

# Health Futures

A handbook for  
health professionals

Martha J. Garrett



World Health Organization  
Geneva

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## **A handbook for health professionals**

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Martha J. Garrett, formerly Deputy Director of the Institute of 21st Century Studies, Arlington, VA, USA, has assisted teams in a number of countries with their analyses of alternative futures. She began working with health futures in 1993 and now teaches research design in the international health degree programme at Uppsala University, Sweden. Dr Garrett has studied computer modelling and information technology and holds a PhD in zoology from the University of North Carolina at Chapel Hill.

# Preface

Awareness of the future has increased markedly over the last 30 years, and it is widely recognized that a long-term perspective is essential in all aspects of national policy-making and planning. Nevertheless, formal analysis of the future remains a low priority for most national decision-makers, in the health sector as in others, for a multitude of reasons, including the lack of a comprehensive handbook on health futures.

The need for such a handbook was discussed during the international consultation on health futures in support of health for all convened by WHO in 1993. The participants recommended that, to promote and support health-futures activities, WHO should publish a handbook on health futures for use by health professionals in Member States. The present handbook has been prepared in response to that recommendation, and is particularly important at the present time, when health indicators remain discouraging in many countries and new threats to health are emerging. Renewing a commitment to health for all is essential under these conditions, as is the development of more effective strategies, policies, and programmes for achieving that goal. This book is intended to encourage and facilitate this process.

The handbook is designed primarily to support the execution of futures activities in the health sector and also to serve as a general reference in the field of futures and health futures, and in training. The core target readers are health professionals with no or limited previous experience of the concepts and techniques of futures studies, employed in the public sector at the national or regional level, and working in developing countries or under other circumstances where resources for futures work may be severely limited. The main emphasis has therefore been on fundamental futures concepts and methods, and the use of futures in an official setting rather than in the private sector. Most of the methods described require no special technological support, although computer-based methods are also included. While some of them may already be familiar to most health planners, the construction of visions and of other alternative future scenarios will not be and is therefore discussed in depth.

In this handbook reference is frequently made to health-futures projects carried out by a futures team with a leader and an advisory committee. While it may often be the choice of a health administration to undertake the study of health futures in this way, it is possible and sometimes preferable to choose a different approach.

Most countries periodically analyse health policy and formulate plans as a means of clarifying the objectives, organizational approaches and resource requirements of national health programmes over a forthcoming medium-term period. In health-situation analysis, policy formulation and programme planning, a number of the methods described in this handbook may well be applicable without creating a special health-futures project. In fact, a number of the methods described here will be familiar to most health planners, including time-series regression, linear and dynamic modelling, the use of expert opinion within Delphi panels, the nominal group method, cross-impact analysis and cost-benefit analysis, to mention a few. Perhaps the key new feature of health-futures work is the construction of visions and alternative future scenarios which are discussed in depth in this handbook. It is also possible for these methods to be used within routine health planning. Thus, ministries are encouraged to consider using these methods even if it is not possible to establish a special health-futures project.

On the other hand, some ministries may find it useful or necessary to sponsor more formal studies in order to carry out more extensive analysis of one or more particular aspects of the health situation or system. Such studies might be contracted out to appropriate institutions or groups outside the ministry. This handbook describes a variety of project approaches that can also support such more intensive study requirements.

Chapter 1 (An introduction to futures) provides background information, including philosophy and terminology. Alternative definitions of scenarios are discussed, as are the many different purposes for which futures exercises can be done.

Chapter 2 (Interviews with leaders of futures projects) is a set of question-and-answer conversations with people responsible for a variety of national health-futures activities. These people are imaginary, but their stories are based on the experiences of real futures teams and reflect accurately the challenges of doing a futures exercise at the national level, as well as the advantages and disadvantages of different approaches.

The points made in Chapter 2 are analysed more fully in Chapter 3 (Implementation of futures work), which deals with the practical aspects of setting up and carrying out a futures exercise, including legal establishment, organizational structure, funding, evaluation, and the factors that promote the effectiveness of futures projects.

