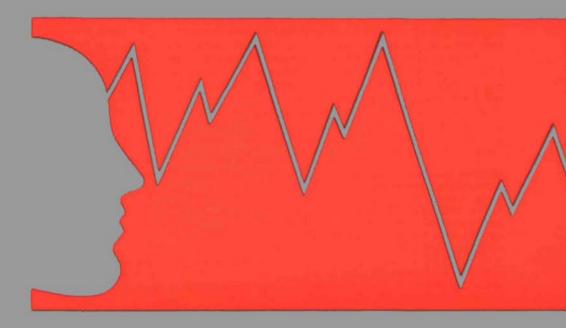
TECHNOLOGY ASSESSMENT IN HEALTH CARE



CAMBRIDGEUNIVERSITY PRESS

International Journal of Technology Assessment in Health Care

Official Journal of the International Society for Technology Assessment in Health Care

Editors

Egon Jonsson, Ph.D.
Professor
The Karolinska Institute and the
Swedish Council on Technology
Assessment in Health Care
P.O. Box 16158
103 24 Stockholm, Sweden
(tel.) 46 8 611-1913
(fax) 46 8 611-7973

Stanley J. Reiser, M.D., Ph.D.
Professor, Program on Humanities and Technology in Health Care
The University of Texas – Houston
Health Science Center
P.O. Box 20708
Houston, Texas 77225, U.S.A.
(tel.) 713 792-5140
(fax) 713 792-5141

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, 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 will be 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 will serve 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.

Membership in the International Society for Technology Assessment in Health Care: Members receive the journal at individual rates and can participate in the Society's activities, including the annual meeting. Individual dues for 1995, including the journal, are US \$95, payable to Cambridge.

Publishing, Production, and Advertising Offices: Cambridge University Press, 40 West 20th Street, New York, NY 10011, U.S.A.

Subscription Offices: Cambridge University Press, 110 Midland Avenue, Port Chester, NY 10573, U.S.A. (for U.S.A., Canada, and Mexico); or Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, England (for U.K. and elsewhere).

1995 Subscription Information: International Journal of Technology Assessment in Health Care (ISSN 0266-4623) is published quarterly. Annual institutional subscription rates for Volume 11 (1995): US \$134.00 in the U.S.A., Canada, and Mexico; UK £86.00 elsewhere. Individual rates: US \$92.00 in the U.S.A., Canada, and Mexico; UK £50.00 elsewhere. Prices include postage and insurance; air mail or registered mail is extra. Back volume prices are available upon request.

Copyright © 1995 Cambridge University Press

All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronic, photocopying, or otherwise, without permission in writing from Cambridge University Press.

Photocopying Information (for users in the U.S.A.): The Item-Fee Code for this publication (0266-4623/95 \$7.50 + .10) indicates that copying for internal or personal use beyond that permitted by Sec. 107 or 108 of the U.S. Copyright Law is authorized for users duly registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the appropriate remittance of \$7.50 per article is paid directly to: CCC, 27 Congress Street, Salem, MA 01970. Specific written permission must be obtained for all other copying; contact the nearest Cambridge University Press office.

Second-class postage paid at New York, NY, and additional mailing offices.

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, 110 Midland Avenue, Port Chester, NY 10573, U.S.A.

International Journal of Technology Assessment in Health Care

Volume 11 1995 Number 3

CONTENTS

SPECIAL SECTION: THE DATIONAL LISE OF THEDADELITIC DOLLGS

Guest Editors: John l Peter	P. Bunker F. Carpenter R. Lee	
Introduction: The Ration Peter F. Carpenter John P. Bunker	onal Use of Therapeutic Drugs Philip R. Lee	381
The Prescription as Fin Jerry Avorn	al Common Pathway	384
The Rational Use of Ma Lars Werkö	edicines	391
	ation on Prescription Drugs: The Evolution of stary Programs in the United States	399
Information on Market Six European Countries Philip Brown Helen Brazier	ed Drugs for Doctors and Patients: Experience in S Peter Charlish Michael Butterfield	410
Pharmaceutical Prescrip	ptions in Italy	417
Rational Prescribing an Approach	nd Interpractitioner Variation: A Multilevel	428
Peter Davis	Barry Gribben	
Patient Decision Makin Jenny L. Donovan	ng: The Missing Ingredient in Compliance Research	443
Treating Menorrhagia is a Survey of Prescribing Angela Coulter Viv Peto	in Primary Care: An Overview of Drug Trials and g Practice Joanne Kelland Margaret C. P. Rees	456
Outcomes Measuremen Pharmaceuticals Rondi R. Grey Charles A. Sanders	t: The Key to the Appropriate Use of Raymond J. Townsend	472
Pharmacists as Agents Helene Levens Lipt Stephen B. Soumer		485

