Priority Setting Toolkit: A guide to the use of economics in healthcare decision making

To Michelle and Diane

Priority Setting Toolkit: A guide to the use of economics in healthcare decision making

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BMJ Books

First published in 2004
by BMJ Books, BMA House, Tavistock Square,
London WC1H 9JR

www.bmjbooks.com

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN 0 7279 1736 6

Typeset by SIVA Math Setters, Chennai, India
Printed and bound in Spain by GraphyCems, Navarra

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Preface

Around the globe, healthcare systems, and health organisations within those systems, are faced with a common dilemma. As resources are limited, choices have to be made about what services to fund and what not to fund. Choices must also be made about the extent to which services will or will not be funded. No additional influx of resources will alleviate the fundamental need to make these choices. The reason is simple: the needs and wants in health care will always outstrip the resources available.

This challenging task of making choices in health care is complicated by any number of factors, including the following:

- limited training for decision makers in economic and ethical concepts
- a lack of understanding of formal approaches to priority setting
- limited information to support trade-offs
- a diverse set of stakeholders and the competing values of those groups
- the often non-rational behaviour of organisations.

This book seeks to provide a clear, non-technical depiction of the economic concepts underlying priority setting in health care, and through this, to present a specific way forward for explicit, evidence-based priority setting for application by decision makers in health organisations. Challenges to this activity, and specific means of overcoming these challenges, are also outlined.

Much of the practical information contained in the Toolkit stems from our experiences with priority setting over the last 15 years, in Britain, Australia and Canada. We are thus indebted to the many colleagues, both fellow researchers and decision makers alike, with whom we have worked over this time and who have advanced our understanding, particularly in the "how to" of this challenging topic.

We offer our heartfelt thanks to Joan McGregor, Stephen Singleton and Roy Mitton for taking the time to critically review the book and provide many helpful comments. We would also like to thank Diane Lorenzetti for her assistance with updating the literature in Chapter 6, and to acknowledge with gratitude the support of Mary Banks and Christina Karaviotis from BMJ Books.

We also thank Elsevier Science Ltd for granting permission to reproduce Figures 5.1 and 6.3, Blackwell Publishing for permission to reproduce Table 4.1, and the CD Howe Institute, Toronto, Canada, for permission to use material for parts of Chapter 2 including Figure 2.1.

The Canadian Health Services Research Foundation provided salary support to Craig Mitton in the form of a post-doctoral fellowship during the time the book was written. Craig Mitton took up this award (2001–2003) in the Calgary Health Region, the Centre for Health and Policy Studies, University of Calgary, Alberta, Canada, and the Division of Health Sciences, Curtin University, Perth, Australia. Cam Donaldson holds the Health Foundation Chair in Health Economics and is an ESRC Advanced Institute of Management Research Public Services Fellow (2003–4).

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Part 1: Background

1: Introduction

The priority setting challenge

In most countries, health care is managed and administered by health organisations that have the responsibility to meet, as best they can within a limited funding envelope, the health needs of a pre-defined population.* This worldwide phenomenon has been brought into focus by various healthcare reforms and other system-level developments, and has resulted in local decision makers being required to set priorities and allocate resources.

In the UK, such an arrangement has existed for over half a century, with health authorities managing and administering the system in the form of the National Health Service (NHS). Recently, the need for local decision making was reaffirmed through the establishment, in England and Wales, of primary care trusts which have responsibility for commissioning services in line with the needs of their local populations.[1] Similar arrangements, involving a commissioner or purchaser of services having to function with limited funding, have been put in place, or are currently being considered, throughout western Europe.[2–6]

In eastern Europe, an important reform in Russia was the transfer of budgetary responsibility to polyclinics, which bought services on behalf of their patients.[7] Since that time, such reforms have struggled to get off the ground, but attempts to mirror them in other eastern European countries have been tried by giving financial responsibility to arms-length intermediaries.[8]

In South American countries, there has also been a growing use of such intermediaries. In Argentina, Chile and Columbia,

*Note that the term "health organisation" is used generically to represent any body which is allocated a fixed amount of money on a regular basis (usually annually) to plan health service provision for a pre-defined population. The covered population could be defined geographically, such as in the cases of health authorities, health boards, health regions, health districts, and primary care trusts, or through prepaid enrolment, such as in the case of health maintenance organisations or other managed care organisations.

intermediaries have been encouraged to compete more with each other to attract enrolees and, in turn, to encourage competition amongst providers.[9–11] Whilst the increased enrolment of large numbers of poor people has been cited as a key achievement of these publicly funded systems, a series of constraints undermining access has been identified.[11] In any case, these developments have left decision makers to set priorities at the local level.

