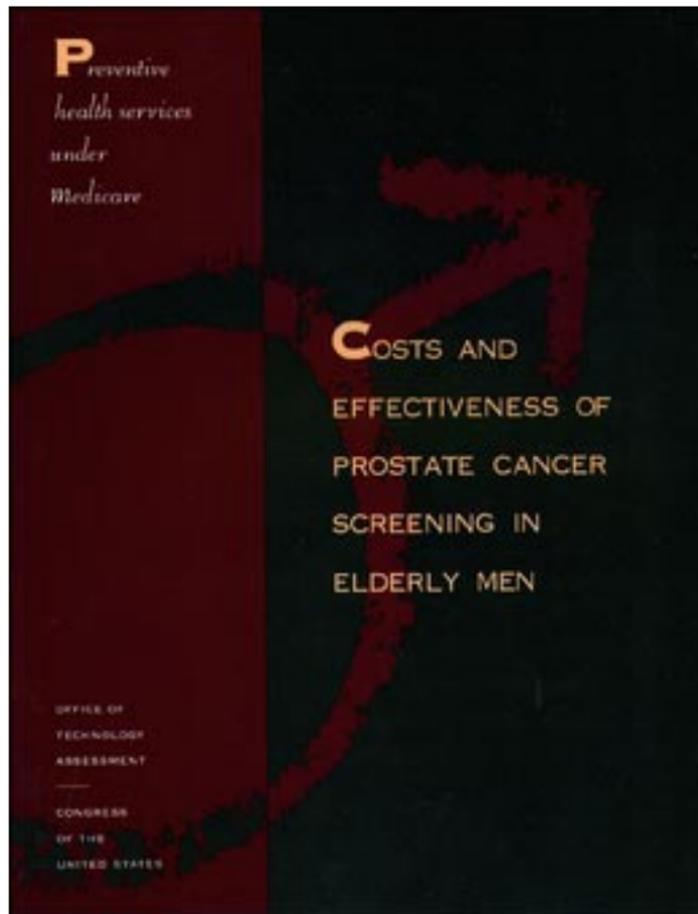


*Costs and Effectiveness of Prostate Cancer
Screening in Elderly Men*

May 1995

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Foreword

Over the last 15 years, interest in strategies to promote health and prevent disease among elderly people has grown substantially. This trend has at least partially resulted from the desire to moderate rising health care costs among this segment of the population. As it has done in the case of this background paper, the House Committee on Ways and Means has periodically asked the Office of Technology Assessment to analyze the costs and effectiveness of providing selected preventive health services to elderly men under the Medicare program. The Senate Committee on Labor and Human Resources had earlier requested that OTA provide information on the value of preventive services to the American people.

Past work by OTA on prevention for elderly people has focused on studies of the costs and effectiveness of pneumococcal and influenza vaccines, and screening for breast, cervical, and colorectal cancer and for glaucoma and elevated cholesterol. This background paper focuses on the procedures of digital rectal examination and the more recently developed, less-invasive prostate-specific antigen blood test—both used to help detect prostate cancer.

The background paper summarizes the evidence on the effectiveness and costs of prostate cancer screening and treatment in elderly men and explores the implications for Medicare of offering this preventive technology as a Medicare benefit. This analysis illustrates the hard policy choices in deciding whether to expend federal resources for screening and treatment as well as risk their attendant complications before scientific research has definitively established the effectiveness of different technologies attempting to cure disease detected in varying stages and circumstances.

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Abbreviations

· ACS	American Cancer Society
· ACS-NPCDP	American Cancer Society National Prostate Cancer Detection Project
· AMA	American Medical Association
· AUA	American Urological Association
· BPH	benign prostatic hyperplasia
· CA	cancer
· CDC	Centers for Disease Control and Prevention
· CI	confidence interval
· CPT-4	<i>Current Procedural Terminology</i> , 4th Edition
· CT	computerized tomography
· DRE	digital rectal examination
· DRG	diagnosis-related group
· FDA	Food and Drug Administration
· HCFA	Health Care Financing Administration
· HMO	health maintenance organization
· HT	hormonal therapy
· LY	life-years
· MRI	magnetic resonance imaging
· ng/mL	nanograms per milliliter
· NPV	negative predictive value
· PC	prostate cancer
· PCS	Patterns of Care Studies
· PDQ	Physicians Data Query
· PIVOT	Prostate Cancer Intervention Versus Observation Trial
· PL	pelvic lymph node dissection (metastasis)
· PLCO	Prostate, Lung, Colorectal, and Ovarian Screening Trial
· pPSA	predicted prostate-specific antigen
· PPV	positive predictive value
· PSA	prostate-specific antigen
· PSAD	prostate-specific antigen density
· RBRVS	resource-based relative value scale
· RCT	randomized controlled trial
· RPX	radical prostatectomy
· RT	radiation therapy
· RTOG	Radiation Therapy Oncology Group
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