

# NATIONAL ACADEMIES REPORTS AND CURRENT PROJECTS ON AGING

List of Content for a Comprehensive Web Page on Aging and Related Issues

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## Current Projects

1. **Advancing Pain Research, Care, and Education**  
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  2. **The Continuing Epidemiological Transition in Sub-Saharan Africa**  
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  3. **Geographic Adjustment in Medicare Payment: Phase I: Improving Accuracy**  
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  10. **Understanding International Health Differences in High-Income Countries**  
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## Demography

1. **Assessing the Impact of Severe Economic Recession on the Elderly: Summary of a Workshop** (2011) [http://www.nap.edu/catalog.php?record\\_id=13118](http://www.nap.edu/catalog.php?record_id=13118)



The economic crisis that began in 2008 has had a significant impact on the well-being of certain segments of the population and its disruptive effects can be expected to last well into the future. The National Institute on Aging (NIA), which is concerned with this issue as it affects the older population in the United States, asked the National Research Council to review existing and ongoing research and to delineate the nature and dimensions of potential scientific inquiry in this area.

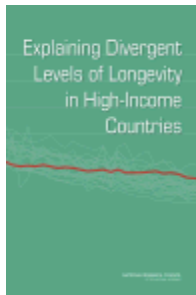
The Committee on Population thus established the Steering Committee on the Challenges of Assessing the Impact of Severe Economic Recession the Elderly to convene a meeting of experts to discuss these issues. The primary purpose of the workshop was to help NIA gain insight into the kinds of questions that it should be asking, the research that it should be supporting, and the data that it should be collecting. Attendees included invited experts in the fields of economics,

sociology, and epidemiology; staff from NIA and the Social Security Administration (SSA); and staff from the National Academies.

This report highlights the major issues that were raised in the workshop presentations and discussion.

## 2. **Explaining Divergent Levels of Longevity in High-Income Countries** (2011)

[http://www.nap.edu/catalog.php?record\\_id=13089](http://www.nap.edu/catalog.php?record_id=13089)



Over the last 25 years, life expectancy at age 50 in the U.S. has been rising, but at a slower pace than in many other high-income countries, such as Japan and Australia. This difference is particularly notable given that the U.S. spends more on health care than any other nation. Concerned about this divergence, the National Institute on Aging asked the National Research Council to examine evidence on its possible causes.

According to *Explaining Divergent Levels of Longevity in High-Income Countries*, the nation's history of heavy smoking is a major reason why lifespans in the U.S. fall short of those in many other high-income nations. Evidence suggests that current obesity levels play a substantial part as well. The book reports that lack of universal access to health care in the U.S. also has increased mortality and reduced life expectancy, though this is a less significant factor for those over age 65 because of Medicare access. For the main causes of death at older ages -- cancer and cardiovascular disease -- available indicators do not suggest that the U.S. health care system is failing to prevent deaths that would be averted elsewhere. In fact, cancer detection and survival appear to be better in the U.S. than in most other high-income nations, and survival rates following a heart attack also are favorable.

*Explaining Divergent Levels of Longevity in High-Income Countries* identifies many gaps in research. For instance, while lung cancer deaths are a reliable marker of the damage from smoking, no clear-cut marker exists for obesity, physical inactivity, social integration, or other risks considered in this book. Moreover, evaluation of these risk factors is based on observational studies, which -- unlike randomized controlled trials -- are subject to many biases.

## 3. **International Differences in Mortality at Older Ages: Dimensions and Sources**

(2010) [http://www.nap.edu/catalog.php?record\\_id=12945](http://www.nap.edu/catalog.php?record_id=12945)



*International Differences in Mortality at Older Ages: Dimensions and Sources* examines patterns in international differences in life expectancy above age 50 and assesses the evidence and arguments that have been advanced to explain the poor position of the United States relative to other countries. The papers in this deeply researched volume identify gaps in measurement, data, theory, and research design and pinpoint areas for future high-priority research in this area.

## 4. **Sex Differences and Implications for Translational Neuroscience Research - Workshop Summary** (2010) [http://www.nap.edu/catalog.php?record\\_id=13004](http://www.nap.edu/catalog.php?record_id=13004)



Biological differences between the sexes influence not only individual health but also public health, biomedical research, and health care. The IOM held a workshop March 8-9, 2010, to discuss sex differences and their implications for translational neuroscience research, which bridges the gap between scientific discovery and application.

5. **Improving the Measurement of Late-Life Disability in Population Surveys: Beyond ADLs and IADLs: Summary of a Workshop (2009)**  
[http://www.nap.edu/catalog.php?record\\_id=12740](http://www.nap.edu/catalog.php?record_id=12740)



Improving the Measurement of Late-Life Disability in Population Surveys summarizes a workshop organized to draw upon recent advances to improve the measurement of physical and cognitive disability in population surveys of the elderly population. The book questions whether or not the measures of activities of daily living and instrumental activities of daily living used in many population surveys are sufficient as the primary survey-based indicators of late-life disability. If not, should they be refined or should they be supplemented by other measures of disability in surveys? If yes, in what ways should disability measures be changed or modified to produce population estimates of late-life disability and to monitor trends? The book also discusses what further research is needed to advance this effort.

6. **The National Academies Keck Futures Initiative: The Future of Human Healthspan: Demography, Evolution, Medicine, and Bioengineering, Task Group Summaries (2008)** [http://books.nap.edu/catalog.php?record\\_id=12084](http://books.nap.edu/catalog.php?record_id=12084)



An individual's healthspan can be defined as the length of time an individual is able to maintain good health. In 2007, over one hundred experts and researchers from public and private institutions across the nation convened to find new ways of addressing the human healthspan and the elusive nature of aging. Experts in public health, bioengineering, neuroscience and gerontology discussed how stress and lifestyle influence the decline of health at older ages. Other discussions focused on the integration of technology in the quality of life, gerontology, regenerative medicine and life expectancy with regard to social and behavioral traits. Still, other groups explored topics such as the cellular and molecular mechanisms of biological aging, the effects of exercise on the human healthspan, and changes in social context to enhance functional status of the elderly. Most importantly, experts agreed that it was imperative to ensure that the elderly have access to medical services by establishing relationships with health care and insurance providers.

7. **Retooling for an Aging America: Building the Health Care Workforce (2008)**  
[http://www.nap.edu/catalog.php?record\\_id=12089](http://www.nap.edu/catalog.php?record_id=12089)



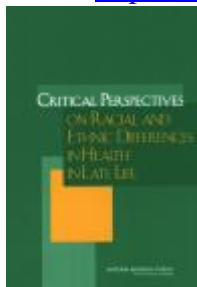
As the first of the nation's 78 million baby boomers begin reaching age 65 in 2011, they will face a health care workforce that is too small and woefully unprepared to meet their specific health needs.

Retooling for an Aging America calls for bold initiatives starting immediately to train all health care providers in the basics of geriatric care and to prepare family members and other informal caregivers, who currently receive little or no training in how to tend to their aging loved ones. The book also recommends that Medicare, Medicaid, and other health plans pay higher rates to boost recruitment and retention of geriatric specialists and care aides.

Educators and health professional groups can use Retooling for an Aging America to institute or increase formal education and training in geriatrics. Consumer groups can use the book to advocate for improving the care for older adults. Health care professional and occupational groups can use it to improve the quality of health care jobs.

#### 8. **Critical Perspectives on Racial and Ethnic Differences in Health in Late Life** (2004)

[http://www.nap.edu/catalog.php?record\\_id=11086](http://www.nap.edu/catalog.php?record_id=11086)

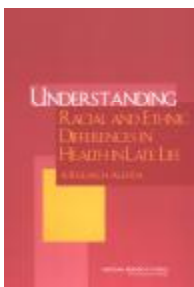


In their later years, Americans of different racial and ethnic backgrounds are not in equally good--or equally poor--health. There is wide variation, but on average older Whites are healthier than older Blacks and tend to outlive them. But Whites tend to be in poorer health than Hispanics and Asian Americans. This volume documents the differentials and considers possible explanations. Selection processes play a role: selective migration, for instance, or selective survival to advanced ages. Health differentials originate early in life, possibly even before birth, and are affected by events and experiences throughout the

life course. Differences in socioeconomic status, risk behavior, social relations, and health care all play a role. Separate chapters consider the contribution of such factors and the biopsychosocial mechanisms that link them to health. This volume provides the empirical evidence for the research agenda provided in the separate report of the Panel on Race, Ethnicity, and Health in Later Life.

#### 9. **Understanding Racial and Ethnic Differences in Health in Late Life: A Research**

**Agenda** (2004) [http://www.nap.edu/catalog.php?record\\_id=11036](http://www.nap.edu/catalog.php?record_id=11036)



As the population of older Americans grows, it is becoming more racially and ethnically diverse. Differences in health by racial and ethnic status could be increasingly consequential for health policy and programs. Such differences are not simply a matter of education or ability to pay for health care. For instance, Asian Americans and Hispanics appear to be in better health, on a number of indicators, than White Americans, despite, on average, lower socioeconomic status. The reasons are complex, including possible roles for such factors as selective migration, risk behaviors, exposure to various stressors, patient attitudes, and geographic variation in health care.

This volume, produced by a multidisciplinary panel, considers such possible explanations for racial and ethnic health differentials within an integrated framework. It provides a concise summary of available research and lays out a research agenda to address the many uncertainties in current knowledge. It recommends, for instance, looking at health differentials

across the life course and deciphering the links between factors presumably producing differentials and biopsychosocial mechanisms that lead to impaired health.

**10. Describing Death in America: What We Need to Know (2003)**

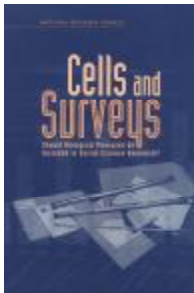
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National expenditures for medical care in the months and days preceding death are enormous. But we do not know whether that money is buying good quality care or optimizing the quality of life of those dying, or whether the situation is getting better or worse over time. The information that exists describing death at a national level though some of it is very informative is fragmentary. This report recommends ways to fill the information gaps by better use of existing nationally-representative data, and through some new measures, in particular, a new, ongoing National Mortality Followback Survey. The aim is to allow us to benchmark where we are today as a society, and what goals we can set to minimize pain and suffering and maximize the quality of life of all of us who will die in the years to come.

**11. Cells and Surveys: Should Biological Measures Be Included in Social Science Research? (2001)**

[http://www.nap.edu/catalog.php?record\\_id=9995](http://www.nap.edu/catalog.php?record_id=9995)



What can social science, and demography in particular, reasonably expect to learn from biological information? There is increasing pressure for multipurpose household surveys to collect biological data along with the more familiar interviewer-respondent information. Given that recent technical developments have made it more feasible to collect biological information in non-clinical settings, those who fund, design, and analyze survey data need to think through the rationale and potential consequences. This is a concern that transcends national boundaries. Cells and Surveys addresses issues such as which biologic/genetic data should be collected in order to be most useful to a range of social scientists and whether amassing biological data has unintended side effects. The book also takes a look at the various ethical and legal concerns that such data collection entails.

**12. Preparing for an Aging World: The Case for Cross-National Research (2001)**

[http://www.nap.edu/catalog.php?record\\_id=10120](http://www.nap.edu/catalog.php?record_id=10120)

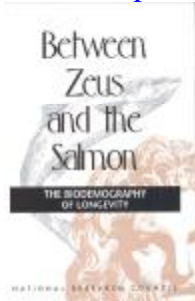


Aging is a process that encompasses virtually all aspects of life. Because the speed of population aging is accelerating, and because the data needed to study the aging process are complex and expensive to obtain, it is imperative that countries coordinate their research efforts to reap the most benefits from this important information. Preparing for an Aging World looks at the behavioral and socioeconomic aspects of aging, and focuses on work, retirement, and pensions; wealth and savings behavior; health and disability; intergenerational transfers; and concepts of well-being. It makes recommendations for a collection of new, cross-national data on aging populations data that will allow nations to develop policies and programs for addressing the major shifts in population age structure now occurring. These efforts, if made internationally, would advance our understanding of the aging process around the world.



**13. Between Zeus and Salmon: The Biodemography of Longevity (1997)**

[http://books.nap.edu/catalog.php?record\\_id=5740](http://books.nap.edu/catalog.php?record_id=5740)

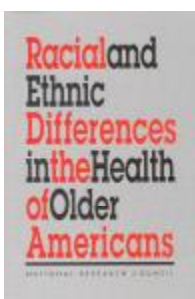


Demographers and public health specialists have been surprised by the rapid increases in life expectancy, especially at the oldest ages, that have occurred since the early 1960s. Some scientists are calling into question the idea of a fixed upper limit for the human life span. There is new evidence about the genetic bases for both humans and other species. There are also new theories and models of the role of mutations accumulating over the life span and the possible evolutionary advantages of survival after the reproductive years.

This volume deals with such diverse topics as the role of the elderly in other species and among human societies past and present, the contribution of evolutionary theory to our understanding of human longevity and intergenerational transfers, mathematical models for survival, and the potential for collecting genetic material in household surveys. It will be particularly valuable for promoting communication between the social and life sciences.

**14. Racial and Ethnic Differences in the Health of Older Americans (1997)**

[http://www.nap.edu/catalog.php?record\\_id=5237](http://www.nap.edu/catalog.php?record_id=5237)



Older Americans, even the oldest, can now expect to live years longer than those who reached the same ages even a few decades ago. Although survival has improved for all racial and ethnic groups, strong differences persist, both in life expectancy and in the causes of disability and death at older ages. This book examines trends in mortality rates and selected causes of disability (cardiovascular disease, dementia) for older people of different racial and ethnic groups.

The determinants of these trends and differences are also investigated, including differences in access to health care and experiences in early life, diet, health behaviors, genetic background, social class, wealth and income. Groups often neglected in analyses of national data, such as the elderly Hispanic and Asian Americans of different origin and immigrant generations, are compared. The volume provides understanding of research bearing on the health status and survival of the fastest-growing segment of the American population.

**15. Health Outcomes for Older People: Questions for the Coming Decade (1996)**

[http://books.nap.edu/catalog.php?record\\_id=5512](http://books.nap.edu/catalog.php?record_id=5512)



In the future, how will older Americans and their families make decisions about important health care choices? Early in 1996, the Greenwall Foundation asked the Institute of Medicine (IOM) to propose an agenda for health outcomes research focused on older people to provide the information to make those decisions. This report contains the response to that request as devised by a 17-member IOM committee. It considers what the future is likely to bring for America's older population, its health care system, and the field of health outcomes research; and it presents the committee's recommendations for research to be undertaken over the next 10 years. As used in this report, health

outcomes research is research that studies the end results of the structure and processes of health care on the health and well-being of patients and populations.

**16. Improving Data on America's Aging Population: Summary of a Workshop (1996)**

[http://www.nap.edu/catalog.php?record\\_id=5481](http://www.nap.edu/catalog.php?record_id=5481)



Despite recent strides in understanding America's aging population, the National Institute on Aging (NIA) believes it is important to continually reassess the current data collection environment and to develop general guidelines for the collection of additional data on aging. In the coming decades, the nation's decision makers will be challenged by changing demands for social and health services due to the anticipated rapid rate of growth of the elderly (65 years or older) and especially of the oldest old (85 years or older). At the same time, national policy makers are contemplating a major shift in responsibility for many social programs from the federal to state government level. Such a

shift would place even greater demands on the capacity of statistical systems to track and publish up-to-date information about the number, health status, economic well-being, employment behavior, living arrangements, and service utilization patterns of the elderly.

It is in this context that the Committee on National Statistics and the Committee on Population, at the request of the NIA, convened a workshop in March 1996 to discuss data on the aging population that address the emerging and important social, economic, and health conditions of the older population. The purposes of the workshop were to identify how the population at older ages in the next few decades will differ from the older population today, to understand the underlying causes of those changes, to anticipate future problems and policy issues, and to suggest future needs for data for research in these areas.

**17. Demography of Aging (1994)** [http://www.nap.edu/catalog.php?record\\_id=4553](http://www.nap.edu/catalog.php?record_id=4553)



As the United States and the rest of the world face the unprecedented challenge of aging populations, this volume draws together for the first time state-of-the-art work from the emerging field of the demography of aging. The nine chapters, written by experts from a variety of disciplines, highlight data sources and research approaches, results, and proposed strategies on a topic with major policy implications for labor forces, economic well-being, health care, and the need for social and family supports.

**18. Trends in Disability at Older Ages: Summary of a Workshop (1994)**

[http://www.nap.edu/catalog.php?record\\_id=9047](http://www.nap.edu/catalog.php?record_id=9047)



In April 1989 the Committee on National Statistics convened a workshop to evaluate disability statistics in the United States and the feasibility of a study to improve the collection and dissemination of disability statistics (Levine, Zitter, and Ingram, 1990). Participants recommended that the committee convene a panel of experts to consider, for different age groups, disability concepts, definitions, trends, indicators, and other related issues. Prior to launching a full-scale study, the committee planned to hold case study workshops or conferences, at the request of sponsoring agencies, to focus on

specific issues.

## 19. Human Factors Research Needs for an Aging Population (1990)

[http://books.nap.edu/catalog.php?record\\_id=1518#orgs](http://books.nap.edu/catalog.php?record_id=1518#orgs)

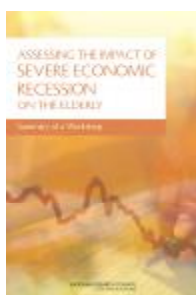


This book describes the demographic, sociological, and ecological background of the aging society, identifies human factors problems associated with aging, summarizes currently relevant information, and recommends directions for research. It suggests a program of research and technology development for the purpose of ameliorating the effects of functional changes that accompany the aging process and provides a basis for additional research and application of human factors engineering data to the design of environments in which aging people must function.

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## Financial Security and Retirement

### 20. Assessing the Impact of Severe Economic Recession on the Elderly: Summary of a Workshop (2011) [http://www.nap.edu/catalog.php?record\\_id=13118](http://www.nap.edu/catalog.php?record_id=13118)



The economic crisis that began in 2008 has had a significant impact on the well-being of certain segments of the population and its disruptive effects can be expected to last well into the future. The National Institute on Aging (NIA), which is concerned with this issue as it affects the older population in the United States, asked the National Research Council to review existing and ongoing research and to delineate the nature and dimensions of potential scientific inquiry in this area. The Committee on Population thus established the Steering Committee on the Challenges of Assessing the Impact of Severe Economic Recession the Elderly to convene a meeting of experts to discuss these issues. The primary purpose of the workshop was to help NIA gain insight into the kinds of questions that it should be asking, the research that it should be supporting, and the data that it should be collecting.

### 21. Grand Challenges of Our Aging Society: Workshop Summary (2010)

[http://books.nap.edu/catalog.php?record\\_id=12852#orgs](http://books.nap.edu/catalog.php?record_id=12852#orgs)



Aging populations are generating both challenges and opportunities for societies around the globe. Increases in longevity and improvements in health raise many questions. What steps can be taken to optimize physical and cognitive health and productivity across the life span? How will older people finance their retirement and health care? What will be the macroeconomic implications of an aging population? How will communities be shaped by the shift in age structure? What global interconnections will affect how each society handles the aging of its population?

To address these questions, the National Academies organized a symposium, summarized in the present volume, to determine how best to contribute to an evidence-based dialogue on population aging that will shape policies and programs. Presentations in the fields of biology, public health, medicine, informatics, macroeconomics, finance, urban planning, and engineering approached the challenges of aging from many different angles. The presenters reviewed the current state of



knowledge in their respective fields, identifying areas of consensus and controversy and delineating the priority questions for further research and policy development.

