SECOND EDITION

KNUT SCHROEDER

THE *10-MINUTE* CLINICAL ASSESSMENT

BMJ Books

WILEY Blackwell

The 10-Minute Clinical Assessment

The 10-Minute Clinical Assessment

Second Edition

Knut Schroeder
MSc PhD DCH DRCOG DGM MRCP FRCGP CertMedEd
Honorary Senior Clinical Lecturer in General Practice
Centre for Academic Primary Care
University of Bristol
General Practitioner, Bristol

WILEY Blackwell BMJ|Books

This edition first published 2017, © [2010, 2017] by John Wiley & Sons Ltd.

BMJ Books is an imprint of BMJ Publishing Group Limited, used under licence by John Wiley & Sons.

Registered office: John Wiley & Sons, Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

Editorial offices: 9600 Garsington Road, Oxford, OX4 2DQ, UK
The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK
111 River Street, Hoboken, NJ 07030-5774, USA

For details of our global editorial offices, for customer services and for information about how to apply for permission to reuse the copyright material in this book please see our website at www.wiley.com/wiley-blackwell

The right of the authors to be identified as the author of this work has been asserted in accordance with the UK Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, except as permitted by the UK Copyright, Designs and Patents Act 1988, without the prior permission of the publisher.

Designations used by companies to distinguish their products are often claimed as trademarks. All brand names and product names used in this book are trade names, service marks, trademarks or registered trademarks of their respective owners. The publisher is not associated with any product or vendor mentioned in this book. It is sold on the understanding that the publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

The contents of this work are intended to further general scientific research, understanding, and discussion only and are not intended and should not be relied upon as recommending or promoting a specific method, diagnosis, or treatment by health science practitioners for any particular patient. The publisher and the author make no representations or warranties with respect to the accuracy or completeness of the contents of this work and specifically disclaim all warranties, including without limitation any implied warranties of fitness for a particular purpose. In view of ongoing research, equipment modifications, changes in governmental regulations, and the constant flow of information relating to the use of medicines, equipment, and devices, the reader is urged to review and evaluate the information provided in the package insert or instructions for each medicine, equipment, or device for, among other things, any changes in the instructions or indication of usage and for added warnings and precautions. Readers should consult with a specialist where appropriate. The fact that an organization or Website is referred to in this work as a citation and/or a potential source of further information does not mean that the author or the publisher endorses the information the organization or Website may provide or recommendations it may make. Further, readers should be aware that Internet Websites listed in this work may have changed or disappeared between when this work was written and when it is read. No warranty may be created or extended by any promotional statements for this work. Neither the publisher nor the author shall be liable for any damages arising herefrom.

Library of Congress Cataloging-in-Publication Data applied for.

9781119106340 (Paperback)

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

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Cover image: © Daniel Entenza / © EyeEm / Gettyimages
Cover design by Andy Meaden.

Set in 8/11pt FrutigerLTStd by Aptara Inc., New Delhi, India

1 2017

For Kiran and Rohan

Table of contents

Foreword

Being a GP is hugely rewarding but also incredibly complex. Patients can and do present themselves with a bewildering array of problems, and they expect their doctor to have the answer to everything straight away.

This variety is what makes general practice both satisfying and challenging, but it can be daunting for a recent graduate who is competent – but perhaps not completely confident.

Therefore, a guide like this is extremely valuable. It covers 154 selected clinical presentations from all the major clinical specialties that can be particularly challenging for people new to general practice. It contains references to the latest evidence and guidelines and tries to maintain a patient-centred approach throughout.

The target audience for this book is senior medical students and doctors starting their career in general practice, who may find the transition from full history and examination to the focused approach that we adopt in general practice difficult. It should also be helpful for candidates preparing for the CSA part of the MRCGP examination.

Even for experienced health professionals, this book will be extremely useful as a quick reference to have handy in the surgery. Because it is impossible to cover everything during a brief clinical assessment, the book tries to point out those areas that should be considered when faced with important and potentially tricky clinical presentations.

