

PRACTICAL PRESCRIBING FOR NURSES

PRACTICAL PRESCRIBING FOR NURSES

DEVELOPING COMPETENCY AND SKILL

BARRY STRICKLAND-HODGE
REBECCA DICKINSON
HELEN BRADBURY





1 Oliver's Yard
55 City Road
London EC1Y 1SP

2455 Teller Road
Thousand Oaks, California 91320

Unit No 323-333, Third Floor, F-Block
International Trade Tower Nehru Place
New Delhi – 110 019

8 Marina View Suite 43-053
Asia Square Tower 1
Singapore 018960

Editor: Laura Walmsley
Editorial Assistant: Sahar Jamfar
Production Editor: Gourav Kumar
Copyeditor: Joy Tucker
Proofreader: Sarah Cooke
Indexer: KnowledgeWorks Global Ltd
Marketing Manager: Ruslana Khatagova
Cover Design: Sheila Tong
Typeset by KnowledgeWorks Global Ltd
Printed in the UK

© Barry Strickland-Hodge, Rebecca Dickinson and
Helen Bradbury 2024

Apart from any fair dealing for the purposes of research,
private study, or criticism or review, as permitted under the
Copyright, Designs and Patents Act, 1988, this publication
may not be reproduced, stored or transmitted in any form,
or by any means, without the prior permission in writing of
the publisher, or in the case of reprographic reproduction, in
accordance with the terms of licences issued by the Copyright
Licensing Agency. Enquiries concerning reproduction outside
those terms should be sent to the publisher.

Library of Congress Control Number: 2023943681

British Library Cataloguing in Publication data

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

ISBN 978-1-5296-0379-8
ISBN 978-1-5296-0378-1 (pbk)

Contents

<i>Abbreviations used in the text</i>	ix
<i>About the editors</i>	xiii
<i>About the contributors</i>	xv
<i>Acknowledgements</i>	xvii
Introduction	1
1 The Development of Nurse Prescribing	3
<i>Barry Strickland-Hodge</i>	
The start of nurse prescribing: The Cumberlege report	4
The Crown reports	5
Processes for the administration, supply and prescribing of medicines	6
Supplementary prescribing (formerly dependent prescribing)	7
Independent prescribing	8
Prescribing for community practitioners and nurse prescribers	8
2 Prescribing Resources and Competency Frameworks	13
<i>Barry Strickland-Hodge</i>	
Formularies	14
The <i>British National Formulary (BNF)</i>	14
The <i>Nurse Prescribers' Formulary (NPF)</i>	16
The <i>Electronic Medicines Compendium (EMC)</i>	17
Frameworks	21
The current <i>Competency Framework for All Prescribers</i>	23
3 The Consultation, Diagnostic Processes, Differential Diagnosis and Influences on Prescribing	27
<i>Melanie McGinlay and Barry Strickland-Hodge</i>	
Consultation skills	28
Consultation models	30
Negotiation and care planning	31
Differential diagnosis and the diagnostic process	32

Influencing your decision-making	33
The Influences on Prescribing	34
4 Putting Shared Decision-making into Practice	39
<i>Rebecca Dickinson, Melanie McGinlay, Helen Bradbury and Sue Alldred</i>	
Duty of care	40
Summary of Decision aids	48
Working with others as part of the multidisciplinary team	48
5 Understanding Patients' Medicines-Related Values, Beliefs and Expectations and Safeguarding	57
<i>Claire Easthall, Rebecca Dickinson, Ruth Setchell and Barry Strickland-Hodge</i>	
Respecting patients' diversity	58
Equality and diversity	58
Exploring patients' medicines-related values, beliefs and expectations	60
Medicines optimisation: Understanding medicines use from the patients' perspective	60
Medicines adherence	61
Theoretical perspectives to help prescribers	64
Social Determinants of Health – The Dahlgren-Whitehead Rainbow	64
Considerations for prescribing in mental health conditions	67
Safeguarding: The role of the prescriber	70
6 An Introduction to Pharmacology and Therapeutics and Prescribing Antimicrobials	79
<i>Barry Strickland-Hodge, Joe Spencer-Jones and Rebecca Dickinson</i>	
Pharmacology: What is it?	80
Pharmacokinetics: The effect of the body on the drug	80
Pharmacogenomics and personalised medicine	88
Antimicrobials: The 'magic bullets'	90
Introduction and history of antimicrobials	90
Antimicrobial resistance	91
Antimicrobial stewardship	92
Prescribing and infection prevention and control	102
7 Medicines Requiring Particular Care when Prescribing	109
<i>Natalie Bryars</i>	
Identifying medicines that are most frequently associated with severe harm	110
Oral methotrexate	111
Anticoagulants	112
Insulin	116
Opioids	117

Oral anticancer medicines (chemotherapy)	119
Antiepileptic medicines	120
8 Prescribing for Particular Patient Groups	123
<i>Daniel Greer</i>	
Prescribing for children	124
Prescribing for patients with liver disease	128
Prescribing for patients with renal impairment	129
Prescribing in pregnancy	130
Prescribing for breast-feeding women	133
Prescribing for older people	135
9 Adverse Drug Reactions and Interactions	139
<i>Barry Strickland-Hodge</i>	
Adverse Drug Events (ADE), Adverse Drug Reactions (ADR) and Side-Effects (SE)	140
Drug interactions	146
10 Prescription Writing, Including Risk of Remote Prescribing	155
<i>Barry Strickland-Hodge, Melanie McGinlay and Rebecca Dickinson</i>	
Prescription writing	156
Prescriptions for controlled drugs	157
Generic prescribing	159
Risks associated with remote prescribing	163
11 Transition to Prescriber and Deprescribing	171
<i>Lorraine Henshaw, Barry Strickland-Hodge and Daniel Okeowo</i>	
Transition to nurse prescriber	172
Continuing professional development	174
Deprescribing	177
<i>Glossary of Terms</i>	185
<i>Appendix 1 The competency framework for all prescribers</i>	191
<i>Appendix 2 Antibiotic 'superbugs'</i>	201
<i>Appendix 3 Calculations</i>	205
<i>Index</i>	215

