners and lower level managers, set the framework for intersectoral relationships and obtain resources for their sector. It is particularly important for them to know what economics, including its concepts, tools and way of thinking, can add to their capacity for making effective decisions. Where is it useful (and where less so)? How does it interact with other issues of importance (e.g. in intersectoral relationships, in discussions with key stakeholders, in negotiations with the finance ministry)? How should they appraise the economic component of the advice they receive, or identify situations when it should be present but is missing?

In developing the tutoring material it was assumed that these very senior decision-makers would be more likely to be interested in the economic way of thinking than in the minutiae of techniques and approaches – the “thinking” rather than the “practical” modules. The contents and learning processes should also, whenever possible, build on matters of immediate interest to participants and develop from them the broader insights and knowledge which will be beneficial in the longer term. This point is illustrated, for example, by the relative time scales for decision-making by senior politicians and officials compared to economists (or risk compared to uncertainty in current discussions on bioterrorism).

The complete book and its full set of modules can be used at the levels of appreciation, appraisal and analysis. Appreciation helps users to gain a fuller understanding of where particular economic reasoning, concepts or tools can be used in health policy-making or practice. Appraisal assists users to make critical assessments of particular studies or uses, including potential uses, of health economics in their work or the related work of others. These two levels are judged likely to be the most appropriate for very senior decision-makers. The third level, analysis, assists users to apply the concepts or tools (e.g. health outcome measurement, costing, or cost–effectiveness analysis). Although this is not a primary purpose here, increasing skills in analysis (even fairly rudimentary analysis) can hone appreciation and appraisal capacities, and thus enable health economics to be applied more appropriately and consistently.

Against this background the material in this abridged book is organized around an introduction, four key themes and a conclusion.

- The *introduction* emphasizes: (i) the contribution which the learning materials can make to senior decision-makers in health care, (ii) areas where particular value is added for them (specific cases; specific concepts, tools and reasoning; and the economic way of thinking), and (iii) the three levels of use (appreciation, appraisal and analysis) with their different degrees of relevance for senior decision-makers.
- The *economics of health* is concerned with: how health is produced; how health does not necessarily equate to health care; and how health relates to the broader economy and society. Both processes and outcomes are important. The theme includes consideration of how the economic, social and other environmental determinants of health interact with individual behaviour and public health; and the importance of intersectoral activities for health. This theme includes material from all of the relevant modules in the book, but in an abbreviated form which focuses on those aspects of particular importance for very senior decision-makers.
- The *economics of health systems development* is concerned with the development of health systems, with particular reference to the WHO European Region, and addresses aspects of knowledge about the economic approach in health care which are not always appreciated, even by senior decision-makers. The two key criteria by which economists judge the development of health systems are discussed: equity, thought of as fairness, relating to both processes and health outcomes; and efficiency, including technical effectiveness, cost-effectiveness and allocative efficiency. The identity between expenditure, income and revenue in health care is presented, a simple concept with powerful implications (and which can be elaborated considerably). The identity relationships can be used to record and understand *retrospectively* the changes that have occurred in health care expenditure, income and revenue, and also to examine *prospectively* the likely consequences of proposed health care reforms. This theme draws on the relevant “thinking modules” of the book, but omits or drastically reduces the main context-specific applications, to fit the time which senior decision-makers can make available.
- The *economics of management and the change process* is concerned with change and how to manage it. Change is a pervasive and continuing feature of European health care systems and the broader economic, social and political environments with which they interact. Change and how to manage it is critical for senior health care decision-makers; for their relationships with other decision-makers in health care, such as managers and practitioners; and for their relationships with other sectors, disciplines and stakeholders. This theme includes discussion of agenda-setting, policy development, policy implementation, and negotiation in health care; how public health is managed, considering especially the protection, promotion and stewardship functions; and citizens’ participation, patients’ rights and ethical frameworks. For example, a knowledge of theoretical frameworks of ethics and rights and possible strategies for their implementation is of great importance for senior decision-makers, as these factors can regulate or otherwise influence the market and the behaviour of participants on both the supply side and the demand side. The relationship between legally-based and economically-based approaches to decision-making in health care is of great interest; and citizens’ participation, patients’ rights and consumers’ rights are widely expected to play increasingly important roles in future throughout the European Region. This theme for the seminar draws on a number of the modules in the book, but in an abbreviated form, given the sharp time constraints, and omitting most of the discussion concerned with practitioners and managers.
- The final theme, on five *economic tools*, is treated in brief, since there is detailed information on each tool in the book, a range of other tools are available elsewhere (e.g. on human resource management, or information, research and other evidence for decision-making), and the most senior decision-makers in health care are unlikely to undertake such analyses themselves. The emphasis in this theme is on the sort of tools which are available, where they can contribute to decision-making by ministers and senior officials (and where their absence should raise queries

about why) and the elements of the tool's application which warrant careful scrutiny. It is emphasized that the analyses are not an end in themselves, but an aid to better decision-making, and that the results can be presented in more or less helpful ways.

- The *conclusion* summarizes what has been learned and reiterates that the learning will not have made the readers economists but was meant to assist them to undertake their demanding duties better.

Overheads and exercises are included for each theme, to explore important aspects and to vary the format of the educational setting. The exercises can be modified or supplemented for particular groups, if required. They are intended to be discussed in working groups and then considered in a plenary session. Two role-plays are also included, one involving a finance minister and a health minister, and the other simulating negotiations over a pay claim between the government and the national association of doctors.

Thus, the detailed contents of the learning package are:

Theme 1. Economics of health
1.1 Interrelationships, and everybody's concern
1.2 Reallocation of resources for health
1.3 Economic, social and individual determinants of health
1.4 A futures orientation
Theme 2. Economics of health systems development
2.1 Equity and efficiency
2.2 Expenditure≡income≡revenue
2.3 Implications of financing systems
2.4 Privatization issues
Theme 3. Economics of management and the change process
3.1 Policy analysis, bargaining and negotiation
3.2 Public health: protection, promotion and stewardship
3.3 Citizens' participation, patients' rights and ethical frameworks
Theme 4. Some economic tools
4.1 Use of tools in supporting decision-making
Exercises
Conclusion

The learning objectives are set out in the introduction to Part 1 of this book.

Model of a one-day seminar

There are several ways and formats in which very senior decision-makers can be brought together to learn. As an example, a prototype seminar on “Health Economics as a Tool for Leaders”, involving a one-day commitment, is described below.

Timing and organization

The considerations are dominated by the limited time which the participants can make available. The judgement was made that they would not make more than one day available.

Given this there appeared to be two alternatives. The first would be to start at lunch-time on day one and continue that afternoon and evening and the next morning, ending with lunch on day two. This is the preferred option, and a detailed organization for it is set out in Fig. 1.

Fig. 1. Suggested programme for a one-day seminar spread over two half-days

Day 1		
Afternoon	13.30 - 15.30	Lunch/arrival Introduction Theme 1: Economics of health <i>Afternoon tea/coffee</i>
	16.00 – 18.00	Theme 2: Economics of health systems development <i>Dinner</i>
Evening	19.30 – 20.30	Exercises on themes 1 and 2 in working groups
	20.45 – 21.30	Role-plays in groups
	21.30 – 22.15	Plenary discussion of role-plays
Day 2		
Morning	8.30 - 10.30	Theme 3: Economics of management and the change process Theme 4: Some economic tools <i>Morning tea/coffee</i>
	11.00 - 12.30	Exercises on themes 3 and 4 in working groups
	12.30 – 13.00	Discussion of exercises in working groups Conclusion <i>Lunch/departure</i>

The second alternative would be a single day. The dangers here include the difficulty for participants in getting away from their normal responsibilities for a whole day (rather than two part days), the disadvantage of not being in the evening (e.g. for a dinner or role-play) or offering the opportunity of overnight reflection; and the lack of a buffer at the beginning and end of the seminar for late arrivals and early departures.

The contents could be used as a core element in a longer, more detailed programme of, for example, three days if (some) participants can make additional time available (e.g. in the parliamentary recess), or combined with other material (e.g. more on the legally-based approaches to decision-making).

Two general matters could be considered at some stage in the seminar.

- (i) The first matter relates to certain *misconceptions* about economists, e.g. they only work with small aspects of the overall picture and are thus not in a position to understand the full implications; they possess a master model which could answer any question as soon as sufficient data of high quality become available; or, while bringing some interesting insights, they always seem to appear at the wrong time. These matters could, for example, be included in the introductory remarks, with some comments on their accuracy or inaccuracy and some suggestions as to how to ensure that the best value is derived from the economists' potential contribution.
- (ii) The second is just *when* the senior decision-maker would expect economists to make their contribution. This issue can arise at a number of points in the seminar. It relates to what sorts of problem are particularly amenable to economic ways of thinking; the stage of the decision-making process where economics is most likely to be helpful; the specific tools to be applied to which problems; and where the absence of economic input suggests caution in reaching a decision.

In the final section of the seminar themes 3 and 4 could be treated separately (rather than together, as proposed), with each presentation followed by a discussion of the relevant exercise in working groups, and a final plenary discussion of both exercises together. This is on the whole less preferred, as it would provide fewer opportunities for the groups to follow their own particular interests in discussing the two areas. For example, some groups may wish to devote more attention to management and the change process than to a detailed discussion of economic tools. The proposed arrangement allows greater flexibility to meet differing interests over time and between and within groups.

The emphasis in the section which discusses the five economic tools should be on what each tool is useful for, from the viewpoint of the most senior health care decision-makers (or other participants). It is worth emphasizing that a wider range of tools is available elsewhere, for example on information for decision-making or human resource management. With respect to each tool individually, and the tools of economic analysis generally, the focus for the discussion is primarily on:

- when consideration should be given to using them (and when their omission should be queried); and
- which elements of the tool require critical assessment to support judicious use.

It is not envisaged that participants should receive a copy of the full set of learning materials (although it is publicly available for use, if required). However, it is expected that tutors will distribute copies of the overheads they propose to use at the beginning of the relevant sessions, and provide copies of the exercises and role-plays to the participants. An introduction for participants, including material similar to that included above under "The target audience" and "Tailoring the material", would be distributed at the beginning of the seminar. It is not proposed that any of the material be distributed prior to the seminar.

The number of participants influences the structure of the meeting. This proposal assumes that there would be about 15 participants. This permits a range of perspectives to be represented, each participant to be engaged actively and three working groups to be formed. There is some flexibility, of course, but it is suggested that numbers not exceed 20.