In other countries, such ideas are newer. For example, in Canada the very notion of "regionalisation" (which does not go as far as independently functioning purchasers and providers or the use of an arms-length intermediary) is a mid-1990s phenomenon in most provinces, and includes legislated mandates to health authorities for priority setting.[12] Even in the USA, the move to managed care in the 1990s has brought the need to set healthcare priorities into sharper focus.[13,14]

Despite a mix of Commonwealth and State healthcare funding in Australia, where there has been a system of integrated health organisations since 1984, local bodies must make choices about what to fund and what not to fund. Finally, New Zealand, which has one of the oldest public healthcare systems in the world, experimented throughout the 1990s with various forms of organisational and funding models.[15]

All such health organisations face a common challenge. As there are more claims on resources than there are resources available, some form of priority setting must occur.[16] That is, resources are scarce and there is thus a need, regardless of how many resources are available in total, to make choices about what to fund and what not to fund. This may be in the form of commissioning services, as is done in the UK and elsewhere, or in dividing up a pool of resources within regional health authorities, as is the case, for example, in Canada and Australia.

Recent work, however, has suggested that decision makers within health organisations may require assistance with priority setting.[17,18] In addition, the allocation of resources in health organisations tends to be conducted on the basis of historical patterns, but this can lead to suboptimal use of the limited resources available. In fact, it is clear, at least in some jurisdictions, that measuring the "return on investment" and planning for how resources should best be spent are not

always very far advanced.[19] What is required, and indeed what decision makers seem to be asking for, is a systematic, explicit approach to priority setting which is fair and, where possible, evidence based.

In today's climate, with strong economic pressures facing every society, the relevance of priority setting is clear. Where to cut, where to expand, and how to conduct these processes are critical questions. As well, there are also a number of wider challenges to priority setting in health care which have to be taken into account, such as the extent of public participation in the process, whose values are to be used at what level of priority setting, what would a *fair* process for priority setting look like, and how should technical judgements of the clinical professions be married with the value judgements of those charged with allocating the resources. In addition, in certain jurisdictions, local decision makers must respond to recommendations from national level bodies, such as the National Institute of Clinical Excellence (NICE) in England and the National Health Committee in New Zealand. While these bodies are concerned about quality across the board, national recommendations must be met locally, leaving decision makers having to make trade-offs under yet more constraints than might otherwise have been the case.

A major question, then, becomes whether there is a process for priority setting which responds practically to the dilemma of resource scarcity. Such a process should be conducted in a manner which is as evidence based as possible and, at the same time, must also encompass a large range of wider challenges, as referred to above.

Two economic concepts

As economics is generally viewed as "the science of choice", it is proposed that this discipline can help to guide healthcare decision makers in using resources in the best manner possible. Two important economic concepts which are referred to throughout this book are opportunity cost and the margin. The former emerges directly from the recognition that resources are scarce, and, as such, choices invariably have to be made. With resources always being limited, by choosing to implement one option, there is a benefit forgone as resources

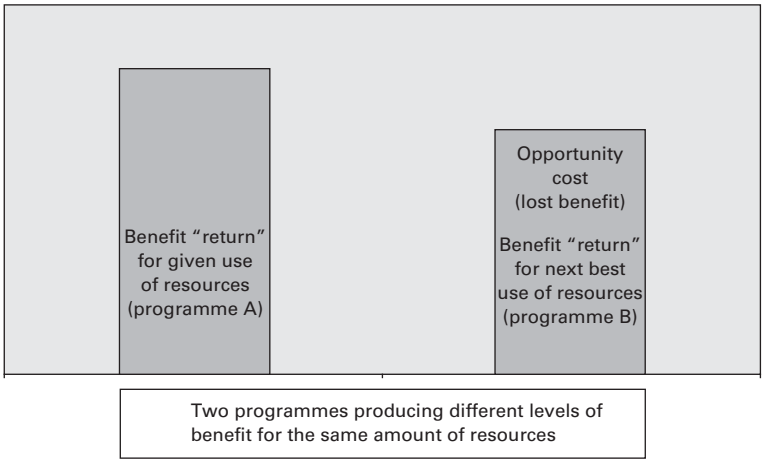

Figure 1.1 Illustration of opportunity cost

are then not available for other options. The lost benefit from the next best use of the resources is the opportunity cost. Referring to Figure 1.1, other things being equal, a decision maker would, hopefully, allocate resources to A in preference to B. Although some benefit is lost by not investing in B, this is less than would be the case if A were sacrificed instead.