Abbreviations Used in the Text

ACE	Angiotensin converting enzyme
ADE	Adverse drug event
ADME	Absorption, distribution, metabolism and elimination
ADR	Adverse drug reactions
AKI	Acute kidney injury
AMR	Antimicrobial resistance
APP	Advanced pharmacist practitioner
APPT	Activated partial thromboplastin time
ARR	Absolute risk reduction
BNF	British National Formulary
BNFC	British National Formulary for Children
BSA	Body surface area
CA-MRSA	Community-acquired MRSA
CCG	Clinical commissioning group
CD	Controlled drug
CKD-EPI	Chronic kidney disease epidemiology collaboration
CMO	Chief medical officer
CMP	Clinical management plan
CNS	Central nervous system
COM	Capability and opportunity and motivation
CoP	Community of practice
COX	Cyclooxygenase
CPD	Continuing professional development
CPE	Carbapenemase-producing enterobacterales
CPNP	Community practitioner nurse prescribers
CQC	Care Quality Commission
CQC	Care Quality Commission
CRP	C-reactive protein
DHSS	Department of Health and Social Services (now Department of Health and Social Care)
DOAC	Direct-acting oral anticoagulant
DOH	Department of Health (now Department of Health and Social Care)
eGFR	Estimated glomerular filtration rate

EMC	Electronic Medicines Compendium
EPS	Electronic prescription service
ESBLs	Extended spectrum β -lactamase producing enterobacteriaceae
GFR	Glomerular filtration rate
GI	Gastrointestinal
GMC	General Medical Council
GPhC	General Pharmaceutical Council
HEE	Health Education England
ICBs	Integrated care boards
ICE	Ideas, concerns and expectations
iDAPs	Interactive drug analysis profiles
IgE	Immunoglobulin E
IgG	Immunoglobulin G
INN	International non-proprietary name (used for generic medicines)
INR	International normalised ratio
Lfpse	Learn from patient safety events
LFTs	Liver function tests
LMWH	Low molecular weight heparins
LTC	Long-term conditions
MDT	Multidisciplinary team
MHRA	Medicines and Healthcare products Regulatory Agency
MIC	Minimum inhibitory concentration
MIMS	Monthly Index of Medical Specialities
MAO	Monoamine oxidase
MRI	Magnetic resonance imaging
MRSA	Methicillin-resistant staphylococcus aureus
MST	Morphine sulphate modified release tablets
NEWS2	The latest version of National Early Warning Score
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
NMC	Nursing and Midwifery Council
NNT	Numbers needed to treat
NPC	National Prescribing Centre
NPF	Nurse Prescribers' Formulary
NPSA	National Patient Safety Agency
NQN	Newly qualified nurse
NRLS	National Reporting and Learning System
NSAIDs	Non-steroidal anti-inflammatory drugs
PACT	Prescribing analysis and cost
PCN	Primary care networks
PCT	Procalcitonin
PGD	Patient group direction
PIL	Patient information leaflet
PIM	Potentially inappropriate medicine
POC	Point of care

POM	Prescription-only medicine
PPE	Personal protective equipment
PPIs	Proton pump inhibitors
PSD	Patient-specific direction
QOF	Quality and outcomes frameworks
RCN	Royal College of Nursing
RPS	Royal Pharmaceutical Society
SE	Side-effect
SmPC	Summary of Product Characteristics
SPS	Specialist Pharmacy Service
UKCPA	United Kingdom Clinical Pharmacy Association
UKHSA	United Kingdom Health Security Agency
UTI	Urinary tract infection
v/v	Volume in or per volume
V100	Prescribing programme as part of a specialist practitioner qualification.
V200	Extended formulary nurse prescribers
V300	Nurse independent/supplementary prescribers
w/v	Weight in (or per) volume
w/w	Weight in or per weight
WCC	White cell count
WHO	World Health Organization

About the Editors

Barry Strickland-Hodge MSc, PhD, FRPharmS, FHEA, Visiting Professor of Prescribing Practice at the University of Leeds and a doctoral supervisor for students at the university of Derby. He was a prescribing adviser to GP practices in Newham and Belfast for 15 years. He developed the prescribing course for pharmacists at the University of Leeds in 2003, with the first intake in 2004. Barry has an interest in the history of medicine and pharmacy and became an apothecary in 1990. He has written a number of books and papers on prescribing and information systems.

Rebecca Dickinson PhD, RGN, is programme lead for adult nursing at the University of Leeds and Chair of the School Ethics Committee. She supports teaching on the independent and supplementary prescribing course for nurses and midwives. Rebecca is interested in how to optimally support patients with understanding about taking their medicines and has a particular interest in promoting understanding of how risk of harm, likelihood of benefit and uncertainty about medicines are communicated to patients. Rebecca's PhD was jointly supported by the University of Leeds and the MHRA and focused on the provision of a headline section and additional benefit information in regulated patient information leaflets.