Adapting the model

Although this seminar material has been developed for an audience of the highest level of decision-makers in health care, there are other groups of senior decision-makers for whom the material, with some modifications (including the exercise and the role-plays), could also be helpful.

- *Politicians*, such as those in portfolios which interact with health or members of parliamentary committees, both continuing committees and ad hoc inquiries. Most of the material appears to be pertinent to their interests, but given their high status and limited time it is suggested that scope be provided for them to modify the structure (particularly the exercises and role-plays) to suit their current concerns. This may be particularly important for ad hoc committees or non-health ministers, both of whom are likely to have a more targeted focus than continuing health committees. Similar comments apply for seminars which focus on senior bureaucrats in agencies that interact with health care agencies or that have a significant independent effect on health outcomes, such as transport, education, income security, housing or the environment.
- *Major funders of health research*, including those who are developing material for evidence-based medicine and practice guidelines. These bodies can be dominated by medical perspectives and could benefit significantly from a greater appreciation of what economics, management and public policy approaches could contribute to their activities. However, they would, in many cases, probably seek a rather different balance in the material to be included. For example, they might want more on information, evidence and decision-making, dissemination, change and the role of professional associations; on the interface between patient care, epidemiology and economics; and generally more on outcomes and less on processes. They might be more concerned with the perspectives of providers relative to users and less interested in some topics which are currently included, such as privatization. It would be helpful if their material stressed the economic contribution to both prospective (including priority areas for research) and retrospective analyses. The exercises (and role-plays) might need to be modified or supplemented to meet the particular requirements of this audience.
- *Courts and other judicial bodies* whose activities include regular or occasional consideration of health-related matters, e.g. compensation for injuries at work or on the roads, complaints about poor quality health care or allegedly inequitable treatment by health care providers or in health care institutions. Again, much of the material currently included appears relevant to their concerns (e.g. equity and efficiency). Some matters are likely to be of less interest to them (e.g. privatization), and other matters would warrant additional consideration (e.g. citizens' participation, patients rights and ethical frameworks, and the relationship of legally-based to economically-based approaches for decision-making in health care). The exercises (and role-plays) could be modified, and new ones added, to meet the special needs of this audience. The focus of these decision-makers may tend to be retrospective, in which case care should be taken to ensure attention is given to prospective elements, including incentives and indirect effects. It would be appropriate to consult them about their special requirements and concerns, including current issues and specialist responsibilities.

In addition, for each of these specialist groups it is open to question whether an experienced tutor with economics knowledge should be supplemented by another contributor whose expertise is closer to that of the participants, such as a (former) minister or parliamentarian, the head of a research funding body or a judge, respectively.

Teaching material: overheads

The material has been developed for an audience of the highest level of decision-makers in health care, such as ministers of health or very senior officials. Sample overheads have been prepared on the most important topics and messages to assist tutors. Also provided are texts in telegram style which could form the basis for additional overheads. You may not wish to use them all, but to select those that are most relevant to particular audiences and to use the additional texts provided for constructing your illustrations. Ideally, matters of pressing, immediate interest to participants can be used to develop the broader insights that will be beneficial for them in the longer term.

The intention is that, in the seminar itself, there will be opportunities throughout all the sessions for discussions to be stimulated among the participants by the material presented. While capitalizing on matters of special interest to the group presents a challenge for the tutor, it enables their current concerns to be used to introduce more general economic principles, techniques and approaches. This is more likely to engage the interests of participants, to bring out relevant aspects of their experience, and to stimulate active learning.

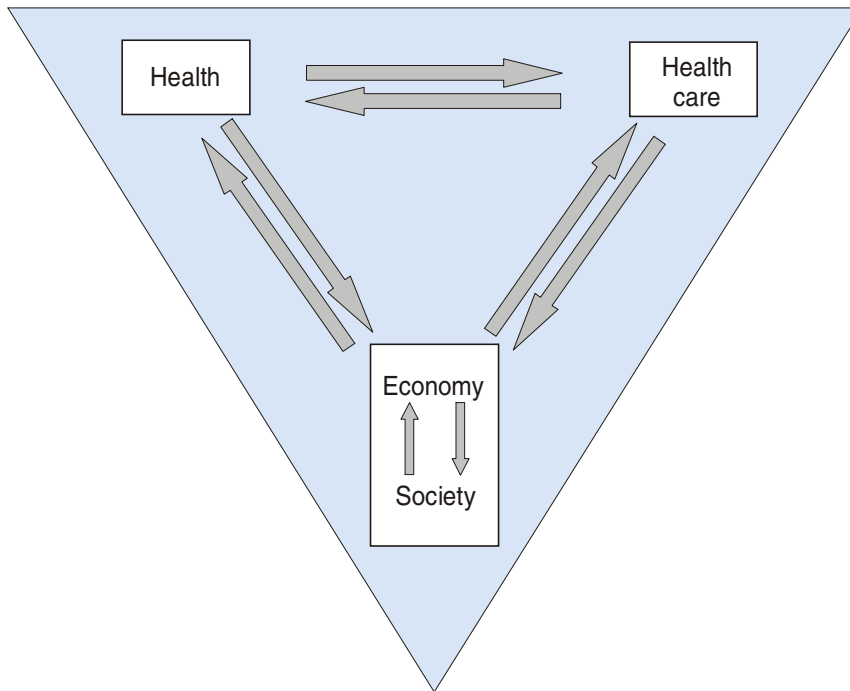
If, as a result, they consider in their subsequent decision-making the possible relevance of economic factors (even if they decide deliberately to ignore them), the seminar will have been successful. The tutor needs, of course, at the end of each session, to ensure that all relevant points have been covered. Otherwise enthusiastic discussion of some matters may cause other important aspects to be overlooked, with the result that the overall learning experience is unbalanced.

The themes are the same as in the learning materials, which also summarizes the messages to be understood and learned.

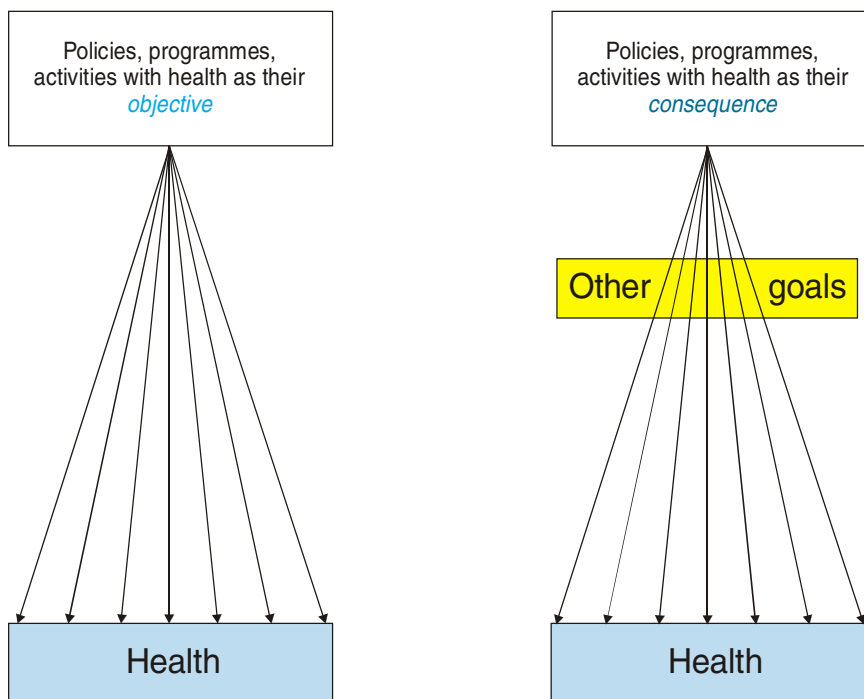
Theme 1. Economics of health

1.1 Interrelationships, and everybody's concern

Overhead: The macro triangle



Overhead: A different view of health policy



Overhead: The health objectives–consequences matrix

Does this policy or action have ...		Health as a <i>consequence</i> (positive or negative)?	
		Yes	No
Health as an <i>objective</i>	Yes	A	B
	No	C	D

Additional material for 1.1

Background

1. The book *Learning to live with health economics* is available.
2. Economics applied to:
 - the public policy process
 - health policy content
 - implementation and practice.
3. Economics considers both individuals and groups. Note that:
 - contexts vary
 - contexts are important.
4. Purpose:
 - to assist users
 - reflects WHO’s role and *modus operandi*.

Using the materials

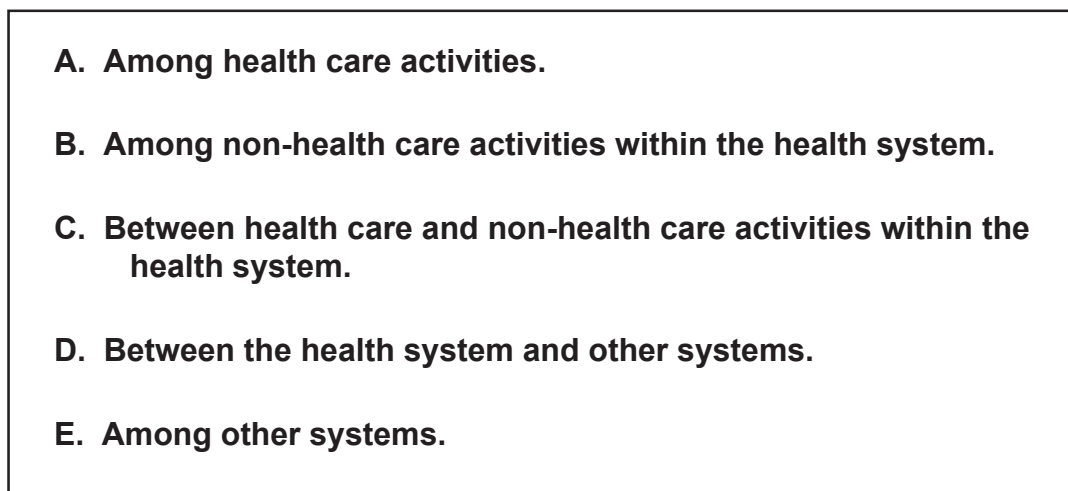
1. Value added for senior decision-makers
 - examples, where economic input is either provided or missing
 - the economic way of thinking
 - sensitivity to local traditions, circumstances and values.
2. Three levels
 - appreciation
 - appraisal
 - analysis.
3. Senior decision-makers affect:
 - the context for others
 - others’ decisions.

