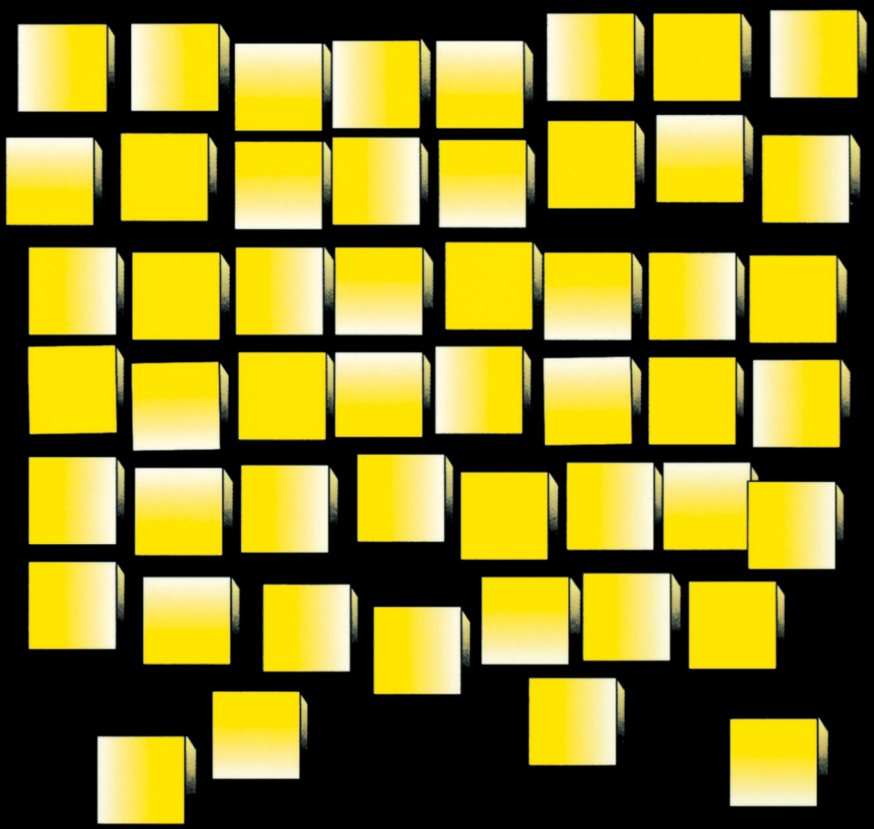
Casemix for All



Edited by HUGH SANDERSON, PHIL ANTHONY and LEONIE MOUNTNEY
Foreword by PETER LEES

Casemix for All

EDITED BY

HUGH SANDERSON
PHIL ANTHONY

AND

LEONIE MOUNTNEY

FOREWORD BY

PETER LEES

CRC Press
Taylor & Francis Group
Boca Raton London New York

CRC Press is an imprint of the
Taylor & Francis Group, an **informa** business

First published 1998 by Radcliffe Publishing

Published 2016 by CRC Press
Taylor & Francis Group
6000 Broken Sound Parkway NW, Suite 300
Boca Raton, FL 33487-2742

ISBN-13: 978-1-85775-217-5 (pbk)

British Library Cataloguing in Publication Data

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

Library of Congress Cataloging-in-Publication Data is available.

Typeset by Advance Typesetting Ltd, Oxfordshire

Contents

	Foreword	v
	Preface	ix
	List of contributors	xiii
1	The philosophy and concepts of casemix	1
2	Resource groupings: history of development and current state	11
3	Condition groupings	27
4	Mental health casemix development: where to and how quickly?	40
5	Healthcare Resource Groups and general practitioner purchasing *Rod Smith, David Archer and Fran Butler*	49
6	Case study: Costing, contracting and resource management *Alan Butler, Jeremy Horgan and Lisa Macfarlane*	60
7	Performance management and audit *Nigel Woodcock and Ken Lloyd*	70
8	Case study: Use of casemix to support purchasing in Doncaster *David Meechan*	80
9	Clinical management and measurement *Tim Scott*	94
10	Health Benefit Groups in NHS decision-making *Andrew Walker, Karen Jack, Sara Twaddle and Harry Burns*	111
Glossary and abbreviations		125
Bibliography		128
Index		131

Foreword

As the tension between the provision, rising demand and cost of health care achieves increasing national prominence, it is especially important that meaningful measures of health care are developed which define need and accurately quantify resource consumption.

