Cambridge University Press 978-0-521-72163-9 - Medication Safety: An Essential Guide Edited by Molly Courtenay and Matt Griffiths Frontmatter More information

## Medication Safety

Cambridge University Press 978-0-521-72163-9 - Medication Safety: An Essential Guide Edited by Molly Courtenay and Matt Griffiths Frontmatter More information

# **Medication Safety**

### An Essential Guide

Edited by Molly Courtenay and Matt Griffiths



Cambridge University Press 978-0-521-72163-9 - Medication Safety: An Essential Guide Edited by Molly Courtenay and Matt Griffiths Frontmatter More information

> CAMBRIDGE UNIVERSITY PRESS Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi, Dubai, Tokyo

Cambridge University Press The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org Information on this title: www.cambridge.org/9780521721639

© M. Courtenay and M. Griffiths 2010

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2010

Printed in the United Kingdom at the University Press, Cambridge

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

ISBN 978-0-521-72163-9 Paperback

Every effort has been made in preparing this book to provide accurate and up-to-date information that is in accord with accepted standards and practice at the time of publication. Although case histories are drawn from actual cases, every effort has been made to disguise the identities of the individuals involved. Nevertheless, the authors, editors, and publishers can make no warranties that the information contained herein is totally free from error, not least because clinical standards are constantly changing through research and regulation. The authors, editors, and publishers therefore disclaim all liability for direct or consequential damages resulting from the use of material contained in this book. Readers are strongly advised to pay careful attention to information provided by the manufacturer of any drugs or equipment that they plan to use.

### Contents

List of contributors vii Preface ix

- Introduction to medication errors and medication safety 1 Molly Courtenay and Matt Griffiths
- 2. **Safety in prescribing** 7 Anne Twidell and Simon de Lusignan
- 3. **Safety in dispensing** 25 Imogen Savage
- 4. **Safety in administering** 43 Jane Watson and Liz Plastow
- 5. Adverse drug reactions and drug interactions 63 Tim House
- Interface of care and communication 83 Alison Blenkinsopp, Gill Dorer, Martin Duerden, Rebecca Jester
- Parenteral drug administration 97 Jasmeet Soar and Jon Standing

- 8. **Calculations** 113 Alison G. Eggleton
- 9. Controlled drugs and patient safety 139 Roger Knaggs
- 10. Reporting medication errors and near misses 155 Sheena Williamson
- 11. Ensuring safety through evidence-based medicine 173 Sharon Smart

Index 193

### Contributors

#### Alison Blenkinsopp

Professor of the Practice of Pharmacy, School of Pharmacy, Keele University, Staffordshire, UK

#### Molly Courtenay

Division of Health and Social Care, Faculty of Health and Medical Sciences, The University of Surrey

#### Gill Dorer

Honorary Research Fellow, University of Leeds School of Healthcare, Faculty of Medicine and Health, Leeds, UK

#### Martin Duerden

Consultant in Medicines Policy and Use, and Honorary Senior Lecturer, University College London, London, UK

#### Alison G. Eggleton

Principal Pharmacist, Education and Training, Cambridge University Hospitals NHS Foundation Trust, Cambridge, UK

#### Matt Griffiths

Senior Nurse, Medicines Management, University Hospitals of Leicester, and Visiting Professor of Prescribing and Medicines Management, School of Health, University of Northampton, Northampton, UK

#### Tim House

Medicines Information Manager, Medicines Information, Inpatient Safety, Addenbrooke's Hospital, Cambridge, UK

#### Rebecca Jester

Head of School of Nursing and Midwifery, Keele University, Staffordshire, UK

#### Roger Knaggs

Specialist Pharmacist, Anaesthesia and Pain Management, Nottingham University Hospitals NHS Trust, Nottingham, UK

#### Simon de Lusignan

Chair, Primary Care Informatics Working Group of the European Federation for Medical Informatics (EFMI)

#### Liz Plastow

Independent Consultant for Nursing & Medicines Management, Specialist Community Public Health Nursing, Wilmington, Honiton, Devon, UK

#### Imogen Savage

Senior Lecturer in Patient Safety, The School of Pharmacy, University of London, London, UK

#### Sharon Smart

Clinical Director, SCHIN Ltd, Newcastle Upon Tyne, UK

#### Jasmeet Soar

Consultant in Anaesthetics & Intensive Care Medicine, North Bristol NHS Trust, Southmead Hospital, Bristol, UK

#### Jon Standing

Senior Pharmacist, Medicines Information Manager, Medicines Information, Pharmacy Department, Southmead Hospital, Bristol, UK

#### Anne Twidell

Merrow, Guildford, Surrey, UK

#### Jane Wastson

Medicines Management Lead, Tiverton, Devon, UK

#### Sheena Williamson

Senior Lecturer, University of Stirling, Department of Nursing and Midwifery, Centre for Health Science, Inverness, UK

### Preface

Non-medical prescribing is a new area of practice for nurses, pharmacists and allied health professionals (AHPS). Over 30 000 district nurses and health visitors are able to prescribe from the Nurse Prescribers Formulary (NPF) for Community Practitioners. More than 14 000 nurses and 1500 pharmacists across the United Kingdom (UK) have virtually the same independent prescribing rights as doctors. Several hundred AHPs (i.e. physiotherapists, podiatrists, chiropodists and radiologists) and optometrists are able to prescribe in partnership with doctors. These figures are set to rise.

Errors surrounding the prescription, administration and dispensing of medicines by healthcare professionals account for a significant amount of harm and even deaths across the UK. Twenty per cent of all critical incidents in the National Health Service (NHS) are caused by medication errors. These errors cost the NHS as much as it would cost to fund two acute teaching hospitals. The reduction of prescribing errors is now a major Government initiative. This timely and much needed text is designed for all healthcare professionals involved in the management of medicines.

Chapter 1, introduction, provides a general overview of medication safety, the different mechanisms available to healthcare professionals to deliver medicines to patients and actions that can be taken to improve medication safety. Chapters 2 to 4 examine safety in prescribing, safety in dispensing and safety in administering. Adverse drug reactions and drug interactions, interface of care and communication and parenteral drug administration, are explored in Chapters 5 to 7. Chapters 8 to 10 deal with calculations, controlled drugs and patient safety, reporting medication incidents and near misses. The final chapter, Chapter 11, focuses on ensuring safety through evidencebased medicine.

Each chapter is fully referenced and, where appropriate, readers are offered suggestions for further reading and other information sources. We hope that that this book will make a positive contribution to a very important aspect of patient care.

> Molly Courtenay Matt Griffiths