Interrelationships

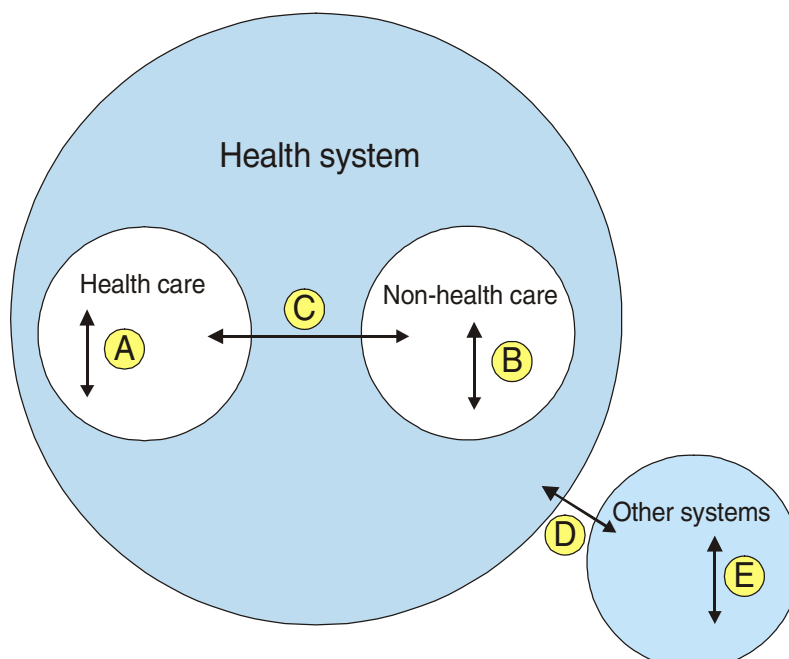
1. Health systems and economic systems are:
 - complex
 - have direct and indirect relationships.

1.2 Reallocation of resources for health

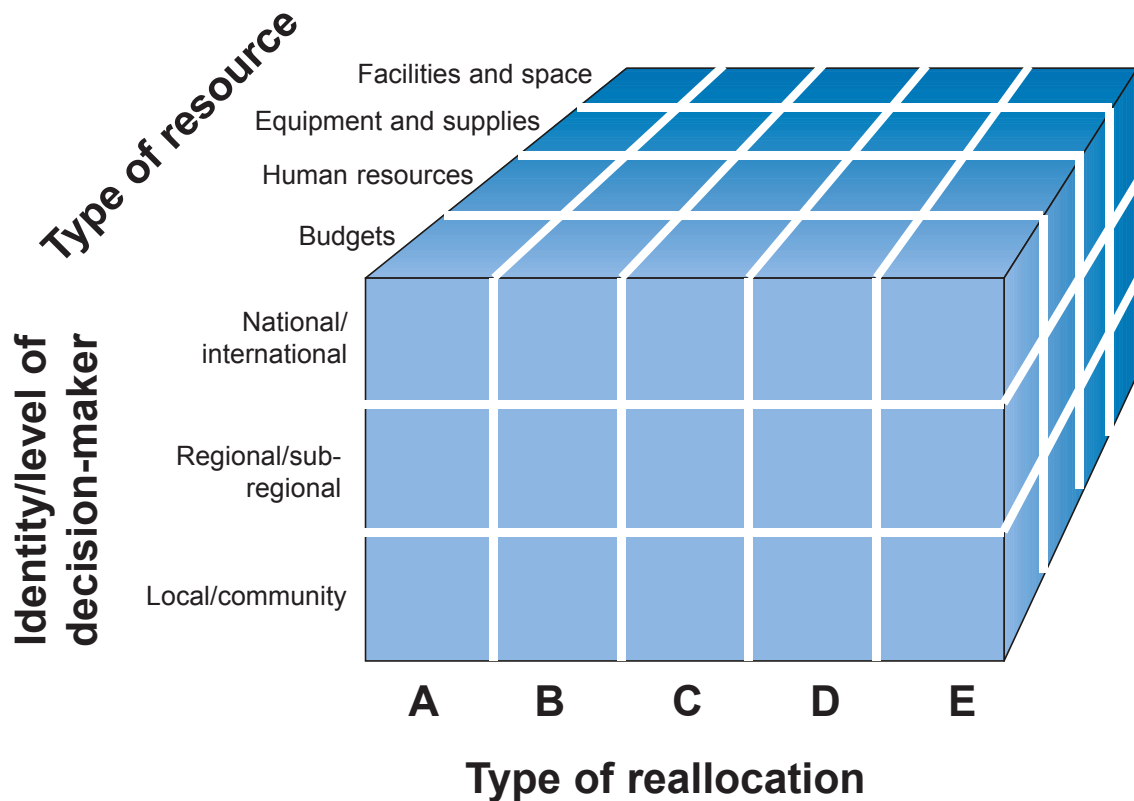
Overhead: Five principal types of reallocation: flows of resources



Overhead: Conceptual framework: flows of resources



Overhead: Conceptual framework: three dimensions



- A Among health care activities
- B Among non-health care activities within the health system
- C Between health care and non-health care activities within the health system
- D Between the health system and other systems
- E Among other systems

Additional material for 1.2

Conceptual framework components

1. Reallocations can take place
 - (i) within the health system, between:
 - different types of health care
 - health care and other health action (e.g. seat-belt legislation);
 - (ii) between the health system and other systems in the economy and society.

Two additional dimensions

1. The types of resource being reallocated, e.g.:
 - command over resources
 - the resources themselves.

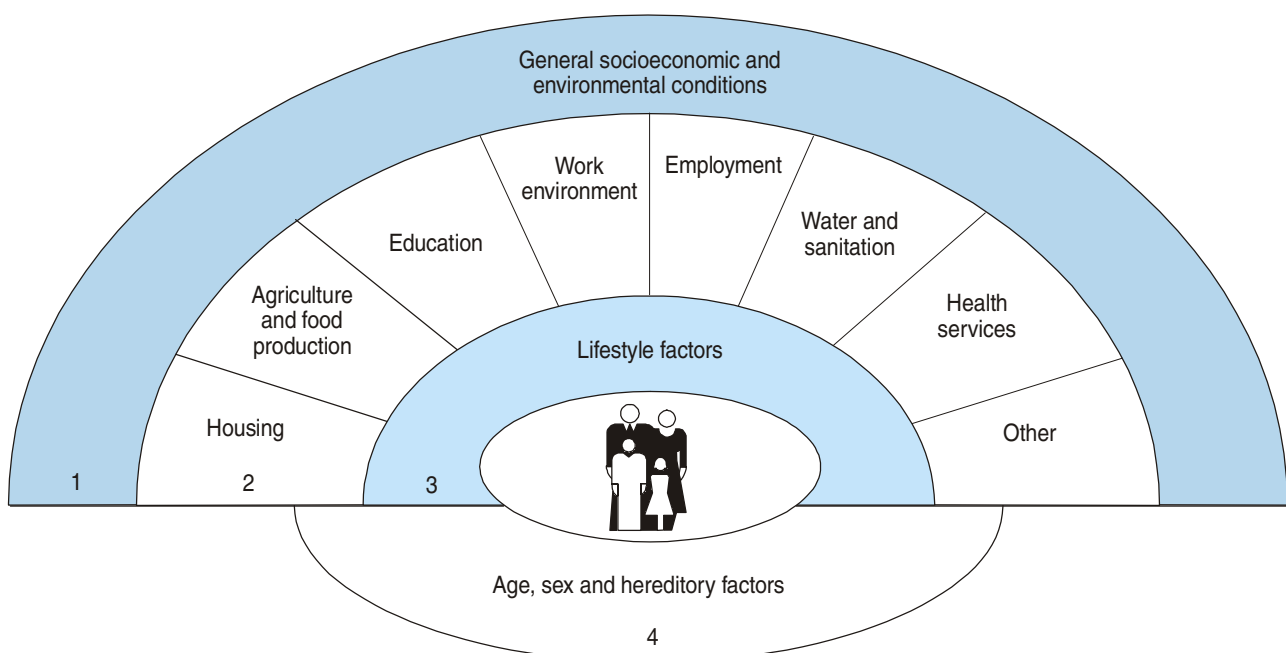
2. The responsible decision-makers
 - different levels of influence
 - public compared to private sector.

The three-dimensional conceptual framework

1. Enables the intersectoral reallocation of resources for health to be:
 - conceptualized
 - discussed.
2. Possible applications:
 - a useful planning tool
 - a monitoring or auditing mechanism
 - prospective as well as retrospective.
3. The local context may require:
 - adaptation
 - development.
4. Preparing the ground for effective implementation.
5. Application in an economy which is:
 - growing
 - declining.

1.3 Economic, social and individual determinants of health

Overhead: Main socioeconomic determinants of health capital

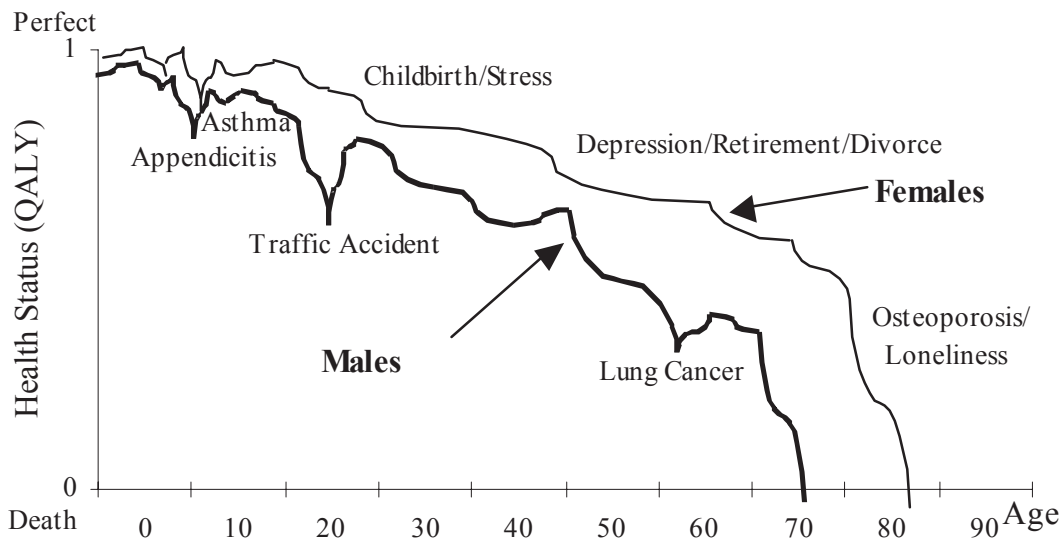


Overhead: Critical transitions and life events

1. **Depend on five factors:**
 - generic endowment
 - life risks
 - the individual's environment
 - behaviour (individuals and their social groups)
 - health care system (including prevention, health promotion).