**22. Improving the Social Security Representative Payee Program: Serving Beneficiaries and Minimizing Misuse (2007)** [http://www.nap.edu/catalog.php?record\\_id=11992#orgs](http://www.nap.edu/catalog.php?record_id=11992#orgs)

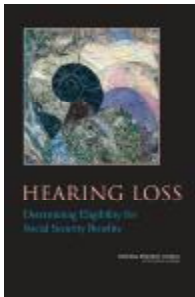


More than 7 million recipients of Social Security benefits have a representative payee—a person or an organization—to receive or manage their benefits. These payees manage Old Age, Survivors and Disability Insurance funds for retirees, surviving spouses, children, and the disabled, and they manage Supplemental Security Income payments to disabled, blind, or elderly people with limited income and resources. More than half of the beneficiaries with a representative payee are minor children; the rest are adults, often elderly, whose mental or physical incapacity prevents them from acting on their own behalf, and people who have been deemed incapable under state guardianship laws. The funds are managed through the Representative Payee Program of the Social Security Administration (SSA). The funds total almost \$4 billion a month, and there are more than 5.3 million representative payees.

In 2004 Congress required the commissioner of the SSA to conduct a one-time survey to determine how payments to individual and organizational representative payees are being managed and used on behalf of the beneficiaries. To carry out this work, the SSA requested a study by the National Academies, which appointed the Committee on Social Security Representative Payees. This report is the result of that study.

**23. Hearing Loss: Determining Eligibility for Social Security Benefits (2004)**

[http://books.nap.edu/catalog.php?record\\_id=11099](http://books.nap.edu/catalog.php?record_id=11099)

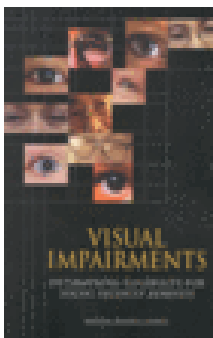


Millions of Americans experience some degree of hearing loss. The Social Security Administration (SSA) operates programs that provide cash disability benefits to people with permanent impairments like hearing loss, if they can show that their impairments meet stringent SSA criteria and their earnings are below an SSA threshold. The National Research Council convened an expert committee at the request of the SSA to study the issues related to disability determination for people with hearing loss. This volume is the product of that study.

Hearing Loss: Determining Eligibility for Social Security Benefits reviews current knowledge about hearing loss and its measurement and treatment, and provides an evaluation of the strengths and weaknesses of the current processes and criteria. It recommends changes to strengthen the disability determination process and ensure its reliability and fairness. The book addresses criteria for selection of pure tone and speech tests, guidelines for test administration, testing of hearing in noise, special issues related to testing children, and the difficulty of predicting work capacity from clinical hearing test results. It should be useful to audiologists, otolaryngologists, disability advocates, and others who are concerned with people who have hearing loss.

**24. Visual Impairments: Determining Eligibility for Social Security Benefits (2002)**

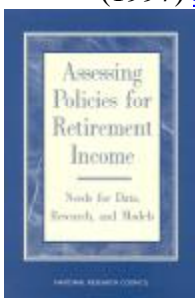
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When children and adults apply for disability benefits and claim that a visual impairment has limited their ability to function, the U.S. Social Security Administration (SSA) is required to determine their eligibility. To ensure that these determinations are made fairly and consistently, SSA has developed criteria for eligibility and a process for assessing each claimant against the criteria. *Visual Impairments: Determining Eligibility for Social Security Benefits* examines SSA's methods of determining disability for people with visual impairments, recommends changes that could be made now to improve the process and the outcomes, and identifies research needed to develop improved methods for the future. The report assesses tests of visual function, including visual acuity and visual fields whether visual impairments could be measured directly through visual task performance or other means of assessing disability. These other means include job analysis databases, which include information on the importance of vision to job tasks or skills, and measures of health-related quality of life, which take a person-centered approach to assessing visual function testing of infants and children, which differs in important ways from standard adult tests.

## 25. **Assessing Policies for Retirement Income: Needs for Data, Research, and Models**

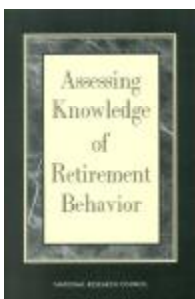
(1997) [http://www.nap.edu/catalog.php?record\\_id=5420](http://www.nap.edu/catalog.php?record_id=5420)



The retirement income security of older Americans and the cost of providing that security are increasingly the subject of major debate. This volume assesses what we know and recommends what we need to know to estimate the short- and long-term effects of policy alternatives. It details gaps in data and research and evaluates possible models to estimate the impact of policy changes that could affect retirement income from Social Security, pensions, personal savings, and other sources.

## 26. **Assessing Knowledge of Retirement Behavior** (1996)

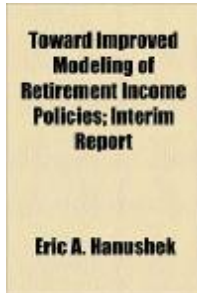
[http://www.nap.edu/catalog.php?record\\_id=5367](http://www.nap.edu/catalog.php?record_id=5367)



This book brings together in one volume what researchers have learned about workers, employers, and retirees that is important for formulating retirement income policies. As the U.S. population ages, there is increasing uncertainty about the solvency of the Social Security and Medicare systems and the adequacy of private pensions to provide for people's retirement needs. The volume covers such critical behaviors as workers' decisions to retire, people's choices of saving over consumption, and employers' decisions about hiring older workers and providing pension and health care benefits. Also covered are trends in mortality, health status, and health care costs that are key to projecting the likely costs and effects of alternative retirement income security policies and a strategy for combining data and research knowledge into a policy modeling framework.

## 27. **Toward Improved Modeling of Retirement Income Policies: Interim Report** (1995)

[http://www.nap.edu/catalog.php?record\\_id=9085](http://www.nap.edu/catalog.php?record_id=9085)



Many government policies and programs that affect the economic well-being of Americans are under scrutiny today to assess their costs and benefits. In 1994, the debate was on how to provide health care at a reasonable cost; at present, there is intense debate about the costs and benefits of federal and state government welfare programs. Another area that is likely to be equally problematic and controversial is how best to ensure the income security of current and future generations of retirees.

The Pension and Welfare Benefits Administration in the U.S.

Department of Labor asked the Committee on National Statistics at the National Research Council to establish a Panel on Retirement Income Modeling. The charge to the panel is to assess the current state of research, models, and data that can help guide policy makers on a broad range of issues related to retirement income and public and private pension policies. The National Institute on Aging and TIAA-CREF also provided support for the project.

## 28. **Ending Mandatory Retirement for Tenured Faculty: The Consequences for Higher Education** (1991) [http://books.nap.edu/catalog.php?record\\_id=1795](http://books.nap.edu/catalog.php?record_id=1795)



The proportion of older faculty is increasing nationwide. This book offers guidance not only for dealing with the elimination of mandatory retirement in higher education but also for current retirement-related issues facing all colleges and universities.

Ending Mandatory Retirement addresses such questions as: Do the special circumstances of higher education warrant the continuation of mandatory retirement? How would an increase in the number of older faculty affect individual colleges and universities and their faculty members? Where there are undesirable effects, what could be done to minimize them?

The book contains analyses of early retirement programs, faculty performance evaluation practices, pension and benefit policies, tenure policies, and faculty ages and retirement patterns.

## **Health and Well-Being**

### Health Care

## 29. **Accounting for Health and Health Care: Approaches to Measuring the Sources and Costs of Their Improvement** (2010)

[http://www.nap.edu/catalog.php?record\\_id=12938#description](http://www.nap.edu/catalog.php?record_id=12938#description)



It has become trite to observe that increases in health care costs have become unsustainable. How best for policy to address these increases, however, depends in part on the degree to which they represent increases in the real quantity of medical services as opposed to increased unit prices of existing services. And an even more fundamental question is the degree to which the increased spending actually has purchased improved health.

Accounting for Health and Health Care addresses both these issues. The government agencies responsible for measuring unit prices for medical services have taken steps in recent years that have greatly improved the accuracy of those measures.

Nonetheless, this book has several recommendations aimed at further improving the price indices.

**30. Improving Health Care Cost Projections for the Medicare Population: Summary of a Workshop (2010)** [http://www.nap.edu/catalog.php?record\\_id=12985](http://www.nap.edu/catalog.php?record_id=12985)



Developing credible short-term and long-term projections of Medicare health care costs is critical for public- and private-sector policy planning, but faces challenges and uncertainties. There is uncertainty not only in the underlying economic and demographic assumptions used in projection models, but also in what a policy modeler assumes about future changes in the health status of the population and the factors affecting health status, the extent and pace of scientific and technological breakthroughs in medical care, the preferences of the population for particular kinds of care, the likelihood that policy makers will alter current law and regulations, and how each of these factors relates to health care costs for the elderly population.

Given the substantial growth in the Medicare population and the continued increases in Medicare, Medicaid, and private health insurance spending, the availability of well-specified models and analyses that can provide useful information on the likely cost implications of health care policy alternatives is essential. It is therefore timely to review the capabilities and limitations of extant health care cost models and to identify areas for research that offer the most promise to improve modeling, not only of current U.S. health care programs, but also of policy alternatives that may be considered in the coming years.

The National Research Council conducted a public workshop focusing on areas of research needed to improve health care cost projections for the Medicare population, and on the strengths and weaknesses of competing frameworks for projecting health care expenditures for the elderly. The workshop considered major classes of projection and simulation models that are currently used and the underlying data sources and research inputs for these models. It also explored areas in which additional research and data are needed to inform model development and health care policy analysis more broadly. The workshop, summarized in this volume, drew people from a wide variety of disciplines and perspectives, including federal agencies, academia, and nongovernmental organizations.

**31. The Role of Human Factors in Home Health Care: Workshop Summary (2010)** [http://www.nap.edu/catalog.php?record\\_id=12927](http://www.nap.edu/catalog.php?record_id=12927)



The rapid growth of home health care has raised many unsolved issues and will have consequences that are far too broad for any one group to analyze in their entirety. Yet a major influence on the safety, quality, and effectiveness of home health care will be the set of issues encompassed by the field of human factors research--the discipline of applying what is known about human capabilities and limitations to the design of products, processes, systems, and work environments.

To address these challenges, the National Research Council began a multidisciplinary study to examine a diverse range of behavioral and human factors issues resulting from the increasing migration of medical devices, technologies, and care practices into

the home. Its goal is to lay the groundwork for a thorough integration of human factors research with the design and implementation of home health care devices, technologies, and practices.

On October 1 and 2, 2009, a group of human factors and other experts met to consider a diverse range of behavioral and human factors issues associated with the increasing migration of medical devices, technologies, and care practices into the home. This book is a summary of that workshop, representing the culmination of the first phase of the study.

**32. Retooling for an Aging America: Building the Health Care Workforce (2008)**

<http://www.iom.edu/Reports.aspx?Topic1={C7C4B78C-62B6-438F-97A6-114348CC1C29}>



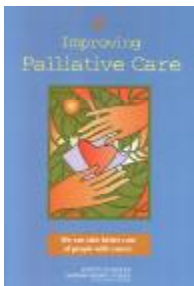
As the first of the nation's 78 million baby boomers begin reaching age 65 in 2011, they will face a health care workforce that is too small and woefully unprepared to meet their specific health needs.

Retooling for an Aging America calls for bold initiatives starting immediately to train all health care providers in the basics of geriatric care and to prepare family members and other informal caregivers, who currently receive little or no training in how to tend to their aging loved ones. The book also recommends that Medicare, Medicaid, and other health plans pay higher rates to boost recruitment and retention of geriatric specialists and care aides.

Educators and health professional groups can use Retooling for an Aging America to institute or increase formal education and training in geriatrics. Consumer groups can use the book to advocate for improving the care for older adults. Health care professional and occupational groups can use it to improve the quality of health care jobs.

**33. Improving Palliative Care: We Can Take Better Care of People With Cancer (2003)**

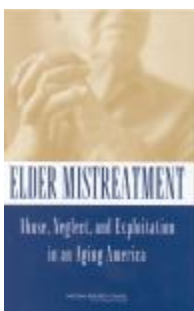
[http://www.nap.edu/catalog.php?record\\_id=10790](http://www.nap.edu/catalog.php?record_id=10790)



This booklet summarizes the findings and recommendations of Improving Palliative Care for Cancer (2001), for the lay reader. It describes the types of palliative care --"comfort care"-- that should be there for people dying from cancer, and the reasons why, too often, people suffer needlessly without it. The concrete steps that could be taken by society and individuals to improve access to palliative care are also laid out, in the recommendations.

**34. Elder Mistreatment: Abuse, Neglect, and Exploitation in an Aging America (2002)**

[http://www.nap.edu/catalog.php?record\\_id=10406](http://www.nap.edu/catalog.php?record_id=10406)



Since the late 1970s when Congressman Claude Pepper held widely publicized hearings on the mistreatment of the elderly, policy makers and practitioners have sought ways to protect older Americans from physical, psychological, and financial abuse. Yet, during the last 20 years fewer than 50 articles have addressed the shameful problem that abusers and sometimes the abused themselves want to conceal.

This report takes a giant step toward broadening our understanding of the mistreatment of the elderly and recommends specific research and funding strategies that can be used to deepen it. The book includes a discussion of the

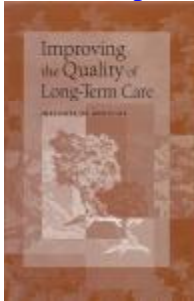


conceptual, methodological, and logistical issues needed to create a solid research base as well as the ethical concerns that must be considered when working with older subjects. It also looks at problems in determination of a report's reliability and the role of physicians, EMTs, and others who are among the first to recognize situations of mistreatment.

This report will be of interest to anyone concerned about the elderly and ways to intervene when abuse is suspected, including family members, caregivers, and advocates for the elderly. It will also be of interest to researchers, research sponsors, and policy makers who need to know how to advance our knowledge of this problem.

**35. Improving the Quality of Long-Term Care (2000)**

[http://www.nap.edu/catalog.php?record\\_id=9611](http://www.nap.edu/catalog.php?record_id=9611)

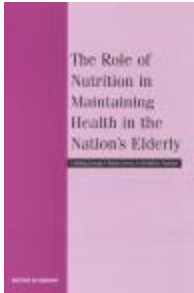


This report describes what is known about quality in various kinds of long-term care (LTC) settings. The report explores ways in which the federal government and states monitor LTC performance; the effects of recent changes in financing; staffing; and infrastructure, among others.

A number of recommendations are made that could improve quality, including investigating new quality measurements; strengthening state and federal survey and sanction activities; improving staffing; and exploring the effects of changes in reimbursement.

**36. The Role of Nutrition in Maintaining Health in the Nation's Elderly: Evaluating Coverage of Nutrition Services for the Medicare Population (2000)**

[http://www.nap.edu/catalog.php?record\\_id=9741](http://www.nap.edu/catalog.php?record_id=9741)



Malnutrition and obesity are both common among Americans over age 65. There are also a host of other medical conditions from which older people and other Medicare beneficiaries suffer that could be improved with appropriate nutritional intervention. Despite that, access to a nutrition professional is very limited.

- § Do nutrition services benefit older people in terms of morbidity, mortality, or quality of life?
- § Which health professionals are best qualified to provide such services?
- § What would be the cost to Medicare of such services? Would the cost be offset by reduced illness in this population?

This book addresses these questions, provides recommendations for nutrition services for the elderly, and considers how the coverage policy should be approached and practiced. The book discusses the role of nutrition therapy in the management of a number of diseases. It also examines what the elderly receive in the way of nutrition services along the continuum of care settings and addresses the areas of expertise needed by health professionals to provide appropriate nutrition services and therapy.

**37. Working Together: We Can Help People Get Good Care When They Are Dying (2000)**

[http://www.nap.edu/catalog.php?record\\_id=9798](http://www.nap.edu/catalog.php?record_id=9798)



This 16-page booklet summarizes the findings from the 1997 report, *Approaching Death: Improving Care at the End of Life*, for the lay reader. *Approaching Death* reflects a wide-ranging effort to understand what we know

about care at the end of life, what we have yet to learn, and what we know but do not adequately apply. It seeks to build understanding of what constitutes good care for the dying and offers recommendations to decision-makers that address specific barriers to achieving good care.

**38. Approaching Death: Improving Care at the End of Life (1997)**

[http://www.nap.edu/catalog.php?record\\_id=5801](http://www.nap.edu/catalog.php?record_id=5801)



When the end of life makes its inevitable appearance, people should be able to expect reliable, humane, and effective caregiving. Yet too many dying people suffer unnecessarily. While an "overtreated" dying is feared, untreated pain or emotional abandonment are equally frightening.

Approaching Death reflects a wide-ranging effort to understand what we know about care at the end of life, what we have yet to learn, and what we know but do not adequately apply. It seeks to build understanding of what constitutes good care for the dying and offers recommendations to decisionmakers that address specific barriers to achieving good care.

This volume offers a profile of when, where, and how Americans die. It examines the dimensions of caring at the end of life.

**39. Nursing Staff in Hospitals and Nursing Homes: Is It Adequate? (1997)**

[http://www.nap.edu/catalog.php?record\\_id=5151](http://www.nap.edu/catalog.php?record_id=5151)



Hospitals and nursing homes are responding to changes in the health care system by modifying staffing levels and the mix of nursing personnel. But do these changes endanger the quality of patient care? Do nursing staff suffer increased rates of injury, illness, or stress because of changing workplace demands? These questions are addressed in *Nursing Staff in Hospitals and Nursing Homes*, a thorough and authoritative look at today's health care system that also takes a long-term view of staffing needs for nursing as the nation moves into the next century. The committee draws fundamental conclusions about the evolving role of nurses in hospitals and nursing homes and presents recommendations about staffing decisions, nursing training, measurement of quality, reimbursement, and other areas. The volume also discusses work-related injuries, violence toward and abuse of nursing staffs, and stress among nursing personnel--and examines whether these problems are related to staffing levels. Included is a readable overview of the underlying trends in health care that have given rise to urgent questions about nurse staffing: population changes, budget pressures, and the introduction of new technologies. *Nursing Staff in Hospitals and Nursing Homes* provides a straightforward examination of complex and sensitive issues surround the role and value of nursing on our health care system.

**40. Best at Home: Assuring Quality Long-Term Care in Home and Community-Based Settings (1996)** [http://www.nap.edu/catalog.php?record\\_id=9063](http://www.nap.edu/catalog.php?record_id=9063)



Millions of Americans—both old and young—currently receive some type of long-term care (LTC) in their own homes or in residential care settings other than nursing facilities. For many—if not the majority—this embodies their emphatic choice to stay in their own homes and communities for as long as possible. Equally compelling to lawmakers and the general public eager to cut

skyrocketing health care costs is the potential for home and community-based care to be a cost-effective alternative to institutional LTC.

Yet concerns abound about the quality of service provided in all the settings that make up the LTC system. The quality of care in nursing facilities has long been questioned, resulting in numerous studies and regulatory efforts. This report, however, focuses on the quality of care provided within individuals' homes— however they define home—whether it is an apartment in a residential care facility, a room in their adult child's home, or the single family dwelling they have lived in for years. This report also briefly examines how the quality of that care is currently assured and improved, and presents a study plan for a much more thorough examination of these issues to be done by the Institute of Medicine (IOM).