Helen Bradbury BSc., (Pharm)., MEd., FRPharmS., FHEA., Visiting Associate Professor at the University of Leeds. Helen worked in the NHS as a hospital pharmacist for 20 years before commencing her academic career. Helen's subject specialities are clinical education, with an interest in pharmacy education, personal and professional development and interprofessional education. In her last role as professional lead for pharmacy she advised on the delivery of the independent prescribing programmes for nurses, midwives, pharmacists and allied healthcare professionals. She has published on reflective practice, interprofessional education and prescribing for medical students.

About the Contributors

Sue Alldred MAPCPharm, MRPharmS, BPharm(Hons), PGDipClinPharm, Independent Prescriber, Advanced Pharmacist Practitioner working in a medical centre and Head of Clinical Pharmacy for South and East Leeds GP group. She is a practising prescriber working across the breadth of clinical conditions encountered in primary care. Prior to this she was a specialist neurology pharmacist at Leeds Teaching Hospitals. She is the regional vice-president for the Primary Care Pharmacists Association and teaches and mentors both postgraduate pharmacists and trainees and pharmacy technicians, together with working as a designated prescribing practitioner for trainee prescribers.

Natalie Bryars BPharm, PGDipClinPharm, Med, MRPharmS, Principal Pharmacist in Clinical Governance at York and Scarborough Teaching Hospitals NHS Foundation Trust. Natalie's role spans clinical governance in secondary care and quality assurance of pharmacy services. She focuses on medicines management, where she writes and reviews policies and procedures, assesses and audits compliance with standards, produces and delivers training programmes and assures the delivery of quality services. She has a keen interest in prescribing and contributes to the prescribing programme for the Hull and York Medical School; her research has focused on how prescribing can be taught more effectively to medical students. She also contributes to the governance and education programmes for non-medical prescribers within her organisation.

Claire Easthall PhD, MPharm, MRPharmS, FHEA, is a Lecturer in Pharmacy in the School of Healthcare, University of Leeds. She is Programme Lead for the PGDip in Pharmacy and also supports teaching and assessment on the Independent Prescribing course. Claire is interested in health behaviour change, with a specific focus on supporting optimal medicines use via person-centred approaches to care and understanding medicines use as a complex health behaviour. Her PhD focused on development of a screening tool to identify individual patient barriers to medicines adherence, yielding a range of peer-reviewed publications. Claire's teaching expertise is integrated into her research interests, but also covers areas such as consultation skills, professional development and reflective practice.

Daniel Greer BPharm, MSc (Clin Pharm), PGCert (Clinical Education), Lead Pharmacist for Gastroenterology, Leeds Teaching Hospitals NHS Trust and formerly Teacher Practitioner on

the postgraduate programme in Pharmacy Practice in the School of Healthcare, University of Leeds. He also contributed to teaching pharmacology within the school.

Lorraine Henshaw DPrac (nursing), MSc, RN, RNT, SFHEA, is a registered general nurse with experience in a variety of clinical and educational settings including neonatal intensive care, general practice nursing and as a clinical research nurse. Currently her role is as a Senior Lecturer in Nursing and Advanced Clinical Practice at the University of Staffordshire. Her research interests centre upon workforce development, role transition and nurse identity.

Joseph Spencer-Jones MRPharmS, PGDip, PGCert, Advanced Clinical Pharmacist for Antimicrobials at Mid Yorkshire Teaching Trust. A qualified pharmacist for ten years, he took a keen interest in antimicrobials when working in infectious diseases at Leeds Teaching Hospitals. An Independent Prescriber from the University of Leeds, he now delivers teaching on the Antimicrobials syllabus for this course. Joe is currently building his research portfolio, with a keen interest in optimising the use of antimicrobials.

Melanie McGinlay BSc (Hons), MSc, Lecturer and Visiting Researcher at the University of Leeds, Leeds Institute of Cardiovascular and Metabolic Medicine and heart failure specialist nurse at Leeds Teaching Hospitals. Melanie has been a registered nurse in cardiology for 14 years and led on the independent and supplementary prescribing course for pharmacists, allied health professionals, midwives and nurses at the University of Leeds. She has written and co-authored on a number of peer-reviewed research papers with a particular focus on medicines optimisation of disease-modifying therapy in chronic cardiac conditions.

Daniel Okeowo MPharm, MRPharmS, is a Lecturer of Pharmacy Practice at Newcastle University and a PhD candidate at the University of Leeds. His research focuses on 'How can deprescribing be safely routinely implemented in primary care?' With a background as a practising pharmacist in primary care, Daniel brings valuable expertise to his research. His research interests lie in polypharmacy and exploring the practical implementation of deprescribing strategies. Furthermore, Daniel has experience teaching various disciplines, including pharmacy, nursing, medicine and postgraduate prescriber courses.

Ruth Setchell (Margaret) BSc (Pharm), PG Cert in Psychiatric Therapeutics. Recently retired from a 35-year career as a hospital pharmacist. After specialising in aseptic services, Ruth changed direction and moved into psychiatric pharmacy, adding a certificate in psychiatric therapeutics from Aston University to her clinical pharmacy diploma. From managing a small psychiatric pharmacy team Ruth subsequently joined a multidisciplinary care homes team project to reduce antipsychotic prescribing in residents with dementia. She qualified as an Independent Prescriber and prescribed psychotropic medications for patients of the care homes team. Throughout her career she has been involved in training clinical, medical, nursing and allied professionals, teaching pre-registration pharmacists, clinical pharmacists and technicians on various programmes within hospitals, universities and with CPPE. She co-authored 'Managing Behavioural and Psychological Disturbance in Dementia', a guidance and resource pack for Leeds in 2014.