2. **An apparent health divide in the population:**
educational level is a key variable
 - differences in:
 - individuals' valuation of their own health
 - attitudes towards professional health services
 - consequences for:
 - their health behaviour
 - including use of health care

Overhead: Life events – an illustration



Overhead: The individual as a producer of health**1. Transformation of health inputs into health outcomes:**

- state of health technology
- individual knowledge

2. Constraints include:

- time; money; prices; regulation.

3. Individual preferences:

- differ; may change.

Therefore, maximizing individual preferences is not equal to maximizing individual health.

Additional material for 1.3**Individuals, health and families**

6. Most individuals lead their lives in families:
 - substantial potential impact on health.
7. The early years of life, e.g.:
 - family, income, education and behaviour
 - gradual change from parental to individual decisions.
8. Adult life:
 - endowment from earlier life
 - adult living arrangements, e.g. single or married
 - children encourage specialization in the household
 - impact on health of family breakdown: for children, for adults.
9. Ageing, e.g.
 - living without a partner
 - intersectoral aspects
 - rising political voice
 - under-utilized resource.

1.4 A futures orientation

Overhead: A futures orientation

1. **The environment for health care decision-making becomes:**
 - **complex and uncertain.**

2. **Futures work includes:**
 - **the participative development of alternative scenarios**
 - **the scanning of developments for new opportunities and challenges.**

3. **It helps to:**
 - **address complex issues**
 - **cope with uncertainties in policy-making.**

Additional material for 1.4

Stakeholders

1. With many stakeholders, action may be required:
 - by different decision-makers
 - in different organizations and sectors.
2. In such circumstances, a command and control approach:
 - is not feasible
 - is not appropriate.
3. There can be many stakeholders, including:
 - scientists
 - the media
 - decision-makers, taking account of internal and external environments.

Futures work

1. Purpose is not to make predictions but to provide foresight.
2. Explores alternative futures.
3. Supports long-term strategic thinking on pressing issues.
4. Quantitative models can contribute.
5. Should not be ad hoc but part of foresight intelligence systems.

Target audiences

1. The wider community (or some groups within it).
2. Policy analysts and advisers within government.
3. Senior policy advisers, who tend to want:
 - simple messages
 - succinct statements with firm content
 - clear relevance to pressing matters.

Scenario writing

1. Storytelling about possible future situations with a particular purpose.
2. To help decision-makers engage with the choices to be made.
3. To identify where choices are likely to have to be made.
4. To clarify how the changes can be made best.
5. Embraces key interlocking dimensions:
 - the key actors
 - context
 - timing.
6. Develops a foresight capability:
 - ongoing
 - incorporate accumulative learning.
7. Benefits compared to costs: include timing, distribution and uncertainty.

Theme 2. Economics of health systems development

2.1 Equity and efficiency

Overhead: Four important concepts

- **Equity**
Can be thought of as fairness. HEALTH21 cites “equity in health and solidarity in action between and within all countries and their inhabitants” as one of the three values that form its ethical foundation.
- **Efficacy**
Is concerned with how effective, say a pharmaceutical drug is in preventing, relieving or curing diseases (or their symptoms or complications).
- **Efficiency**
There are three main elements of efficiency: technical efficiency (“do not waste resources”); cost–effectiveness (“produce each output at least cost”); and allocative efficiency (“produce the type and amounts of output which people value most”).
- **Productivity**
What beneficial consequences are achieved by particular activities? The more benefits can be achieved for a given use of resources, the better; similarly, if the same level of benefits can be achieved using less resources (e.g. people, time or facilities).

Additional material for 2.1

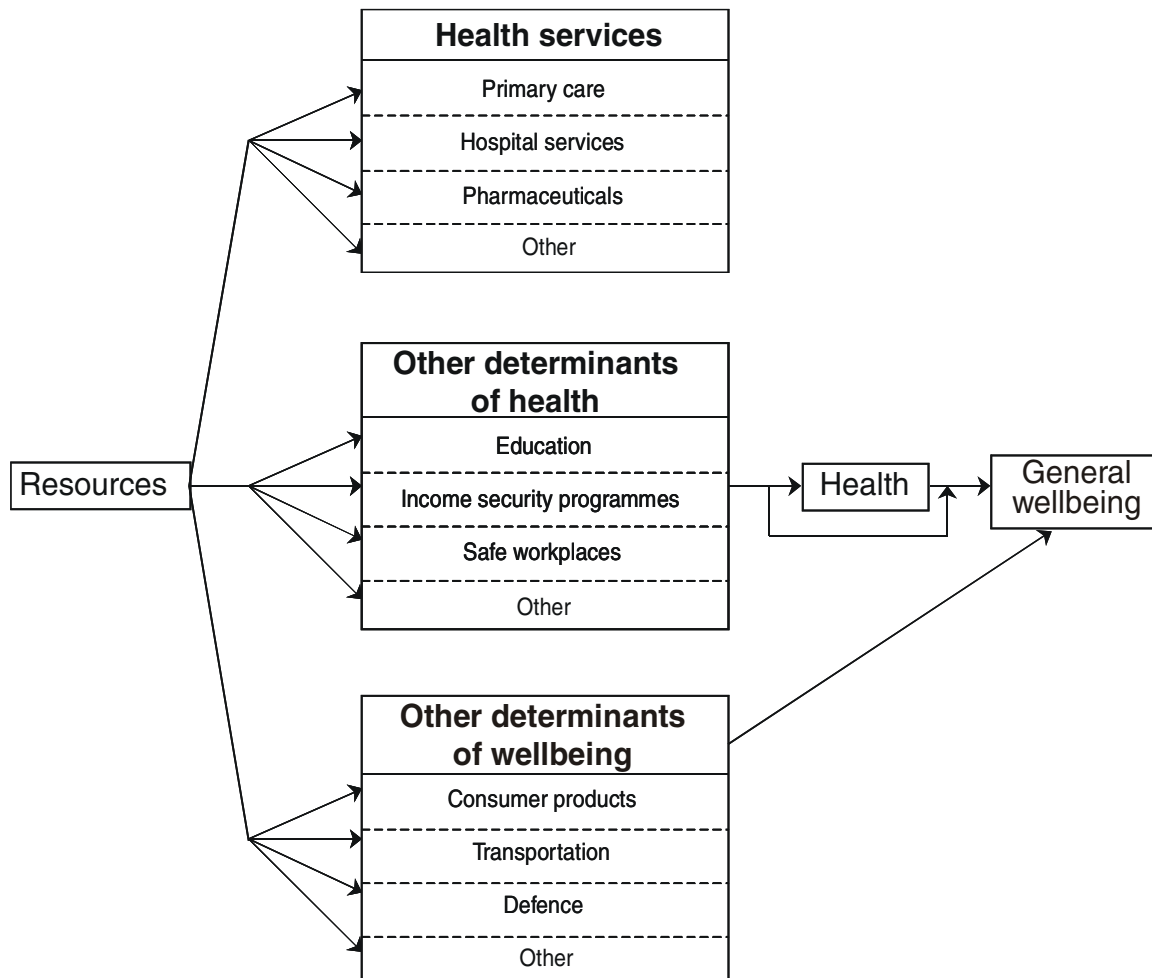
Fair distribution of resources

1. Do features of health care mean it should be distributed differently from other goods and services?
2. Does it matter who receives health care goods and services?
3. Does only the process chosen to distribute health care have to be equitable?
4. Does it matter, as well, how care ends up getting distributed?

Note:

- (a) There is no technical answer. Values matter.
- (b) What is acceptable in one jurisdiction may be unacceptable elsewhere.

Overhead: The magnitude of a society's resource allocation problem



Overhead: Six ways in which there can be too much health care

1. **Effective health care that is more costly than necessary.**
2. **Health that is more costly than necessary.**
3. **Health care that is valued below its cost.**
4. **Health that is valued below its cost.**
5. **Health care that is not effective.**
6. **Wellbeing that is more costly than necessary.**

Equitable distribution

To distribute equitably health-producing goods and services, or health, means distributing them:

- in a way that is acceptable, given the characteristics of the goods and services such as:
 - their physical nature, specifically divisibility and scarcity
 - prevailing cultural beliefs, e.g. essential versus discretionary services;
- in a way that is acceptable, given the characteristics of the recipients:
 - some recipients may have claims to a greater proportion of resources
 - for example, according to group membership, contribution to society, need;
- according to acceptable processes, or criteria about acceptable outcomes of these processes, i.e. fair process or fair end states:
 - processes include: market exchange, queuing, governance processes
 - end states include: equality, horizontal equity, vertical equity.

Three main elements of (economic) efficiency

1. Technical efficiency (do not waste resources).
2. Cost-effectiveness (produce each output at least cost).
3. Allocative efficiency (produce output which people value most):
 - the types of output
 - the amounts of output.

Note:

- (a) Equating costs and benefits at the margin:
 - may be met through prices and markets
 - often the required conditions are violated.
- (b) Technical efficiency and cost-effectiveness relate to production; allocative efficiency introduces consumption, thereby bringing together the supply side and the demand side.

Criteria for judging whether a change is an improvement

1. The Pareto criterion:
 - measures allocative efficiency
 - is an individualistic notion
 - assumes a given distribution of income and wealth.
2. For most policies, there are both gainers and losers.
3. Potential Pareto criterion:
 - gainers could compensate losers
 - compensation not actually paid.
4. Allocative efficiency is not necessarily equal to social desirability.

