



## *Challenges to Tackling Antimicrobial Resistance*

Antimicrobial resistance (AMR) is a biological mechanism whereby a microorganism evolves over time to develop the ability to become resistant to antimicrobial therapies such as antibiotics. The drivers of and potential solutions to AMR are complex, often spanning multiple sectors. The internationally recognized response to AMR advocates for a ‘One Health’ approach, which requires policies to be developed and implemented across human, animal, and environmental health. To date, misaligned economic incentives have slowed the development of novel antimicrobials and limited efforts to reduce antimicrobial usage. However, the research which underpins the variety of policy options to tackle AMR is rapidly evolving across multiple disciplines such as human medicine, veterinary medicine, agricultural sciences, epidemiology, economics, sociology and psychology. By bringing together in one place the latest evidence and analysing the different facets of the complex problem of tackling AMR, this book offers an accessible summary for policy-makers, academics and students on the big questions around AMR policy.

This title is also available as Open Access on Cambridge Core.

MICHAEL ANDERSON is a Research Officer in Health Policy at the Department of Health Policy, London School of Economics and Political Science, and a Medical Doctor undertaking General Practice specialty training.

MICHELE CECCHINI is a Senior Health Economist, Health Division, in the Directorate for Employment, Labour and Social Affairs, Organisation for Economic Co-operation and Development.

ELIAS MOSSIALOS is Brian Abel-Smith Professor of Health Policy, Head of the Department of Health Policy at the London School of Economics and Political Science, and Co-Director of the European Observatory on Health Systems.

## **European Observatory on Health Systems and Policies**

The volumes in this series focus on topical issues around the transformation of health systems in Europe, a process being driven by a changing environment, increasing pressures and evolving needs.

Drawing on available evidence, existing experience and conceptual thinking, these studies aim to provide both practical and policy-relevant information and lessons on how to implement change to make health systems more equitable, effective and efficient. They are designed to promote and support evidence-informed policy-making in the health sector and will be a valuable resource for all those involved in developing, assessing or analysing health systems and policies.

In addition to policy-makers, stakeholders and researchers in the field of health policy, key audiences outside the health sector will also find this series invaluable for understanding the complex choices and challenges that health systems face today.

### **Series Editors**

**JOSEP FIGUERAS** Director, European Observatory on Health Systems and Policies

**MARTIN MCKEE** Co-Director, European Observatory on Health Systems and Policies, and Professor of European Public Health at the London School of Hygiene & Tropical Medicine

**ELIAS MOSSIALOS** Co-Director, European Observatory on Health Systems and Policies, and Brian Abel-Smith Professor of Health Policy, London School of Economics and Political Science

**REINHARD BUSSE** Co-Director, European Observatory on Health Systems and Policies, and Head of the Department of Health Care Management, Berlin University of Technology

# Challenges to Tackling Antimicrobial Resistance

Economic and Policy Responses

Edited by

MICHAEL ANDERSON

*London School of Economics and Political Science*

MICHELE CECCHINI

*OECD*

ELIAS MOSSIALOS

*London School of Economics and Political Science*



**CAMBRIDGE**  
UNIVERSITY PRESS

European  
**Observatory**  
on Health Systems and Policies  
a partnership hosted by WHO



# CAMBRIDGE UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre,  
New Delhi – 110025, India

79 Anson Road, #06–04/06, Singapore 079906

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

[www.cambridge.org](http://www.cambridge.org)

Information on this title: [www.cambridge.org/9781108799454](http://www.cambridge.org/9781108799454)

DOI: [10.1017/9781108864121](https://doi.org/10.1017/9781108864121)

Copyright © World Health Organization (acting as the host organization for, and secretariat of, the European Observatory on Health Systems and Policies) and OECD (2019).

This work is in copyright. It is subject to statutory exceptions and to the provisions of relevant licensing agreements; with the exception of the Creative Commons version the link for which is provided below, no reproduction of any part of this work may take place without written permission.

An online version of this work is published at [doi.org/10.1017/9781108864121](https://doi.org/10.1017/9781108864121) under a Creative Commons Open Access license CC-BY- NC-ND 3.0 IGO which permits re-use, distribution and reproduction in any medium for non-commercial purposes providing appropriate credit to the original work is given. You may not distribute derivative works without permission. To view a copy of this license, visit <https://creativecommons.org/licenses/by/3.0/igo/legalcode>

All versions of this work may contain content reproduced under license from third parties. Permission to reproduce this third-party content must be obtained from these third-parties directly.

When citing this work, please include a reference to the DOI [10.1017/9781108864121](https://doi.org/10.1017/9781108864121)

First published 2019

Printed in the United Kingdom by TJ International Ltd. Padstow Cornwall

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

ISBN 978-1-108-79945-4 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.