Acknowledgements

Agnes Kozłowska. MHRA Customer Experience Centre, Communications and Engagement

Alexandra Freeman. NHSE/Winton Centre for Risk & Evidence Communication, University of Cambridge

Angela Crawford. Directorate Administrator Royal Pharmaceutical Society

Datapharm Professional Regulation Directorate

Emma Blankson. Policy Manager, General Medical Council

House of Commons Library

Ian Moir. National Institute for Health and Care Excellence, Science, Evidence and Analytics Directorate

Jane Trodd. Royal Pharmaceutical Society Librarian

Medicines and Healthcare Products Regulatory Agency

Nursing and Midwifery Council Education and Standards Team

Penny North-Lewis. Leeds Teaching Hospitals NHS Trust

Rebecca Braybrooks. Royal Pharmaceutical Society Professional Support Adviser

Specialist Pharmacy Services

The Leeds Library

Introduction

As I write this, it is 350 years since Jonathan Goddard, a London physician, wrote ‘only doctors should prescribe’ (Goddard, 1670). This was at a time when he and many other physicians were railing against the apothecaries who had increased their level of involvement in the prescribing of medicines. When there were few physicians in London, such as in times of sickness, illness and plague, the apothecaries felt it necessary to take on the role not only of compounding and dispensing, but also diagnosing and prescribing. In 1968, still 300 years after Goddard, the Medicines Act of 1968 stated that under the National Health Service the only individuals who would be able to prescribe would be doctors and dentists for patients and veterinary surgeons for animals. Even so, dentists were required to use the *Dental Practitioners’ Formulary* if they were to prescribe for their NHS patients. Privately dentists were allowed to prescribe anything they felt was appropriate and for which they felt they had the knowledge.

It wasn’t until 1986 that Baroness Cumberlege, in the House of Lords, moved that community nurses, including district nurses, should be allowed to prescribe from a specific shortlist of medicines for their patients. This was supported in the Lords and in the Commons because it was realised that district nurses, for example, requiring dressing packs or similar would need to get a prescription signed by a doctor. After this – which might seem a small change, but did require new legislation – things moved much more rapidly as Dr June Crown produced the Crown reports recommending that others should be able to prescribe. In April 2012 a major change took place: that qualified independent prescribing nurses and independent prescribing pharmacists were permitted to prescribe anything from the *British National Formulary* (BNF) within their scope of practice, with two specific exemptions when used for addiction. It was only a matter of time before other healthcare professionals, following a regulated prescribing course, were permitted to prescribe from a range of medicines for their patients, with certain specific restrictions.

This short book looks at various aspects of prescribing, from its history to the transition from qualified nurse to prescriber. It includes deprescribing, where medicines considered inappropriate can be, with the patient’s involvement and agreement, removed from a list of repeat prescriptions.

One important aspect of this book is that we do not define prescribing by what it is not. You will not see the letters *non*, related to prescribing or the prescribers you are, or will become. We are all expected to follow the *Competency Framework for All Prescribers* published by the Royal Pharmaceutical Society in 2021. These show the skills and competencies that all prescribers from whatever branch of healthcare they come should be able to demonstrate.

In fact, this book follows the competency framework closely. Each chapter takes aspects of the framework and explains and describes what these mean in practice. Each chapter, following the history of nurse prescribing, is broken down into various parts, but all in some way relate to the framework.

We hope you will find this book useful before, during and after courses in prescribing.

Barry Strickland-Hodge
Pharmacist, apothecary and visiting professor of prescribing practice

References

Goddard, J.A. 1670. *Discourse, setting forth the unhappy condition of the practice of physick in London*. London: Royal Society, VIII, 442–55. The London Physician found at the Leeds Subscription Library.

2

Prescribing Resources and Competency Frameworks

Barry Strickland-Hodge

Chapter summary

This chapter discusses:

- formularies
 - the *British National Formulary* (BNF) and the *British National Formulary for Children* (BNFC)
 - the Drug Tariff
 - *Electronic Medicines Compendium* (EMC)
 - the *Nurse Prescribers' Formulary* (NPF) for V100 and V150 prescribers
 - competency frameworks generally and
 - the *Competency Framework for All Prescribers*.
-

Introduction

As you have seen from Chapter 1, prescribing – from 1968 following the publication of the Medicines Act (Medicines Act, 1968) until the publication of the Medicinal Products: Prescription By Nurses Etc. Act (1992) – was the realm of doctors and dentists only (and vets for animals). Following the publication of this latter Act in 1992 (Medicinal Products, 1992) community practitioner nurse prescribers could prescribe from a limited list of medicinal products: the *Nurse Prescribers' Formulary for Community Practitioners* (NPF). There have been many formularies particularly in hospital but the ones we will start with are the NPF and the *British National Formulary* (BNF). Formal frameworks for prescribers have been available since 2001; the first for nurse prescribers will be discussed, ending with the latest RPS publication *A Competency Framework for All Prescribers* (RPS, 2021). The competencies being discussed in this chapter are: Competency 4, Prescribe, with the statement supporting the competency being, '4.3. Understands and uses relevant national, regional and local frameworks for the use of medicines'; and Competency 8, Prescribe Professionally, with the supporting statement, '8.3. Knows and works within legal and regulatory frameworks affecting prescribing practice'.

In the Further information section of the *Competency Framework* (in the supporting statements for Competency 4 and Competency 8) it says, 'frameworks include local formularies, care pathways, protocols and professional guidelines, as well as evidence-based guidelines from relevant national, regional and local committees' (RPS, 2021). Thus the inclusion of frameworks and formularies here.