2.2 Expenditure \equiv income \equiv revenue

Overhead: The expenditure \equiv income \equiv revenue identity

1. Every expenditure on health care:
 - is also an income to someone
 - must be financed somehow through revenue.
2. Especially valuable insight for:
 - senior decision-makers
 - those involved in reforms.
3. Thus:
 - *expenditure on health care, goods and services necessarily equal*
 - *income earned from the provision of health care, goods and services necessarily equals*
 - *revenues raised to pay for health care goods and services.*

Additional material for 2.2

In more detail

1. The relationship is an identity: the three items must be equal.
2. Expenditure = $P \times Q$ (where P is the unit price and Q is the quantity of each type of health care good and service).
3. Income = $W \times Z$ (where W is payment per unit of input, and Z is the various inputs which are combined).
4. Revenue = $TF + SI + UC + PI$ (where TF is taxation, SI is social insurance contributions, UC is direct charges to users, and PI is private insurance provisions).
5. The identity can be used:
 - retrospectively
 - prospectively, e.g.:
 - for controlling publicly financed health care expenditure
 - for addressing real (or perceived) shortages of doctors
 - for responding to the increasing use and cost of drugs.

Other complexities

1. $P \times Q \equiv W \times Z \equiv TF + SI + UC + PI$.
2. Z includes all who derive income from the provision of health care goods and services, including management.
3. A health “production function”, linking Q to the population’s health status.
4. A health care “production function” linking Q to Z.
5. A demand relationship, linking C to Q.
6. A capacity relation, linking Q to a maximum available stock of inputs and resources.
7. How could this identity assist other users (e.g. managers or practitioners)?

2.3 Implications of financing systems

Overhead: Objectives of health policy (they may conflict)

1. **Macroeconomic efficiency.**
2. **Microeconomic efficiency.**
3. **Quality.**
4. **Choice and responsiveness.**
5. **Feasibility and sustainability.**

Overhead: Methods of financing health services

1. **General taxation.**
2. **Social insurance.**
3. **Voluntary, supplementary and private insurance.**
4. **Hypothecated taxation.**
5. **Medical savings accounts.**
6. **User charges.**

Overhead: Methods of paying providers

- 1. Paying doctors:**
 - fee-for-service
 - capitation
 - salary.
- 2. Paying hospitals:**
 - retrospective remuneration
 - prospective remuneration, e.g. line items, global budgets, DRG's.
- 3. Paying for pharmaceuticals:**
 - supply-side measures, e.g. pricing, formularies, cost-effectiveness
 - proxy demand-side measures (especially physicians; pharmacists)
 - demand-side measures, e.g. cost-sharing; health promotion.

Overhead: Health systems: development and finance

- 1. Make allocation cost-effective**
 - cost-effective production of appropriate health goods and services.
- 2. Make distribution fair**
 - fair financing
 - fair access to health goods and services
 - fair payment to providers.
- 3. Make development sustainable**
 - policy development, continuous learning, management of change
 - sustainable resource base
 - incentives for improving performance and health.

Additional material for 2.3

Allocating resources

1. Budget allocation formulae, e.g.:
 - political versus health needs
 - long-term incentives.
2. Purchaser–provider split:
 - what actually works
 - influencing providers on how to deliver care.
3. Information needs for efficient purchasing, e.g.:
 - appraisal of population health needs
 - monitoring and evaluation, e.g. outcomes, institutions and clinicians
 - monitoring costs of provision
 - design of incentive-compatible contracts.

2.4 Privatization issues

Overhead: privatization

1. **Can refer to several different economic functions that occur in health care systems.**
2. **Economic functions include:**
 - ownership of facilities
 - delivery of services
 - financing
 - management
 - administration
 - regulation
 - provision of information.
3. **When using this term it is important to specify clearly the function(s) involved.**
4. **The above functions are only the means by which countries seek to achieve policy objectives/ends.**
5. **Choosing ends requires that value judgements be made that:**
 - may differ between countries
 - may differ within countries.
6. **New models of public-private partnership:**
 - the public versus private debate is becoming blurred
 - conduct analysis – at level of specific policy proposals
 - with clear policy objectives.

Overhead: five other matters

1. **All models have their respective advantages and disadvantages.**
2. **Countries proposing to change, need to examine the potential for new problems, e.g.:**
 - **the move from a tax-financed to a social insurance model may increase the need for managerial and actuarial skills.**
3. **Private is not equal to competition:**
 - **public and private refer to a status**
 - **Competition is a process.**
4. **Complexity of modern health care systems renders public/private distinctions difficult:**
 - **boundary of what is “public”**
 - **joint ventures and shared ownership models**
 - **capital market and financing arrangements.**
5. **The overall responsibility of governments remains.**

Additional material for 2.4**Privatization principles**

1. Evaluate the type, scope and degree of privatization.
2. Privatization is:
 - a means to achieve desired ends
 - not an end in itself.
3. Privatization is a question of determining property rights.
4. Selective privatization is more likely to work effectively in service provision than in funding.
5. Consult as widely as possible in setting policy objectives.
6. Never let the perfect become the enemy of the merely good.
7. Limited, small-scale experiments, trials or pilot schemes, may often be better than trying to implement new policy ideas across the entire health system.

An example from a central Asian republic

1. Privatization ought to be part of a broader strategy:
 - for health reform
 - more generally.
2. The need for complementary policies, e.g. any core or guaranteed package.

3. Operation of the capital market:
 - effect on sale price
 - sales relative to recurrent costs, investment needs
 - effects on future investment and innovation.
4. Create an appropriate regulatory environment, e.g. to control:
 - private institutions
 - professional power.
5. Train experts, including managerial cadres.
6. Contracting framework (do not have to be fixed contracts).
7. Creation of purchasing power, e.g. public, private insurance, individuals.
8. Interaction between:
 - privatization process, and
 - subsequent operation of private sector, and
 - coherence of public and private sectors.

Theme 3. Economics of management and the change process

3.1 Policy analysis, bargaining and negotiation

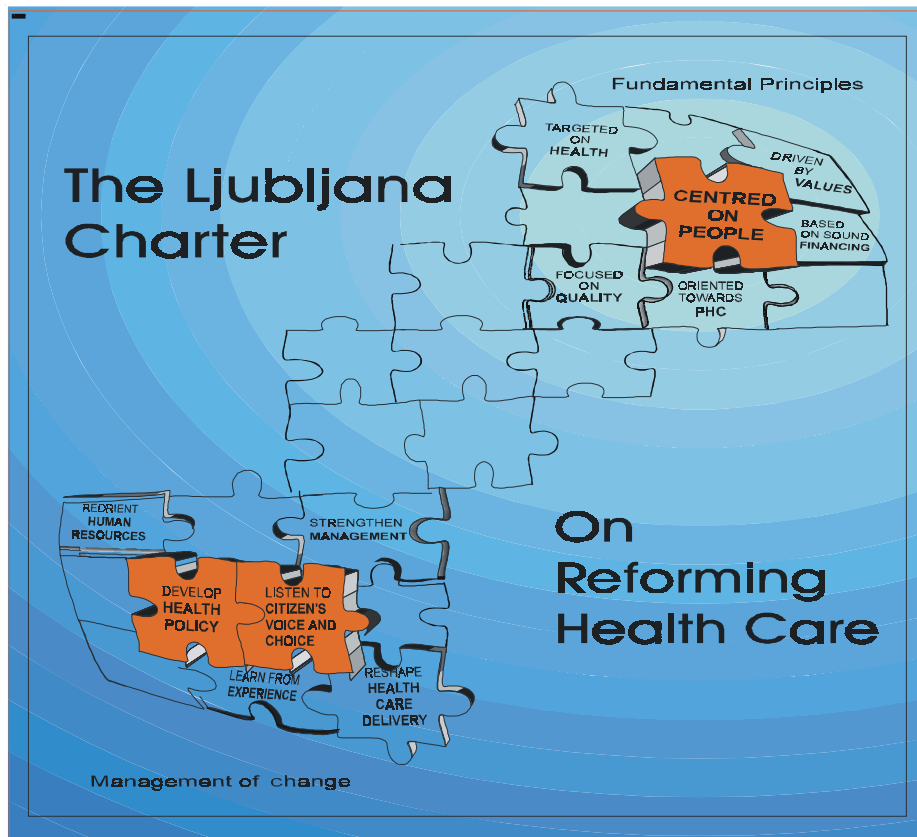
Overhead: Health policy analysis

- 1. The study of:**
 - agenda-setting
 - health policy development
 - health policy implementation.
- 2. It is not:**
 - political strategy
 - political advocacy.
- 3. Can be considered at three (linked) levels:**
 - legislative
 - administrative
 - clinical.