The Rational Use of Therapeutic Drugs in Lessons from Cumulative Meta-analyses of Joseph Lau		509
GENERAL ESSAYS		
	Susan D. Keller	525
	John E. Brazier The IQOLA Project Group	
The Distribution of "Big Ticket" Medical Pablo Lázaro	Technologies in OECD Countries Kathryn Fitch	552
Eric H. Larson		571
Medical Device Education among Austral Comparison of Agency and Hospital Nur Edwina A. McConnell Jutta H. Nissen		585
	ne Prostate: Premature Evaluation Andrew Street Helen Crowe	595
Cost-effectiveness Studies of Renal Trans Ingvar Karlberg	plantation Gudrun Nyberg	611
TECHNOLOGY ASSESSMENT REPORT	тѕ	
Tech-brief from the Alberta Implementation Committee for Health Technology Assessment Multiple Chemical Sensitivities: Diagnostic Determinations		
Reports and Health Technology Briefs from Health and Welfare (AIHW) MRI of the Knee Assistive Devices for the Disabled Economic Factors in the Treatment of F	,	624
Office Pathology Testing Helical CT Scanners Dedicated MRI Extremity Scanners Stereotactic Image-guided Surgery		
Report from the Canadian Coordinating (Assessment (CCOHTA) The Introduction of Laparoscopic Chole		628

Report from the Conseil d'Évaluation des Technologies de la Santé du Québec (CETS)	629
The Impact of Renal Extracorporeal Shock-wave Lithotripsy on the Use of Resources in the Quebec Health Care System	
Report from the Health Technology Assessment Unit of the Basque Country (OSTEBA)	631
Osteoporosis Therapy in the Basque Country	
Report from the Medical Technology and Practice Patterns Institute, Inc. (MTPPI)	632
Implications of NAFTA for Trade in Health Care Technology	
Reports from the Swedish Council on Technology Assessment in Health Care (SBU)	634
Traffic Accidents Moderately Elevated Blood Pressure	
Consensus Statements from the U.S. National Institutes of Health (NIH) Effects of Corticosteroids for Fetal Maturation on Perinatal Outcomes Helicobacter pylori in Peptic Ulcer Disease	637
Report from the World Congress on Medical Physics and Biomedical Engineering Health Technology Assessment Program at the 1994 Meeting	638
BOOK REVIEW	640
CONTRIBUTORS	643
CONTRIBUTORS	04.1

International Journal of Technology Assessment in Health Care

Editors

Egon Jonsson, Ph.D. Professor

The Karolinska Institute and the Swedish Council on Technology Assessment in Health Care P.O. Box 16158
103 24 Stockholm. Sweden

Stanley J. Reiser, M.D., Ph.D.
Professor, Program on Humanities
and Technology in Health Care
The University of Texas—Houston
Health Science Center
P.O. Box 20708
Houston, Texas, 77225, U.S.A.

Associate Editor

Elizabeth Heitman, Ph.D.
Program on Humanities and
Technology in Health Care
The University of Texas—Houston
Health Science Center
Houston, Texas, U.S.A.

Editorial Board

Per Buch Andreasen, M.D., Ph.D.

Department of Gastroenterology and Clinical Pharmacology Gentofte University Hospital Hellerup, Denmark

H. David Banta, M.D., M.P.H. Professor

University of Limburg Maastricht, Netherlands

Jeremiah A. Barondess, M.D. President
New York Academy of Medicine

New York, New York, U.S.A.

Clyde Behney

Assistant Director
Office of Technology
Assessment
Congress of the United States
Washington, DC, U.S.A.