Casemix is the science of classifying and quantifying the use of health care resources and, in England and Scotland, Healthcare Resource Groups (HRGs) are the measurement tool. Healthcare Resource Groups define resource use on the basis of the treatment profile to produce a multi-purpose set of groupings which are usable and understood by clinicians and managers. Interestingly, by combining clinical and resource data, groupings often have different, but highly relevant meanings for clinicians and managers and can be a useful language to facilitate dialogue between the two groups.

Casemix is not a new concept, its roots originating in the USA in the 1970s. Healthcare Resource Groups, the English equivalent of the 'parent' US system – Diagnosis Related Groups – were developed in response to the Resource Management Initiative in 1986, and were given greater impetus by the introduction of the Internal Market to the National Health Service (NHS). The latest White Paper, *The New NHS* (December 1997) has increased the focus on performance management of efficiency and effectiveness and HRGs will provide the basis for benchmarking activity costs. Consequently, HRGs are now in widespread use in the UK, and will shortly be mandatory in all specialties for costing and pricing. From this flows their use for agreement specification and monitoring, service planning and national comparisons, and these functions will be enhanced by their combination with Health Benefit Groups (HBGs) as a way of categorizing the need in the population.

The success and value of HRGs in the UK can be directly credited to the editors of this book. Hugh Sanderson, Phil Anthony and Leonie Mountney have led the development and implementation of casemix for the NHS through the National Casemix Office and its network, including the clinician-led specialty working groups. The network is reflected in the diverse range of contributors to this book, who include the recognized theoretical experts

in the casemix field and a wide range of practical users from primary and secondary care, and from finance, contracting and clinical staff.

Casemix for All covers present and future topics, and touches on the more difficult areas of mental health and community and primary care. It also includes valuable case studies drawn from expert users. The resulting blend gives the book a broad appeal to those in the front line of managing clinical services, who cannot afford to be ignorant of casemix, its use and its implications.

PETER LEES
Chairman, British Association of Medical Managers
Consultant Neurosurgeon and Director of Research,
Southampton University Hospitals NHS Trust
January 1998

With grateful thanks to Bob Logan, Emeritus Professor of Medical Care, London School of Hygiene and Tropical Medicine, who created the opportunity and provided the encouragement for the start of casemix studies in this country; and to Tim Scott, who ensured their continuation through the Resource Management Programme.

Preface

ANYONE working in the NHS who has some responsibility for the management of the delivery of services to patients needs to have information about the types of patients they are serving, the types of care provided and the results that they have achieved. This has of course always been true, but the increasing costs and demands on the NHS and the increasing availability of information makes it even more important for managers to be able to use this information effectively.

Casemix for All helps the reader to a better understanding of the principles and purposes of casemix and explains the way in which these concepts have been turned into practical casemix groupings, both in this and other countries. It also provides the reader with some practical examples of how the application of casemix groupings to patient data has helped to improve the management of services.

The book also highlights the enormous potential of casemix analysis, not only now, but also in the future, when clinical systems will provide highly detailed and accurate clinical information for statistical analysis. There is much under-exploited potential that can be used now, but we should realize that a future potential also exists, and be aware that when clinical systems are widely available, we will be able to use the data within them for very useful purposes.

The concept of casemix is therefore at a cross-roads: the methods that are available now need to be exploited, and also the future methods of grouping data need to be considered. These will alter radically the ways in which we think about casemix, the development of data systems and the ways in which data can be analysed to improve the management of health services.