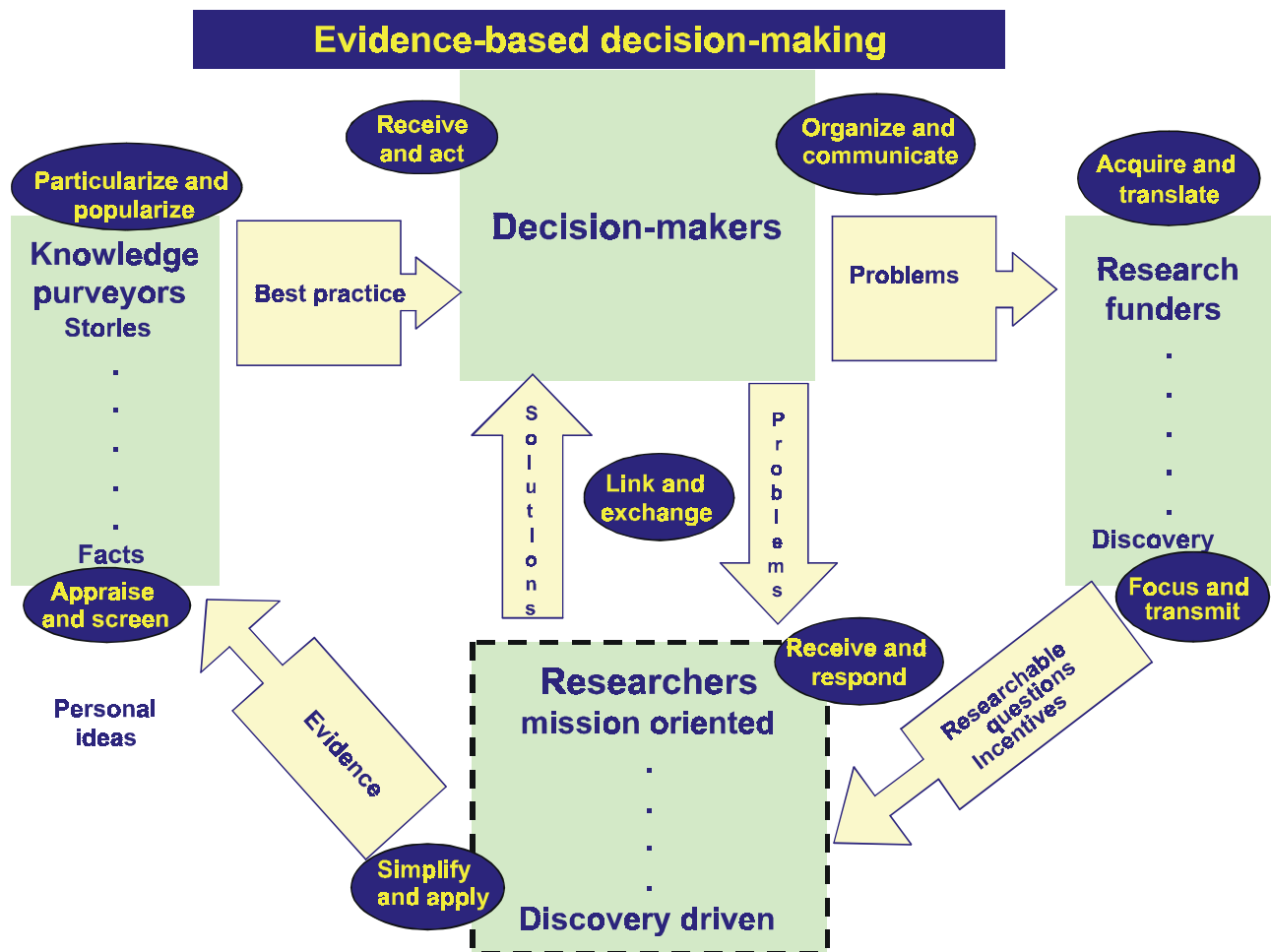
Overhead: Examples of topics addressed by health policy analysts

Steps in the policy-making process	Levels of policy-making		
	Clinical	Administrative	Legislative
Agenda-setting	Why are particular practice guidelines developed?	Why do needs of a particular group become an issue?	Why does privatization of health care become an issue?
Development	Why do practice guidelines for the same condition differ?	Why do some managers of primary care centres focus on young children and others on the elderly?	Why do some governments privatize health care and others not?
Implementation	Why are some practice guidelines implemented?	Why do some programmes targeted at particular groups succeed?	Why do privatization initiatives sometimes succeed?

Overhead: The Ljubljana Charter



Overhead: Evidence-based decision-making



Based on Fig. 4 in: Canadian Health Services Research Foundation. *Health Services Research and Evidence-Based Decision-Making*. Ottawa, Ontario. 2000. <http://www.chsrf.ca/docs/resource/>

Additional material for 3.1

From understanding to action

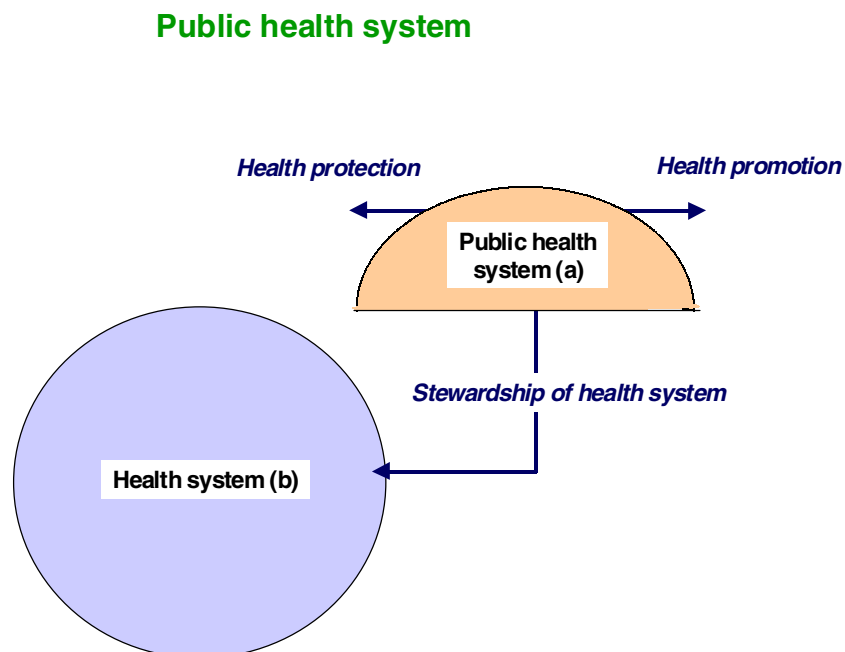
1. Stakeholder analysis, and political feasibility.
2. Rules for decision-making:
 - values
 - facts.
3. Establish strategies for improving chances of adoption, e.g.:
 - bargaining
 - strengthening the position of supporters; weakening the position of opponents
 - mobilizing unorganized supporters; deterring organized opponents.

Some key elements

1. Objectives:
 - must be clearly defined
 - may be difficult to achieve completely.
2. Hallmarks of a quality health service:
 - commitment to health gain: add years to life, add quality life to years
 - commitment to people
 - commitment to resource effectiveness:
 - (a) the four E's: efficiency, effectiveness, economy and equity
 - (b) outcomes and processes are both important.
3. Maximizing policy gains, subject to constraints (or giving satisfaction):
 - bargaining, negotiating, compromising when unavoidable
 - balancing a range of risks
 - orientation to action and demonstration of gains.
4. Combination of a range of resources:
 - people (labour) especially important
 - rapid change requires continuing learning.

3.2 Public health: protection, promotion and stewardship

Overhead: Public health system



- **International, national, subnational, local levels**
- **Actors and actions having an explicit health purpose**

Additional material for 3.2

Public health approaches

1. Narrowly focused:
 - a range of technical services, especially environmental health and communicable disease control.
2. Broader, covering the organized efforts of society to:
 - protect and promote the population's health
 - prevent and control disease
 - mitigate the effects of disability and handicap
 - ensure the wellbeing and care of those with chronic health problems and the terminally sick.
3. Primary health care (as originally defined by WHO):
 - provides a set of principles
 - identifies actors to be involved
 - includes mobilization of resources outside health care.
4. The underpinning ethic is equity (in the sense of fairness).
5. Health for all agenda moving through setting goals towards deciding rights (or vice versa).

Issues on which the economist's contribution can be helpful

1. Public goods in the health field.
2. Notion of consumer sovereignty applied to health care, including:
 - the feasibility and limits of user choice
 - importance of knowledge.
3. Effects of dissemination and use of knowledge.
4. Monopolies, such as public institutions, professions, health insurance.
5. The appropriateness for the health field of:
 - laissez-faire
 - collectivism.
6. The concept of utility applied to the health field.
7. Pricing in health care.
8. Principle of substitution.
9. Costs and benefits; timing; distribution; and incentives.
10. Returns to scale and the division of labour.

Effective implementation

1. Identify:
 - the courses of action required
 - the interested parties who should be involved
 - what consequences follow.
2. Seek political commitments, build networks, and encourage grassroots activities and support.
3. Negotiate action planning:
 - on specific issues
 - with preparation and consultation
 - building-in monitoring and evaluation.
4. Recognize:
 - the resources required and the benefits from early successes
 - that action can be, but often is not, taken
 - that implementation is more difficult in a declining than a growing economy.

Primary health care

1. Resources are mostly provided:
 - by informal care, e.g. individuals, families or communities
 - some paid, some voluntary
 - by women.
2. Interventions:
 - are often diffuse rather than discrete, and long-term in their outcomes
 - closely linked to family, friends and community
 - difficult to evaluate using the empirical quantitative methods frequently used by health economists.
3. Changing demographic and social patterns pose special challenges to primary care in, e.g.:
 - long-term care
 - caring for older people
 - relationships among health professionals
 - the balance of cure and care.
4. Many health systems have concluded that:
 - health care should be organized around patients
 - communication is important
 - care requires coordination and cannot usually be left to specialists.

3.3 Citizens' participation, patients' rights and ethical frameworks

Overhead: Level of dissatisfaction with health care systems (%)

Country	Percent dissatisfied	Country	Percent dissatisfied
Austria	4.7%	Italy	59.4%
Belgium	8.3%	Luxembourg	8.9%
Denmark	5.7%	Netherlands	17.4%
Finland	6.0%	Portugal	59.3%
France	14.6%	Spain	28.6%
Germany	10.9%	Sweden	14.2%
Greece	53.9%	United Kingdom	40.9%
Ireland	29.1%		

Source: Mossialos, E. Citizens' views on health systems in the 15 Member States of the European Union (1).

Overhead: Citizens' participation

1. **Clinical accountability**
2. **Ethical accountability**
3. **Professional accountability**
4. **Legal accountability**
5. **Economic accountability**
6. **Political accountability**

Note:

Their relative weighting varies between countries

Overhead: Patients' rights

- 1. Can be linked to more general human rights:**
 - equity, dignity, participation, justice
 - United Nations system, European Union
- 2. Greater specificity in patients' rights documents**
- 3. Assuming a higher priority in practice (not only rhetoric)**
- 4. Negative rights have been less controversial than positive rights.**
- 5. Political, social and psychological pathways; financial consequences**
- 6. Relevant for countries with widely different health systems**

Additional material for 3.3**Citizens' participation, patients' rights and ethical frameworks**

1. A knowledge of frameworks of ethics and rights and strategies for their implementation:
 - is of great importance for senior decision-makers and health economists
 - they are factors that can regulate or influence the market.
2. Citizens' participation, patients' rights and consumers' rights will play increasingly important roles in:
 - the health care market
 - medical practice
 - treatment across countries, especially inside the European Union.
3. Various implementation strategies, e.g.:
 - advocacy models
 - implicit legal reinforcement
 - explicit charters of health rights.
4. Utilization frameworks of assessment (e.g. cost–effectiveness analyses):
 - likely to be supplemented with approaches sensitive to health rights in discussions on rationing and priority-setting.