#### **41. Health Outcomes for Older People: Questions for the Coming Decade (1996)**

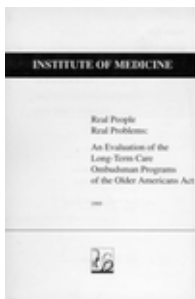
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In the future, how will older Americans and their families make decisions about important health care choices? Early in 1996, the Greenwall Foundation asked the Institute of Medicine (IOM) to propose an agenda for health outcomes research focused on older people to provide the information to make those decisions. This report contains the response to that request as devised by a 17-member IOM committee. It considers what the future is likely to bring for America's older population, its health care system, and the field of health outcomes research; and it presents the committee's recommendations for research to be undertaken over the next 10 years. As used in this report, health outcomes research is research that studies the end results of the structure and processes of health care on the health and well-being of patients and populations.

#### **42. Real People Real Problems: An Evaluation of the Long-Term Care Ombudsman Programs of the Older Americans Act (1995)**

[http://books.nap.edu/catalog.php?record\\_id=9059](http://books.nap.edu/catalog.php?record_id=9059)

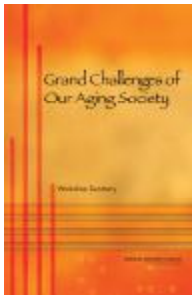


Long-term care (LTC) ombudsmen advocate to protect the health, safety, welfare, and rights of the institutionalized elderly in nursing facilities<sup>2</sup> and board and care (B&C) homes. Given the dramatic changes that are occurring in the entire LTC sector, the need for such advocates is compelling. Recently, policymakers—at the urging of ombudsmen themselves—concluded that a more in-depth examination of the program is warranted, with the aim of clarifying present strengths and weaknesses and assessing the program's potential for future contributions. To this end, the Congress of the United States directed, in the 1992 reauthorization of the Older Americans Act (OAA), that the Assistant Secretary for Aging conduct a study of the state LTC ombudsman programs. This report is a culmination of that study, performed by the IOM.

### Health Promotion

#### **43. Grand Challenges of Our Aging Society: Workshop Summary (2010)**

[http://books.nap.edu/catalog.php?record\\_id=12852#orgs](http://books.nap.edu/catalog.php?record_id=12852#orgs)

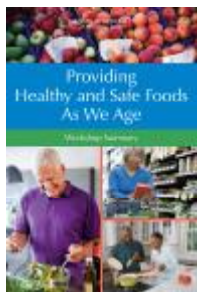


Aging populations are generating both challenges and opportunities for societies around the globe. Increases in longevity and improvements in health raise many questions. What steps can be taken to optimize physical and cognitive health and productivity across the life span? How will older people finance their retirement and health care? What will be the macroeconomic implications of an aging population? How will communities be shaped by the shift in age structure? What global interconnections will affect how each society handles the aging of its population?

To address these questions, the National Academies organized a symposium, summarized in the present volume, to determine how best to contribute to an evidence-based dialogue on population aging that will shape policies and programs. Presentations in the fields of biology, public health, medicine, informatics, macroeconomics, finance, urban planning, and engineering approached the challenges of aging from many different angles. The presenters reviewed the current state of knowledge in their respective fields, identifying areas of consensus and controversy and delineating the priority questions for further research and policy development.

#### 44. **Providing Healthy and Safe Foods As We Age: Workshop Summary** (2010)

[http://books.nap.edu/catalog.php?record\\_id=12967](http://books.nap.edu/catalog.php?record_id=12967)



Does a longer life mean a healthier life? The number of adults over 65 in the United States is growing, but many may not be aware that they are at greater risk from foodborne diseases and their nutritional needs change as they age. The IOM's Food Forum held a workshop October 29-30, 2009, to discuss food safety and nutrition concerns for older adults.

#### 45. **The National Academies Keck Futures Initiative: The Future of Human Healthspan: Demography, Evolution, Medicine, and Bioengineering, Task Group Summaries** (2008) [http://books.nap.edu/catalog.php?record\\_id=12084](http://books.nap.edu/catalog.php?record_id=12084)



An individual's healthspan can be defined as the length of time an individual is able to maintain good health. In 2007, over one hundred experts and researchers from public and private institutions across the nation convened to find new ways of addressing the human healthspan and the elusive nature of aging. Experts in public health, bioengineering, neuroscience and gerontology discussed how stress and lifestyle influence the decline of health at older ages. Other discussions focused on the integration of technology in the quality of life, gerontology, regenerative medicine and life expectancy with regard to social and behavioral traits. Still, other groups explored topics such as the cellular and molecular mechanisms of biological aging, the effects of exercise on the human healthspan, and changes in social context to enhance functional status of the elderly. Most importantly, experts agreed that it was imperative to ensure that the elderly have access to medical services by establishing relationships with health care and insurance providers.

#### 46. Standardizing Medication Labels: Confusing Patients Less, Workshop Summary

(2008) [http://www.nap.edu/catalog.php?record\\_id=12077#description](http://www.nap.edu/catalog.php?record_id=12077#description)



Medications are an important component of health care, but each year their misuse results in over a million adverse drug events that lead to office and emergency room visits as well as hospitalizations and, in some cases, death. As a patient's most tangible source of information about what drug has been prescribed and how that drug is to be taken, the label on a container of prescription medication is a crucial line of defense against such medication safety problems, yet almost half of all patients misunderstand label instructions about how to take their medicines. *Standardizing Medication Labels: Confusing Patients Less* is the summary of a workshop, held in Washington, D.C. on October 12, 2007, that was organized to examine what is known about how medication container labeling affects patient safety and to discuss approaches to addressing identified problems.

#### 47. Technology for Adaptive Aging (2004)

[http://www.nap.edu/catalog.php?record\\_id=10857](http://www.nap.edu/catalog.php?record_id=10857)



Emerging and currently available technologies offer great promise for helping older adults, even those without serious disabilities, to live healthy, comfortable, and productive lives. What technologies offer the most potential benefit? What challenges must be overcome, what problems must be solved, for this promise to be fulfilled? How can federal agencies like the National Institute on Aging best use their resources to support the translation from laboratory findings to useful, marketable products and services?

*Technology for Adaptive Aging* is the product of a workshop that brought together distinguished experts in aging research and in technology to discuss applications of technology to communication, education and learning, employment, health, living environments, and transportation for older adults. It includes all of the workshop papers and the report of the committee that organized the workshop. The committee report synthesizes and evaluates the points made in the workshop papers and recommends priorities for federal support of translational research in technology for older adults.

#### 48. Immunization Safety Review: Influenza Vaccines and Neurological Complications

(2003) [http://www.nap.edu/catalog.php?record\\_id=10822#description](http://www.nap.edu/catalog.php?record_id=10822#description)



Infection with the influenza virus can have a serious effect on the health of people of all ages, although it is particularly worrisome for infants, the elderly, and people with underlying heart or lung problems. A vaccine exists (the flu shot) that can greatly decrease the impact of influenza. Because the strains of virus that are expected to cause serious illness and death are slightly different every year, the vaccine is also slightly different every year and it must be given every year, unlike other vaccines.

The Immunization Safety Review committee reviewed the data on influenza vaccine and neurological conditions and concluded that the evidence favored rejection of a causal relationship between influenza vaccines and exacerbation of multiple sclerosis. For the other neurological conditions studied, the committee concluded the evidence about the effects of influenza vaccine is inadequate to accept or reject a causal relationship. The committee also reviewed theories on how the influenza vaccine could damage the nervous system. The evidence



was at most weak that the vaccine could act in humans in ways that could lead to these neurological problems.

**49. New Horizons in Health: An Integrative Approach (2001)**

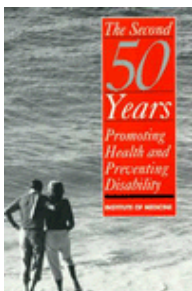
[http://www.nap.edu/catalog.php?record\\_id=10002](http://www.nap.edu/catalog.php?record_id=10002)



New Horizons in Health discusses how the National Institutes of Health (NIH) can integrate research in the social, behavioral, and biomedical sciences to better understand the causes of disease as well as interventions that promote health. It outlines a set of research priorities for consideration by the Office of Behavioral and Social Sciences Research (OBSSR), with particular attention to research that can support and complement the work of the National Institutes of Health. By addressing the range of interactions among social settings, behavioral patterns, and important health concerns, it highlights areas of scientific opportunity where significant investment is most likely to improve national and global health outcomes. These opportunities will apply the knowledge and methods of the behavioral and social sciences to contemporary health needs, and give attention to the chief health concerns of the general public.

**50. The Second Fifty Years: Promoting Health and Preventing Disability (1992)**

[http://books.nap.edu/catalog.php?record\\_id=1578](http://books.nap.edu/catalog.php?record_id=1578)



Taking its title from the second 50 years of the human life span of about 100 years, this book presents wide-ranging and practical recommendations for health care providers, policymakers, and other sectors of society. These recommendations range from setting new national policies to changing the way elderly patients are interviewed in the doctor's office, and from what exercises older persons should do to how city planners should design our urban environment.

Disability

**51. Blue Water Navy Vietnam Veterans and Agent Orange Exposure (2011)**

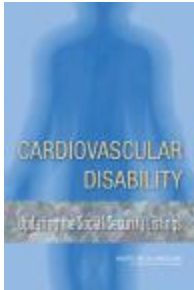
[http://www.nap.edu/catalog.php?record\\_id=13026&utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+nap%2Fnew+\(New+from+the+National+Academies+Press\)](http://www.nap.edu/catalog.php?record_id=13026&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+nap%2Fnew+(New+from+the+National+Academies+Press))



The Department of Veterans Affairs (VA) has established that Vietnam veterans are automatically eligible for disability benefits should they develop any diseases associated with Agent Orange exposure, however, veterans who served on deep sea vessels in Vietnam are not included. These "Blue Water Navy" veterans must prove they were exposed to Agent Orange before they can claim benefits. At the request of the VA, the Institute of Medicine (IOM) examined whether Blue Water Navy veterans had similar exposures to Agent Orange as other Vietnam veterans.

**52. Cardiovascular Disability: Updating the Social Security Listings (2010)**

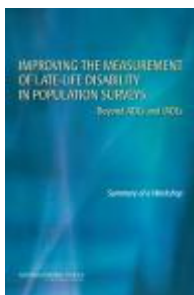
[http://www.nap.edu/catalog.php?record\\_id=12940](http://www.nap.edu/catalog.php?record_id=12940)



The Social Security Administration (SSA) uses a screening tool called the Listing of Impairments to identify claimants who are so severely impaired that they cannot work at all and thus immediately qualify for benefits. In this report, the IOM makes several recommendations for improving SSA's capacity to determine disability benefits more quickly and efficiently using the Listings.

**53. Improving the Measurement of Late-Life Disability in Population Surveys: Beyond ADLs and IADLs: Summary of a Workshop (2009)**

[http://www.nap.edu/catalog.php?record\\_id=12740](http://www.nap.edu/catalog.php?record_id=12740)



Improving the Measurement of Late-Life Disability in Population Surveys summarizes a workshop organized to draw upon recent advances to improve the measurement of physical and cognitive disability in population surveys of the elderly population. The book questions whether or not the measures of activities of daily living and instrumental activities of daily living used in many population surveys are sufficient as the primary survey-based indicators of late-life disability. If not, should they be refined or should they be supplemented by other measures of disability in surveys? If yes, in what ways should disability measures be changed or modified to produce population estimates of late-life disability and to monitor trends? The book also discusses what further research is needed to advance this effort.

**54. Veterans and Agent Orange: Update 2008 (2008)**

[http://books.nap.edu/catalog.php?record\\_id=12662](http://books.nap.edu/catalog.php?record_id=12662)



From 1962 to 1971, the U.S. military sprayed herbicides over Vietnam to strip the thick jungle canopy that could conceal opposition forces, to destroy crops that those forces might depend on, and to clear tall grasses and bushes from the perimeters of U.S. base camps and outlying fire-support bases. In response to concerns and continuing uncertainty about the long-term health effects of the sprayed herbicides on Vietnam veterans, Veterans and Agent Orange provides a comprehensive evaluation of scientific and medical information regarding the health effects of exposure to Agent Orange and other herbicides used in Vietnam. The 2008 report is the eighth volume in this series of biennial updates. It will be of interest to policy makers and physicians in the federal government, veterans and their families, veterans' organizations, researchers, and health professionals.

**55. Improving the Social Security Disability Decision Process (2007)**

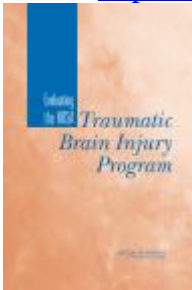
[http://books.nap.edu/catalog.php?record\\_id=11859#orgs](http://books.nap.edu/catalog.php?record_id=11859#orgs)



The Social Security Administration (SSA) asked the Institute of Medicine (IOM) to study its medical procedures and criteria for determining disability and to make recommendations for improving the timeliness and accuracy of its disability decisions. SSA asked the IOM to help in two broad areas, broken down into 10 specific tasks. The results of IOM's analysis are detailed in this report.

## 56. Evaluating the HRSA Traumatic Brain Injury Program (2006)

[http://www.nap.edu/catalog.php?record\\_id=11600](http://www.nap.edu/catalog.php?record_id=11600)



Traumatic brain injuries (TBI) are caused by sudden jolts, blows, or penetrating head trauma that disrupts the function of the brain. A TBI can happen to anyone. Young children, teenaged boys, soldiers in Iraq, and elderly persons are especially at risk. About 5.3 million Americans are estimated to have a TBI-related disability. The Centers for Disease Control and Prevention estimate that at least 1.4 million TBIs occur in the United States each year.

The long-term consequences of TBI may be altered cognition, personality, and behavior as well as sensory and motor impairments. Because the damage to the brain from a TBI is hidden from view and the consequences are often not obvious to the casual observer, epidemiologists and other researchers often portray TBI as a "hidden" or "silent" epidemic. Many health care professionals, community service workers, and the public are unaware of TBI's impact.

In 1989, a federal task force reported to the nation that there were serious gaps in post-acute clinical care and rehabilitation for persons with traumatic brain injury. Eight years later in the Traumatic Brain Injury Act of 1996, Congress directed the Health Resources and Services Administration (HRSA) to take on a share of the responsibility for advancing state-based TBI service systems.

In this report, the IOM Committee on Traumatic Brain Injury assesses the impact of the HRSA TBI Program.

## 57. Enabling America: Assessing the Role of Rehabilitation Science and Engineering

(2005) [http://www.nap.edu/catalog.php?record\\_id=5799](http://www.nap.edu/catalog.php?record_id=5799)



The most recent high-profile advocate for Americans with disabilities, actor Christopher Reeve, has highlighted for the public the economic and social costs of disability and the importance of rehabilitation. Enabling America is a major analysis of the field of rehabilitation science and engineering. The book explains how to achieve recognition for this evolving field of study, how to set priorities, and how to improve the organization and administration of the numerous federal research programs in this area.

The committee introduces the "enabling-disability process" model, which enhances the concepts of disability and rehabilitation, and reviews what is known and what research priorities are emerging in the areas of:

- § Pathology and impairment, including differences between children and adults.
- § Functional limitations--in a person's ability to eat or walk, for example.

- § Disability as the interaction between a person's pathologies, impairments, and functional limitations and the surrounding physical and social environments. This landmark volume will be of special interest to anyone involved in rehabilitation science and engineering: federal policymakers, rehabilitation practitioners and administrators, researchers, and advocates for persons with disabilities.

**58. Health and Safety Needs of Older Workers (2004)**

[http://books.nap.edu/catalog.php?record\\_id=10884](http://books.nap.edu/catalog.php?record_id=10884)



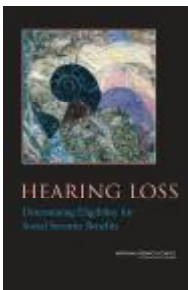
Mirroring a worldwide phenomenon in industrialized nations, the U.S. is experiencing a change in its demographic structure known as population aging. Concern about the aging population tends to focus on the adequacy of Medicare and Social Security, retirement of older Americans, and the need to identify policies, programs, and strategies that address the health and safety needs of older workers.

Older workers differ from their younger counterparts in a variety of physical, psychological, and social factors. Evaluating the extent, causes, and effects of these factors and improving the research and data systems necessary to address the health and safety needs of older workers may significantly impact both their ability to remain in the workforce and their well being in retirement.

Health and Safety Needs of Older Workers provides an image of what is currently known about the health and safety needs of older workers and the research needed to encourage social policies that guarantee older workers a meaningful share of the nation's work opportunities.

**59. Hearing Loss: Determining Eligibility for Social Security Benefits (2004)**

[http://books.nap.edu/catalog.php?record\\_id=11099](http://books.nap.edu/catalog.php?record_id=11099)

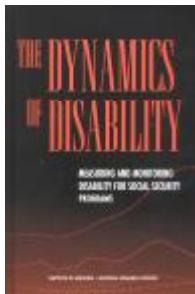


Millions of Americans experience some degree of hearing loss. The Social Security Administration (SSA) operates programs that provide cash disability benefits to people with permanent impairments like hearing loss, if they can show that their impairments meet stringent SSA criteria and their earnings are below an SSA threshold. The National Research Council convened an expert committee at the request of the SSA to study the issues related to disability determination for people with hearing loss. This volume is the product of that study.

Hearing Loss: Determining Eligibility for Social Security Benefits reviews current knowledge about hearing loss and its measurement and treatment, and provides an evaluation of the strengths and weaknesses of the current processes and criteria. It recommends changes to strengthen the disability determination process and ensure its reliability and fairness. The book addresses criteria for selection of pure tone and speech tests, guidelines for test administration, testing of hearing in noise, special issues related to testing children, and the difficulty of predicting work capacity from clinical hearing test results. It should be useful to audiologists, otolaryngologists, disability advocates, and others who are concerned with people who have hearing loss.

**60. The Dynamics of Disability: Measuring and Monitoring Disability for Social Security Programs (2002)**

[http://www.nap.edu/catalog.php?record\\_id=10411](http://www.nap.edu/catalog.php?record_id=10411)



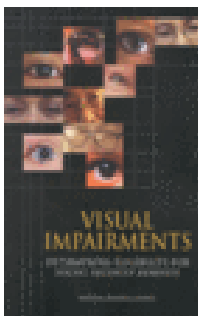
The Society Security disability program faces urgent challenges: more people receiving benefits than ever before, the prospect of even more claimants as baby boomers age, changing attitudes culminating in the Americans With Disabilities Act. Disability is now understood as a dynamic process, and Social Security must comprehend that process to plan adequately for the times ahead. The Dynamics of Disability provides expert analysis and recommendations in key areas:

- § Understanding the current social, economic, and physical environmental factors in determining eligibility for disability benefits.
- § Developing and implementing a monitoring system to measure and track trends in work disability.
- § Improving the process for making decisions on disability claims.
- § Building Social Security's capacity for conducting needed research.

This book provides a wealth of detail on the workings of the Social Security disability program, recent and emerging disability trends, issues and previous experience in researching disability, and more. It will be of primary interest to federal policy makers, the Congress, and researchers and it will be useful to state disability officials, medical and rehabilitation professionals, and the disability community.