Casemix for All should be read by health service managers and clinicians who have some management responsibilities within the NHS, whether they are in a purchaser or in a provider organization, in primary, community or secondary hospital care settings. In particular, it focuses on the difference between groupings of patients with conditions and groupings of intervention episodes and the way in which these two separate types of groupings can be used in isolation and together to improve understanding of the

performance of health services. This is not just for the acute services (which has been the traditional domain of casemix groups), but as a way of understanding the complete spectrum of services required for a wide range of conditions, from individuals who are at risk, to those with irreversible and progressive disease.

It also discusses the application of these casemix grouping methods to particular health service management problems and includes chapters from contributors who have been using casemix groupings as purchasers (both at health authority and general practitioner (GP) level), as providers and also within provider organizations.

Chapter 5, by Rod Smith, David Archer and Fran Butler identifies issues in the use of HRGs from a GP purchasing perspective, and the ways in which cost information and clinical performance can be assessed. Chapter 6, by Alan Butler, Jeremy Horgan and Lisa Macfarlane from Southampton University Hospitals Trust shows how HRGs have been used to support the development of clinical directorates and the negotiation of contracts with purchasers. Chapter 7, also from a provider perspective by Nigel Woodcock and Ken Lloyd from Northampton, identifies how HRGs have been used to examine quality of care, and to support service developments. Chapter 8, by David Meechan discusses how HRGs have been used to support and monitor contracts by Doncaster Health Authority. Chapter 9, by Tim Scott discusses the use of casemix groups by clinical directors for the purpose of managing their clinical directorates.

These contributions are focused mainly on the use of groupings of treatment episodes, HRGs, since these are more widely available at present. Chapter 10, however, by Andrew Walker from the Greater Glasgow Health Board and colleagues discusses the pilot experience of using both condition-based groups (Health Benefit Groups (HBGs)) and treatment episodes (HRGs). In particular it describes the difficulties of obtaining the data at present, and the potential applications for commissioning and monitoring the services required to meet the needs of the population.

Casemix for All is not intended to be a manual of how to use the grouping software (whether for HRGs, Diagnosis Related Groups (DRGs), Disease Staging or some other grouping method), nor a manual for describing how to process records that have been allocated into groups. It is, however, a book which explains why casemix groups are useful and the reasons for grouping and analysing patient records.

The structure and application of casemix groupings is very dependent on the health care system, and particularly the method of funding in existence. For this reason, the way in which grouping systems are used varies between countries. Since health care systems are developing constantly, it follows that the application and design of grouping systems need to

change and adapt, and for this reason the work of developing patient groupings is dynamic. There is much work still to be done in exploring the concepts, developing new and better groupings of patients and health care activities and applying them to improve the management of health services. This book raises some of the unresolved issues and points to potential developments that may deal with current problems. Since it is also true that some of the recent developments in health care systems are dependent upon (and may even be driven by) the improved availability of information, consideration is given to how developments in the construction of casemix groupings could be used to develop equitable and effective health services.

The book has been written at a time when the White Paper, *The New NHS*, will emphasize the use of casemix in the NHS. However, whatever structure of organization and allocation of resources is employed in any health care system, it is likely that ways of identifying the needs and costs of care will be important. We anticipate that much of the material contained in this book will become increasingly relevant, both in the UK and elsewhere.

Many colleagues within the NHS, the NHS Executive and in other countries have contributed to the development of our ideas and knowledge. Particular thanks go to all of the members of the National Casemix Office who have participated in many of the internal discussions, to the members of the clinical working groups and project boards who have helped and guided the development of casemix in England, and to those colleagues within the Patient Classification Systems in Europe (PCSE) association, who have helped us to see the issues within the NHS from an international perspective.

Finally, our thanks are due to Lesley Morris for her long-suffering patience in typing and administrative support.

