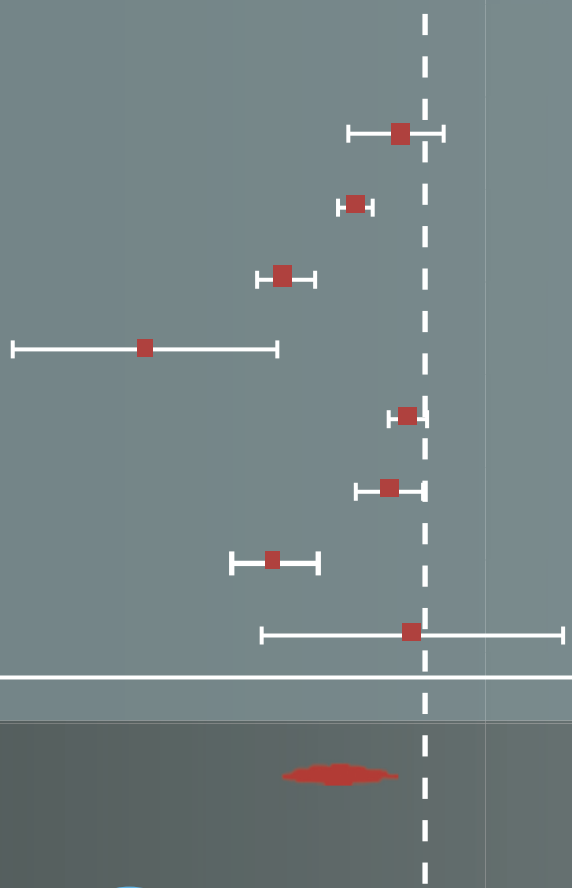


International Journal of

Technology Assessment in Health Care



ISSN: 0266-4623

CAMBRIDGE
UNIVERSITY PRESS

International Journal of Technology Assessment in Health Care

Official Journal of Health Technology Assessment International

Editor-in-Chief

Wendy Babidge, BApp Sci (Hons), Ph.D., Grad Dip Bus, GAICD

General Manager Research, Audit and Academic Surgery, Royal Australasian College of Surgeons

Adjunct Associate Professor, University of Adelaide

199 Ward St, North Adelaide South Australia 5006, Australia

Email: wendy.babidge@adam.com.au

Aims and Scope: The *International Journal of Technology Assessment in Health Care* has as its specific scope of interest the generation, evaluation, diffusion, and use of health care technology. It addresses the diverse audience of health care providers within medicine, public health, nursing, and the allied health professions; decision makers in government, industry, and health care organizations; and the scholarly disciplines such as ethics, economics, law, history, sociology, psychology, and engineering. The journal aims to fill the needs of those interested in the complexities of interaction between people and technology; technology as a force in social and organizational change; and technology as it is created, produced, applied, and paid for. It examines descriptively and analytically the effects of technology as perceived from the vantage point of different academic disciplines and policy-making organizations and examines methods necessary to conduct studies and evaluations of technology.

The focus of the journal is the international health care community. The experience of different countries in their encounter with health care technology, viewed comparatively, is invaluable to understanding its effects. Further, it is important to establish ties with the scholars, governments, and private institutions concerned with health care technology so that the experiences and learning of the international community in its parts can benefit the whole. The use of technology in health care has created some of the major dilemmas in society today. The journal serves as a forum for the wide range of professionals interested in the assessment of medical technology, its consequences for patients, and its impact on society.

Publishing, Advertising, and Subscription Offices: Cambridge University Press, One Liberty Plaza, Floor 20, New York, NY 10006, U.S.A. (for U.S.A., Canada, and Mexico); or Cambridge University Press, Journals Fulfillment Department, UPH, Shaftesbury Road, Cambridge CB2 8BS, UK (for U.K. and elsewhere).

2020 Subscription Information: *International Journal of Technology Assessment in Health Care* (ISSN 0266-4623) is

published bimonthly in February, April, June, August, October, and December by Cambridge University Press, One Liberty Plaza, Floor 20, New York, NY 10006; Cambridge University Press, Journals Fulfillment Department, UPH, Shaftesbury Road, Cambridge CB2 8BS, UK. Annual institutional subscription rates for Volume 36 (2020): Institutions online only US \$654.00, and online only UK and elsewhere £376.00. Individuals online only US \$380.00, and online only UK and elsewhere £214.00. Single part: US \$125.00 in the U.S.A., Canada and Mexico; UK £72.00 and elsewhere. Online only for all institutions. Print editions ceased in 2014. Back volume prices are available upon request. *International Journal of Technology Assessment in Health Care* and other Cambridge journals can be found at <http://journals.cambridge.org>

© Cambridge University Press 2020

All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronic or otherwise, without permission in writing from Cambridge University Press. Policies, request forms, and contacts are available at: <http://www.cambridge.org/rights/permissions.permission.htm>

Permission to copy (for users in the U.S.A.) is available from Copyright Clearance Center, <http://www.copyright.com>, email: info@copyright.com.

Postmaster: Send address changes in the U.S.A. and Canada to: *International Journal of Technology Assessment in Health Care*, Journals Department, Cambridge University Press, One Liberty Plaza, Floor 20, New York, NY 10006, U.S.A. Send address changes elsewhere to: *International Journal of Technology Assessment in Health Care*, Cambridge University Press, Journals Fulfillment Department, UPH, Shaftesbury Road, Cambridge CB2 8BS, UK.