#### 61. **Visual Impairments: Determining Eligibility for Social Security Benefits (2002)**

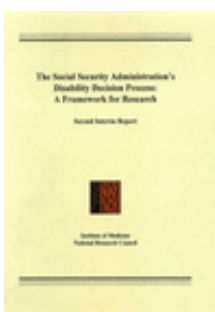
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When children and adults apply for disability benefits and claim that a visual impairment has limited their ability to function, the U.S. Social Security Administration (SSA) is required to determine their eligibility. To ensure that these determinations are made fairly and consistently, SSA has developed criteria for eligibility and a process for assessing each claimant against the criteria. Visual Impairments: Determining Eligibility for Social Security Benefits examines SSA's methods of determining disability for people with visual impairments, recommends changes that could be made now to improve the process and the outcomes, and identifies research needed to develop improved methods for the future. The report assesses tests of visual function, including visual acuity and visual fields whether visual impairments could be measured directly through visual task performance or other means of assessing disability. These other means include job analysis databases, which include information on the importance of vision to job tasks or skills, and measures of health-related quality of life, which take a person-centered approach to assessing visual function testing of infants and children, which differs in important ways from standard adult tests.

#### 62. **The Social Security Administration's Disability Decision Process: A Framework for Research, Second Interim Report (1998)**

[http://www.nap.edu/catalog.php?record\\_id=6194](http://www.nap.edu/catalog.php?record_id=6194)



In July 2005, the Social Security Administration (SSA) proposed a new approach to assessing claims for disability benefits, which includes establishment of a national network of medical and psychological experts to evaluate cases. SSA asked the Institute of Medicine of the National



Academies to offer guidance on the medical expertise required to evaluate medical records quickly and accurately.

In its new report, *Improving the Social Security Disability Decision Process: Interim Report*, an IOM committee offers recommendations on the credentials that medical and psychological personnel who review case records should have, the training they need, and the compensation necessary to attract them.

The interim report also addresses training and certification requirements for medical experts who examine applicants at SSA's request, called consultative examiners, and criteria for presumptive disability, a procedure that provides immediate payments to low-income applicants who are likely to be approved when the formal decision process is completed.

A final report, *Improving the Social Security Decision Process*, released in 2007, addressed the Listing of Impairments, a screening tool that SSA uses to determine disability solely on medical grounds.

**63. Trends in Disability at Older Ages: Summary of a Workshop (1994)**

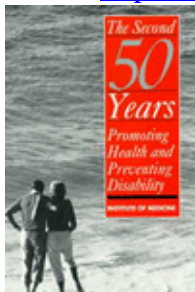
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In April 1989 the Committee on National Statistics convened a workshop to evaluate disability statistics in the United States and the feasibility of a study to improve the collection and dissemination of disability statistics (Levine, Zitter, and Ingram, 1990). Participants recommended that the committee convene a panel of experts to consider, for different age groups, disability concepts, definitions, trends, indicators, and other related issues. Prior to launching a full-scale study, the committee planned to hold case study workshops or conferences, at the request of sponsoring agencies, to focus on specific issues.

**64. The Second Fifty Years: Promoting Health and Preventing Disability (1992)**

[http://books.nap.edu/catalog.php?record\\_id=1578](http://books.nap.edu/catalog.php?record_id=1578)



Taking its title from the second 50 years of the human life span of about 100 years, this book presents wide-ranging and practical recommendations for health care providers, policymakers, and other sectors of society. These recommendations range from setting new national policies to changing the way elderly patients are interviewed in the doctor's office, and from what exercises older persons should do to how city planners should design our urban environment.

Cancer

**65. Blue Water Navy Vietnam Veterans and Agent Orange Exposure (2011)**

[http://www.nap.edu/catalog.php?record\\_id=13026&utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+nap%2Fnew+\(New+from+the+National+Academies+Press\)](http://www.nap.edu/catalog.php?record_id=13026&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+nap%2Fnew+(New+from+the+National+Academies+Press))



The Department of Veterans Affairs (VA) has established that Vietnam veterans are automatically eligible for disability benefits should they develop

any diseases associated with Agent Orange exposure, however, veterans who served on deep sea vessels in Vietnam are not included. These "Blue Water Navy" veterans must prove they were exposed to Agent Orange before they can claim benefits. At the request of the VA, the Institute of Medicine (IOM) examined whether Blue Water Navy veterans had similar exposures to Agent Orange as other Vietnam veterans.

**66. Nanotechnology and Oncology – Workshop Summary (2011)**

[http://www.nap.edu/catalog.php?record\\_id=13037](http://www.nap.edu/catalog.php?record_id=13037)



One way scientists are working to overcome challenges in cancer treatment and improve cancer care is through nanotechnology. The National Cancer Policy forum held a workshop July 12-13, 2010, to explore challenges in the use of nanotechnology in oncology.

**67. The National Cancer Policy Summit: Opportunities and Challenges in Cancer Research and Care (2011)**

[http://www.nap.edu/catalog.php?record\\_id=13101](http://www.nap.edu/catalog.php?record_id=13101)



Many ongoing changes are likely to have an impact on cancer research and care. For example, technological advances are rapidly changing the way cancer research is conducted, and the recently passed healthcare reform legislation has many implications for cancer care. Technological advances are altering the way cancer research is conducted and cancer care is delivered, and the recently passed healthcare reform legislation has many implications for cancer care. There is a growing emphasis on molecularly targeted therapies, information technology (IT), and patient-centered care, and clinical cancer research has become a global endeavor. At the same time, there are concerns about shrinking research budgets and escalating costs of cancer care.

Considering such changes, the National Cancer Policy Forum (NCPF) of the Institute of Medicine held a National Cancer Policy Summit on October 25, 2010. The Summit convened key leaders in the cancer community to identify and discuss the most pressing policy issues in cancer research and cancer care. *The National Cancer Policy Summit: Opportunities and Challenges in Cancer Research and Care* is a summary of the summit. The report explores policy issues related to cancer research, the implementation of healthcare reform, delivery of cancer care, and cancer control and public health needs. Expert participants suggested many potential actions to provide patient-centered cancer care, to foster more collaboration, and to achieve other goals to improve research and care.

**68. Extending the Spectrum of Precompetitive Collaboration in Oncology Research - Workshop Summary (2010)**

[http://www.nap.edu/catalog.php?record\\_id=12930](http://www.nap.edu/catalog.php?record_id=12930)



Despite spending more time and money in developing novel therapeutics, the success rate for new pharmacologic treatments has been poor. Although the research and development expenditures have grown 13 percent each year since

1970 (a 50-fold increase), the number of new drugs approved annually is no greater now than it was 50 years ago. Over the past decade, skyrocketing costs and the complexity of the scientific knowledge upon which to develop new agents have provided incentives for alternative approaches to drug development, if we are to continue to improve clinical care and reduce mortality. These challenges create opportunities for improved collaboration between industry, academia, government, and philanthropic organizations at each stage in new drug development, marketing, and implementation.

Perhaps the most appropriate initial step in addressing the need for collaboration is to consider more precompetitive relationships that allow sharing of scientific information to foster drug development. While these collaborative relationships in basic and preclinical research on drug targets and the early stages of clinical testing are acknowledged to be potentially important drivers for innovation and more rapid marketing of new agents, they also raise a number of concerns that must be addressed. For example, acknowledgment of academic productivity and independence and economic competitiveness must be considered and these challenges managed to foster a culture of collaboration. At the same time, regulatory issues, the need for standardization, and intellectual property concerns must be confronted if the current models for drug development are to be refined to encourage robust participation in precompetitive collaborations.

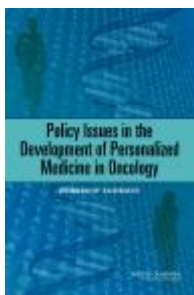
Recognizing the growing importance of precompetitive collaborations in oncology drug development, as well as the challenges these innovative collaborations pose, the National Cancer Policy Forum of the Institute of Medicine held a workshop on February 9 and 10, 2010. This book is a summary of the workshop proceedings.

**69. A Foundation for Evidence-Driven Practice: A Rapid Learning System for Cancer Care - Workshop Summary (2010)** [http://www.nap.edu/catalog.php?record\\_id=12868](http://www.nap.edu/catalog.php?record_id=12868)



The IOM's National Cancer Policy Forum held a workshop October 5-6, 2009, to examine how to apply the concept of a 'rapid learning health system' to the problem of cancer. This document summarizes the workshop.

**70. Policy Issues in the Development of Personalized Medicine in Oncology. Workshop Summary (2010)** [http://www.nap.edu/catalog.php?record\\_id=12779](http://www.nap.edu/catalog.php?record_id=12779)

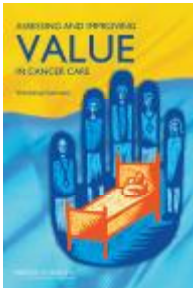


One of the challenges in treating cancer is the disease's complexity and variation among patients. Cancer manifests differently in each patient, so treatments that are effective in one patient may not be effective in another. As cancer care becomes more personalized, subpopulations of individuals will be given preventive or therapeutic interventions based on their susceptibility to a particular disease or their predicted response to a specific treatment. However, before the use of personalized cancer care can reach its full potential, the health care system must resolve a number of technological, regulatory, and reimbursement issues.

To explore these policy challenges, the National Cancer Policy Forum held the workshop Policy Issues in the Development of Personalized Medicine in Oncology in June 2009. Experts provided presentations on the current state of personalized medicine technology, as well as issues in the validation of, regulation of, and reimbursement for the predictive tests that underpin personalized medicine. Participants discussed the obstacles and possible solutions to further developing and using personalized medicine technologies. This document summarizes the workshop.

**71. Assessing and Improving Value in Cancer Care: Workshop Summary (2009)**

[http://books.nap.edu/catalog.php?record\\_id=12644](http://books.nap.edu/catalog.php?record_id=12644)



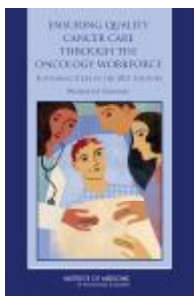
Unlike many other areas in health care, the practice of oncology presents unique challenges that make assessing and improving value especially complex. First, patients and professionals feel a well-justified sense of urgency to treat for cure, and if cure is not possible, to extend life and reduce the burden of disease. Second, treatments are often both life sparing and highly toxic. Third, distinctive payment structures for cancer medicines are intertwined with practice. Fourth, providers often face tremendous pressure to apply the newest technologies to patients who fail to respond to established treatments, even

when the evidence supporting those technologies is incomplete or uncertain, and providers may be reluctant to stop toxic treatments and move to palliation, even at the end of life. Finally, the newest and most novel treatments in oncology are among the most costly in medicine.

This volume summarizes the results of a workshop that addressed these issues from multiple perspectives, including those of patients and patient advocates, providers, insurers, health care researchers, federal agencies, and industry. Its broad goal was to describe value in oncology in a complete and nuanced way, to better inform decisions regarding developing, evaluating, prescribing, and paying for cancer therapeutics.

**72. Ensuring Quality Cancer Care Through the Oncology Workforce: Sustaining Care in the 21st Century: Workshop Summary (2009)**

[http://books.nap.edu/catalog.php?record\\_id=12613](http://books.nap.edu/catalog.php?record_id=12613)

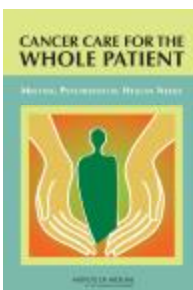


The American Society of Clinical Oncology (ASCO) predicts that by 2020, there will be an 81 percent increase in people living with or surviving cancer, but only a 14 percent increase in the number of practicing oncologists. As a result, there may be too few oncologists to meet the population's need for cancer care. To help address the challenges in overcoming this potential crisis of cancer care, the National Cancer Policy Forum of the Institute of Medicine (IOM) convened the workshop Ensuring Quality Cancer Care through the Oncology Workforce: Sustaining Care in the 21st Century in Washington, DC

on October 20 and 21, 2008.

**73. Cancer Care for the Whole Patient: Meeting Psychosocial Health Needs (2008)**

[http://books.nap.edu/catalog.php?record\\_id=11993](http://books.nap.edu/catalog.php?record_id=11993)



Cancer care today often provides state-of-the-science biomedical treatment, but fails to address the psychological and social (psychosocial) problems associated with the illness. This failure can compromise the effectiveness of



health care and thereby adversely affect the health of cancer patients. Psychological and social problems created or exacerbated by cancer—including depression and other emotional problems; lack of information or skills needed to manage the illness; lack of transportation or other resources; and disruptions in work, school, and family life—cause additional suffering, weaken adherence to prescribed treatments, and threaten patients' return to health.

Today, it is not possible to deliver high-quality cancer care without using existing approaches, tools, and resources to address patients' psychosocial health needs. All patients with cancer and their families should expect and receive cancer care that ensures the provision of appropriate psychosocial health services.

*Cancer Care for the Whole Patient* recommends actions that oncology providers, health policy makers, educators, health insurers, health planners, researchers and research sponsors, and consumer advocates should undertake to ensure that this standard is met.

#### **74. Implementing Colorectal Cancer Screening: Workshop Summary (2008)**

[http://books.nap.edu/catalog.php?record\\_id=12239](http://books.nap.edu/catalog.php?record_id=12239)

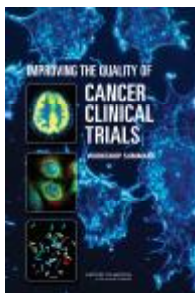


The IOM's National Cancer Policy Board estimated in 2003 that even modest efforts to implement known tactics for cancer prevention and early detection could result in up to a 29 percent drop in cancer deaths in about 20 years. The IOM's National Cancer Policy Forum, which succeeded the Board after it was disbanded in 2005, continued the Board's work to outline ways to increase screening in the U.S.

On February 25 and 26, 2008, the Forum convened a workshop to discuss screening for colorectal cancer. Colorectal cancer screening remains low, despite strong evidence that screening prevents deaths. With the aim to make recommended colorectal cancer screening more widespread, the workshop discussed steps to be taken at the clinic, community, and health system levels. Workshop speakers, representing a broad spectrum of leaders in the field, identified major barriers to increased screening and described strategies to overcome these obstacles. This workshop summary highlights the information presented, as well as the subsequent discussion about actions needed to increase colorectal screening and, ultimately, to prevent more colorectal cancer deaths.

#### **75. Improving the Quality of Cancer Clinical Trials: Workshop Summary (2008)**

[http://books.nap.edu/catalog.php?record\\_id=12146](http://books.nap.edu/catalog.php?record_id=12146)



Scientists and clinicians seek a new paradigm that could improve the efficiency, cost-effectiveness, and overall success rate of cancer clinical trials, while maintaining the highest standards of quality. To explore innovative paradigms for cancer clinical trials and other ways to improve their quality, the National Cancer Policy Forum held a workshop, Improving the Quality of Cancer Clinical Trials, in Washington, DC. The main goals of the workshop were to examine new approaches to clinical trial design and execution that would: (1) better inform decisions and plans of those responsible for developing new cancer therapies (2) more rapidly move new diagnostic tests and treatments toward regulatory approval and use in the clinic (3) be less costly than current trials. The resulting workshop summary will serve as input to the deliberations of an Institute of Medicine committee that will develop consensus-based recommendations for moving the field of cancer clinical trials forward.



**76. Veterans and Agent Orange: Update 2008 (2008)**

[http://books.nap.edu/catalog.php?record\\_id=12662](http://books.nap.edu/catalog.php?record_id=12662)



From 1962 to 1971, the U.S. military sprayed herbicides over Vietnam to strip the thick jungle canopy that could conceal opposition forces, to destroy crops that those forces might depend on, and to clear tall grasses and bushes from the perimeters of U.S. base camps and outlying fire-support bases.

In response to concerns and continuing uncertainty about the long-term health effects of the sprayed herbicides on Vietnam veterans, *Veterans and Agent Orange* provides a comprehensive evaluation of scientific and medical information regarding the health effects of exposure to Agent Orange and other herbicides used in Vietnam. The 2008 report is the eighth volume in this series of biennial updates. It will be of interest to policy makers and physicians in the federal government, veterans and their families, veterans' organizations, researchers, and health professionals.

**77. Cancer Biomarkers: The Promises and Challenges of Improving Detection and Treatment (2007)** [http://books.nap.edu/catalog.php?record\\_id=11892](http://books.nap.edu/catalog.php?record_id=11892)



Many cancer patients are diagnosed at a stage in which the cancer is too far advanced to be cured, and most cancer treatments are effective in only a minority of patients undergoing therapy. Thus, there is tremendous opportunity to improve the outcome for people with cancer by enhancing detection and treatment approaches. Biomarkers will be instrumental in making that transition. Advances in biotechnology and genomics have given scientists new hope that biomarkers can be used to improve cancer screening and detection, to improve the drug development process, and to enhance the effectiveness and safety of cancer care by allowing physicians to tailor treatment for individual patients—an approach known as personalized medicine. However, progress overall has been slow, despite considerable effort and investment, and there are still many challenges and obstacles to overcome before this paradigm shift in oncology can become a reality.

**78. Cancer Control Opportunities in Low- and Middle-Income Countries (2007)**

[http://books.nap.edu/catalog.php?record\\_id=11797](http://books.nap.edu/catalog.php?record_id=11797)



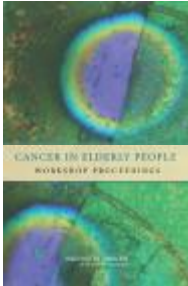
Cancer is low or absent on the health agendas of low- and middle-income countries (LMCs) despite the fact that more people die from cancer in these countries than from AIDS and malaria combined. International health organizations, bilateral aid agencies, and major foundations—which are instrumental in setting health priorities—also have largely ignored cancer in these countries.

This book identifies feasible, affordable steps for LMCs and their international partners to begin to reduce the cancer burden for current and future generations. Stemming the growth of cigarette smoking tops the list to prevent cancer and all the other major chronic diseases. Other priorities include infant vaccination against the hepatitis B virus to prevent liver cancers and vaccination to prevent cervical cancer. Developing and increasing capacity for cancer screening and treatment of highly curable cancers (including most childhood malignancies) can be accomplished using "resource-level appropriateness" as a guide. And there

are ways to make inexpensive oral morphine available to ease the pain of the many who will still die from cancer.

**79. Cancer in Elderly People: Workshop Proceedings (2007)**

<http://www.nap.edu/topics.php?topic=387&start=10>



A high proportion of cancer occurs primarily in older persons, and incidence of the major cancers is greater. This, combined with the expansion of an aging America, is bound to have far reaching effects on the nation's healthcare industry.

This summary of a workshop held in October 2006, reviews the various important implications of changing demographics and the cancer disease burden in the United States.

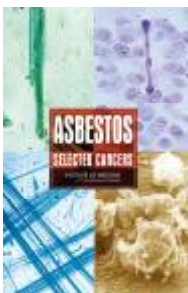
**80. Cancer-Related Genetic Testing and Counseling: Workshop Proceedings (2007)**

[http://books.nap.edu/catalog.php?record\\_id=11971](http://books.nap.edu/catalog.php?record_id=11971)



These proceedings of a workshop presented to the Institute of Medicine's (IOM) National Cancer Policy Forum (the forum) on March 30, 2007, are the result of forum discussions about genetic testing and counseling at its meetings on June 16 and October 30, 2006. Those discussions, led by forum members Betty Ferrell and Patricia Ganz, noted that genetic testing and counseling are becoming more complex and important for informing patients and families of risks and benefits of certain courses of action, and yet organized expert programs are in short supply. The subject matter involves not only the scientific and clinical aspects but also workforce and reimbursement issues, among others. Drs. Ferrell and Ganz proposed that the forum could provide a useful review of the various important implications of these issues by holding and reporting a workshop on the subject. They volunteered to work with staff to organize and lead such a workshop.