An important goal that can be reached through priority setting activity is to maximise benefits and, conversely, minimise opportunity costs. The logical implication of applying this concept is that one needs to know both the resources used as well as the health and other gains obtained from various healthcare options. It is this information which allows decision makers to optimally deploy limited healthcare resources.

Thanks to the second concept mentioned above – the margin – one does not have to measure the costs and benefits of all new and existing healthcare options on an ongoing basis. The margin has to do with the benefit gained or lost from adding or subtracting the next unit of resources for a given programme. The size of the programmes does not matter; it is the gains (or losses) that are realised by putting more resources into (or taking resources away from) each programme at the margin that is the key. For the programmes

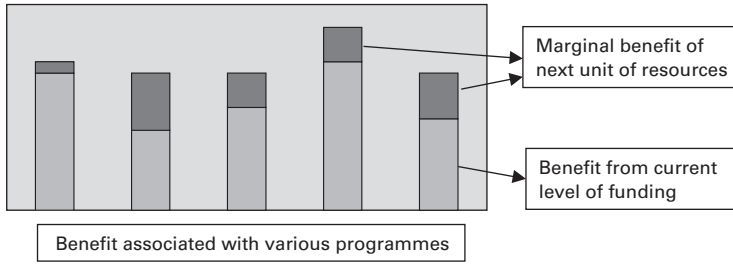

Figure 1.2 Marginal benefit of next unit of resources

illustrated in Figure 1.2, if each programme were to be expanded by one unit of resources, the programme second from the left would be the preferred choice, again all things being equal, as the greatest marginal benefit is realised for this programme.

So, in a given healthcare setting, if one extra dollar were to be made available, that dollar should ideally be invested in the area in which the most benefit (however defined) will be gained in return. Conversely, if the budget in a given setting was to be contracted by one dollar, the first dollar to be taken out should, in theory, be obtained from the area where the least benefit will be lost. Furthermore, even in a stable funding situation, thinking at the margin enables decision makers to consider shifting or *re*allocating resources in a manner which will improve patient benefit overall.

The importance of the margin stems from the fact that it is about changing situations in such a way as to make them better. Increasing benefits from limited healthcare resources is what being efficient, or being more efficient, is all about. Two different types of efficiency which are central to healthcare priority setting are outlined in Chapter 2. As other important goals are of course sought through priority setting activity, such as improving equity (or fairness), the focus throughout the book is not only on maximising benefits from limited resources but more broadly is about using resources in a manner in which various locally defined criteria, or principles, are best met.

The Toolkit

To address the issues raised above, this book seeks to provide decision makers with a set of tools to put the economic concepts of opportunity cost and the margin into practice within health organisations. Recognising the complexity of real world decision making, the challenge is to do so in a pragmatic enough manner so as to provide a practical aid for decision makers. As no one "gold standard" for priority setting stands out in the literature to date, a number of approaches to priority setting are initially outlined, with comparisons enabling critical appraisal in relation to the economic concepts mentioned above.

In the end, what will be seen as the way forward has more to do with a way of thinking about the economic concepts, and the consequent principles of efficiency and equity, than with a single approach for setting priorities. Part of the Toolkit, therefore, involves being aware of the concepts which underlie an economics-based approach to priority setting. That said, and coming back to the practicalities, one particularly useful approach to priority setting which permits these economic concepts to be operationalised is programme budgeting and marginal analysis (PBMA). It is this approach, which has been used in health organisations over the past three decades, that forms the basis of this Toolkit.

Despite the positive impact of PBMA in many areas, challenges remain in its implementation, providing an explanation for why even greater use has not occurred. The approach itself, case studies to exemplify its application and a number of challenges related to PBMA and other explicit approaches to priority setting are presented in this book. It is also useful to recognise early on that having an explicit approach for priority setting is only part of the solution. While the primary focus of the Toolkit is on the "how to", it is also recognised that there is a need to evaluate the process of priority setting itself.[14] Drawing the "how to" and the "evaluation" together is considered herein.

Overview of this book

The overall purpose of this book is to provide practical guidelines for healthcare priority setting and, as well, an in

depth understanding of related issues, for managers, clinicians and health researchers. In this way, the book offers a set of tools to carry out priority setting, and also intends to stimulate debate and challenge the way of thinking for all those interested in or charged with the difficult task of setting healthcare priorities.

The specific aims of this book are:

1 To outline the basic concepts of an economic approach to healthcare priority setting.
2 To appraise critically several approaches to priority setting, out of which one, PBMA, will be put forth as the most useful way forward.
3 To provide a detailed set of steps for carrying out a PBMA process and an inventory of activities to date in the use of PBMA.
4 To demonstrate, through the use of case studies, how economic concepts can be put into practice at different levels in health care.
5 To highlight specific challenges in moving from theory to practical and useful applications which can make a difference in the real world of healthcare delivery.