Bernard S. Bloom, Ph.D.

Research Associate Professor University of Pennsylvania Medical School Philadelphia, Pennsylvania, U.S.A.

Els Borst-Eilers, M.D., Ph.D. Chair Ministry of Health

The Hague, Netherlands

Robert Brook, M.D., Sc.D.
The Rand Corporation
UCLA Schools of Medicine
and Public Health
Santa Monica, California, U.S.A.

Roger Bulger, M.D. President

London, England

Association of Academic Health Centers Washington, DC, *U.S.A.*

John P. Bunker, M.D., MRCP CRC Clinical Trials Centre King's College School of Medicine and Dentistry Rayne Institute

John L. Cova, Ph.D., M.P.H. Private Consultant Washington, DC, *U.S.A.*

Richard Cranovsky, M.D. Institut Suisse de la Santé Publique Aarau, Switzerland

Luigi Donato, M.D.
Professor
Instituto de Fisiología Clinica
CNR
Pisa, *Italy*

Robert Evans, Ph.D.

Professor Department of Economics University of British Columbia Vancouver, British Columbia, Canada

David Feeny, Ph.D. Professor McMaster University Hamilton, Ontario, Canada

Alicia Granados, M.D.
Director
Catalan Office for Health
Technology Assessment
Department of Health
and Social Security
Generalital de Catalunya

Barcelona, Spain

Ruth S. Hanft, Ph.D., Sc.D. (Hon.)
Professor
Department of Health Services
Management and Policy
The George Washington
University
Washington, DC, U.S.A.

Akinori Hisashige, M.D., Dr.Med.Sci.

Professor University of Tokushima School of Medicine Tokushima, *Japan*

Peter F. Hjort, M.D. Professor National Institute of Public Health

Oslo, Norway

Naoki Ikegami, M.D.

Professor Keio University School of Medicine Tokyo, *Japan*

Ted R. Mannen

Executive Vice President
Health Industry Manufacturers
Association
Washington, DC, U.S.A.

Jean-Paul Moatti

Institut Paoli Calmettes INSERM Marseille, France

Frederick Mosteller, Ph.D.

Director
Technology Assessment Group
Department of Health Policy
and Management
Harvard School of Public Policy
Boston, Massachusetts, U.S.A

Duncan Neuhauser, Ph.D.

Professor
Department of Community
Health
School of Medicine
Case Western Reserve
University
Cleveland, Ohio, U.S.A.

Miriam Orleans, Ph.D.

Professor
Department of Preventive
Medicine and Biometrics
University of Colorado
Health Sciences Center
Denver, Colorado, U.S.A.

Jorge Peña-Mohr, Ph.D.
Pan American Health
Organization
Pan American Sanitary Bureau
World Health Organization

Seymour Perry, M.D.
Senior Scholar
Medical Technology and
Practice Patterns Institute
Washington, DC, U.S.A.

Washington, DC, U.S.A.

Frederick C. Robbins, M.D.
University Professor
Case Western Reserve
University
Cleveland, Ohio, U.S.A.

Tore Scherstén, M.D.
Professor
Dean, Faculty of Medicine
University of Göteborg
Department of Surgery
Göteborg, Sweden

Steven Schroeder, M.D.
President
Robert Wood Johnson Foundation
Princeton, New Jersey, U.S.A.

Mordechai Shani, M.D.

Director

The Chaim Sheba Medical Center Tel-Hashomer, *Israel*

Jane E. Sisk, Ph.D.
Columbia University
School of Public Health
New York, New York, U.S.A.

Jacobo A. Tieffenberg, M.D. President ACINDES Buenos Aires, *Argentina*

Ted Tyson
President
Tyson Consulting Group
Buffalo Grove, Illinois, U.S.A.

Johannes Vang, M.D., Ph.D. Professor University of Linköping Linköping, Sweden

Judith L. Wagner, Ph.D.
Office of Technology Assessment
Congress of the United States
Washington, DC, U.S.A.

Norman Weissman, Ph.D. ISTAHC Washington, DC, U.S.A.

Pamala Reed, MPH
Production Editor
The University of Texas—Houston
Health Science Center
Houston, Texas, U.S.A.