**81. Asbestos: Selected Cancers (2006)** [http://books.nap.edu/catalog.php?record\\_id=11665](http://books.nap.edu/catalog.php?record_id=11665)



In conjunction with drafting comprehensive legislation concerning compensation for health effects related to asbestos exposure (the Fairness in Asbestos Injury Act), the Senate Committee on the Judiciary directed the Institute of Medicine to assemble the Committee on Asbestos: Selected Health Effects. This committee was charged with addressing whether asbestos exposure is causally related to adverse health consequences in addition to asbestosis, mesothelioma, and lung cancer. Asbestos: Selected Cancers presents the committee's comprehensive distillation of the peer-reviewed scientific and medical literature regarding association between asbestos and colorectal, laryngeal, esophageal, pharyngeal, and stomach cancers.

**82. Developing Biomarker-Based Tools for Cancer Screening, Diagnosis, and Treatment: The State of the Science, Evaluation, Implementation, and Economics Workshop Summary (2006)** [http://books.nap.edu/catalog.php?record\\_id=11768](http://books.nap.edu/catalog.php?record_id=11768)



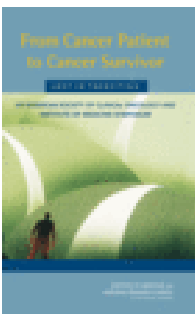
Research has long sought to identify biomarkers that could detect cancer at an early stage, or predict the optimal cancer therapy for specific patients. Fueling interest in this research are recent technological advances in genomics, proteomics, and metabolomics that can enable researchers to capture the molecular fingerprints of specific cancers and fine-tune their classification according to the molecular defects they harbor. The discovery and development of new markers of cancer could potentially improve cancer screening, diagnosis, and treatment. Given the potential impact cancer biomarkers could have on the cost effectiveness of cancer detection and treatment, they could profoundly alter the economic burden of cancer as well.

Despite the promise of cancer biomarkers, few biomarker-based cancer tests have entered the market, and the translation of research findings on cancer biomarkers into clinically useful tests seems to be lagging. This is perhaps not surprising given the technical, financial, regulatory, and social challenges linked to the discovery, development, validation, and incorporation of biomarker tests into clinical practice. To explore those challenges and ways to overcome them, the National Cancer Policy Forum held the conference “Developing Biomarker-Based Tools for Cancer Screening, Diagnosis and Treatment: The State of the Science, Evaluation, Implementation, and Economics” in Washington, D.C., from March 20 to 22, 2006.

This document is a summary of the conference proceedings, which will be used by an Institute of Medicine (IOM) committee to develop consensus-based recommendations for moving the field of cancer biomarkers forward.

### **83. From Cancer Patient to Cancer Survivor - Lost in Transition: An American Society of Clinical Oncology and Institute of Medicine Symposium (2006)**

[http://books.nap.edu/catalog.php?record\\_id=11613](http://books.nap.edu/catalog.php?record_id=11613)



In this report, the American Society of Clinical Oncology (ASCO) and the Institute of Medicine (IOM) present a one-day symposium that was held at the IOM to further disseminate the conclusions and recommendations of the joint IOM and National Research Council report, From Cancer Patient to Cancer Survivor: Lost in Transition.

### **84. The Future of Disability in America (2006)**

[http://books.nap.edu/catalog.php?record\\_id=11898](http://books.nap.edu/catalog.php?record_id=11898)



The future of disability in America will depend on how well the U.S. prepares for and manages the demographic, fiscal, and technological developments that will unfold during the next two to three decades.

Building upon two prior studies from the Institute of Medicine (the 1991 Institute of Medicine's report Disability in America and the 1997 report Enabling America), The Future of Disability in America examines both progress and concerns about continuing barriers that limit the independence, productivity, and participation in community life of people with disabilities.

This book offers a comprehensive look at a wide range of issues, including the prevalence of disability across the lifespan; disability trends the role of assistive technology; barriers posed by health care and other facilities with inaccessible buildings, equipment, and information formats; the needs of young people moving from pediatric to adult health care and of adults experiencing premature aging and secondary health problems; selected issues in health care financing (e.g., risk adjusting payments to health plans, coverage of assistive technology); and the organizing and financing of disability-related research.

The Future of Disability in America is an assessment of both principles and scientific evidence for disability policies and services. This book's recommendations propose steps to eliminate barriers and strengthen the evidence base for future public and private actions to reduce the impact of disability on individuals, families, and society.

**85. Implementing Cancer Survivorship Care Planning: Workshop Summary (2006)**

[http://www.nap.edu/catalog.php?record\\_id=11739](http://www.nap.edu/catalog.php?record_id=11739)



One of the key recommendations of the joint IOM and NRC book, *From Cancer Patient to Cancer Survivor: Lost in Transition*, is that patients completing their primary treatment for cancer be given a summary of their treatment and a comprehensive plan for follow-up. This book answers practical questions about how this "Survivorship Care Plan," including what exactly it should contain, who will be responsible for creating and discussing it, implementation strategies, and anticipated barriers and challenges.

**86. Workshop on Disability in America: A New Look - Summary and Background Papers (2006)**

[http://www.nap.edu/catalog.php?record\\_id=11579](http://www.nap.edu/catalog.php?record_id=11579)



Beginning in late 2004, the IOM began a project to take a new look at disability in America. It will review developments and progress since the publication of the 1991 and 1997 Institute reports. For technical contracting reasons, the new project was split into two phases. During the limited first phase, a committee appointed by IOM planned and convened a 1-day workshop to examine a subset of topics as background for the second phase of project. As was agreed upon with the sponsor of the workshop, the Centers for Disease Control and Prevention (CDC), the topics were:

- methodological and policy issues related to the conceptualization, definition, measurement, and monitoring of disability and health over time;
- trends in the amount, types, and causes of disability;
- disability across the age spectrum and in the context of normal aging; and
- secondary health conditions.

The phase-one workshop was held in Washington, D.C. on August 1, 2005. Its participants included researchers, clinicians, social service professionals, policy experts, and consumer representatives and advocates. This report summarizes the workshop presentations and discussions.

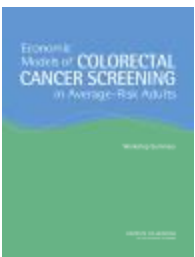
**87. Assessing the Quality of Cancer Care: An Approach to Measurement in Georgia**  
(2005) [http://books.nap.edu/catalog.php?record\\_id=11244](http://books.nap.edu/catalog.php?record_id=11244)



Shortly after 1998, leading members of Georgia's government, medical community, and public-spirited citizenry began considering ways in which some of Georgia's almost \$5 billion, 25-year settlement from the tobacco industry's Master Settlement Agreement with the 50 states could be used to benefit Georgia residents. Given tobacco's role in causing cancer, they decided to create an entity and program with the mission of making Georgia a national leader in cancer prevention, treatment, and research (GCC, 2001, 2003). This new entity—called the Georgia Cancer Coalition, Inc. (GCC)—and the state of Georgia subsequently began implementing a far-reaching state cancer initiative that includes five strategic goals: (1) preventing cancer and detecting existing cancers earlier; (2) improving access to quality care for all state residents with cancer; (3) saving more lives in the future; (4) training future cancer researchers and caregivers; and (5) turning the eradication of cancer into economic growth for Georgia (GCC, 2001).

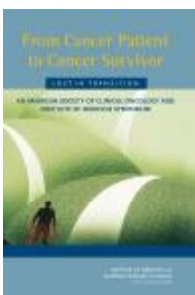
In conjunction with this effort, GCC contracted with the Institute of Medicine (IOM) to identify a set of measures that could be used to gauge Georgia's progress in improving the quality of its cancer services and in reducing cancer-related morbidity and mortality (Toal, 2003). This report is a summary of the IOM's findings.

**88. Economic Models of Colorectal Cancer Screening in Average-Risk Adults: Workshop Summary** (2005) [http://books.nap.edu/catalog.php?record\\_id=11228](http://books.nap.edu/catalog.php?record_id=11228)



The National Cancer Policy Board and the Board on Science, Engineering, and Economic Policy convened a workshop in January 2004 on Economic Models of Colorectal Cancer (CRC) Screening in Average-Risk Adults. The purpose of the workshop was to explore the reasons for differences among leading cost-effectiveness analysis (CEA) models of CRC screening, which public health policy makers increasingly rely on to help them sift through the many choices confronting them. Participants discussed the results of a collaborative pre-workshop exercise undertaken by five research teams that have developed and maintained comprehensive models of CRC screening in average-risk adults, to gain insight into each model's structure and assumptions and possible explanations for differences in their published analyses. Workshop participants also examined the current state of knowledge on key inputs to the models with a view toward identifying areas where further research may be warranted. This document summarized the presentations and discussion at the workshop.

**89. From Cancer Patient to Cancer Survivor: - Lost in Transition: An American Society of Clinical Oncology and Institute of Medicine Symposium** (2006)  
[http://books.nap.edu/catalog.php?record\\_id=11613](http://books.nap.edu/catalog.php?record_id=11613)



In this report, the American Society of Clinical Oncology (ASCO) and the Institute of Medicine (IOM) present a one-day symposium that was held at the IOM to further disseminate the conclusions and recommendations of the joint IOM and National Research Council report, *From Cancer Patient to Cancer Survivor: Lost in Transition*.



**90. Fulfilling the Potential of Cancer Prevention and Early Detection: An American Cancer Society and Institute of Medicine Symposium (2004)**

[http://books.nap.edu/catalog.php?record\\_id=10941](http://books.nap.edu/catalog.php?record_id=10941)



In this report, the American Cancer Society (ACS) and the Institute of Medicine (IOM) present a one-day symposium that was held at the Institute to further disseminate the conclusions and recommendations of the Institute's National Cancer Policy Board report, *Fulfilling the Potential of Cancer Prevention and Early Detection*. The symposium was led by the Director of the National Cancer Institute (NCI), the Chief Executive Officer of the American Cancer Society, and the President of the IOM.

**91. Meeting Psychosocial Needs of Women with Breast Cancer (2004)**

[http://books.nap.edu/catalog.php?record\\_id=10909](http://books.nap.edu/catalog.php?record_id=10909)



In *Meeting Psychosocial Needs of Women with Breast Cancer*, the National Cancer Policy Board of the Institute of Medicine examines the psychosocial consequences of the cancer experience. The book focuses specifically on breast cancer in women because this group has the largest survivor population (over 2 million) and this disease is the most extensively studied cancer from the standpoint of psychosocial effects. The book characterizes the psychosocial consequences of a diagnosis of breast cancer, describes psychosocial services and how they are delivered, and evaluates their effectiveness. It assesses the status of professional education and training and applied clinical and health services research and proposes policies to improve the quality of care and quality of life for women with breast cancer and their families. Because cancer of the breast is likely a good model for cancer at other sites, recommendations for this cancer should be applicable to the psychosocial care provided generally to individuals with cancer. For breast cancer, and indeed probably for any cancer, the report finds that psychosocial services can provide significant benefits in quality of life and success in coping with serious and life-threatening disease for patients and their families.

**92. Fulfilling the Potential for Cancer Prevention and Early Detection (2003)**

[http://books.nap.edu/catalog.php?record\\_id=10263](http://books.nap.edu/catalog.php?record_id=10263)



Cancer ranks second only to heart disease as a leading cause of death in the United States, making it a tremendous burden in years of life lost, patient suffering, and economic costs. *Fulfilling the Potential for Cancer Prevention and Early Detection* reviews the proof that we can dramatically reduce cancer rates. The National Cancer Policy Board, part of the Institute of Medicine, outlines a national strategy to realize the promise of cancer prevention and early detection, including specific and wide-ranging recommendations. Offering a wealth of information and directly addressing major controversies, the book

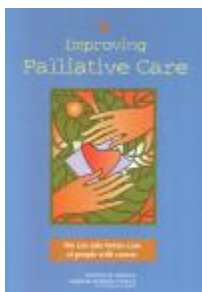
includes:

- A detailed look at how significantly cancer could be reduced through lifestyle changes, evaluating approaches used to alter eating, smoking, and exercise habits.

- An analysis of the intuitive notion that screening for cancer leads to improved health outcomes, including a discussion of screening methods, potential risks, and current recommendations.
- An examination of cancer prevention and control opportunities in primary health care delivery settings, including a review of interventions aimed at improving provider performance.
- Reviews of professional education and training programs, research trends and opportunities, and federal programs that support cancer prevention and early detection.

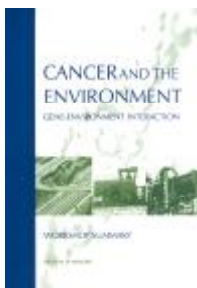
This in-depth volume will be of interest to policy analysts, cancer and public health specialists, health care administrators and providers, researchers, insurers, medical journalists, and patient advocates.

**93. Improving Palliative Care: We Can Take Better Care of People With Cancer (2003)**  
[http://www.nap.edu/catalog.php?record\\_id=10790](http://www.nap.edu/catalog.php?record_id=10790)



This booklet summarizes the findings and recommendations of Improving Palliative Care for Cancer (2001), for the lay reader. It describes the types of palliative care -- "comfort care" -- that should be there for people dying from cancer, and the reasons why, too often, people suffer needlessly without it. The concrete steps that could be taken by society and individuals to improve access to palliative care are also laid out, in the recommendations.

**94. Cancer and the Environment: Gene-Environment Interactions (2002)**  
[http://books.nap.edu/catalog.php?record\\_id=10464](http://books.nap.edu/catalog.php?record_id=10464)



Both environmental and genetic factors are known to be involved in the development of cancer. For example, environmental factors such as exposures to certain chemicals or to sunlight have long been linked to the development of some types of cancers. In planning this workshop, the Roundtable on Environmental Health Sciences, Research, and Medicine wanted to address the link between environmental factors and the development of cancer in the light of recent advances in genomics and, more specifically, in toxicogenomics and gene–environment interactions. Speakers were invited from many scientific disciplines including epidemiology, molecular biology, oncology, microbiology and immunology, nutrition science, and human genetics. The goals of the workshop were to facilitate discussion among these scientists; to assess genetic–environmental interactions across diverse populations, including the underserved, women, children, and minorities; and to review what is known about gene–environment interactions in site-specific cancers. This book summarizes the workshop proceedings and recommendations.

**95. Interpreting the Volume-Outcome Relationship in the Context of Cancer Care (2001)**  
[http://books.nap.edu/catalog.php?record\\_id=10160](http://books.nap.edu/catalog.php?record_id=10160)



On May 11, 2000, the Institute of Medicine (IOM, 2000a) held a workshop to bring together experts to:

- review evidence of the relationship between volume of services and health-related outcomes for cancer and other conditions;
- discuss methodological issues related to the interpretation of the association between volume and outcome;
- assess the applicability of volume as an indicator of quality of care; and
- identify research needed to better understand the volume—outcome relationship and its application to quality improvement.

The workshop was jointly sponsored by IOM's Committee on Quality of Health Care in America and the National Cancer Policy Board, with financial support from the Agency for Healthcare Research and Quality (AHRQ). The board discussed volume-related policy issues at their October 2000 board meeting with three participants of the IOM workshop, Colin Begg, R. Adams Dudley, and Edward Hannan. This White Paper briefly summarizes the findings from the workshop and presents board recommendations for implementing volume-based policies relevant to cancer care.

#### 96. Developing Technologies for Early Detection of Breast Cancer: Summary of Public Workshop #2 (2000) [http://books.nap.edu/catalog.php?record\\_id=10011](http://books.nap.edu/catalog.php?record_id=10011)



In November 1999, the Institute of Medicine, in consultation with the Commission on Life Sciences, the Commission on Physical Sciences, Mathematics, and Applications, and the Board of Science, Technology and Economic Policy initiated a one-year technology assessment study on emerging technologies for the early detection of breast cancer. The committee's mandate was twofold: (1) to review emerging technologies that could potentially aid in earlier detection of breast cancer and (2) to recommend priorities for bolstering the technology development, evaluation, and adoption process, with the goal that such

development could reduce breast cancer burden and deaths. As part of its charge, the committee held two workshops. At the first public workshop, held in February 2000, outside experts were invited to describe a variety of promising emerging early detection technologies. A second workshop, held June 19-20, 2000, examined several factors that influence whether or not a new cancer detection technology is developed, tested, and enters the clinic; how fast the technology development process proceeds; the key players in the technology development process; and the current climate for technology development. This book summarizes the findings of the second workshop conducted on this topic.

#### 97. Developing Technologies for Early Detection of Breast Cancer: A Public Workshop Summary (2000) [http://books.nap.edu/catalog.php?record\\_id=9893](http://books.nap.edu/catalog.php?record_id=9893)

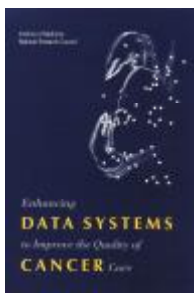


In November 1999, the Institute of Medicine, in consultation with the Commission on Life Sciences, the Commission on Physical Sciences, Mathematics, and Applications, and the Board on Science, Technology and Economic Policy launched a one year study on technologies for early detection of breast cancer. The committee was asked to examine technologies under

development for early breast cancer detection, and to scrutinize the process of medical technology development, adoption, and dissemination. The committee is gathering information on these topics for its report in a number of ways, including two public workshops that bring in outside expertise. The first workshop on “Developing Technologies for Early Breast Cancer Detection” was held in Washington DC in February 2000. The content of the presentations at the workshop is summarized here. A second workshop, which will focus on the process of technology development and adoption, will be held in Washington, DC on June 19–20. A formal report on these topics, including conclusions and recommendations, will be prepared by the committee upon completion of the one-year study.

**98. Enhancing Data Systems to Improve the Quality of Cancer Care (2000)**

[http://books.nap.edu/catalog.php?record\\_id=9970](http://books.nap.edu/catalog.php?record_id=9970)



One of the barriers to improving the quality of cancer care in the United States is the inadequacy of data systems. Out-of-date or incomplete information about the performance of doctors, hospitals, health plans, and public agencies makes it hard to gauge the quality of care. Augmenting today's data systems could start to fill the gap.

This report examines the strengths and weaknesses of current systems and makes recommendations for enhancing data systems to improve the quality of cancer care. The board's recommendations fall into three key areas:

- § Enhance key elements of the data system infrastructure (i.e., quality-of-care measures, cancer registries and databases, data collection technologies, and analytic capacity).
- § Expand support for analyses of quality of cancer care using existing data systems.
- § Monitor the effectiveness of data systems to promote quality improvement within health systems.

**99. A Report on the Sponsors of Cancer Treatment Clinical Trials and Their Approval and Monitoring Mechanisms (1999)**

[http://books.nap.edu/catalog.php?record\\_id=9442](http://books.nap.edu/catalog.php?record_id=9442)

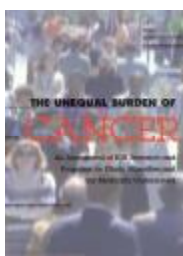


Hundreds of clinical trials for cancer treatment are carried out in a wide variety of settings in the United States, from high-profile cancer centers in major metropolitan areas, to the community hospital down the street. They range from “phase I” trials with few participants to “phase III” trials, which may have hundreds or, occasionally, thousands of patients. Virtually all trials, however, particularly later phase trials, are sponsored by a small number of organizations.

This report summarizes what we know about the sponsors of cancer treatment clinical trials and their approval and monitoring mechanisms.