Strategies for implementation

1. Advocacy and patient empowerment:
 - joining partners together
 - range of possible entry points
 - range of options for planning and funding, e.g.:
 - moral suasion
 - formal political control
 - countervailing power.
2. Legal provisions
 - generally rights are restricted to statements of principles
 - a legal entitlement, not a privilege, a commodity, or a product of charity
 - can have disadvantages, e.g. coverage, legalism, may slow social change.
3. Health rights in health care assessment
 - recognition of a plurality of evaluation dimensions:
 - trade-offs
 - hierarchical order (Rawls).⁶
4. Assessment of health outcomes in a rights based context may result in:
 - analysis of the fulfilment of basic health rights
 - control for unacceptable inequalities
 - aggregate (population) utility-based outcomes and measures.

⁶ Rawls, J. A theory of justice. Cambridge, MA, Harvard University Press, 1971.

Theme 4. Some economic tools

4.1 Use of economic tools

Overhead: Economic tools include (4.1)

1. Health outcome measurement (e.g. quality-adjusted life-years).
2. Costing (e.g. total costs, the components of cost and their distribution).
3. Economic evaluation (e.g. the cost-effectiveness of a new drug).
4. Development and diffusion of health technology
(e.g. incentives for R&D and for how technologies are used).
5. Economic modelling and forecasting (e.g. a decision-tree model or econometric approaches).

Note:

See details in *Learning to live with health economics*.

Other tools are available in textbooks.

Emphasis on usefulness of tools; elements requiring assessment.

Additional material for 4.1

Health outcome measurement

For example, the Quality of Well-Being Index assesses mobility, physical activity and social activity. An interviewer asks what the patient did as a result of illness during the last six days. Scoring for particular functions is based on preference weights derived from the normal population. The benefits represented by particular outcomes can be compared with the costs of doing so.

1. The goal of health care and action, to protect, promote and preserve health status:
 - requires standardized assessments.
2. To understand the concepts of health outcomes assessment, distinguish between:
 - efficacy
 - effectiveness
 - efficiency
 - process and outcomes.

3. Health:
 - is a multidimensional construct
 - health care is only one determinant of health.
4. The objectives of health outcomes assessment are based on:
 - equity and equality
 - quality of care (plan–do–check–assess cycle)
 - patient’s autonomy and choices
 - responsiveness to patients.

Note: In future, explicit health rights will be more important.
5. Main domains of health outcomes include the six D’s:
 - disease, death, discomfort, disability
 - “dollars”
 - dissatisfaction.
6. Measurement of health status outcomes requires standardized instruments with:
 - proven psychometric properties, especially validity, reliability, sensitivity
 - practical utility for a setting.

Costs

Costs refer to the opportunities foregone when a given resource is used in a particular way. Total costs can be compared with benefits to see if the resource use is worthwhile. The distribution of costs influences the incentives faced by participants, i.e. whether to take the action or avoid it.

1. Refer to the benefits sacrificed elsewhere (“foregone”):
 - resources have alternative uses
 - are wider than financial expenditure alone
 - can differ according to the viewpoint adopted.
2. Comparing costs and benefits
 - Requires accurate estimation of total costs.
3. Total costs can be viewed from various perspectives, e.g.:
 - types
 - sources
 - timing, uncertainty.
4. Changing the distribution of total costs can alter:
 - the incentives faced by participants
 - the actions they take.
5. The cost information:
 - can be difficult to obtain
 - three stages, progressively more difficult
 - identification
 - measurement
 - valuation

- consistent approaches facilitate:
 - comparisons
 - longer-term learning.
- 6. Cost information:
 - can be presented in more or less helpful ways
 - an aid to:
 - improved decision-making
 - better use of scarce resources
 - improved outcomes.

Economic evaluation

Economic evaluation – comparing the costs and consequences of, say, introducing a new drug, building a new hospital or purchasing equipment – can help to make the best use of scarce resources.

1. Concerned with assessing efficiency or value for money.
2. Economic evaluation compares the costs and consequences. Many forms, e.g.:
 - cost–effectiveness analysis
 - cost–benefit analysis
 - cost–utility analysis.
3. Key methodological principles include:
 - framing the question clearly
 - consideration of an adequate range of alternatives
 - the use of good evidence about effectiveness
 - allowance for timing differences and uncertainty
 - incremental analysis of costs and consequences.
4. Can be used in association with a range of policies:
 - to encourage rational diffusion and use of health technologies
 - to reform payment schemes for institutions and health professionals
 - to develop health care practice guidelines.
5. Can be used to assess health-producing measures:
 - in different sectors of the economy, e.g.:
 - road safety
 - environmental protection
 - occupational health.

Development of health technology

Health technologies are not confined to the clinical patient care sector but comprise all health promotion, disease prevention, diagnosis, treatment, rehabilitation and care activities. Economics can help to explain why some technologies are developed, and why some are used more than others.

1. Technologies for health are mechanisms that:
 - combine scarce resources to produce health improvements for the individual and the entire population.

2. They are developed in the public and private sectors, e.g.:
 - publicly funded research at universities and in research institutes
 - privately funded research and development (R&D) by the pharmaceutical industry.
3. New technologies are not developed haphazardly. They are:
 - influenced by the existing incentives
 - created by government regulations and market incentives.

Diffusion of health technology

1. Considerable inefficiencies can occur in:
 - how technologies are produced (through R&D)
 - how they are used, e.g.:
 - on inappropriate patients
 - in the wrong settings
 - by untrained professionals.
2. New health technologies:
 - are diffused gradually
 - adoption generally follows an S-shape pattern.
3. Various factors inhibit or encourage diffusion and use, e.g.:
 - basic demography and epidemiology of the disease
 - the payment mechanisms for:
 - health professionals
 - institutions
 - relative prices and costs
 - financial incentives and direct regulation.

Economic modelling and forecasting

There is a range of models available: for example, epidemiological models emphasize the relevance of changes in disease patterns, trend models can incorporate technological change (e.g. project what its costs will be in the future), and disease models concentrate on the developments in a cohort of patients once a disease has already started. Models facilitate comparison of a basic scenario with a further alternative, such as comparing intervention with no intervention, or a new intervention with the old intervention.

1. Economic models are a tool to support:
 - decision-making
 - policy development.
2. Transparent models:
 - structure problems
 - make explicit the assumptions used
 - explain the consequences clearly.
3. Decision models help rational decision-makers:
 - to choose the best strategy among clearly defined alternatives.

4. They should clearly:
 - state their purpose
 - justify their theoretical basis.
5. The detailed module provides discussion of:
 - a simple decision-tree model
 - scenario models
 - disease models
 - econometric models.
6. To ensure high quality support for decision-makers requires:
 - methodological expertise:
 - expertise about the health problem
 - expertise in supporting decisions
 - critical stance by decision-makers.

Teaching material: exercises

Exercises are very important. Those that follow have been developed in addition to those in the book. The exercises could be set by you prior to the workshop, or developed by the group following discussion with you. They could be chosen, for example, by you from those which have been prepared; supplemented by other exercises as required (e.g. for different groups of participants) or discussed with interested participants to see if alternatives are preferred. You can select the exercises likely to be most valuable for the particular group being assembled. Depending on the composition of the group of participants it may be necessary to consider developing additional exercises. For example, the exercises suitable for ministers or very senior bureaucrats may well need to be modified or supplemented for major funders of research or those with judicial responsibilities. It would be desirable to complete the selection of exercises before the group meets, since time for these senior decision-makers at the meeting itself will be at a premium.

Two role-plays are also included with the learning materials, one taken from Module 2.3.1 in the book and the other (developed for these seminars) on negotiations for a pay increase between the national association of doctors, the finance minister and the health minister. The most suitable time for these role-plays is likely to be the evening of the first day. There should be an opportunity for the participants to have a plenary discussion about the different approaches, results and trade-offs which emerge from the negotiations in each working group.

Theme 1. Economics of health

Exercise 1.1. Interrelationships, and everybody's concern

The main goal of the highest level of decision-makers in the health care system (e.g. ministers of health, the most senior officials) is to improve health. However, health outcomes are not derived solely from the activities of the health care sector. How can the most senior decision-makers:

- best prioritize their activities, so that benefits are maximized relative to costs;
- foster the necessary cooperation between economic sectors, so that the contribution of other ministries to health gain is obtained;
- achieve the appropriate contributions from the public and private sectors, so that not only the public sector is considered in ministerial decisions;
- decide which economic analysis tools help them to make those decisions better?

Exercise 1.2. Reallocation of resources for health

Since there are many determinants of health, how can senior decision-makers in health care maximize the favourable impacts of:

- the economic, social and other environmental factors (e.g. lower unemployment, higher levels of income);
- influences at the workplace (e.g. fewer accidents);
- factors operating at the level of individual behaviour (e.g. less alcohol and smoking, better diets); and
- the influences operating through families (e.g. better mental health).

Given the range of factors that contribute to health outcomes, to what extent are:

- decisions properly collective (e.g. made by governments) or individual (e.g. made by private individuals or families);
- outcomes emphasized (e.g. health status) compared to processes (e.g. treatment with dignity, waiting times);
- decisions thought of as having long-term or more immediate consequences (e.g. after the next election)?

Exercise 1.3. Reallocation of resources for health (role-play)

Having read the play below, discuss the following two questions.

1. Barbara Luke, the minister of health, is concerned about the percentage of national income spent on health. Which factors do you think should be considered when deciding this? Do these factors differ from those you would consider when deciding the percentage to be spent on education, telecommunications or subsidizing agriculture?
2. Robin Matthew, the minister of finance, is concerned that important health problems are not being tackled rigorously. Which improvements could be made in health programmes in your own country which might appeal to the minister of finance because they would help the national economy?

Panel of Ministers: Economic policies and health care reform

Introduction by moderator

Ladies and gentlemen, ministers of health, I am delighted to welcome you to Ljubljana for an extraordinary session to exchange experience on health care reform. Before we get down to business, just imagine, that we are moving to EUROPIA, a country psychologically if not physically near the heart of the region. We are privileged to observe Robin Matthew, the rising star of the government, as the clever minister of finance, who is waiting in a restaurant for a private meeting with a colleague ... Here she comes, the seasoned minister of health, Barbara Luke. Just listen to what they are saying.

Scene: In the restaurant: a dialogue on health policy between colleagues

Robin: As you know, we might become a candidate country to join the European Union. Therefore, we will look carefully at things like the European monetary system and other criteria by which our case will be judged. Frankly speaking, it will be a big headache for any finance minister.

Barbara: How so? I thought it was supposed to be a big opportunity.

