The overall OTA assessment, The Implications of Cost-Effectiveness Analysis of Medical Technology, consists of a main, policy-oriented report plus five background papers. The present volume, The Management of Health Care Technology in Ten Countries, is one of the background papers. The main report and the other background efforts are briefly described below.

The main report, *The Implications of Cost- Effectiveness Analysis of Medical Technology*, examines three major issues: 1) the general usefulness of CEA/CBA in decisionmaking regarding medical technology, 2) the methodological strengths and shortcomings of the technique, and 3) the potential for initiating or expanding the use of CEA/CBA in six health care programs (reimbursement coverage, health planning, market approval for drugs and medical devices, Professional Standards Review Organizations, R&D activities, and health maintenance organizations), and most importantly, the implications of any expanded use.

The prime focus of the report is on the application of CEA/CBA to medical technology (i. e., the drugs, devices, and medical and surgical procedures used in medical care, and the organizational and support systems within which such care is provided). With the exception of a background paper *on* psychotherapy, the report does not address psychosocial medicine. Other aspects of health, such as the environment, are not directly covered either. The findings of the assessment, though, might very well apply to health care resource decisionmaking in general, and with modification, to other policy areas such as education, the environment, and occupational safety and health.

The main report contains chapters on methodology, general decisionmaking, each of the six health programs mentioned above, and the general usefulness of CEA/CBA. It contains appendixes covering a survey of current and past uses of CEA/CBA by agencies (primarily Federal), a survey of the resource costs involved in conducting CEA/CBAs, a discussion of ethical issues and CEA/CBA, and a brief discussion of legal issues.

In order to help examine the applicability of techniques to assess the costs and benefits of medical technology, 19 case studies were prepared. All **19 are available** individually. In addition, 17 of the cases are available collectively in a volume entitled *Background Paper #2:* Case *Studies* of *Medical Technologies.* Some of the cases represent formal CEAS (e.g., the case on bone marrow transplants), and some represent net cost or "least cost" analysis (e. g., the case on certain respiratory therapies). Other cases illustrate various issues such as the difficulty of conducting CEA in the absence of adequate efficacy and safety information (e. g., the case on breast cancer surgery), or the role and impact of formal analysis on policymaking (e.g., the case on end-stage renal disease interventions). The 17 case studies in *Background Paper #2* and their authors are:

Artificial Heart Deborah P. Lubeck John P. Bunker Automated Multichannel Chemistry Analyzers Milton C. Weinstein Laurie A. Pearlman **Bone Marrow Transplants** Stuart O. Schweitzer C. C. Scalzi **Breast Cancer Surgery** Karen Schachter Duncan Neuhauser Cardiac Radionuclide Imaging William B. Stason Eric Fortess Cervical Cancer Screening Bryan R. Luce Cimetidine and Peptic Ulcer Disease Harvey V. Fineberg Laurie A. Pearlman Colon Cancer Screening David M. Eddy **CT** Scanning Judith L. Wagner Elective Hysterectomy Carol Korenbrot Ann B. Flood Michael Higgins Noralou Roos John P. Bunker End-Stage Renal Disease Interventions Richard A. Rettig Gastrointestinal Endoscopy Jonathan A. Showstack Steven A. Schroeder Neonatal Intensive Care Peter Budetti Peggy McManus Nancy Barrand Lu Ann Heinen Nurse Practitioners Lauren LeRoy

Orthopedic Joint Prosthetic Implants Judith D. Bentkover Philip G. Drew Periodontal Disease Interventions Richard M. Scheffler Sheldon Rovin Respiratory Therapy Richard M. Scheffler Morgan Delaney

The 18th case study is published separately as *Background Paper #3: The Efficacy and Cost-Effec-tiveness of Psychotherapy.* That study assesses methodological and substantive issues relating to the scope of psychotherapy, the evaluation of psychotherapeutic efficacy, and the applicability of CEA/ CBA in assessing psychotherapy. It was prepared by Leonard Saxe on the basis of a report prepared for OTA by Brian Yates and Frederick Newman. The 19th case study was prepared by Judith Wagner and is published separately as *Background Paper #5: Assessment of Four Common X-Ray Procedures*.

A related report prepared by OTA and reviewed by the Advisory Panel to the overall assessment is *A Review* of *Selected Federal Vaccine and Immuniza*tion Policies. That study, published in September of **1979, examined** vaccine research, development, and production; vaccine efficacy, safety, and cost-effectiveness; liability issues; and factors affecting the use of vaccines. Pneumococcal vaccine was used as a case study, and a CEA/CBA was performed.

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