**100. The Unequal Burden of Cancer: An Assessment of NIH Research and Programs for Ethnic Minorities and the Medically Underserved (1999)**

[http://books.nap.edu/catalog.php?record\\_id=6377](http://books.nap.edu/catalog.php?record_id=6377)



We know more about cancer prevention, detection, and treatment than ever before--yet not all segments of the U.S. population have benefited to the

fullest extent possible from these advances. Some ethnic minorities experience more cancer than the majority population, and poor people--no matter what their ethnicity--often lack access to adequate cancer care. This book provides an authoritative view of cancer as it is experienced by ethnic minorities and the medically underserved. It offers conclusions and recommendations in these areas:

- § Defining and understanding special populations, and improving the collection of cancer-related data.
- § Setting appropriate priorities for and increasing the effectiveness of specific National Institutes of Health (NIH) research programs, to ensure that special populations are represented in clinical trials.
- § Disseminating research results to health professionals serving these populations, with sensitivity to the issues of cancer survivorship.

The book provides background data on the nation's struggle against cancer, activities and expenditures of the NIH, and other relevant topics.

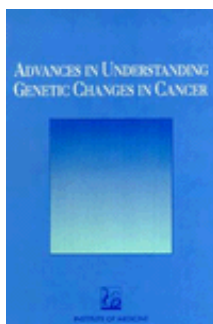
**101. A Review of the Department of Defense's Program for Breast Cancer Research**  
(1997) [http://books.nap.edu/catalog.php?record\\_id=5808](http://books.nap.edu/catalog.php?record_id=5808)



According to current statistical data, one in eight women will be diagnosed with breast cancer. The five-year survival rate for breast cancer patients has improved in recent years, but the overall mortality rates have changed little. In 1993 Congress allocated \$210 million for breast cancer research as part of the Department of Defense budget. An Institute of Medicine (IOM) committee was convened at that time to advise the U.S. Army Medical Research and Development Command on strategies for managing a breast cancer research program. This book evaluates the program's management and achievements to date. Although it is too early to evaluate the program in terms of breakthrough results and new insights produced by the funded projects or investigators, this book documents the process used to select research proposals for funding and analyzes the portfolio of funded projects in terms of their responsiveness to the recommendations and fundamental questions articulated in the 1993 IOM report.

**102. Advances in Understanding Genetic Changes in Cancer: Impact on Diagnosis and Treatment Decisions in the 1990s** (1992)

[http://books.nap.edu/catalog.php?record\\_id=1965](http://books.nap.edu/catalog.php?record_id=1965)



The past 20 years have seen a rapid increase in our understanding of the biology of cancer. And, advances in understanding the genetics of cancer are beginning to have an impact on the clinical management of malignant disease. Many of the genetic changes that underlie malignant transformation of cells and/or that distinguish malignant clones can be used as markers to diagnose, monitor, or characterize various forms of cancer. The purpose of this volume is to assess the current status of genetic testing in cancer management both from the standpoint of those tests and genetic markers that are presently available and from the perspective of genetic



approaches to cancer testing that are likely to have an impact on cancer management in the near future.

**103. Breast Cancer: Setting Priorities for Effectiveness Research (1990)**

[http://books.nap.edu/catalog.php?record\\_id=1779](http://books.nap.edu/catalog.php?record_id=1779)



As part of its planning for an “Effectiveness Initiative,” the Health Care Financing Administration (HCFA) of the U.S. Department of Health and Human Services asked the Institute of Medicine (IOM) in late 1988 to conduct workshops on research topics and methods for three high-priority clinical conditions: breast cancer, acute myocardial infarction, and hip fracture. The research workshops had three objectives: (1) to examine each clinical condition in detail; (2) to identify key patient management topics for each condition that deserve further investigation in terms of “effectiveness” as contrasted with “efficacy”; and (3) to propose appropriate research strategies and methods. To conduct these workshops, the IOM appointed special study committees, and this report documents the IOM committee’s recommendations from the workshop on breast cancer.

Other Diseases and Illnesses

**104. Assessing the Impact of Severe Economic Recession on the Elderly: Summary of a Workshop (2011)** [http://www.nap.edu/catalog.php?record\\_id=13118](http://www.nap.edu/catalog.php?record_id=13118)



The economic crisis that began in 2008 has had a significant impact on the well-being of certain segments of the population and its disruptive effects can be expected to last well into the future. The National Institute on Aging (NIA), which is concerned with this issue as it affects the older population in the United States, asked the National Research Council to review existing and ongoing research and to delineate the nature and dimensions of potential scientific inquiry in this area. The Committee on Population thus established the Steering Committee on the Challenges of Assessing the Impact of Severe Economic Recession the Elderly to convene a meeting of experts to discuss these issues. The primary purpose of the workshop was to help NIA gain insight into the kinds of questions that it should be asking, the research that it should be supporting, and the data that it should be collecting.

**105. Blue Water Navy Vietnam Veterans and Agent Orange Exposure (2011)**

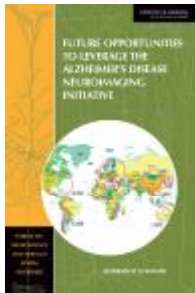
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The Department of Veterans Affairs (VA) has established that Vietnam veterans are automatically eligible for disability benefits should they develop any diseases associated with Agent Orange exposure, however, veterans who served on deep sea vessels in Vietnam are not included. These "Blue Water Navy" veterans must prove they were exposed to Agent Orange before they can claim benefits. At the request of the VA, the Institute of Medicine (IOM)

examined whether Blue Water Navy veterans had similar exposures to Agent Orange as other Vietnam veterans.

**106. Future Opportunities to Leverage the Alzheimer's Disease Neuroimaging Initiative - Workshop Summary (2010)** <http://www.iom.edu/Reports/2010/Future-Opportunities-to-Leverage-Alzheimers-Disease-Neuroimaging-Initiative.aspx>



Nearly 5.3 million Americans are living with Alzheimer's disease, and 26.6 million people are affected worldwide. The Alzheimer's Disease Neuroimaging Initiative (ADNI), a public-private partnership, provides a publicly available, international database of clinical and imaging data to foster research and collaboration on Alzheimer's research worldwide. The Institute of Medicine held a workshop on July 12, 2010, to explore opportunities to use information from and partnerships formed because of ADNI to continue to improve the understanding and treatment of Alzheimer's disease.

**107. Mental, Neurological, and Substance Use Disorders in Sub-Saharan Africa: Reducing the Treatment Gap, Increasing Quality of Care - Workshop Summary (2010)** <http://www.iom.edu/Reports.aspx?Topic1={C7C4B78C-62B6-438F-97A6-114348CC1C29}>



Millions of people in sub-Saharan Africa suffer from mental, neurological, and substance use (MNS) disorders, and most do not have the resources to obtain treatment. The Uganda National Academy of Sciences and the Institute of Medicine hosted a workshop to discuss the state of care for MNS disorders in sub-Saharan Africa.

**108. A Population-Based Policy and Systems Change Approach to Prevent and Control Hypertension (2010)** <http://www.iom.edu/Reports/2010/A-Population-Based-Policy-and-Systems-Change-Approach-to-Prevent-and-Control-Hypertension.aspx>



Hypertension is one of the leading causes of death in the United States, affecting nearly one in three Americans. It is prevalent in adults and endemic in the older adult population. Hypertension is a major contributor to cardiovascular morbidity and disability. Although there is a simple test to diagnose hypertension and relatively inexpensive drugs to treat it, the disease is often undiagnosed and uncontrolled.

*A Population-Based Policy and Systems Change Approach to the Prevention and Control Hypertension* identifies a small set of high-priority areas in which public health officials can focus their efforts to accelerate progress in hypertension reduction and control. It offers several recommendations that embody a population-based approach grounded in the principles of measurement, system change, and accountability. The recommendations are

designed to shift current hypertension reduction strategies from an individual-based approach to a population-based approach. They are also designed to improve the quality of care provided to individuals with hypertension and to strengthen the Center for Disease Control and Prevention's leadership in seeking a reduction in the sodium intake in the American diet to meet dietary guidelines.

The book is an important resource for federal public health officials and organizations, especially the Center for Disease Control and Prevention, as well as medical professionals and community health workers.

**109. Veterans and Agent Orange: Update 2008 (2008)**

[http://books.nap.edu/catalog.php?record\\_id=12662](http://books.nap.edu/catalog.php?record_id=12662)

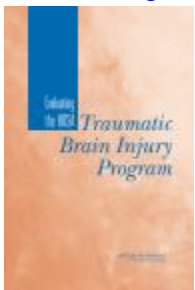


From 1962 to 1971, the U.S. military sprayed herbicides over Vietnam to strip the thick jungle canopy that could conceal opposition forces, to destroy crops that those forces might depend on, and to clear tall grasses and bushes from the perimeters of U.S. base camps and outlying fire-support bases.

In response to concerns and continuing uncertainty about the long-term health effects of the sprayed herbicides on Vietnam veterans, *Veterans and Agent Orange* provides a comprehensive evaluation of scientific and medical information regarding the health effects of exposure to Agent Orange and other herbicides used in Vietnam. The 2008 report is the eighth volume in this series of biennial updates. It will be of interest to policy makers and physicians in the federal government, veterans and their families, veterans' organizations, researchers, and health professionals.

**110. Evaluating the HRSA Traumatic Brain Injury Program (2006)**

<http://www.iom.edu/Reports/2006/Evaluating-the-HRSA-Traumatic-Brain-Injury-Program.aspx>

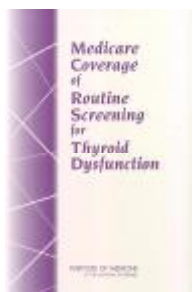


Traumatic brain injuries (TBI) are caused by sudden jolts, blows, or penetrating head trauma that disrupts the function of the brain. A TBI can happen to anyone. Young children, teenaged boys, soldiers in Iraq, and elderly persons are especially at risk. About 5.3 million Americans are estimated to have a TBI-related disability. The Centers for Disease Control and Prevention estimate that at least 1.4 million TBIs occur in the United States each year.

The long-term consequences of TBI may be altered cognition, personality, and behavior as well as sensory and motor impairments. Because the damage to the brain from a TBI is hidden from view and the consequences are often not obvious to the casual observer, epidemiologists and other researchers often portray TBI as a "hidden" or "silent" epidemic. Many health care professionals, community service workers, and the public are unaware of TBI's impact.

**111. Medicare Coverage of Routine Screening for Thyroid Dysfunction (2003)**

[http://www.nap.edu/catalog.php?record\\_id=10682](http://www.nap.edu/catalog.php?record_id=10682)

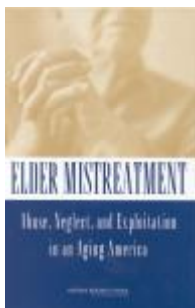


The Medicare program was established in 1965 under Title XVIII of the Social Security Act. The program has become the principal means of providing health insurance coverage to the American population aged 65 and older as well as

covering individuals with permanent disabilities or end-stage renal failure. Notwithstanding the enormous scale of the Medicare program, Congress has explicitly excluded a number of health care services. Section 1862(a)(1)(A) of Title XVIII states that the program may not pay for services that “are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member.” Section 1862(a)(7) excludes routine physical examinations. These provisions have amounted to an exclusion of preventive services. In subsequent years Congress has overridden this exclusion for specific preventive services, adding them to the Medicare program.

Section 123 of the Consolidated Appropriations Act for 2001 commissioned the National Academy of Sciences, now known as the National Academies, “and as appropriate in conjunction with the United States Preventive Services Task Force, to conduct a study on the addition of coverage of routine thyroid screening using a thyroid stimulating hormone test as a preventive benefit provided to Medicare beneficiaries under Title XVIII of the Social Security Act for some or all Medicare beneficiaries” and to “consider the short-term and long-term benefits, and costs to the Medicare program, of such addition.” The serum thyroid stimulating hormone (TSH) assay is a common blood test that is already covered by the Medicare program for the diagnosis and treatment of illness. This volume, prepared by a committee appointed by the Institute of Medicine of the National Academies, is an inquiry into the additional costs and benefits of also offering this test as a preventive service.

**112. Elder Mistreatment: Abuse, Neglect, and Exploitation in an Aging America (2002)**  
[http://www.nap.edu/catalog.php?record\\_id=10406](http://www.nap.edu/catalog.php?record_id=10406)

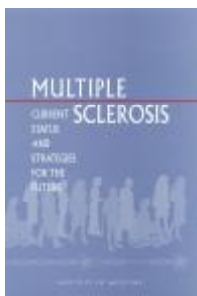


Since the late 1970s when Congressman Claude Pepper held widely publicized hearings on the mistreatment of the elderly, policy makers and practitioners have sought ways to protect older Americans from physical, psychological, and financial abuse. Yet, during the last 20 years fewer than 50 articles have addressed the shameful problem that abusers and sometimes the abused themselves want to conceal.

This report takes a giant step toward broadening our understanding of the mistreatment of the elderly and recommends specific research and funding strategies that can be used to deepen it. The book includes a discussion of the conceptual, methodological, and logistical issues needed to create a solid research base as well as the ethical concerns that must be considered when working with older subjects. It also looks at problems in determination of a report's reliability and the role of physicians, EMTs, and others who are among the first to recognize situations of mistreatment.

This report will be of interest to anyone concerned about the elderly and ways to intervene when abuse is suspected, including family members, caregivers, and advocates for the elderly. It will also be of interest to researchers, research sponsors, and policy makers who need to know how to advance our knowledge of this problem.

**113. Multiple Sclerosis: Current Status and Strategies for the Future (2001)**  
<http://www.iom.edu/Reports.aspx?Topic1={C7C4B78C-62B6-438F-97A6-114348CC1C29}>



Multiple sclerosis is a chronic and often disabling disease of the nervous system, affecting about 1 million people worldwide. Even though it has been known for over a hundred years, no cause or cure has yet been discovered-but now there is hope. New therapies have been shown to slow the disease progress in some patients, and the pace of discoveries about the cellular machinery of the brain and spinal cord has accelerated.

This book presents a comprehensive overview of multiple sclerosis today, as researchers seek to understand its processes, develop therapies that will slow or halt the disease and perhaps repair damage, offer relief for specific symptoms, and improve the abilities of MS patients to function in their daily lives.

The panel reviews existing knowledge and identifies key research questions, focusing on:

- § Research strategies that have the greatest potential to understand the biological mechanisms of recovery and to translate findings into specific strategies for therapy.
- § How people adapt to MS and the research needed to improve the lives of people with MS.
- § Management of disease symptoms (cognitive impairment, depression, spasticity, vision problems, and others).

#### 114. **Summary of a Workshop on Research in Multiple Sclerosis** (2001)

[http://books.nap.edu/catalog.php?record\\_id=10116](http://books.nap.edu/catalog.php?record_id=10116)



More than 50 invited experts representing international organizations supporting MS research participated in an April, 2001, workshop held in Washington D.C. to advance research recommended by the report, *Multiple Sclerosis: Current Status and Strategies for the Future*. This workshop summary presents the reports from each breakout group and summarizes the plenary session discussion. For clarity, the recommendations are grouped slightly differently from the grouping in the report.

## Law and Policy

#### 115. **Blue Water Navy Vietnam Veterans and Agent Orange Exposure** (2011)

[http://www.nap.edu/catalog.php?record\\_id=13026&utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+nap%2Fnew+\(New+from+the+National+Academies+Press\)](http://www.nap.edu/catalog.php?record_id=13026&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+nap%2Fnew+(New+from+the+National+Academies+Press))



The Department of Veterans Affairs (VA) has established that Vietnam veterans are automatically eligible for disability benefits should they develop any diseases associated with Agent Orange exposure, however, veterans who served on deep sea vessels in Vietnam are not included. These "Blue Water Navy" veterans must prove they were exposed to Agent Orange before they can claim benefits. At the request of the VA, the Institute of Medicine (IOM) examined whether Blue Water Navy veterans had similar exposures to Agent Orange as other Vietnam veterans.



**116. Improving Health Care Cost Projections for the Medicare Population: Summary of a Workshop** (2010) [http://www.nap.edu/catalog.php?record\\_id=12985](http://www.nap.edu/catalog.php?record_id=12985)



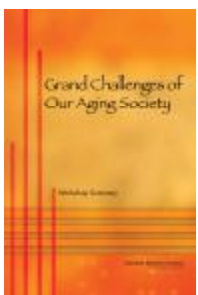
Developing credible short-term and long-term projections of Medicare health care costs is critical for public- and private-sector policy planning, but faces challenges and uncertainties. There is uncertainty not only in the underlying economic and demographic assumptions used in projection models, but also in what a policy modeler assumes about future changes in the health status of the population and the factors affecting health status, the extent and pace of scientific and technological breakthroughs in medical care, the preferences of the population for particular kinds of care, the likelihood that policy makers

will alter current law and regulations, and how each of these factors relates to health care costs for the elderly population.

Given the substantial growth in the Medicare population and the continued increases in Medicare, Medicaid, and private health insurance spending, the availability of well-specified models and analyses that can provide useful information on the likely cost implications of health care policy alternatives is essential. It is therefore timely to review the capabilities and limitations of extant health care cost models and to identify areas for research that offer the most promise to improve modeling, not only of current U.S. health care programs, but also of policy alternatives that may be considered in the coming years.

The National Research Council conducted a public workshop focusing on areas of research needed to improve health care cost projections for the Medicare population, and on the strengths and weaknesses of competing frameworks for projecting health care expenditures for the elderly. The workshop considered major classes of projection and simulation models that are currently used and the underlying data sources and research inputs for these models. It also explored areas in which additional research and data are needed to inform model development and health care policy analysis more broadly. The workshop, summarized in this volume, drew people from a wide variety of disciplines and perspectives, including federal agencies, academia, and nongovernmental organizations.

**117. Grand Challenges of Our Aging Society: Workshop Summary** (2010)  
[http://books.nap.edu/catalog.php?record\\_id=12852#orgs](http://books.nap.edu/catalog.php?record_id=12852#orgs)



Aging populations are generating both challenges and opportunities for societies around the globe. Increases in longevity and improvements in health raise many questions. What steps can be taken to optimize physical and cognitive health and productivity across the life span? How will older people finance their retirement and health care? What will be the macroeconomic implications of an aging population? How will communities be shaped by the shift in age structure? What global interconnections will affect how each society handles the aging of its population?

To address these questions, the National Academies organized a symposium, summarized in the present volume, to determine how best to contribute to an evidence-based dialogue on population aging that will shape policies and programs.

Presentations in the fields of biology, public health, medicine, informatics, macroeconomics, finance, urban planning, and engineering approached the challenges of aging from many different angles. The presenters reviewed the current state of knowledge in their respective fields, identifying areas of consensus and controversy and delineating the priority questions for further research and policy development.

**118. Preparing for the Challenges of Population Aging in Asia: Strengthening the Scientific Basis of Policy Development (2010)**

<http://www7.nationalacademies.org/cpop/CommitteePublications.html>

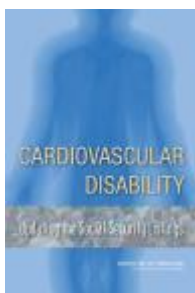


*Preparing for the Challenges of Population Aging in Asia* discusses the challenges posed by a rapidly aging population and identifies needed research to help policymakers better respond to them. While the percentage of elderly people in nearly every nation is growing, this aging trend is particularly stark in parts of Asia. Projections indicate that the portion of the population age 65 and older will more than triple in China, India, and Indonesia and more than double in Japan between 2000 and 2050, based on data from the United Nations.

Moreover, this demographic shift is coinciding with dramatic economic and social changes in Asia, including changing family structures and large-scale migrations from rural to urban areas.