While the focus of this book, as illustrated in the sub-title ("the use of economics in healthcare decision making"), is on the contribution of health economics to priority setting in health organisations, the information in the book has clearly benefited from contributions from other disciplines. Although it is emphasised that any priority setting framework used in health care should adhere to the economic concepts of opportunity cost and the margin, these concepts on their own are not enough. This is illustrated by the fact that economic approaches to priority setting, despite having been shown to be useful in specific contexts in the past, have not to date generated universal appeal.

As will be uncovered in the following chapters, it is only through collaborative efforts between the various stakeholders including patients, clinicians, managers, ethicists, organisational behaviourists, health economists and health services researchers that a comprehensive approach to priority setting can result, as shown in Figure 1.3. In the end, these different streams are brought together in the hope of offering a launching pad not only for those making decisions to move

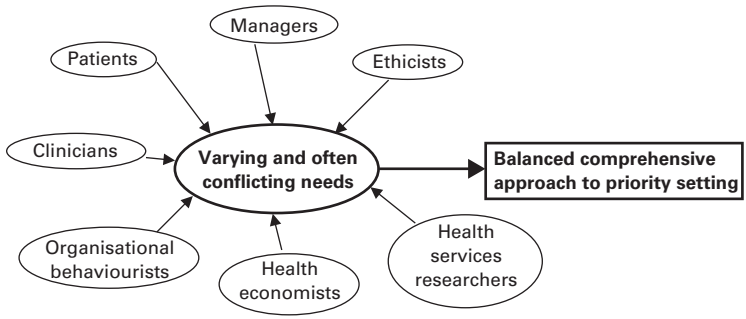

Figure 1.3 Stakeholder relationship and basic objective

forward with the important task of priority setting, but also for researchers to join together in future collaborative efforts.

The book opens with a detailed discussion of the two fundamental economic concepts, already outlined in brief above, along with two key principles in health care, efficiency and equity. Following this, in Chapters 3 and 4, a number of widely used approaches to healthcare priority setting are critically appraised against these economic concepts, and an ethical framework that is currently gaining some recognition is presented as a means to evaluate priority setting activity.

In Chapter 5, the PBMA process is presented in a practical, step by step manner. A detailed description of the history of PBMA and its use internationally, including its impact, is then provided in Chapter 6. In order to illustrate the use of PBMA, case studies from Britain and Canada are presented in Chapter 7. In so doing, it will be demonstrated that PBMA, and, as such, an economic way of thinking, can be used to inform priority setting at different levels within health organisations.

As alluded to, numerous challenges to explicit, evidence-based priority setting activity exist, and some of these are highlighted in Chapters 8 through 12. These chapters serve as a response to a number of matters raised in the literature relating not only to PBMA, but also to other explicit, evidence-based approaches to priority setting. Importantly, none of these challenges would seem to be insurmountable for forward thinking decision makers willing to stand up to the political forces and "do the right thing".

The book closes with an outline of next steps for moving the priority setting agenda forward, in both the real world of decision making and the land of academia. While it is intended that managers and clinicians will have a much better handle on the practical doing of priority setting after reading the Toolkit, it is also thought that, more generally, progress depends on decision makers and researchers working together.

Summary

In summary, the following are some of the key points addressed throughout the book.

- The devolution of responsibility for management and delivery of health services in most countries has led to the need for local decision makers to set priorities and allocate resources.
- Whatever the amount of resources received for health care, some means of priority setting is required to divide up the available resources amongst the competing claims.
- There is scope for helping managers and clinicians to gain a better understanding of approaches to priority setting and thereby advance decision making beyond historical patterns of allocation.
- The economic concepts of opportunity cost and the margin should underpin any approach for setting priorities, but these in and of themselves are not enough.
- PBMA operationalises the economic concepts in a pragmatic and useful manner, and serves as the basis for the "way forward" presented in this book.
- As can be expected, numerous challenges to explicit priority setting in healthcare organisations exist, although none would seem insurmountable.
- Various academic disciplines must work together with decision makers to inform the way forward for priority setting in health care.

The formation, in 1996, of the International Society for Priorities in Health Care implies not only that priority setting in health care is now globally recognised but also that there is a desire to share experiences of the many priority setting practices which exist in different jurisdictions. The time is

now to "make a start" and, to paraphrase Voltaire, "to not let the best be the enemy of the good". While there is still much work to be done in priority setting in health care, significant and exciting strides in this area have been made in the past decade. Although "the best" may not yet have been reached, it is hoped that this Toolkit can serve as an important step in moving forward.

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