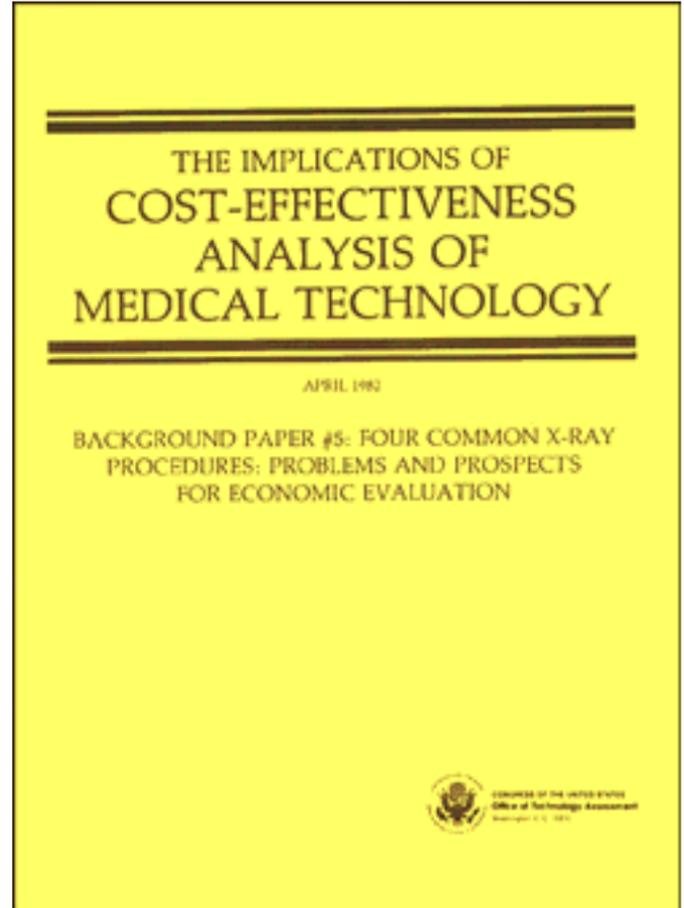


*Four Common X-Ray Procedures:  
Problems and Prospects for Economic  
Evaluation*

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# THE IMPLICATIONS OF **COST-EFFECTIVENESS** **ANALYSIS OF** **MEDICAL TECHNOLOGY**

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APRIL 1982

## BACKGROUND PAPER #5: FOUR COMMON X-RAY PROCEDURES: PROBLEMS AND PROSPECTS FOR ECONOMIC EVALUATION

by  
Judith L. Wagner, Ph. D., and Martha J. Krieger  
The Urban Institute, Washington, D. C.

OTA Background papers are documents containing information that supplements formal OTA assessments or is an outcome of internal exploratory planning and evaluation. The material is usually not of immediate policy interest and does not present options for Congress to consider.



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# Foreword

This volume is a background paper for OTA'S assessment, *The Implications of Cost-Effectiveness Analysis of Medical Technology*, Prepared at the request of the Senate Committee on Labor and Human Resources, that assessment analyzes the feasibility, implications, and usefulness of applying cost-effectiveness and cost-benefit analysis (CEA/CBA) in health care decisionmaking. The major, policy-oriented report of the assessment was published in August 1980. In addition to the main report and this paper on the economic evaluation of diagnostic X-ray procedures, there are four other background papers: 1) a document which addresses methodological issues and reviews the CEA/CBA literature, 2) a psychotherapy case study, 3) 17 other case studies of individual medical technologies, and 4) a review of international experience in managing medical technology. Another related report was published in September of 1979: *A Review of Selected Federal Vaccine and Immunization Policies*.

*Background Paper #.5: Four Common X-Ray Procedures: Problems and Prospects for Economic Evaluation* was specifically requested by the Senate Committee on Finance. It was prepared under contract for OTA by Judith L. Wagner, Ph. D., and Martha J. Krieger, of the Urban Institute.

Since OTA does not make specific recommendations of policy action or endorse particular technologies, the views presented in this study are strictly those of the authors. OTA encouraged the authors to present balanced information and also subjected the study to an extensive review process. Initial drafts were reviewed by OTA staff and members of the advisory panel for the overall assessment, and subsequent drafts were then reviewed by more than 20 outside reviewers from Government agencies, professional societies, consumer and public interest groups, medical practice, and academia. Although the many reviewers for this background paper and the other parts of the assessment cannot be acknowledged individually, OTA is very grateful for their comments and advice.



JOHN H. GIBBONS  
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