**119. Cardiovascular Disability: Updating the Social Security Listings (2010)**

[http://www.nap.edu/catalog.php?record\\_id=12940](http://www.nap.edu/catalog.php?record_id=12940)



The Social Security Administration (SSA) uses a screening tool called the Listing of Impairments to identify claimants who are so severely impaired that they cannot work at all and thus immediately qualify for benefits. In this report, the IOM makes several recommendations for improving SSA's capacity to determine disability benefits more quickly and efficiently using the Listings.

**120. The Safe Use Initiative and Health Literacy: A Workshop - Workshop Summary (2010)**

[http://www.nap.edu/catalog.php?record\\_id=12975](http://www.nap.edu/catalog.php?record_id=12975)



Every year at least 1.5 million people suffer adverse effects from medication. These problems occur because people misunderstand labels, are unaware of drug interactions, or otherwise use medication improperly. The Food and Drug Administration's Safe Use Initiative seeks to identify preventable medication risks and develop solutions to them. The IOM held a workshop to discuss the FDA's Safe Use Initiative and other efforts to improve drug labeling and safety.

**121. Standardizing Medication Labels: Confusing Patients Less, Workshop Summary**

(2008) [http://www.nap.edu/catalog.php?record\\_id=12077](http://www.nap.edu/catalog.php?record_id=12077)



Medications are an important component of health care, but each year their misuse results in over a million adverse drug events that lead to office and emergency room visits as well as hospitalizations and, in some cases, death. As a patient's most tangible source of information about what drug has been prescribed and how that drug is to be taken, the label on a container of prescription medication is a crucial line of defense against such medication safety problems, yet almost half of all patients misunderstand label instructions about how to take their medicines. *Standardizing Medication Labels: Confusing Patients Less* is the summary of a workshop, held in Washington, D.C. on October 12, 2007, that was organized to examine what is known about how medication container labeling affects patient safety and to discuss approaches to addressing identified problems.

**122. Veterans and Agent Orange: Update 2008 (2008)**

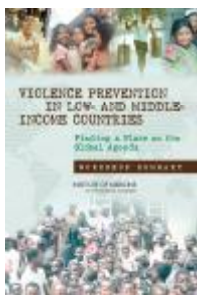
[http://books.nap.edu/catalog.php?record\\_id=12662](http://books.nap.edu/catalog.php?record_id=12662)



From 1962 to 1971, the U.S. military sprayed herbicides over Vietnam to strip the thick jungle canopy that could conceal opposition forces, to destroy crops that those forces might depend on, and to clear tall grasses and bushes from the perimeters of U.S. base camps and outlying fire-support bases. In response to concerns and continuing uncertainty about the long-term health effects of the sprayed herbicides on Vietnam veterans, *Veterans and Agent Orange* provides a comprehensive evaluation of scientific and medical information regarding the health effects of exposure to Agent Orange and other herbicides used in Vietnam. The 2008 report is the eighth volume in this series of biennial updates. It will be of interest to policy makers and physicians in the federal government, veterans and their families, veterans' organizations, researchers, and health professionals.

**123. Violence Prevention in Low- and Middle-Income Countries: Finding a Place on the Global Agenda. Workshop Summary (2008)**

[http://www.nap.edu/catalog.php?record\\_id=12016](http://www.nap.edu/catalog.php?record_id=12016)



The current state of science in violence prevention reveals progress, promise, and a number of remaining challenges. In order to fully examine the issue of global violence prevention, the Institute of Medicine in collaboration with Global Violence Prevention Advocacy, convened a workshop and released the workshop summary entitled, *Violence Prevention in Low-and Middle-Income Countries*.

The workshop brought together participants with a wide array of expertise in fields related to health, criminal justice, public policy, and economic development, to study and articulate specific opportunities for the U.S. government and other leaders with resources to more effectively support programming for prevention of the many types of violence. Participants highlighted the need for the timely development of an integrated, science-based approach and agenda to support research, clinical practice, program development, policy analysis, and advocacy for violence prevention.

**124. Improving the Social Security Representative Payee Program: Serving Beneficiaries and Minimizing Misuse (2007)**

[http://www.nap.edu/catalog.php?record\\_id=11992#orgs](http://www.nap.edu/catalog.php?record_id=11992#orgs)



More than 7 million recipients of Social Security benefits have a representative payee—a person or an organization—to receive or manage their benefits. These payees manage Old Age, Survivors and Disability Insurance funds for retirees, surviving spouses, children, and the disabled, and they manage Supplemental Security Income payments to disabled, blind, or elderly people with limited income and resources. More than half of the beneficiaries with a representative payee are minor children; the rest are adults, often elderly, whose mental or physical incapacity prevents them from acting on their own behalf, and people who have been deemed incapable under state guardianship laws. The funds are managed through the Representative Payee Program of the Social Security Administration (SSA). The funds total almost \$4 billion a month, and there are more than 5.3 million representative payees.

In 2004 Congress required the commissioner of the SSA to conduct a one-time survey to determine how payments to individual and organizational representative payees are being managed and used on behalf of the beneficiaries. To carry out this work, the SSA requested a study by the National Academies, which appointed the Committee on Social Security Representative Payees. This report is the result of that study.

**125. Rewarding Provider Performance: Aligning Incentives in Medicare (Pathways to Quality Health Care Series) (2007)**

[http://www.nap.edu/catalog.php?record\\_id=11723#description](http://www.nap.edu/catalog.php?record_id=11723#description)

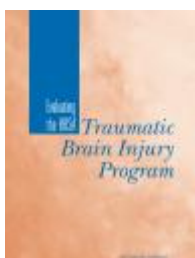


The third installment in the *Pathways to Quality Health Care* series, *Rewarding Provider Performance: Aligning Incentives in Medicare*, continues to address the timely topic of the quality of health care in America. Each volume in the series effectively evaluates specific policy approaches within the context of improving the current operational framework of the health care system. The theme of this particular book is the staged introduction of pay for performance into Medicare. Pay for performance is a strategy that financially rewards health care providers for delivering high-quality care. Building on the findings and recommendations described in the two companion editions, *Performance Measurement and Medicare's Quality Improvement Organization Program*, this book offers options for implementing payment incentives to provide better value for America's health care investments.

This book features conclusions and recommendations that will be useful to all stakeholders concerned with improving the quality and performance of the nation's health care system in both the public and private sectors.

**126. Evaluating the HRSA Traumatic Brain Injury Program (2006)**

[http://www.nap.edu/catalog.php?record\\_id=11600](http://www.nap.edu/catalog.php?record_id=11600)



Traumatic brain injuries (TBI) are caused by sudden jolts, blows, or penetrating head trauma that disrupts the function of the brain. A TBI can happen to



anyone. Young children, teenaged boys, soldiers in Iraq, and elderly persons are especially at risk. About 5.3 million Americans are estimated to have a TBI-related disability. The Centers for Disease Control and Prevention estimate that at least 1.4 million TBIs occur in the United States each year.

The long-term consequences of TBI may be altered cognition, personality, and behavior as well as sensory and motor impairments. Because the damage to the brain from a TBI is hidden from view and the consequences are often not obvious to the casual observer, epidemiologists and other researchers often portray TBI as a "hidden" or "silent" epidemic. Many health care professionals, community service workers, and the public are unaware of TBI's impact.

**127. Medicare's Quality Improvement Organization Program: Maximizing Potential (Series: Pathways to Quality Health Care) (2006)**

[http://www.nap.edu/catalog.php?record\\_id=11604#description](http://www.nap.edu/catalog.php?record_id=11604#description)



*Medicare's Quality Improvement Organization Program* is the second book in the new *Pathways to Quality Health Care* series. Focusing on performance improvement, it considers the history, role, and effectiveness of the Quality Improvement Organization (QIO) program and its potential to promote quality improvement within a changing health care delivery environment that includes standardized performance measures and new data collection and reporting requirements. This book carefully examines the QIOs that serve every state as well as the national program that guides and supports them. In addition, it highlights the important roles that a national program with private organizations in each state can play in promoting higher quality care. *Medicare's Quality Improvement Organization Program* looks closely at the technical assistance role of the QIO program and the need to encourage and support providers to improve their performance. By providing an in-depth assessment of the federal experience with quality improvement and recommendations for program improvement, this book helps point the way for those who strive to create higher quality and better value in health care. Intended for multiple audiences, *Medicare's Quality Improvement Organization Program* is essential reading for members of Congress, the federal executive branch, the QIOs, health care providers and clinicians, and stakeholder groups.

**128. When I'm 64 (2006)** [http://www.nap.edu/catalog.php?record\\_id=11474](http://www.nap.edu/catalog.php?record_id=11474)

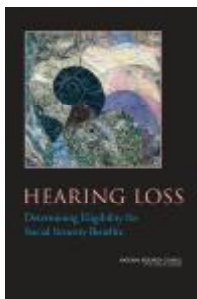


*When I'm 64* explores what we know about how behavior changes as people age and poses intriguing research questions whose answers can expand our knowledge. The recommended research areas are geared to both practical issues in everyday life and to fields that have unusual promise for making significant advances in understanding the psychological mechanisms that underlie behavior. The report also looks at the question of whether being socially engaged affects our cognitive abilities, as well as the effects that stereotypes about aging have on the older population—and the younger one. As the “baby boomers” enter late life, these issues will play increasingly major roles in all aspects of the U.S. economy and society.



**129. Hearing Loss: Determining Eligibility for Social Security Benefits (2004)**

[http://books.nap.edu/catalog.php?record\\_id=11099](http://books.nap.edu/catalog.php?record_id=11099)

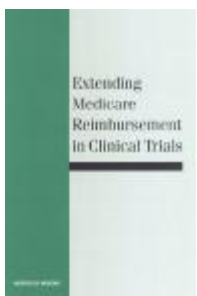


Millions of Americans experience some degree of hearing loss. The Social Security Administration (SSA) operates programs that provide cash disability benefits to people with permanent impairments like hearing loss, if they can show that their impairments meet stringent SSA criteria and their earnings are below an SSA threshold. The National Research Council convened an expert committee at the request of the SSA to study the issues related to disability determination for people with hearing loss. This volume is the product of that study.

*Hearing Loss: Determining Eligibility for Social Security Benefits* reviews current knowledge about hearing loss and its measurement and treatment, and provides an evaluation of the strengths and weaknesses of the current processes and criteria. It recommends changes to strengthen the disability determination process and ensure its reliability and fairness. The book addresses criteria for selection of pure tone and speech tests, guidelines for test administration, testing of hearing in noise, special issues related to testing children, and the difficulty of predicting work capacity from clinical hearing test results. It should be useful to audiologists, otolaryngologists, disability advocates, and others who are concerned with people who have hearing loss.

**130. Extending Medicare Reimbursement in Clinical Trials (2003)**

[http://www.nap.edu/catalog.php?record\\_id=9742](http://www.nap.edu/catalog.php?record_id=9742)



Clinical trials have become an essential component of modern medical care. The breakneck speed of medical advances and the increased effort to base clinical decisions on reliable evidence place clinical trials in an ever more prominent position between medical innovation and medical practice.

Expanding the evidence base for health care interventions is clearly in the interest of both taxpayers who support Medicare and beneficiaries who receive services.

This report recommends an explicit policy for reimbursement of routine patient care costs in clinical trials. It further recommends that HCFA provide additional support for selected clinical trials, and that the government support the establishment of a national clinical trials registry.

**131. Medicare Coverage of Routine Screening for Thyroid Dysfunction (2003)**

[http://www.nap.edu/catalog.php?record\\_id=10682](http://www.nap.edu/catalog.php?record_id=10682)



The Medicare program was established in 1965 under Title XVIII of the Social Security Act. The program has become the principal means of providing health insurance coverage to the American population aged 65 and older as well as covering individuals with permanent disabilities or end-stage renal failure. Notwithstanding the enormous scale of the Medicare program, Congress has explicitly excluded a number of health care services. Section 1862(a)(1)(A) of Title XVIII states that the program may not pay for services that “are not

reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member.” Section 1862(a)(7) excludes routine physical examinations. These provisions have amounted to an exclusion of preventive services. In subsequent years Congress has overridden this exclusion for specific preventive services, adding them to the Medicare program.

Section 123 of the Consolidated Appropriations Act for 2001 commissioned the National Academy of Sciences, now known as the National Academies, “and as appropriate in conjunction with the United States Preventive Services Task Force, to conduct a study on the addition of coverage of routine thyroid screening using a thyroid stimulating hormone test as a preventive benefit provided to Medicare beneficiaries under Title XVIII of the Social Security Act for some or all Medicare beneficiaries” and to “consider the short-term and long-term benefits, and costs to the Medicare program, of such addition.” The serum thyroid stimulating hormone (TSH) assay is a common blood test that is already covered by the Medicare program for the diagnosis and treatment of illness. This volume, prepared by a committee appointed by the Institute of Medicine of the National Academies, is an inquiry into the additional costs and benefits of also offering this test as a preventive service.

**132. Elder Mistreatment: Abuse, Neglect, and Exploitation in an Aging America (2002)**

[http://www.nap.edu/catalog.php?record\\_id=10406](http://www.nap.edu/catalog.php?record_id=10406)



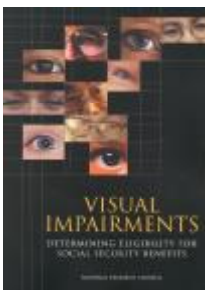
Since the late 1970s when Congressman Claude Pepper held widely publicized hearings on the mistreatment of the elderly, policy makers and practitioners have sought ways to protect older Americans from physical, psychological, and financial abuse. Yet, during the last 20 years fewer than 50 articles have addressed the shameful problem that abusers and sometimes the abused themselves want to conceal.

This report takes a giant step toward broadening our understanding of the mistreatment of the elderly and recommends specific research and funding strategies that can be used to deepen it. The book includes a discussion of the conceptual, methodological, and logistical issues needed to create a solid research base as well as the ethical concerns that must be considered when working with older subjects. It also looks at problems in determination of a report's reliability and the role of physicians, EMTs, and others who are among the first to recognize situations of mistreatment.

This report will be of interest to anyone concerned about the elderly and ways to intervene when abuse is suspected, including family members, caregivers, and advocates for the elderly. It will also be of interest to researchers, research sponsors, and policy makers who need to know how to advance our knowledge of this problem.

**133. Visual Impairments: Determining Eligibility for Social Security Benefits (2002)**

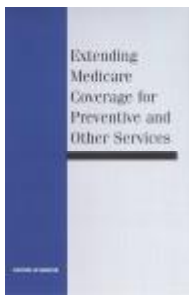
[http://www.nap.edu/catalog.php?record\\_id=10320](http://www.nap.edu/catalog.php?record_id=10320)



When children and adults apply for disability benefits and claim that a visual impairment has limited their ability to function, the U.S. Social Security Administration (SSA) is required to determine their eligibility. To ensure that these determinations are made fairly and consistently, SSA has developed criteria for eligibility and a process for assessing each claimant against the

criteria. **Visual Impairments: Determining Eligibility for Social Security Benefits** examines SSA's methods of determining disability for people with visual impairments, recommends changes that could be made now to improve the process and the outcomes, and identifies research needed to develop improved methods for the future. The report assesses tests of visual function, including visual acuity and visual fields whether visual impairments could be measured directly through visual task performance or other means of assessing disability. These other means include job analysis databases, which include information on the importance of vision to job tasks or skills, and measures of health-related quality of life, which take a person-centered approach to assessing visual function testing of infants and children, which differs in important ways from standard adult tests.

**134. Extending Medicare Coverage for Preventive and Other Services (2000)**  
[http://www.nap.edu/catalog.php?record\\_id=9740](http://www.nap.edu/catalog.php?record_id=9740)

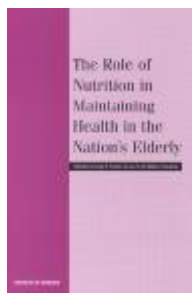


In the Balanced Budget Act of 1997 (Public Law 105–33), Congress called for the Department of Health and Human Services to arrange for the National Academy of Sciences (NAS) to analyze “the short- and long-term benefits, and costs to Medicare” of extending coverage for certain preventive and other services. The services were screening for skin cancer; medically necessary dental services; elimination of time restrictions on coverage for immunosuppressive drugs after transplants; routine patient care costs in clinical trials; and nutrition therapy.

This report, which was developed by an expert committee of the Institute of Medicine, reviews the first three services listed above. It is intended to assist policymakers by providing syntheses of the best evidence available about the effectiveness of these services and by estimating the cost to Medicare of covering them. For each service or condition examined, the committee commissioned a review of the scientific literature that was presented and discussed at a public workshop.

As requested by Congress, this report includes explicit estimates only of costs to Medicare, not costs to beneficiaries, their families, or others. It also does not include cost-effectiveness analyses. That is, the extent of the benefits relative to the costs to Medicare—or to society generally—is not evaluated for the services examined.

**135. The Role of Nutrition in Maintaining Health in the Nation's Elderly: Evaluating Coverage of Nutrition Services for the Medicare Population (2000)**  
[http://www.nap.edu/catalog.php?record\\_id=9741](http://www.nap.edu/catalog.php?record_id=9741)



Malnutrition and obesity are both common among Americans over age 65. There are also a host of other medical conditions from which older people and other Medicare beneficiaries suffer that could be improved with appropriate nutritional intervention. Despite that, access to a nutrition professional is very limited.

- § Do nutrition services benefit older people in terms of morbidity, mortality, or quality of life?
- § Which health professionals are best qualified to provide such services?

- § What would be the cost to Medicare of such services? Would the cost be offset by reduced illness in this population?

This book addresses these questions, provides recommendations for nutrition services for the elderly, and considers how the coverage policy should be approached and practiced. The book discusses the role of nutrition therapy in the management of a number of diseases. It also examines what the elderly receive in the way of nutrition services along the continuum of care settings and addresses the areas of expertise needed by health professionals to provide appropriate nutrition services and therapy.

**136. Developing an Information Infrastructure for the Medicare+Choice Program: Summary of a Workshop (1999)** [http://www.nap.edu/catalog.php?record\\_id=6419](http://www.nap.edu/catalog.php?record_id=6419)



On March 4 and 5, 1998, the Institute of Medicine (IOM) Committee on Choice and Managed Care held a 2-day workshop entitled Developing the Information Infrastructure for Medicare Beneficiaries. This workshop was a follow-up to the IOM report entitled *Improving the Medicare Market: Adding Choice and Protections* (Institute of Medicine, 1996).

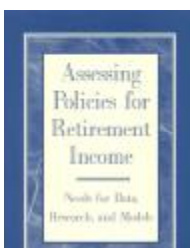
**137. The Social Security Administration's Disability Decision Process: A Framework for Research, Second Interim Report (1998)** [http://www.nap.edu/catalog.php?record\\_id=6194](http://www.nap.edu/catalog.php?record_id=6194)



During the past two decades, unprecedented growth has occurred in the Social Security Disability Insurance (SSDI) and the Supplemental Security Income (SSI) programs. At the same time, processing time for disability claims and appeals determinations has increased substantially.

This report is the second in a series of short interim reports of the National Academy of Sciences' Committee to Review the SSA's Disability Decision Process Research. This second report is limited to a preliminary review of SSA's research plan for developing a revised decision process to determine a person's disability. In that context, the report outlines a framework for a research design and reviews the general features and directions specified by SSA in the scope of work in the relevant RFPs for the conduct of the research. It identifies critical elements of a research design that are missing from SSA's current plans, and expresses serious concerns about these gaps. As appropriate, preliminary comments are made on the work plans developed by the organizations awarded the research contracts by SSA in September 1997. Further, the report comments on the research projects completed prior to the start of the present study, but which are part of SSA's redesign research plan.