This guide is a highly valuable tool to use alongside the RCGP curriculum. It reflects a desire to improve patient care and the quality of general practice, a goal which should be applauded.

As someone who is passionate about general practice and GP education, I'm proud to recommend this book by Knut Schroeder as an excellent contribution to the genre.

Professor Steve Field FRCGP
Chairman, Royal College of General Practitioners

Preface to the 1st edition

Those of us who work in busy clinical settings often have to assess patients under considerable time constraints. This can be a challenge, particularly when faced with undifferentiated presentations such as 'headache', 'chest pain', 'weight loss' or 'dizziness'. *The 10-Minute Clinical Assessment* provides suggestions for a focused approach in such situations and covers a selection of important and frequently demanding or difficult clinical presentations – symptoms as well as conditions – from all the major clinical specialties.

Medical students, nurses and even doctors undergoing postgraduate training often get surprisingly little teaching and training on what to include in a focused history and examination. This book bridges the gap by highlighting important differential diagnoses, 'red flags' and key aspects to consider during clinical assessment, while also giving some indication as to *why* these might be relevant. Important clinical presentations are covered with reference to the latest evidence and guidelines, and traditional practice is challenged in areas where new evidence has emerged. The book takes a holistic approach and also emphasises issues that are important for patients, including their ideas, concerns, expectations and issues around quality of life.

This book aims to be an *aide memoire* for general practitioners, trainees in general practice, medical students, nurses and paramedics working in primary care settings. Hospital doctors might also find the book useful when patients under their care develop clinical problems that are outside their specialty interest or when working in the Accident & Emergency department. It has been designed to allow quick reference during busy clinical sessions and in exam preparation. Information is presented in a structured, condensed and hopefully easily accessible way.

The 10-Minute Clinical Assessment is based on experience gained from clinical practice, student teaching and examination, backed up by an extensive literature search and consultation with experts. Sections of the book have been 'field-tested' among general practitioners, trainee doctors, medical students and nurses. In addition, every section has been reviewed by expert readers from primary and secondary care, whose comments have been invaluable and have led to numerous improvements and alterations. Some of the chapters on chronic diseases and cancer have also been looked at by 'expert' patients.

The book is not meant to be prescriptive – clinical assessment is not a tick-box exercise! Each clinical encounter is different, has its own dynamic and needs to be tailored to the individual – taking a patient-centred and caring approach. Because it is impossible to cover everything during a brief clinical assessment, the book points out those areas that should be considered when faced with important and potentially tricky clinical presentations. It offers some of the 'essential pieces of a jigsaw puzzle' that can help with recognising the whole picture.

The book covers clinical assessment only and deliberately does not include investigation and management, which for symptom-based presentations will often depend on the outcome of the assessment. *The 10-Minute Clinical Assessment*

therefore needs to be read in conjunction with larger textbooks, as well as books on consultation skills, physical examination and clinical diagnosis – assuming that readers will have had the relevant clinical teaching at the bedside.

It was tempting to include pictures, case studies and diagrams, but this would have made the book too bulky for use in day-to-day practice. There is some unavoidable overlap and repetition between some of the topics, but these are kept to a minimum and allow each chapter to be read alone and independently.

I hope that the book will give you a better understanding of:

- The issues that are important for patients.
- Which questions to ask and what to examine (and why!) during focused clinical assessment, especially when under time pressure.
- How to recognise 'red flags' and important disease patterns.
- The main differential diagnoses and risk factors for each presentation.
- How to exclude major and serious diagnoses quickly.
- How to reduce the potential for misdiagnosis.
- Which areas to explore in order to make informed decisions about patient management.
- What information to consider for inclusion in referral letters to specialists.
- Which clinical details are relevant when presenting history and examination findings to other colleagues.
- Which essential issues to cover when assessing patients during undergraduate finals or postgraduate clinical examinations.

I sincerely hope that you will find the format of the book and the information provided useful. Please feel free to contact me (k.schroeder@bristol.ac.uk) if you spot any errors or have suggestions for further improvements.

