# Strategies for Medical Technology Assessment

September 1982

NTIS order #PB83-113274

# STRATEGIES FOR MEDICAL TECHNOLOGY ASSESSMENT

SRPTEMBER 1982



For sale by the Superintendent of Documents,

Library of Congress Catalog Card Number 82-600606

U.S. Government Printing Office, Washington, D.C. 20402

#### **Foreword**

This report, *Strategies for Medical Technology Assessment*, analyzes the present system of identifying and testing medical technologies and of synthesizing and disseminating assessment information. OTA began the study in July 1980, at the request of the House Committee on Energy and Commerce.

The report focuses on the flow of information that is central to an efficient assessment system. Methods for testing technologies and for synthesizing information are explored, and a compendium of data and bibliographic sources are included. The report also describes the innovation process for medical technologies, the effects that Federal policies have on that process, and the needs those policies generate for technology assessment information. It critiques the current system of assessment and provides policy options, both legislative and oversight, for Congress to improve the system.

During the course of this assessment, both the House Committee on Energy and Commerce and the Senate Committee on Labor and Human Resources requested that OTA study several specific areas in more depth. In response to these requests, OTA is publishing three other volumes: 1) a report on medical technology under proposals to increase competition in health care, 2) a report on the postmarketing surveillance of prescription drugs, and 3) a technical memorandum on MEDLARS (the National Library of Medicine's Medical Literature Analysis and Retrieval System) and health information policy. Another paper, funded as part of this assessment, concerns the potential role of Professional Standards Review Organizations in medical technology assessment.

In preparing this report, OTA consulted with members of the advisory panel for the assessment, with contractors and special consultants, and with numerous other experts in industry, medicine, economics, pharmacology, ethics, information science, and health policy.

Drafts of the final report were reviewed by the advisory panel chaired by Dr. Lester Breslow, by the Health Program Advisory Committee chaired by Dr. Sidney S. Lee, and by approximately 100 other individuals and groups representing a wide range of disciplines and perspectives. We are grateful for their many contributions. As with all OTA reports, however, the content is the responsibility of the Office and does not constitute consensus or endorsement by the advisory panel or the Technology Assessment Board.

JOHN H. GIBBONS

Director

### Advisory Panel for Strategies for Medical Technology Assessment

Lester Breslow, Panel Chairman School of Public Health, University of California, Los Angeles

Morris Cohen

Director of Technology Assessment Kaiser Permanence Medical Group

Richard Cooper

Williams & Connolly, Inc.

D. V. d'Arbeloff

Chairman and Chief Executive Officer Millipore Corp.

Harvey Fineberg

Harvard School of Public Health

Jerome D. Frank

The Henry Phipps Psychiatric Clinic The Johns Hopkins Hospital

William Goffman

School of Library Science Case Western Reserve University

Leon Greene

Vice President

**New Product Technology** 

Smith, Kline & French Laboratories, Inc.

David B. Homer

Orthopedic Surgeon

Stanley B. Jones

Vice President

Blue Cross/Blue Shield Association

F. Wilfrid Lancaster

**Graduate School of Library and Information** Science
University of Illinois

Louise B. Russell **Senior Fellow** 

The Brookings Institute

Herbert Semmel

President

**Consumer Coalition for Health** 

Robert M. Veatch

Kennedy Institute of Ethics Georgetown University

Richard W. Vilter

American College of Physicians

College of Medicine

University of Cincinnati

Kenneth E. Warner

School of Public Health

**University of Michigan** 

Richard N. Watkins

Staff Physician

Group Health Cooperative

Carol Weiss

**Graduate School of Education** 

**Harvard University** 

Kerr L. White

Deputy Director for Health Sciences

**Rockefeller Foundation** 

# OTA Project Staff—Strategies for Medical Technology Assessment

H. David Banta, Assistant Director, OTA Health and Life Sciences Division

Clyde J. Behney, Health Program Manager

Bryan R. Luce, F'reject Director
Dale A. Carlson, Analyst
John C. Langenbrunner, Analyst
Gloria Ruby, Analyst
Kerry Britten Kemp, Editor

Virginia Cwalina, Administrative Assistant Mary E. Harvey, Secretary Pamela Simerly, Secretary Lorraine G. Ferris, Secretary\* Nancy L. Kenney, Secretary\*

Other Contributing Staff

Ann Rose, Senior Analyst
Arthur Kohrman, Congressional Fellow
Hellen Gelband, Analyst
Mark Hochler, Intern
Lisa Scheffler, Intern
Harvey Sepler, Intern

Principal Contractors

Rand Corp.
John P. Bunker, *Stanford University*Lawrence Miike
John B. Reiss, *Baker and Hostetler*Leonard Saxe, *Boston University*Paul M. Wortman, *University of Michigan* 

# **OTA Publishing Staff**

John C. Holmes, *Publishing Officer* 

John Bergling Kathie S. Boss Debra M. Datcher Joe Henson

<sup>\*</sup>Until January 1982, • \*Until September 1981.

#### **Health Program Advisory Committee**

Sidney S. Lee, Chairman
Vice President, Michael Reese Hospital and Medical Center

Stuart H. Altman

Florence Heller School Brandeis University

Robert Ball'

Institute of Medicine National Academy of Sciences

Lewis N. Butler\*

Health Policy Program
School of Medicine
University of Colifornia

University of California, San Francisco

**Kurt Deuschle** 

Mount Sinai School of Medicine

Zita Fearon\*

Consumer Commission on the Accreditation of Health Services, Inc.

Rashi Fein

Center for Community Health and Medical Care Harvard Medical School

Melvin A. Glasser

Committee for National Health Insurance

Patricia King

Georgetown Law Center

Joyce C. Lashof

School of Public Health University of California, Berkeley

Mark Lepper

Vice President for Inter-Institutional Affairs Rush-Presbyterian-St. Luke's Medical Center

Margaret Mahoney

President

The Commonwealth Fund

Frederick Mosteller

Department of Health Policy and Management Harvard School of Public Health

Beverlee Myers\*

**Director** 

**Department of Health Services** 

State of California

Mitchell Rabkin

General Director Beth Israel Hospital

Dorothy P. Rice

Department of Social and Behavioral Sciences

School of Nursing

University of California, San Francisco

Richard K. Riegelman

School of Medicine

George Washington University

Walter L. Robb

Vice President and General Manager

Medical Systems Operations

General Electric

Frederick C. Robbins

President

**Institute of Medicine** 

National Academy of Sciences

Rosemary Stevens

Department of History and Sociology of Science

University of Pennsylvania

Kerr White

**Deputy Director for Health Sciences** 

**Rockefeller Foundation** 

<sup>&</sup>quot;Former members of the Health Program Advisory Committee whose terms expired prior to the completion of this study