Formularies

In the UK, formularies exist to specify which drugs are available on the NHS for particular groups of prescribers. The two main reference sources providing this information are the BNF and the Drug Tariff; both are available online as an app or in hard copy (see also Chapter 1). In hospital, formularies are a method by which physicians and pharmacists, working through an appropriate medicines committee, can evaluate and select medications for use in the hospital.

Local NHS hospital trusts and integrated care boards (ICBs) often produce their own list of medicines considered best for prescribing within their organisation or the whole locality. It would be particularly useful if such formularies created through medicines committees in hospital were shared with primary care to help when transferring patients from hospital. This is done in some areas but not all.

Local formularies across England vary in the range of medicines the formulary includes and the processes for developing and updating the formulary. A list of potential benefits of local formularies is shown in **Box 2.1**.

The *British National Formulary* (BNF)

You will have come across the BNF on many occasions, and it was mentioned in Chapter 1 of this book. It contains a wide spectrum of information and advice on prescribing and

Box 2.1

Benefits of local formularies may include:

- improving patient outcomes by optimising the use of medicines;
- supporting the inclusion of patient factors in decisions about medicines;
- improving local care pathways;
- improving collaboration between health professionals and commissioners;
- improving quality by reducing inappropriate variations in clinical care;
- improving quality through access to cost-effective medicines;
- supporting the supply of medicines across a local health economy;
- supporting financial management and expenditure on medicines across health communities;
- supporting prescribers to follow guidance published by professional regulatory bodies in relation to medicines and prescribing (NICE, 2014).

pharmacology, along with specific facts and details about many available medicines. Though it is a national formulary, it nevertheless also includes entries for some medicines which are *not* available under the NHS and must be prescribed and/or purchased privately. A symbol clearly denotes such drugs in their entry.

It is used by healthcare professionals as a reference for correct dosage, indication, interactions and side-effects of drugs. Information on drugs is drawn from the manufacturers' product literature, medical and pharmaceutical literature, regulatory authorities and professional bodies. Advice is constructed from clinical literature, and reflects, as far as possible, an evaluation of the evidence from diverse sources.

The BNF also takes account of authoritative national guidelines and emerging safety concerns. In addition, the Joint Formulary Committee, which oversees the publication and content of the BNF, takes advice on all therapeutic areas from expert clinicians; this ensures that the BNF recommendations are relevant to practice.

Sister publication

The ***British National Formulary for Children (BNFC)***, first published September 2005, is published yearly and details the doses and uses of medicines in children from neonates to adolescents (see Chapter 8 on medicines use in special patient groups). To find out more, go to www.bnf.org/about/

The Drug Tariff

The Drug Tariff provides information on what will be paid to contractors for NHS services including the cost of drugs and appliances supplied against an NHS prescription

but also remuneration to NHS contractors such as pharmacies. To find out more see Drug Tariff, 2023, and www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/drug-tariff

Perhaps more important to all prescribers is that in the Drug Tariff there is a section (Section XVIII A), known unofficially as the 'Blacklist', which lists medicines which cannot be prescribed under the NHS.

There is also a short list within the Drug Tariff which shows those medicines that can be prescribed but only under certain circumstances (Section XVIII B), the details of which go beyond the scope of this short book. However, it would be useful for you as a prescriber to look at this list at some point.

Neither sections XVIII A nor B are available on the online version of the Drug Tariff, but you can see a hard copy or view a pdf available from the home page or at www.nhsbsa.nhs.uk/sites/default/files/2022-06/Drug%20Tariff%20July%202022.pdf

The Nurse Prescribers' Formulary (NPF)

The *Nurse Prescribers' Formulary for Community Practitioners* (NPF) is a list of medicines that can be prescribed by community practitioner nurse prescribers (CPNPs) who have received training specifically to become such prescribers. It is issued within the BNF every two years.

It covers such areas as laxatives, skin preparations, elastic hosiery (for a full list, see a current NPF) and is the approved list for prescribing by community practitioner nurse prescribers, district nurses and specialist public health nurses, including health visitors. In addition to the relatively brief list are all pharmacy medicines sold under the supervision of a pharmacist and marked with a letter P on packets and a number of prescription-only medicines (POMs), such as nystatin oral suspension, enabling nurses to prescribe in areas such as minor injuries, minor ailments, health promotion and palliative care. The CPNP must only prescribe items from the NPF and for the conditions specifically mentioned. For example, for Co-danthramer oral suspension NPF refers the nurse to the monograph in the BNF but adds that the nurse can prescribe this after consultation with a doctor for constipation in palliative care. So there are some restrictions on the use of the preparation within the NPF. There are a number of appliances as well as medicinal products that can be prescribed by the CPNP. These are shown in the Drug Tariff; Part XVII(B) gives the NPF again, including showing where various appliances can be found. The section is called Appliances and reagents (including wound management products) and also appears in the NPF in the BNF. The CPNP can prescribe:

- appliances as listed in Part IXA (including contraceptive devices);
- incontinence appliances as listed in Part IXB;
- stoma appliances and associated products as listed in Part IXC;
- chemical reagents, as listed in Part IXR.