Knut Schroeder
Bristol

Preface to 2nd edition

This new 2nd edition of *The 10-Minute Clinical Assessment* continues to give you all the information you need to carry out an effective and focused clinical assessment in general practice.

We have fully revised all the chapters using the latest key references, including the latest guidance from the National Institute for Health and Care Excellence (NICE).

Based on feedback and suggestions, especially from medical students and general practitioners in training, we have also added the following three new chapters on topics that are right at the heart of general practice:

- **Focused Clinical Assessment.** Discover how to become more patient-centred, learn some useful tricks of the trade and explore how you can save time in the consultation without compromising on quality.
- **Useful Consultation Tools.** Find better ways of asking questions and – more importantly – getting patients to talk. Uncovering how you can become a more effective listener and explore sensitive topics under time constraints, this chapter is packed with tips for conducting more effective consultations.
- **Red Flags in General Practice.** Learn how to spot important warning signs of serious disease and how to make sense of red flags, and find useful advice on avoiding serious medical errors.

I hope not only that this book will help you provide excellent care for your patients, but also that it supports you in becoming a more effective, better and happier doctor.

Wishing you all the best for your career,

Knut Schroeder
Bristol
June 2016

About the author

Knut Schroeder is a practising NHS GP with over 20 years' experience (10 of these as a GP Principal) and Honorary Senior Clinical Lecturer in General Practice at the University of Bristol. He is passionate about teaching consultation skills to new generations of GPs, particularly around 'focused clinical assessment' and 'red flags'.

During his time as a full-time Consultant Senior Lecturer, he co-developed and delivered undergraduate and postgraduate courses on clinical diagnosis and evidence-based medicine. He was also responsible for the general practice part of the final-year examination for medical students at the University of Bristol for 2 years. He was a GP Trainer for 8 years and continues to teach medical students.

Knut has authored four books and co-written a number of book chapters, including *Sustainable Healthcare*, *Diagnosing Your Health Symptoms for Dummies* and two chapters of the *Oxford Textbook of Primary Medical Care*. He has written papers and articles published in international peer-reviewed journals and the GP press. Knut was Deputy Co-ordinating Editor for the Cochrane Heart Group for 4 years and has experience in writing and assessing systematic reviews of clinical literature.

Acknowledgements

I would like to thank Dr Gill Jenkins (part-time GP in Bristol, medical writer and broadcaster) for contributing to chapters in the obstetric, gynaecology and endocrine sections and for commenting on earlier versions of the manuscript.

Very special thanks go to Mary Banks, Simone Heaton and everyone else at Wiley-Blackwell for their tremendously kind support, encouragement, patience and professionalism.

Many thanks also to the doctors and nurses at the Stokes Medical Centre in Little Stoke, Bristol, for their comments and suggestions. I enjoyed the discussions!

Many general practitioners, hospital specialists, medical students, nurses, emergency care practitioners, paramedics and 'expert' patients have very kindly given up their time to read and comment on individual chapters or whole sections, or have contributed in other ways. I am particularly grateful to the following people (in alphabetical order) for their constructive criticisms and helpful suggestions, some of which have led to substantive changes:

Dr Andreas Baumbach, Dr Andrew Blythe, Dr Kate Boyd, Dr Simon Bradley, Dr Peter Brindle, Dr David Cahill, Dr Shane Clarke, Dr Mike Cohen, Dr Michelle Cooper, Mike Cox, Prof Paul Dieppe, Dr Lindsey Dow, Dr Ian Ensum, Dr Stuart Glover, Dr William Hamilton, Dr Michael Harris, Dr John Harvey, Dr Gayani Herath, Dr Rachel Hilton, Dr Rhian Johns, Dr James Jones, Dr David Kessler, Dr Tina LeCoyte, Prof Andy Levy, Dr Anne Lingford-Hughes, Dr Elaine Lunts, Dr Paul Main, Dr Kate Mather, Dr David Memel, Lionel Nel, Mr Desmond Nunez, Dr Jess O'Riordan, Dr Lucy Pocock, Dr Robert Przemioslo, Dr Jon Rees, Dr Rebecca Reynolds, Dr Hayley Richards, Dr Ginny Royston, Dr Trevor Thompson, Mr Derek Tole, Dr Antje Walker, Dr Jane Watkins, Dr Alastair Wilkins, Dr Philip Williams and Dr Wolfram Woltersdorf.