HUGH SANDERSON, PHIL ANTHONY AND LEONIE MOUNTNEY
January 1998

List of contributors

David Archer
General Practitioner
Lincoln House Surgery
Wolsey Road
Hemel Hempstead
Herts HP2 4SH

Harry Burns
Director of Public Health
Greater Glasgow Health Board
Dalian House
350 St Vincent Street
Glasgow G3 8YU

Alan Butler
Director of Finance and Information
Southampton University Hospitals Trust
Tremona Road
Southampton SO16 6YD

Fran Butler
Project Manager
Berkshire Integrated Purchasing Project
Berkshire Health Authority
57–59 Bath Road
Reading
Berks RG30 2BA

Jeremy Horgan
Costing Development Manager
Healthcare Analysis Research Unit
Southampton University Hospitals Trust
Tremona Road
Southampton SO16 6YD

Karen Jack
Research Assistant
Accounts Commission for Scotland
18 George Street
Edinburgh EH2 2QU

Ken Lloyd
Former Chief Executive
Northampton General Hospital
Billing Road
Northampton NN1 5BD

Lisa Macfarlane
Healthcare Analysis Research Unit
Southampton University Hospitals Trust
Tremona Road
Southampton SO16 6YD

David Meechan
Director of Research and Information
Doncaster Health Authority
White Rose House
Ten Pound Walk
Doncaster DN4 5DJ

Leonie Mountney
Operational Director
National Casemix Office
Highcroft
Romsey Road
Winchester
Hants SO22 5DH

Hugh Sanderson
Director
National Casemix Office
Highcroft
Romsey Road
Winchester
Hants SO22 5DH

Tim Scott
Senior Fellow
BAMM
Barnes Hospital
Cheadle
Cheshire SK8 2NY

Rod Smith
General Practitioner
Balmore Park Surgery
59a Hemdean Road
Caversham
Berks RG4 7SS

Sara Twaddle
Director of Research and Audit
Stobhill Hospital NHS Trust
Balomock Road
Glasgow G21 3UW

Andrew Walker
Greater Glasgow Health Board
Dalian House
350 St Vincent Street
Glasgow G3 8YU

Nigel Woodcock
Deputy Chief Executive/Director of Finance
Northampton General Hospital
Billing Road
Northampton NN1 5BD

1 The philosophy and concepts of casemix

Classification and grouping

Classification of events in the outside world is fundamental to organizing knowledge. In order to survive, our ancestors in the hunter/gatherer stage of evolutionary history needed to classify animals into those they could eat and those that could eat them. Such a simple classification inevitably becomes more complex; perhaps subdividing into those animals that were really good to eat, those that were not so good, and those which could be eaten if there was nothing else. Similarly, there were animals who were very likely to eat our ancestors, which they needed to keep well away from, and those animals which ate humans only under extreme circumstances and which they could ignore for most of the time.

In exactly the same way, in describing patients and activities in health services, we need to be able to classify those patients and the activities provided to patients, in order to describe them and predict their needs for care or the prognosis of treatment. Of course, since every individual is unique, every patient is unique and every treatment is unique, but at some level of generalization it is possible to identify the common characteristics of patients and the common characteristics of their treatments. Indeed, without such an ability to classify, there would be no knowledge, there would be no medical or nursing textbooks and there would be no clinical trials or evidence-based medicine. Classification of patients has been undertaken for many years. One of the early examples of the uses of classification for statistical reporting was the *London Bills of Mortality*, by John Graunt,[1] developed in the 17th Century. Over time, these systems developed into the International Classification of Diseases (ICD),[2] which has been widely adopted across the world for the purpose of reporting mortality and morbidity.

All classifications however are a balance between precision and practicality and the level of detail within a classification is dependent on its purpose. To an entomologist there are several million species of insects and the distinction between each species is important. To a lay person there may be 20 or 30 important types of insect, and the rest are bugs, creepy-crawlies, flies or just 'insects'. The level of detail may also depend on the