Table 2.1 The areas covered by the NPF

Analgesics	Emollient and barrier preparations	Prevention of neural tube defects
Appliances and reagents for diabetes	Eye drop dispensers	Removal of earwax
Contraceptives, non-hormonal	Laxatives	Stoma appliances
Disinfection and cleansing	Local anaesthetics	Stoma care
Drugs for scabies and head lice	Nicotine replacement therapy	Urinary catheters and appliances
Drugs for the mouth	Other skin conditions	
Drugs for threadworms	Peak flow meters	

Activity 2.1

Look at a current NPF which is in the BNF. In the hard copy it is towards the back or use the link bnf.nice.org/nurse-prescribers-formulary/

What do you think of the list?

Does it cover the areas with which you are dealing?

Which of the included items are you familiar with and which, if any, have you used or recommended?

These are for community practitioners who have completed the necessary training – not supplementary or independent nurse prescribers.

There is no right or wrong answer here; it is what you think about the list and whether you think it adequate for CPNPs to practice effectively.

The *Electronic Medicines Compendium* (EMC)

The Data Sheet Compendium, as it was known, was a hard copy book containing all of the data sheets, now called summaries of product characteristics (SmPC) for all licensed medicines in the UK. The EMC is, as you can imagine, much easier to handle. The EMC is the most up-to-date, approved and regulated information source on medicines and patient information for licensed drugs. As a healthcare professional you can look at the summary of product characteristics (SmPC) for any licensed drug in the UK. The structure of the entries consistent throughout, giving more detail than the BNF. As this is an important source, the next activity will give you an opportunity to look at it if you haven't already (EMC, 2023).

Activity 2.1

Go to www.medicines.org.uk/emc (EMC, 2023) and look at the front home page. The first thing you see is:

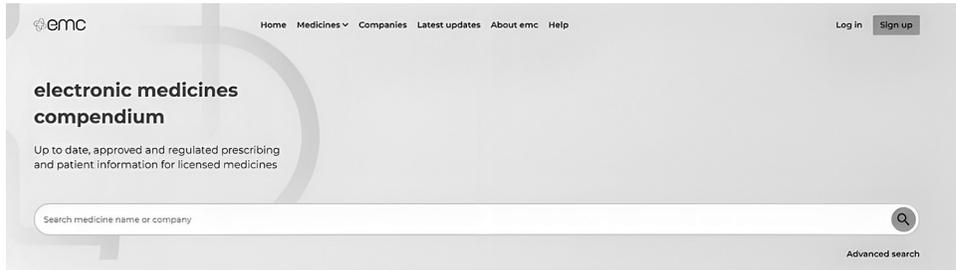


Figure 2.1 EMC home page

© Datapharm and reproduced with kind permission

At the top of the page are tabs you can look at: for example, under the Medicines tab you can see discontinued medicines, which could be useful.

You do not need to register if you are only wishing to look at specific medicines as the SmPC (accessible to healthcare professional) or the patient information leaflet (PIL). Type in the name of the medicine you wish to look at and don't forget to press the magnifying glass symbol. Next you can view the latest updates on this front page.



Latest updates

Spikevax bivalent Original/Omicron BA.4-5 25 micrograms/25 micrograms dispersion for injection

Active ingredients/generics: elasomeran, davesomeran

Moderna Biotech UK Ltd

new

Spikevax bivalent Original/Omicron BA.4-5 (50 micrograms/50 micrograms)/mL dispersion for injection

Active ingredients/generics: elasomeran, davesomeran

Moderna Biotech UK Ltd

new

Zejula 100 mg hard capsules

Active ingredients/generics: niraparib tosylate monohydrate

GlaxoSmithKline UK

updated

More medicines

Figure 2.2 Latest updates

Also on the front page is the link to the Yellow Card reporting system which we will look at in Chapter 9.

Report side effect

To ensure safe and effective use, emc and the pharmaceutical companies who provide information to this site, encourage reporting of suspected side effects to medicines, vaccines and medical device incidents to the MHRA Yellow Card scheme. This includes reporting defective or falsified (fake) products.

[Go to Yellow Card site](#)

Figure 2.3 Yellow Card reporting system

Now search for Perindopril erbumine 8mg tablets by typing the name perindopril in the search box and selecting the correct one. Press the magnifying glass symbol.

You will see:

Perindopril Erbumine 8 mg tablets

Active Ingredient: perindopril tert-butylamine
 Company: Mylan [See contact details](#)
 ATC code: C09AA04 

About Medicine

 Prescription only medicine

[Healthcare Professionals \(SmPC\)](#) [Patient Leaflet \(PIL\)](#)

 This information is for use by healthcare professionals

Last updated on emc: 22 Jul 2022

Figure 2.4 Perindopril erbumine

(Datapharm Perindopril erbumine 8mg tablets showing access to the SmPC and the PIL)

Looking at the SmPC, the structure is the same for all medicines within the EMC; you will need to expand the part of the entry you are interested in. For example, if you expand Section 4, Clinical particulars, you see there are nine further sections.

You can further expand each of these subdivisions such as contraindications or undesirable effects.

Looking specifically at undesirable effects, this gives an initial summary and then lists any reported undesirable effect using an agreed frequency set of definitions.

4. Clinical particulars

- 4.1 Therapeutic indications
- 4.2 Posology and method of administration
- 4.3 Contraindications
- 4.4 Special warnings and precautions for use
- 4.5 Interaction with other medicinal products and other forms of interaction
- 4.6 Fertility, pregnancy and lactation
- 4.7 Effects on ability to drive and use machines
- 4.8 Undesirable effects
- 4.9 Overdose

Figure 2.5 Clinical particulars

Summary of safety profile

The safety profile of perindopril is consistent with the safety profile of ACE inhibitors:

The most frequent adverse events reported in clinical trials and observed with perindopril are: dizziness, headache, paraesthesia, vertigo, visual disturbances, tinnitus, hypotension, cough, dyspnoea, abdominal pain, constipation, diarrhoea, dysgeusia, dyspepsia, nausea, vomiting, pruritis, rash, muscle cramps, and asthenia.