Finally, I would like to thank my wife, Dr Sharmila Choudhury, for her understanding, kind support and constructive comments during this project.

Selected useful resources

The following is a selection of resources that have been useful reference points during the preparation of this book and which provide excellent sources for further information:

1. The 10-Minute Consultation series in the *British Medical Journal*. Available from: http://www.bmj.com/specialties/10-minute-consultation (last accessed 29 April 2016).
2. Clinical Knowledge Summaries. cks.nice.org.uk.
3. National Institute for Health and Care Excellence (NICE). www.nice.org.uk.
4. PatientPlus articles. www.patient.co.uk.
5. People's Experiences at healthtalk.org. Available from: http://www.healthtalk.org/peoples-experiences (last accessed 29 April 2016).
6. The Rational Clinical Examination series in *JAMA*. Available from: http://jama.jamanetwork.com/collection.aspx?categoryid=6257 (last accessed 29 April 2016).
7. Scottish Intercollegiate Guidelines Network (SIGN). www.sign.ac.uk.

The focused consultation

Focused clinical assessment

Key issues

Practical points

- **Effective practice.** Conducting a focused clinical assessment provides a good basis for safe and effective clinical practice.
- **Time constraints.** Students and doctors working in general practice can find it difficult to perform an effective clinical assessment within short (e.g. 10–15 minutes) overall consultation times, which will often also include discussing a management plan, issuing prescriptions, ordering tests and writing case notes.
- **Strategies.** Various strategies exist to help assess patients in a focused yet patient-centred way.

Structuring the consultation

Preparation

- **Key thoughts.** Think about the key issues from the start of the consultation – or even before, if you know the reason for the patient's attendance. This will help you decide which issues to focus on during the consultation.
- **Practical points.** At the beginning of the consultation, make a mental list of the main points to bear in mind, such as red flags (ruling in and ruling out disease), possible differential diagnoses and diagnoses you do not want to miss.
- **Demographic variables.** Combine your medical knowledge with the likely prevalence of conditions in your work setting.
- **Risk factors.** Consider possible risk factors, such as alcohol, smoking and unhealthy diet(s).
- **Red flags.** Think about relevant alarm symptoms and signs that you might need to explore for a particular clinical presentation.
- **Stocking the room.** Make sure your consulting room is well stocked with essentials for the consultation (e.g. sampling bottles, stationery, thermometer covers, etc.), because having to leave your room to get these can waste valuable time.

History

- **Ideas, concerns and expectations.** Explore the patient's health beliefs, worries and understanding of their symptom(s) and condition(s), and what impact these have on their day-to-day life. Try to phrase your questions naturally (you can find useful phrases in the chapter on Useful Consultation Tools).
- **History of presenting complaint.** Focus initially on exploring issues around the presenting complaint and use relevant questions to rule in and rule out important diagnoses.

The 10-Minute Clinical Assessment, Second Edition. Knut Schroeder.
© 2017 John Wiley & Sons, Ltd. Published 2017 by John Wiley & Sons, Ltd.

- **Past and current medical problems.** Identify any comorbidities that might influence your diagnosis and management.
- **Medication.** Consider all medication, but especially any drugs that might be particularly relevant, such as oral anticoagulants (e.g. bleeding), nonsteroidal anti-inflammatory drugs (NSAIDs) (e.g. gastric problems) and steroids (e.g. immunosuppression).
- **Family history.** Does the patient have a significant family history that may be relevant?
- **Social history.** How does the clinical presentation fit into the patient's social context, including work, home life and social situation?
- **Review of previous investigations.** Check the results of any previous relevant investigations, because they may influence your assessment.