Founding Editors: Egon Jonsson and Stanley J. Reiser

CONTENTS

Commentaries

- 285 A different animal? Identifying the features of health technology assessment for developers of medical technologies
Janet Bouttell, Andrew Briggs and Neil Hawkins
- 292 Beyond the numbers: A critique of quantitative multi-criteria decision analysis
Michael J. DiStefano and Carleigh B. Krubiner
- 297 Valuing alzheimer's disease drugs: A health technology assessment perspective on outcomes
Annette Bauer, Raphael Wittenberg, Amanda Ly, Anders Gustavsson, Christin Bexelius, Claire Tochel, Martin Knapp, Mia Nelson and Catherine Sudlow

Methods

- 304 Towards greater impact in health technology assessment: horizon scanning for new and emerging technologies in Singapore
Wan Qing Wong, Liang Lin, Hong Ju and Kwong Ng
- 311 Assessment of technical errors and validation processes in economic models submitted by the company for NICE technology appraisals
Demi Radeva, Gareth Hopkin, Elias Mossialos, John Borrill, Leeza Osipenko and Huseyin Naci
- 317 Projecting effectiveness after ending a randomized controlled trial: a two-state Markov microsimulation model
Fei Yuan, Shrikant I. Bangdiwala, Wesley Tong and Andre Lamy
- 325 Exploring the identification, validation, and categorization of costs and benefits of education in mental health: The PECUNIA project
Irina Pokhilenko, Luca M.M. Janssen, Silvia M.A.A. Evers, Ruben M.W.A. Drost, Judit Simon, Hans-helmut König, Valentin Brodszky, Luis Salvador-carulla, A-la Park, William W. Hollingworth and Aggie T.G. Paulus, on behalf of the PECUNIA Group
- 332 Benchmarking health technology assessment agencies—methodological challenges and recommendations
Ting Wang, Iga Lipska, Neil McAuslane, Lawrence Liberti, Anke Hövels and Hubert Leufkens

Assessments

- 349 Evaluation of 3D printing costs in surgery: a systematic review
Carole Serrano, Sarah Fontenay, Hélène van den Brink, Judith Pineau, Patrice Prognon and Nicolas Martelli
- 356 Measuring patient satisfaction with video consultation: a systematic review of assessment tools and their measurement properties
Esther Z. Barsom, Ewout van Hees, Willem A. Bemelman and Marlies P. Schijven
- 363 Effectiveness, efficacy, and safety of wearable cardioverter-defibrillators in the treatment of sudden cardiac arrest – Results from a health technology assessment
Pamela Aidelsburger, Janine Seyed-Ghaemi, Christian Guinin and Andreas Fach
- 372 Review of real-world evidence studies in type 2 diabetes mellitus: Lack of good practices
Véronique Lambert-obry, Jean-philippe Lafrance, Michelle Savoie, Sandrine Henri and Jean Lachaine

- 380** Quality of economic evaluations of ventricular assist devices: A systematic review
Sarah Fontenay, Lionel Catarino, Soumeya Snoussi, Hélène van den Brink, Judith Pineau, Patrice Prognon and Nicolas Martelli
- 388** Real-world evidence use in assessments of cancer drugs by NICE
Ash Bullement, Tanja Podkonjak, Mark J. Robinson, Eugene Benson, Ross Selby, Anthony J. Hatswell and Gemma E. Shields
- 395** Collaboration applications for mixed home care — A systematic review of evaluations and outcomes
Madeleine Renyi, Ulrike Lindwedel-reime, Lisa Blattert, Frank Teuteberg and Christophe Kunze
- 404** Impact of rarity on Canadian oncology health technology assessment and funding
James Keech, Wei Fang Dai, Maureen Trudeau, Rebecca E. Mercer, Rohini Naipaul, Frances C. Wright, Sarah E. Ferguson, Gail Darling, Scott Gavura, Andrea Eisen, C. Tom Kouroukis, Jaclyn Beca and Kelvin K.W. Chan
- 410** Evaluation of precision medicine assessment reports of the Belgian healthcare payer to inform reimbursement decisions
Laurenz Govaerts, Anouk Waeytens, Walter Van Dyck, Steven Simoens and Isabelle Huys
- 418** Exploring the identification, validation, and categorization of the cost and benefits of criminal justice in mental health: the PECUNIA project
Luca M. M. Janssen, Irina Pokhilenko, Silvia M. A. A. Evers, Aggie T. G. Paulus, Judit Simon, Hans-helmut König, Valentin Brodzsky, Luis Salvador-Carulla, A-La Park, W. Hollingworth and Ruben M. W. A. Drost and on behalf of the PECUNIA group

Policies

- 426** NICE's evaluations of medicines authorized by EMA with conditional marketing authorization or under exceptional circumstances
Pilar Pinilla-Dominguez, Huseyin Naci, Leeza Osipenko and Elias Mossialos
- 434** Can multi-criteria decision analysis (MCDA) be implemented into real-world drug decision-making processes? A Canadian provincial experience
Tracey-Lea Laba, Bashir Jiwani, Robert Crossland and Craig Mitton
- 440** Application of evidence-informed deliberative processes in health technology assessment in low- and middle-income countries
Wija Oortwijn, Sanne van Oosterhout and Lydia Kapiriri
- 445** Principles for deliberative processes in health technology assessment
Kenneth Bond, Rebecca Stiffell and Daniel A. Ollendorf
- 453** Addressing the challenges of implementing a Health Technology Assessment Policy Framework in South Africa
Debjani Mueller
- 459** Real-world evidence to support payer/HTA decisions about highly innovative technologies in the EU—actions for stakeholders
Karen M. Facey, Piia Rannanheimo, Laura Batchelor, Marine Borchardt and Jo de Cock