Tabulated list of adverse reactions

The following undesirable effects have been observed during clinical trials and/or post-marketing use with perindopril and ranked under the following frequency:

Very common ($\geq 1/10$); Common ($\geq 1/100$ to $< 1/10$); Uncommon ($\geq 1/1,000$ to $< 1/100$); Rare ($\geq 1/10,000$ to $< 1/1,000$); Very rare ($< 1/10,000$); Not known (cannot be estimated from the available data).

Figure 2.6 Initial summary of undesirable effects

© Datapharm and reproduced with kind permission

Note the definitions of Very common, Common, Uncommon, Rare, Very rare and Not known. If a side-effect is said to be Rare that does not mean it may not occur in the patient you are dealing with. In fact, the symbol before each of the definitions is especially important. Take, on the one hand, Very common; the symbol before means 'equal to or more than' 1 in 10. That could mean 10 in 10. Patients may say 1 in 10 means 9 in 10 do not get the side-effect. Draw their attention to the symbol or at least its meaning. On the other hand, the symbol before Very rare is less than 1 in 10,000. The numbers are based on Yellow Card reports of side-effects; those for new drugs may underestimate until more patients have used them. The section then lists all of the reported side-effects and indicates their frequency using the definition above. Also see the section on adverse drug effects and side-effects in Chapter 9 of this book.

Activity 2.2

Now look up any medicine you are familiar with and find the indications and undesirable effects.

As you can see this is a particularly useful source of medicines information. It is up to date and easy to use. The structure for each included medicine is the same.

So, formularies list drugs that you can prescribe; in the case of the Drug Tariff, it shows you which drugs cannot be prescribed on the NHS, or which can only be prescribed under specific circumstances. Formularies are basic lists, but the BNF and the BNFC give guidance on prescribing and each monograph (drug entry) shows what the medicine is for – the indication, when that medicines should be avoided, the contraindications, what advice there is if the patient has hepatic or renal dysfunction, prescribing in pregnancy and prescribing when breast-feeding. The BNF and the BNFC are invaluable to you as a prescriber. The Drug Tariff is more important to pharmacists but still it is worth looking at. The EMC is useful not only for the summary of product characteristics, but also the patient information leaflets that accompany the medicines when they are dispensed, and which are shown in the EMC. It means that during a consultation with a patient you can see what they will be given to read with their prescribed medicine and, if necessary, you can explain certain points.

Frameworks

A framework is a system that guides and supports you when you are dealing with an activity such as prescribing. A competency framework is a structure which describes the competencies (demonstrable knowledge, skills, characteristics, qualities and behaviours) central to a safe and effective performance in a role (RPS, 2021). Looking specifically at prescribing, the National Prescribing Centre (NPC) produced a number of such competency frameworks for the individual groups of prescribers from 2001 onwards.

The first edition, called *Maintaining Competency in Prescribing: An Outline Framework to Help Nurse Prescribers* (NPC, 2001), has a foreword from the then Chief Nursing Officer in which she reiterates the ongoing need for nurses to prescribe safely, appropriately and with confidence. Frameworks are the support mechanism needed.

The initial framework was aimed at helping the individual nurse and their managers to identify gaps in knowledge and skills, thus leading to suitable training and development. The framework could also be used by those approved higher education institutions to offer appropriate courses built around the competencies, acting as another layer of support.

The competency framework can also be the structure for continuing professional development (CPD) to ensure if roles change new competencies which may be required can be identified and strengthened.

The first edition, specifically for nurses and not at that time anticipated as being for all prescribers, explained the structure which, although developed over the ten years, has retained its overarching appearance. The NPC suggested that the framework could be used

by qualified nurse prescribers as a form of reflection on their day-to-day prescribing, being especially good when used with groups of nurses. Nurses were encouraged to download the framework and adapt or customise it to suit individual needs. The NPC became part of NICE in April 2011.

In 2003 the nurse competency framework was updated and by 2004 other healthcare professions were being accepted onto courses to become supplementary prescribers. The NPC produced individual competency frameworks for pharmacists, optometrists and allied health professionals. These competency frameworks were structured in an equivalent way to the original 2001 nurse competency framework.

The Competency Framework for All Prescribers

It was then agreed to produce a single competency framework as all prescribers would need to maintain the same competencies when it came to prescribing. The first framework for all prescribers was published in May 2012, again by the NPC using multidisciplinary expertise. It became clear that ‘a common set of competencies underpin prescribing regardless of professional background’ (NPC, 2012). The statement in the document said that: ‘The single competency framework provides an outline of common prescribing competencies that, if acquired and maintained can help all prescribers to become and remain effective prescribers’ (NPC, 2012, p. 4).

The framework can be used by any prescriber at any point in their career. It is not only to guide the prescribing courses, but also for use in CPD and in general sessions with other prescribers.

The proposed use of the framework is shown in **Box 2.2**.