Robin: Well, we need to slim down public expenditure, cut taxes and remove some of the costs which are now falling on employers. I am just giving you a chance to look at the issues from my perspective. I think that you will have to rethink ideas in your sector.

Barbara: But surely we cannot cut health expenditure any further. The percentage going to health is already way below our neighbours', and our doctors and nurses continue to be relatively poor.

Robin: I am sorry I must be blunt. How could I explain to other ministers why I should treat you differently? Why are you so special, this is what they will say. These are tough times for all of us, even if there was no economic decline.

Barbara: Well, I don't see myself behaving differently from any other health minister. When I meet my fellow health ministers from other countries, they all ...

Robin: Exactly! When I look at your colleagues in the other countries, they are also having a hard time making the health industry more efficient and competitive.

Barbara: I am sorry, Robin, you are quite wrong there. You are ignoring all the serious reform initiatives that have taken place in countries across Europe. In our different ways we are trying to find the balance – the public/private mix, as some of us call it. Everyone of us, we are trying to bring expenditure under control. Precisely because health is not an industry, we have to think about the quality of care people get and how it meets their needs.

Robin: Look, in education, they tell me how many schools and teachers they need, and why. They tell me how many university places, and we all agree that we are investing in education and training. In social security, they tell me how many elderly people there are, how many disabled, how many long-term employed, and I work out what we can afford. But you ...

Barbara: Wait a minute!

Robin: You tell the public that we are getting healthier, and yet every year you tell me that you need more money. Is your budget supposed to be open-ended upwards? You lead people to think that their care is free, but someone must be paying the bill.

Barbara: No, no, I do not mean that everything needs to be free. There is a lot of self-care in families and among friends. People buy drugs over the counter. There is a tremendous interest now in things like nutrition and promoting health. None of this comes into your calculations. The fact is that whenever

we maintain or restore someone's health, we have helped the individual as well as the economy. We have enabled a disabled person to go on living an independent life, we have a schoolchild who can study uninterrupted and we have made workers become more productive.

Robin: That I do not doubt. My job is to get public expenditure under control. Consumer goods improve the standard of living, remove household chores, maximize people's leisure possibilities. They give them the chance to get on with the kind of lives they want to live. The health sector only drains resources away from the nation. Where is the profit?

Barbara: Of course we do not have profit in the health care sector, nor are we trying to turn our health care into a trading company. We have health gain, but it is also clear that family doctors and community nurses reduce and prevent the need for expensive services.

Robin: If it's that straightforward why are you always asking for more money and expecting the health insurance people to hike up their premiums? Or is it because some important health problems are not tackled vigorously, for example accidents, suicides and heart attacks, especially among young men?

Barbara: On the contrary. We have made a good start with making people more aware of how to use appropriate services appropriately and how to look after themselves. The quality of services is constantly being improved.

Robin: I have not tried to cut your budget for its own sake. Anyhow, I cannot get this country's economy on the right track unless all ministers are seen to exercise restraint. For example, there are several countries which use fewer beds and doctors. And let me remind you that we have closed quite a number of old-fashioned industrial plants in other sectors.

Barbara: I don't think that you have grasped my message. Good social policies, including health, will make people believe that this is the country they want to live in. People will then truly make our country a place worth living in. Good social policy supports economic policy. I need your help to provide our people with a set of decent essential services. Do that for us, and we can assure you, you will eventually see the economy grow, as we all want to see it grow, and that will lift the pressure off both of us when we come to talk about budgets in the future. You see, really you should ask me what I would do with a 5% increase in my budget. I have plenty of practical ideas.

Robin: I have to rush now. It was nice talking with you. We can discuss this again when the economy has recovered.

The scene fades ...

Theme 2. Economics of health systems development

Exercise 2.1. Equity and efficiency

Consider the implications of a substantial proposed policy change in your country in terms of the expenditure \equiv income \equiv revenue identity.

- Who gains (e.g. health workers) and who loses (e.g. taxpayers)?
- What implications are there for
 - health care production, e.g. will you get better health outcomes or productivity;
 - health production, e.g. will health improve as a result of changes in areas other than health care, such as transport, the environment, education?
- Are the implications similar for decision-makers at the three levels (ministers and very senior officials, managers and practitioners)? If not:
 - how do they differ (e.g. policy compared to practice);
 - what are the implications for
 - the incentives they face (e.g. the balance of costs and benefits for them)
 - the decisions they take (e.g. popularity, prestige, quality compared to quantity of care)?

What is good for the hospital or the overall health system may be a problem for doctors (e.g. lower salaries) and a danger to the re-election chances of politicians (and do not forget the patient!).

Exercise 2.2. Expenditure \equiv income \equiv revenue

In your country is the health care:

- not effective (e.g. over-treatment);
- effective but more costly than necessary (e.g. over-priced drugs or health provision by doctors when nurses could provide it satisfactorily); or
- valued below its cost (e.g. the benefits to the patient, who pays nothing, are less than the cost to society of providing the treatment)?

Why has this happened, and how could economic analysis improve the situation in the future?

Exercise 2.3. Implications of financing systems

In many health care systems consideration is being given to greater privatization. If this applies in your country, consider the following questions.

- What is to be privatized, and what is it intended to achieve by doing so
 - explicitly
 - implicitly?
- What role is being proposed for economic analysis in the decision-making process, and what other contributions *could* it make?
- How is the process of privatization to be undertaken (and what complementary changes are required, for example in training managers)?

- How are equity, effectiveness and responsiveness to be achieved?
- How will the continuing overall responsibilities of the government, its stewardship function, be discharged under the new arrangements?
- After privatization, how will you and other senior decision-makers know if you have achieved what you intended? On what information will these conclusions be based?

Theme 3. Economics of management and the change process

Exercise 3.1. Policy analysis, bargaining and negotiation

Most decision-makers probably spend more of their time on health policy development and less on agenda-setting and implementation.

Consider three significant advisory or policy-making episodes in which you were involved recently. How much time and effort did you devote to:

- agenda-setting
- health policy development
- health policy implementation?

In terms of maximizing your contribution to the achievement of improved health outcomes and processes:

- do you consider these allocations optimal
- should they be changed (if so, how)
- how would you know if the change was an improvement?

To what extent do these allocations of your personal resources facilitate optimal decisions by others?

Exercise 3.2. Public health: protection, promotion and stewardship

Economics are involved in many decisions. It is important to know the questions for which economics are relevant, what tools can be used and how you can best use them.

1. Where is economics currently contributing to your decision-making, and what other areas are there where it could be helpful?
2. How would you know, from your existing monitoring and evaluation mechanisms, whether progress was being made towards your objectives?

Exercise 3.3. Citizens' participation, patients' rights and ethical frameworks

Surveys show that many citizens are dissatisfied with their health care systems, e.g. in Italy 59%, in Greece 54% and in the United Kingdom 41%, according to a survey.⁷ Also, why are so many fewer people dissatisfied in other countries in the WHO European Region, say in Denmark and Finland (6%), in Germany (11%) and in France (15%)?

Can you use health economics to challenge such findings? Can health economists find effective ways of improving the situation? Are senior decision-makers responsible for these results?

How can health economics be used to pinpoint responsibilities and accountabilities, say by managers and practitioners, for health care outcomes and processes (e.g. by health status measurement, quality assessment or cost-effectiveness analysis)?

Approaches to decision-making in health care can be legally based or economically based. Do you see these two approaches as competitive or complementary?

Exercise 3.4. Citizens' participation, patients' rights and ethical frameworks (role-play)

The role-play involves negotiations about a claim for increased salaries for doctors. The negotiators are:

- the doctors' association, represented by the chairperson of the national medical association and its chief industrial relations officer;
- the finance minister, as the chief government negotiator; and
- the minister for health, who has an adviser from the health ministry (if numbers in the group sessions permit it).

Each working group undertakes the same role-play, involving the doctors' initial claim, the response from the government, the resulting negotiations and the final agreed settlement. The settlement could include an overall salary increase, variations for a range of purposes (e.g. areas of medical shortage or geographic regions) and any quid pro quo the government obtains for its additional expenditure.

After the group discussions are completed the results and the process by which they were obtained are considered in a plenary session. The focus should be particularly on the similarities, the differences and the reasons for them in each group.

⁷ Mossialos, E. Citizens' views on health systems in the 15 member states of the European Union. *Health economics*, 6(2): 109–116 (1997).

Theme 4. Some economic tools

Exercise 4.1. Relevance of economic tools

Imagine that you are limited to taking up two of the five tools of economic analysis included in the learning materials:

- health outcome measurement (e.g. quality-adjusted life-years);
- costing (e.g. total costs, the components of the costs and their distribution);
- economic evaluation (e.g. the cost–effectiveness of a new drug);
- development and diffusion of health technology (e.g. the incentives for R&D and for how technologies are used);
- economic modelling and forecasting (e.g. a decision-tree model or econometric approaches).

Consider particular decisions you are going to be making.

- For what sorts of decision would the economic tools be useful to you, and at what stage of the decision-making process?
- In using the economic tool(s) to assist you in reaching a better decision, what elements of the analysis and its interpretation would you subject to critical assessment?

Exercise 4.2. Use of economic tools

Consider a significant health care decision in which you were involved recently.

- Did you use economic analysis tools in the decision-making process?
- Knowing what you know now, could greater value have been derived from their inclusion than actually occurred?
- In summary, what changes (e.g. in the analysis, its interpretation, its use and its broader context) would contribute to better uses of the tools in the future?

Final comments

1. The learning materials do not produce a fully trained health economist.
2. A short seminar enables users to:
 - judge better what are appropriate and inappropriate circumstances for the application of health economics;
 - appraise more perceptively the advice senior decision-makers receive from health economists (and when it is missing);
 - understand some specific economic tools, concepts and reasoning;
 - benefit from the economic way of thinking (e.g. incentives, marginal analysis, costs compared to benefits, equity and efficiency);
 - benefit from meeting and interacting with other senior colleagues and input from an experienced resource person in the field.
3. The full set of learning modules in the complete book:
 - contains much more detail and additional topics
 - provides detailed references, examples and exercises.
4. Economic advice to support decision-makers can be provided in numerous other ways, including:
 - by staff with economic expertise;
 - by experts in WHO or elsewhere (many are included or referred to in the full set of learning materials);
 - through support for research (and training) in high priority areas.