Chapter 4 (Common components) describes the units of which futures projects are typically constructed, and outlines one way in which these components could be combined. This design is provided to help to clarify the relationships among the components, not as a recommended "best" way to do a futures project. Numerous other designs, both hypothetical and historical, can be found in Chapter 5 (Alternative designs).

Chapter 6 (Methods and tools) contains a survey of techniques and devices applicable to futures work, guidelines for selecting the most appropriate ones in a particular case, and suggestions as to the application of various methods to specific steps in a futures exercise. The ways in which the tools can be used singly and in combination in ongoing policy-making and planning activities are also described.

While many of the examples given in Chapters 1–6 are health related, most of the material applies equally well to other sectors. In contrast, Chapter 7 (Application of futures techniques to health) focuses specifically on health and health care, and discusses the relevance of futures approaches to health policy-making and planning, especially at the national level. Examples are given of health-futures projects and programmes from around the world, together with other designs that could be employed in health-futures activities carried out for various purposes.

Chapter 8 (Printed and on-line information resources) describes how bibliographical information relevant to health-futures research can be identified and accessed, and advice is given on the design of effective information searches.

Chapter 9 (Directory) lists relevant organizations, networks, training programmes, funders, and sources of published materials. Addresses and telephone and fax numbers are given for each listing.

A glossary of terms is also provided. This is followed by Annex 1 on drawing up a budget and seeking funding.

Some guidance on the way that this handbook should be used would seem to be necessary since it is assumed that many readers will be newcomers to the field participating in a health-futures project within the public sector. Such projects are usually undertaken by a team with a designated leader. If the project is a large one, the work may be overseen by a board of directors consisting of representatives of sponsoring institutions and financial donors. The guidelines that follow are based on the assumption that the project has this type of organizational structure and that the team and directors wish to use this handbook as a key source of reference in planning and executing their health-futures project.

It is important that both the team leader and the head of the board of directors are thoroughly familiar with all the chapters in the handbook and are prepared to discuss them with the team and the board.



Teams should begin their work by reading Chapter 1 (An introduction to futures) and discussing its implications for their work. Even those team members with extensive experience of futures research should read this chapter in order to avoid erroneous assumptions about the philosophy or terminology on which the handbook is based. The team should then read and discuss Chapters 4 (Common components), 5 (Alternative designs), and 7 (Application of futures techniques to health) before making basic decisions about the project design. Once the design has been determined, the team should refer to Chapter 6 (Methods and tools) to identify and select techniques appropriate to that design. The section on criteria for tool selection should be especially helpful at this point.

When teams are ready to begin collecting information for their project, they should go through Chapter 8 (Printed and on-line information resources) to get ideas about potentially useful background materials. Depending on the circumstances, it may be advisable for the team to include an information expert who will be responsible for acquiring published and computer-based information. If so, this chapter will be of primary interest to that person.

If a board of directors is responsible for the establishment and execution of the project, the members of that board should read Chapters 1–5, paying special attention to Chapter 3 (Implementation of futures work). If the board expects to discuss the choice of tools with the team, they should read Chapter 6 (Methods and tools), and especially the sections on tool selection and application. The board should also be aware of the contents of Chapter 9 (Directory) so that the information given there can be used as need be, e.g. in fund-raising and to make contact with futures organizations.

When this handbook was first discussed at the 1993 international consultation on health futures, participants from several countries stressed the need for it to be totally inclusive, i.e. for all the information needed to do a health-futures project to be included. Access to printed literature is restricted in many countries, so that handbooks that mention an essential method or concept and then refer readers to other sources for details are of limited utility. This has been taken into account as far as possible in the preparation of this handbook, and the essential information needed in a variety of health-futures projects has been included, and many commonly used futures tools have been explained in sufficient detail to allow their reconstruction and application.

