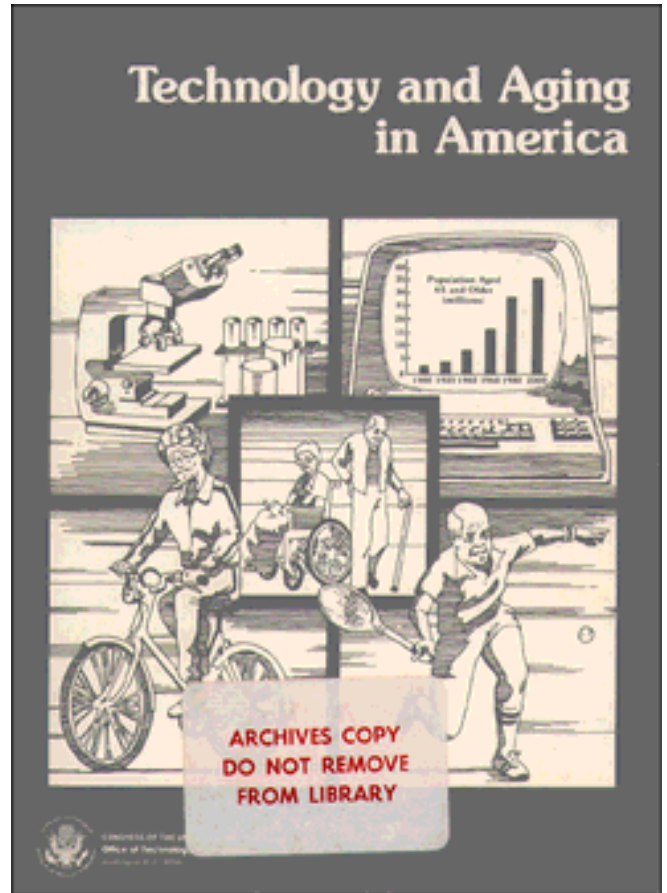


Technology and Aging in America

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Foreword

Rapid technological change in American society has been accompanied by accelerating growth of the population over 65. Older persons now outnumber teenagers in the United States; by 2025 the ratio will be more than 2 to 1 and the older population will have notably larger proportions in the oldest ages. New challenges will face the public and private sectors in both responding to the needs and utilizing the resources of older Americans.

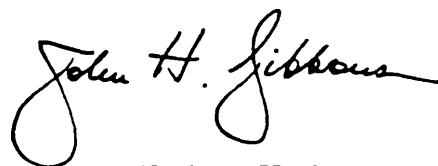
This assessment was requested by the Senate Special Committee on Aging and the House Select Committee on Aging. A letter of endorsement was received from the House Committee on Education and Labor. The study focuses on the functional status of the elderly and ways in which technology can assist them to maintain their independence and enhance their quality of life. Recent significant improvements in longevity of the elderly have led to rising prevalence of chronic diseases that impair their ability to function independently.

The report discusses five chronic conditions that severely affect older persons—steoarthritis, dementia, osteoporosis, hearing impairments, and urinary incontinence. The potential health improvements from behaviors that may delay the onset of chronic diseases, the need for increased biomedical research into the causes of these diseases, and methods to encourage behaviors that promote health are also reviewed. Special attention is given to the potential impact of telecommunications in the home and community in promoting self-health care among the elderly. The importance of medication for management of chronic impairments is also assessed, but much remains unknown about the particular effects of drugs on older persons. The report stresses the need for a coordinated approach to long-term care and improved technologies to assess health and functional status. A wider range of options for supportive services and settings would more appropriately respond to the different needs among the older population. Because Federal and State reimbursement policies influence the availability of health and long-term care services, changes in reimbursement criteria can promote such options.

The housing and living environment of the elderly are also described. Federal programs that subsidize rental housing for the elderly could pay greater attention to coordination of community-based services with these housing programs. New design standards that promote safety and improve the elderly's ability to be self-sufficient are also stressed. Modern construction technologies more easily allow existing single-family units to be renovated for the elderly. Shared housing, residential care facilities, accessory units, and other types of residences would expand the housing choices available to older Americans. The study also evaluates the impact of changes in workplace technology. Job security may be weakened in some industries, while in others it can enhance job performance, safety, and security for older workers. Telecommunications are making the "electronic cottage" a reality and older persons may be able to take advantage of emerging opportunities for home-based work arrangements. Finally, the retraining of older workers would encourage continued employment or provide new employment possibilities.

OTA was assisted in the preparation of this study by an advisory panel of individuals representing a wide range of backgrounds, including geriatrics, health policy, biology, gerontology, demography, economics, academia, private industry, labor, and advocacy organizations. More than 80 reviewers drawn from universities, governmental agencies, and the private sector provided helpful comments on draft reports.

OTA expresses sincere appreciation to each of these individuals. As with all OTA reports, the content is the responsibility of the Office and does not necessarily constitute the consensus or endorsement of the advisory panel or the Technology Assessment Board.



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NOTE: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The views expressed in this OTA report, however, are the sole responsibility of the Office of Technology Assessment.

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Related Activities and Products

“The Impact of Technology on Long-Term Care,” a workshop jointly sponsored by OTA, Project HOPE, and the National Health Policy Forum (held February 1983)

Impacts of Neuroscience, OTA Background Paper

Management of Hearing Impairment in the Elderly, OTA Background Paper

Technologies for Managing Urinary Incontinence, OTA Case Study

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