Box 2.2

Uses of the framework include:

1. inform education curricula and relevant accreditation of prescribing programmes;
2. inform the design and delivery of education programmes – for example, through validation of educational sessions (including rationale for need), and as a framework to structure learning and assessment;
3. help healthcare professionals prepare to prescribe and provide the basis for ongoing education and development programmes, and revalidation processes – for example, for use as a framework for a portfolio to demonstrate competency in prescribing;
4. help prescribers identify strengths and areas for development through self-assessment appraisal and as a way of structuring feedback from colleagues;
5. provide professional organisations or specialist groups with a basis for the development of levels of prescribing competency – for example, from recently qualified prescriber through to advanced prescriber;
6. stimulate discussions around prescribing competencies and multidisciplinary skill mix at an organisational level;

7. inform organisational recruitment processes to help frame questions and benchmark candidates' prescribing experience;
8. inform the development of organisational systems and processes that support safe, effective prescribing – for example, local clinical governance frameworks.

The current *Competency Framework for All Prescribers*

The framework does suggest that as it does not contain statements that relate to specialist areas of prescribing as it is a competency framework for all prescribers, it must be contextualised to reflect different areas of practice, levels of expertise and settings.

The *Competency Framework* is shown, with permission of the RPS, as Appendix 1 in this book. This framework consolidates the existing profession-specific prescribing frameworks and updates the competencies in order to provide a single common framework that is relevant to doctors, dentists and all other qualified UK prescribers.

The current edition is much more detailed, even as compared to the 2016 one, and has useful notes to help define and explain individual competencies. New ones have been added, as necessary. Prescribing courses across the UK can use this new RPS framework to ensure teaching and practice helps the nurse develop the required competencies.

Appendix 1, which shows the *Competency Framework* (although for the full document please go to www.rpharms.com/resources/frameworks/prescribing-competency-framework/competency-framework) shows that the framework is divided into two domains. Domain 1 covers the consultation (see **Box 2.3**) and Domain 2 prescribing governance (see **Box 2.4**).

Within the two domains there are ten competencies, each with several supporting statements related to the prescriber role showing the activity which the prescriber should demonstrate. Following this are sections on further information which support the prescriber by giving more information about the competency and giving some examples.

Look at the first competency, Assess the patient. Within these there are 14 supporting statements all related to the assessment of the patient. The further information on these supporting statements shows such things as having an appropriate setting for the consultation, using appropriate language for age etc. and understanding that a clinical assessment includes observations, psychosocial assessments and physical examination. The full ten competencies given in Appendix 1, but are shown here for simplicity.

Box 2.3

Domain 1: The consultation

1. Assess the patient.
2. Identify evidence-based treatment options available for clinical decision making.
3. Present options and reach a shared decision.
4. Prescribe.
5. Provide information.
6. Monitor and review.

Looking at competency 4, Prescribe, there are 14 supporting statements and a further four points of further information.

Box 2.4

Domain 2: Prescribing governance

7. Prescribe safely.
8. Prescribe professionally.
9. Improve prescribing practice.
10. Prescribe as part of a team.

Looking at Competency 7, Prescribe safely, there are eight supporting statements and a further three points of further information for this competency.

Now would be a suitable time to look at Appendix 1 and note the depth and range of competencies required to be a prescriber. Remember this is not just for nurses, it is for *all* prescribers.

Throughout this short book, we will point the reader to the appropriate domain and competency.

Summary

In the UK, formularies exist to specify which drugs are available on the NHS for particular groups of prescribers. The two main reference sources providing this information are the BNF and the Drug Tariff.

A framework is a system that guides and supports you when you are dealing with an activity such as prescribing. A competency framework is a structure which describes the competencies (demonstrable knowledge, skills, characteristics, qualities and behaviours) central to a safe and effective performance in a role.

Formularies and frameworks are there to help and support you in your decisions about prescribing for your patients. Familiarise yourself with those related to your area of prescribing.

References

- BNF 2022. *British National Formulary: Key Information on the Selection, Prescribing, Dispensing and Administration of Medicines*. Available at bnf.nice.org.uk/ (accessed December 2022).
- BNFC 2023. *British National Formulary for Children: Key Information on the Selection, Prescribing, Dispensing and Administration of Medicines*. London: BMJ Group.
- Electronic Medicines Compendium. 2023. *Datapharm Perindopril Erbumine 8mg tablets*. (Updated July 2022) Available at <https://www.medicines.org.uk/emc/product/4391> (Accessed April 2023).
- Drug Tariff 2023. Available at faq.nhsbsa.nhs.uk/knowledgebase/article/KA-01493/en-us (accessed December 2022).

- EMC 2023. *Electronic Medicines Compendium*. Available at www.medicines.org.uk/emc (accessed December 2022).
- Medicinal Products: Prescription By Nurses Etc. Act 1992 (C. 28). [online] London: HMSO. Available at www.legislation.gov.uk/ukpga/1992/28 (accessed 12 May 2023).
- Medicines Act 1968 (C. 67). [online] London: HMSO. Available at www.legislation.gov.uk/ukpga/1968/67/contents (accessed 12 May 2023).
- NICE 2014. *Medicines Practice Guideline: Developing and Updating Local Formularies*. 14 March. Updated 28 October 2015. Available at www.nice.org.uk/guidance/mpg1 (accessed December 2022).
- NPC 2001. *Maintaining Competency in Prescribing: An Outline Framework to Help Nurse Prescribers*. 1st ed. Liverpool: NPC.
- NPC 2012. *A Single Competency Framework for All Prescribers*. Liverpool: NPC.
- NPF 2022. *Nurse Prescribers' Formulary*. Available at bnf.nice.org.uk/nurse-prescribers-formulary (accessed December 2022).
- RPS 2021. *A Competency Framework for All Prescribers*. Available at www.rpharms.com/resources/frameworks/prescribing-competency-framework/competency-framework (accessed 12 May 2023).