Examination

- **Ask permission.** Always ask patients' permission before you perform a physical examination, and offer a chaperone for intimate examinations, if appropriate. During the clinical assessment, stay sensitive to the patient's feelings, and be alert to nonverbal cues.
- **General assessment.** Quickly look for any obvious clues. Does the patient look unwell? Are there any obvious physical signs at first glance?
- **Vital signs.** Record important vital signs (e.g. pulse, blood pressure, temperature, respiratory rate, oxygen saturation in the periphery) to help in assessing the severity of the illness. Taking vital signs is also useful as a baseline for ongoing monitoring and for medicolegal reasons.
- **Focused physical examination.** Adopt a focused and selective approach, tailored to the findings from the history. Inspect, palpate, auscultate and check the function of relevant body areas and systems, as appropriate. You are looking for evidence that confirms or refutes your working diagnosis. Be curious and be prepared to reconsider your diagnosis when the findings are at odds with the history (e.g. hearing fine crackles in a patient with chronic obstructive pulmonary disease (COPD)).

The diagnostic process

Consider 'early triggers' in the consultation

- **Spot the diagnosis.** You may be able to recognise nonverbal patterns, such as skin conditions (e.g. atopic eczema) or a 'barking' cough (whooping cough), based on your previous experience or clinical knowledge.
- **Explore patients' self-labelling.** Patients may come with a self-diagnosis (which may or may not be correct), which can direct the diagnostic process.
- **Consider the presenting complaint.** The patient's initial statement (e.g. 'I have tummy pain' or 'I have a headache') can be used to direct your assessment.
- **Establish your working hypothesis.** Elements in both the history and the examination may trigger your working hypothesis. For example, thirst, feeling

unwell and looking tired in a young person may suggest the possibility of type 1 diabetes.

Strategies for narrowing down the possibilities

- **Rule out diagnoses.** Shortlist and rule out serious diagnoses based on what you consider to be likely causes of the presenting problem. This can also help to prevent clinical errors.
- **Assess in a stepwise fashion.** Assess patients based on the anatomical location of their problem or the suspected underlying pathological process. Clarify exactly where the problem is located, for example by asking them to point to the relevant body area.
- **Consider likelihood.** Use symptoms, signs and diagnostic tests to rule in or rule out likely and unlikely diagnoses. This requires you to know the degree to which a positive or negative result from your history, examination and bedside tests adjusts the probability of a given disease.
- **Recognise patterns.** Compare symptoms and signs with patterns you have seen in previous patients and cases you have read about – a common approach in general practice. This process relies on your memory of known patterns of disease. Remember that some conditions, such as myocardial infarction, brain tumour and depression, can present in various ways. Over time, you will build up a repertoire of these patterns and their variants.
- **Use clinical prediction rules.** Validated clinical prediction rules (e.g. the Ottawa ankle rules) represent a more formal version of pattern recognition.

Consider other strategies

- **Known diagnosis.** You can often rule out serious disease without further testing if a diagnosis is sufficiently certain (e.g. viral upper respiratory tract infection, viral wart, acne vulgaris).
- **Point-of-care tests.** Use appropriate point-of-care (bedside) tests to rule in or rule out a disease (e.g. blood glucose strip test, urine dipstick, oxygen saturation in the periphery). This can be useful in the presence of red flags and when a presentation or diagnosis does not fit any obvious pattern of disease.
- **Tests of treatment.** Use the response to treatment to refute or confirm a diagnosis (e.g. inhalers in nocturnal cough).
- **Tests of time.** Use the natural course of a disease to predict when the patient should improve (the 'wait and see' approach) (e.g. in suspected viral gastroenteritis or the common cold).
- **No label applied.** When you cannot arrive at a diagnosis, consider sharing your uncertainty with the patient and establish a 'safety net' by arranging appropriate clinical review, appropriate diagnostic tests or referral, as required.

Writing useful case notes

- **Concision.** Write concise yet comprehensive case notes and consider taking a structured approach (e.g. history, examination, impression and working diagnosis, management).