Nevertheless, since the futures field draws on the techniques of so many disciplines, it has not been possible to describe fully all the methods used. Most of those that are only partially covered by the text, however, such as surveys and statistical analysis, are widely used in other kinds of research conducted within the health sector. It has therefore been assumed that



individuals with appropriate experience of these methods can be found to participate in projects. Similarly, no attempt has been made to cover in detail issues related to health and health care, since it is assumed that all teams carrying out health-futures activities will include knowledgeable health professionals.

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**CHAPTER 1**

# An introduction to futures

## 1.1 What does “futures” mean?

Futures research has been going on for 50 years, and health-futures activities have already been carried out in some countries for over a decade. Nevertheless, the “futures” approach is still unfamiliar to most health professionals. This introductory chapter will therefore explain what the term means and what its relevance is to the public sector.

The futures approach is not a substitute for long-term planning, strategic management and policy-making, though it can support and complement these processes, but rather an anticipatory discipline closely related to them. Over the years, the futures approach has exchanged ideas and techniques with them, as well as with political and social science, economics, policy studies, computer modelling, human ecology, sustainable development, organizational learning, systems thinking, decision theory, and game theory.

However, academic disciplines have traditionally been clearly separated from one another so that these exchanges and the resulting shared interests have not always been acknowledged or even recognized. Readers who work in the public sector but have had little or no exposure to futures ideas will probably discover that many futures concepts and methods are familiar, although possibly known by other names. The overlap between futures and other anticipatory disciplines makes it difficult to define the limits of futures and also raises the question, “Why use futures at all?” The answer is that the futures approach provides a richer set of ideas about the future and tools for exploring the future than can be found in the individual disciplines on which it has drawn, and also has its own unique contributions to make.

The futures approach is not meant to replace the established anticipatory and decision-making processes used by governments and other institutions, nor is it intended to be a substitute for planning, strategic management, and policy formulation. Applied appropriately, however, the futures approach can support, strengthen, and complement these activities, e.g. by identifying previously unrecognized factors affecting a sector, providing a better understanding of how a system functions, and tracing the longer-term and cross-sectoral effects of policies.

Furthermore, the futures approach can serve purposes for which neither planning nor policy-making is intended or for which they are insufficient by themselves. It provides mechanisms for facilitating change and stimulating new ways of thinking, allows participation in decision-making, draws people and institutions together to work cooperatively towards a common desired future, and can be used effectively to test options, re-examine priorities, and renew strategies.

The following five aspects that distinguish futures from other anticipatory approaches deserve special mention:

- *Breadth of coverage.* Planning within a sector is usually focused more or less completely on that sector, strategic planning takes account of the major outside factors that may influence intrasectoral trends, but the futures approach goes a step further. It typically considers a much wider field than would be addressed in a planning or policy exercise, including other sectors, international aspects, and even factors that do not yet exist or are just emerging.
- *Attention to underlying causes.* The futures approach involves looking beyond surface patterns, such as trends in various sectors, to discover the underlying factors and interactions that cause these patterns.
- *Different questions.* Futures projects often answer questions other than those addressed in planning and policy-making. Rather than asking "What can we do to meet needs, given our current resources?", a futures exercise is more likely to ask "What is our desired future for this sector?" The question "What is the most likely future we should plan for?" may be posed, but so too might the question "What are some unlikely futures that might nevertheless happen, and that we should be prepared for?"
- *Sources of information.* The information sources used in futures work include some that are seldom used in other anticipatory processes. Official information systems and formal databases may be used in futures work, but so too may interviews with a small group of carefully selected individuals, public opinion gathered through surveys or open meetings, and ideas gleaned by scanning the popular media and the academic literature.
- *Time perspective.* Futures research differs from policy-making and planning in how far into the future it sets its sights. The time perspective of a futures exercise is usually at least 10 years, frequently 20 or 30 years, and sometimes even longer.

This last characteristic, the extended perspective of the futures approach, is often misunderstood and is a major cause of scepticism about the worth and validity of futures work. Why look 30 years into the future, when current