**138. Assessing Policies for Retirement Income: Needs for Data, Research, and Models (1997)** [http://www.nap.edu/catalog.php?record\\_id=5420](http://www.nap.edu/catalog.php?record_id=5420)



The retirement income security of older Americans and the cost of providing that security are increasingly the subject of major debate. This volume assesses what we know and recommends what we need to know to estimate the short- and long-term effects of policy alternatives. It details gaps in data and research and evaluates possible models to estimate the impact of policy changes that could affect retirement income from Social Security, pensions, personal savings, and other sources.

**139. Improving the Medicare Market: Adding Choice and Protections (1996)**

[http://www.nap.edu/catalog.php?record\\_id=5299](http://www.nap.edu/catalog.php?record_id=5299)



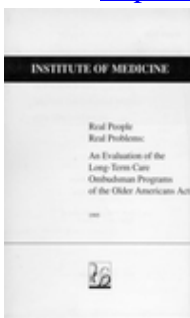
Medicare beneficiaries are rapidly moving into managed care, as attempts to restrain the growth of this costly entitlement program progress. However, advocates for patients question whether the necessary information and structures are in place to enable Medicare consumers to select wisely among private-sector managed care options. Improving the Medicare Market examines how to give Medicare beneficiaries the same choice of health plan options enjoyed in the private sector--yet protect them as consumers and patients.

This book recommends approaches to ensuring accountability and informed purchasing for Medicare beneficiaries in an environment of broader choice and managed care--how the government should evaluate and approve plans, what role the traditional Medicare program should play, how to help to elderly understand their options, and many other practical matters.

The committee discusses the information requirements of Medicare beneficiaries and explores in detail how best to respond to their special needs. And it examines the procedures that should be developed to provide the necessary protections for the elderly in a managed care system.

**140. Real People Real Problems: An Evaluation of the Long-Term Care Ombudsman Programs of the Older Americans Act (1995)**

[http://books.nap.edu/catalog.php?record\\_id=9059](http://books.nap.edu/catalog.php?record_id=9059)

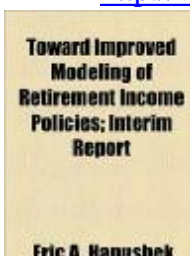


Long-term care (LTC) ombudsmen advocate to protect the health, safety, welfare, and rights of the institutionalized elderly in nursing facilities<sup>2</sup> and board and care (B&C) homes. Given the dramatic changes that are occurring in the entire LTC sector, the need for such advocates is compelling. Recently, policymakers—at the urging of ombudsmen themselves—concluded that a more in-depth examination of the program is warranted, with the aim of clarifying present strengths and weaknesses and assessing the program's potential for future contributions. To this end, the Congress of the United States directed, in the 1992 reauthorization of the Older Americans Act (OAA), that

the Assistant Secretary for Aging conduct a study of the state LTC ombudsman programs. This report is a culmination of that study, performed by the IOM.

**141. Toward Improved Modeling of Retirement Income Policies: Interim Report (1995)**

[http://www.nap.edu/catalog.php?record\\_id=9085](http://www.nap.edu/catalog.php?record_id=9085)



Many government policies and programs that affect the economic well-being of Americans are under scrutiny today to assess their costs and benefits. In 1994,



the debate was on how to provide health care at a reasonable cost; at present, there is intense debate about the costs and benefits of federal and state government welfare programs. Another area that is likely to be equally problematic and controversial is how best to ensure the income security of current and future generations of retirees.

The Pension and Welfare Benefits Administration in the U.S. Department of Labor asked the Committee on National Statistics at the National Research Council to establish a Panel on Retirement Income Modeling. The charge to the panel is to assess the current state of research, models, and data that can help guide policy makers on a broad range of issues related to retirement income and public and private pension policies. The National Institute on Aging and TIAA-CREF also provided support for the project.

**142. Ending Mandatory Retirement for Tenured Faculty: The Consequences for Higher Education** (1991) [http://books.nap.edu/catalog.php?record\\_id=1795](http://books.nap.edu/catalog.php?record_id=1795)



The proportion of older faculty is increasing nationwide. This book offers guidance not only for dealing with the elimination of mandatory retirement in higher education but also for current retirement-related issues facing all colleges and universities. Ending Mandatory Retirement addresses such questions as: Do the special circumstances of higher education warrant the continuation of mandatory retirement? How would an increase in the number of older faculty affect individual colleges and universities and their faculty members? Where there are undesirable effects, what could be done to minimize them?

The book contains analyses of early retirement programs, faculty performance evaluation practices, pension and benefit policies, tenure policies, and faculty ages and retirement patterns.

**143. Medicare: New Directions in Quality Assurance Proceedings** (1991) [http://www.nap.edu/catalog.php?record\\_id=1768](http://www.nap.edu/catalog.php?record_id=1768)



This book contains chapters and commentaries by members of the Institute of Medicine (IOM) committee and by outstanding practitioners, researchers, legislators, and policymakers about the IOM's proposals for new directions in quality assurance as specified in Medicare: A Strategy for Quality Assurance, Volumes 1 and 2.

Sections of this new book address ideas about how to move toward increasing professionalism, implementing organization and system-focused quality improvement, better decision making by patients and clinicians, patient outcomes orientation, and public accountability and program evaluation. Other sections explore research questions and capacity building in the field of quality assessment and improvement, the epidemiology and quality problems, and legal issues in quality assessment.

**144. Medicare: A Strategy for Quality Assurance, Volume I** (1990) [http://www.nap.edu/catalog.php?record\\_id=1547](http://www.nap.edu/catalog.php?record_id=1547)



Health care for the elderly American is among our nation's more pressing social issues. Our society wishes to ensure quality health care for all older people, but

there is growing concern about our ability to maintain and improve quality in the face of efforts to contain health care costs.

Medicare: A Strategy for Quality Assurance answers the U.S. Congress' call for the Institute of Medicine to design a strategic plan for assessing and assuring the quality of medical care for the elderly. This book presents a proposed strategic plan for improving quality assurance in the Medicare program, along with steps and timetables for implementing the plan by the year 2000 and the 10 recommendations for action by Congress.

The book explores quality of care--how it is defined, measured, and improved--and reviews different types of quality problems. Major issues that affect approaches to assessing and assuring quality are examined.

Medicare: A Strategy for Quality Assurance will be immediately useful to a wide audience, including policymakers, health administrators, individual providers, specialists in issues of the older American, researchers, educators, and students.

**145. Medicare: A Strategy for Quality Assurance, Volume II (1990)**

[http://www.nap.edu/catalog.php?record\\_id=1548](http://www.nap.edu/catalog.php?record_id=1548)



Volume II of Medicare: A Strategy for Quality Assurance provides extensive source materials on quality assurance, including results of focus groups with the elderly and practicing physicians, findings from public hearings on quality of care for the elderly, and many exhibits from site visits and the literature on quality measurements and assurance tools. The current Medicare peer review organization program and related hospital accreditation efforts are comprehensively described as background for the recommendations in Volume I of this report. Like the companion volume, this substantial book will be a valuable reference document for all groups concerned with quality of health care and the elderly.

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## **Safety and Transportation**

**146. Older Commercial Drivers: Do They Pose a Safety Risk? (2010)**

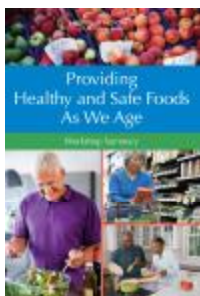
[http://www.trb.org/SafetyHumanFactors/Blurbs/Older\\_Commercial\\_Drivers\\_Do\\_They\\_Pose\\_a\\_Safety\\_Risk\\_164061.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/Older_Commercial_Drivers_Do_They_Pose_a_Safety_Risk_164061.aspx)



TRB's Commercial Truck and Bus Safety Synthesis Program (CTBSSP) Synthesis 18: Older Commercial Drivers: Do They Pose a Safety Risk? explores age-related changes in the basic functional abilities needed to drive safely. The report is designed to help assist industry and labor practitioners in promoting safer commercial operations

**147. Providing Healthy and Safe Foods As We Age: Workshop Summary (2010)**

[http://books.nap.edu/catalog.php?record\\_id=12967](http://books.nap.edu/catalog.php?record_id=12967)



Does a longer life mean a healthier life? The number of adults over 65 in the United States is growing, but many may not be aware that they are at greater risk from foodborne diseases and their nutritional needs change as they age. The IOM's Food Forum held a workshop October 29-30, 2009, to discuss food safety and nutrition concerns for older adults.

148. **The Safe Use Initiative and Health Literacy: A Workshop - Workshop Summary** (2010) <http://www.iom.edu/Reports/2010/The-Safe-Use-Initiative-and-Health-Literacy-A-Workshop.aspx>



Every year at least 1.5 million people suffer adverse effects from medication. These problems occur because people misunderstand labels, are unaware of drug interactions, or otherwise use medication improperly. The Food and Drug Administration's Safe Use Initiative seeks to identify preventable medication risks and develop solutions to them. The IOM held a workshop to discuss the FDA's Safe Use Initiative and other efforts to improve drug labeling and safety.

149. **Highway Safety: Planning; Young Drivers; Older Drivers; Indian Nations; Roundabouts; Traffic Law Enforcement; and Trucks and Buses** (2009) [http://www.trb.org/SafetyHumanFactors/Blurbs/Highway\\_Safety\\_Planning\\_Young\\_Drivers\\_Older\\_Driver\\_160630.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/Highway_Safety_Planning_Young_Drivers_Older_Driver_160630.aspx)



TRB's Transportation Research Record: Journal of the Transportation Research Board, No. 2078 includes 18 papers that explore safety-conscious planning in mid-sized metropolitan areas, safety and accessibility effects of pay-as-you-drive strategies, driver injury severity causes in single-vehicle-deer crashes, road hazards detection by novice teen and experienced drivers, effect of passenger age and gender on fatal crash risks of young drivers, actual and perceived behavior of older drivers on freeways, and older driver behavior related to fatal crashes. This issue of the TRR also examines spinal rotation during a driving task; analysis of elderly mobility policies; crash reporting on Indian reservations; conversion of all-way stop-controlled intersections into roundabouts; comparison of safety of signalized intersections and roundabouts; knowledge of correct roundabout negotiation; physical devices for traffic calming in rural communities; dynamic variable speed limit strategies on freeways; automated speed enforcement programs; automated speed enforcement cameras in Charlotte, North Carolina; and effect of truck lane restrictions on freeways in mountainous areas.

150. **Highway Safety, School Transportation, and Emergency Evacuation** (2009) [http://www.trb.org/SafetyHumanFactors/Blurbs/Highway\\_Safety\\_School\\_Transportation\\_and\\_Emergency\\_159539.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/Highway_Safety_School_Transportation_and_Emergency_159539.aspx)



TRB's Transportation Research Record: Journal of the Transportation Research Board, No. 2009 includes 17 papers that explore hazard anticipation of novice and experienced drivers, eye movement patterns of novice teen drivers, differences in perceptions of driving skills, older drivers and the driving decision, monitoring displays and speed cameras for speed reduction, intersection safety camera program, highway safety corridors, and effectiveness of targeting red light violations. This issue of the TRR also examines the effect of seat belts on cost of injuries, seat belt usage by blacks and Hispanics,

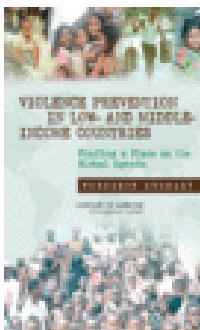
dilemma zone protection for trucks at high-speed signalized intersections, traffic safety and safe routes to schools, funding pupil transportation, footprint methodology for road safety, updating a state department of transportation database of crash reduction factors, social risk index to hurricanes in coastal regions, and no-notice evacuation following train wreck and chlorine spill.

**151. Standardizing Medication Labels: Confusing Patients Less, Workshop Summary** (2008) [http://www.nap.edu/catalog.php?record\\_id=12077](http://www.nap.edu/catalog.php?record_id=12077)



Medications are an important component of health care, but each year their misuse results in over a million adverse drug events that lead to office and emergency room visits as well as hospitalizations and, in some cases, death. As a patient's most tangible source of information about what drug has been prescribed and how that drug is to be taken, the label on a container of prescription medication is a crucial line of defense against such medication safety problems, yet almost half of all patients misunderstand label instructions about how to take their medicines. Standardizing Medication Labels: Confusing Patients Less is the summary of a workshop, held in Washington, D.C. on October 12, 2007, that was organized to examine what is known about how medication container labeling affects patient safety and to discuss approaches to addressing identified problems.

**152. Violence Prevention in Low- and Middle-Income Countries: Finding a Place on the Global Agenda. Workshop Summary** (2008) <http://www.iom.edu/Reports.aspx?Topic1={C7C4B78C-62B6-438F-97A6-114348CC1C29}>



The current state of science in violence prevention reveals progress, promise, and a number of remaining challenges. In order to fully examine the issue of global violence prevention, the Institute of Medicine in collaboration with Global Violence Prevention Advocacy, convened a workshop and released the workshop summary entitled, *Violence Prevention in Low-and Middle-Income Countries*.

The workshop brought together participants with a wide array of expertise in fields related to health, criminal justice, public policy, and economic development, to study and articulate specific opportunities for the U.S. government and other leaders with resources to more effectively support programming for prevention of the many types of violence. Participants highlighted the need for the timely development of an integrated, science-based approach and agenda to support research, clinical practice, program development, policy analysis, and advocacy for violence prevention.

**153. Driver Behavior, Older Drivers, Simulation, User Information Systems, and Visualization (2007)**

[http://www.trb.org/SafetyHumanFactors/Blurbs/Driver\\_Behavior\\_Older\\_Drivers\\_Simulation\\_User\\_Info\\_158833.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/Driver_Behavior_Older_Drivers_Simulation_User_Info_158833.aspx)



TRB's Transportation Research Record: Journal of the Transportation Research Board (TRR), No. 1980 explores accident reconstruction, risk perception, modeling driving behavior, driver response to rainfall on expressways, rewards for safe driving behavior, highway safety flares, adaptive cruise control and alert modality, eyeglance behavior, and multitasking with visual impairment and age. This TRB also examines road safety priorities in an aging society, electronic stability control systems effectiveness, cell phone use effect on driver distraction, dynamic fog warning and speed advisory messages, closed-circuit television road images for poor-visibility information, anticipatory traveler information systems, wildlife advisories, and an interactive virtual reality visualization system.

**154. Transportation in an Aging Society: Improving Mobility and Safety for Older Drivers (2007)**

[http://www.trb.org/SafetyHumanFactors/Blurbs/Transportation\\_in\\_an\\_Aging\\_Society\\_Improving\\_Mobility\\_159262.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/Transportation_in_an_Aging_Society_Improving_Mobility_159262.aspx)



TRB Special Report 218, Transportation in an Aging Society: Improving Mobility and Safety for Older Drivers explores the mobility and safety needs of older persons. Originally published in 1988, the report is now available in an electronic format. The report examines safety needs of the older person in traffic; reviews potential measures to improve highways, vehicles, driver and pedestrian performance, and alternatives to the private automobile; and assesses public policy questions about costs, the tradeoffs between safety and mobility objectives, and the sometimes conflicting needs of individuals, different age groups, and the public generally. The report also identifies areas for future research and includes recommendations for improvements in highway conditions, vehicle design, licensing, testing, education activities, and transportation alternatives. The report was published in two volumes. Volume 1 contains an overview of the issues and the committee's recommendations; Volume 2 contains the technical papers prepared for the study.

**155. Safety: Older Drivers; Traffic Law Enforcement; Management; School Transportation; Emergency Evacuation; Truck and Bus; and Motorcycles (2006)**

[http://www.trb.org/SafetyHumanFactors/Blurbs/Safety\\_Older\\_Drivers\\_Traffic\\_Law\\_Enforcement\\_Manag\\_157121.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/Safety_Older_Drivers_Traffic_Law_Enforcement_Manag_157121.aspx)



TRB's Transportation Research Record: Journal of the Transportation Research Board No. 1922 examines the responses of cognitively impaired older drivers to emergency vehicles, the crash cost savings associated with red light cameras, the design of safe roadways within and around schools in Texas, the modeling of contraflow freeway traffic under evacuation conditions, and the safety effects of separate roads for trucks.



**156. Improving the Safety of Older Road Users (2005)**

[http://www.trb.org/SafetyHumanFactors/Blurbs/Improving\\_the\\_Safety\\_of\\_Older\\_Road\\_Users\\_156344.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/Improving_the_Safety_of_Older_Road_Users_156344.aspx)



TRB's National Cooperative Highway Research Program (NCHRP) Synthesis 348: Improving the Safety of Older Road Users examines programs and policies in place across the country to improve the safety and mobility of older road users. The report documents a range of strategies and related programs under way in roadway engineering, driver licensing, public information and education, and enforcement and adjudication.

**157. Safe Mobility for Older Americans (2005)**

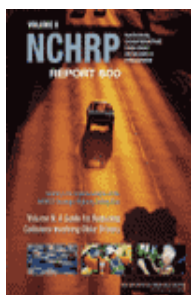
[http://www.trb.org/SafetyHumanFactors/Blurbs/Safe\\_Mobility\\_for\\_Older\\_Americans\\_156428.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/Safe_Mobility_for_Older_Americans_156428.aspx)



TRB's Conference Proceedings on the Web 2, Safe Mobility for Older Americans: Report of the Committee for the Conference on Transportation in an Aging Society summarizes research accomplishments made during the past decade related to the mobility of older Americans. The report also includes recommendations for policy makers, the research community, government agencies, older persons and their caregivers, the private sector, and other stakeholders to improve older adult safety and mobility and to spur research in needed areas. TRB Conference Proceedings 27: Transportation in an Aging Society: A Decade of Experience (2004) is a companion document to the report.

**158. A Guide for Reducing Collisions Involving Older Drivers (2004)**

[http://www.trb.org/SafetyHumanFactors/Blurbs/A\\_Guide\\_for\\_Reducing\\_Collisions\\_Involving\\_Older\\_Drivers\\_154829.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/A_Guide_for_Reducing_Collisions_Involving_Older_Drivers_154829.aspx)



TRB's National Cooperative Highway Research Program (NCHRP) Report 500 - Guidance for Implementation of the AASHTO Strategic Highway Safety Plan Volume 9: A Guide for Reducing Collisions Involving Older Drivers provides strategies that can be employed to reduce the number of collisions involving older drivers.

**159. Health and Safety Needs of Older Workers (2004)**

[http://books.nap.edu/catalog.php?record\\_id=10884](http://books.nap.edu/catalog.php?record_id=10884)



Mirroring a worldwide phenomenon in industrialized nations, the U.S. is experiencing a change in its demographic structure known as population aging. Concern about the aging population tends to focus on the adequacy of Medicare and Social Security, retirement of older Americans, and the need to identify policies, programs, and strategies that address the health and safety needs of older workers.

Older workers differ from their younger counterparts in a variety of physical, psychological, and social factors. Evaluating the extent, causes, and effects of these factors and improving the research and data systems necessary to address the health and safety needs of older workers may significantly impact both their ability to remain in the workforce and their well being in retirement.

*Health and Safety Needs of Older Workers* provides an image of what is currently known about the health and safety needs of older workers and the research needed to encourage social policies that guarantee older workers a meaningful share of the nation's work opportunities.

**160. Highway Safety: Older Persons; Traffic Law Enforcement; Management and Trucking (2004)**

[http://www.trb.org/SafetyHumanFactors/Blurbs/Highway\\_Safety\\_Older\\_Persons\\_Traffic\\_Law\\_Enforceme\\_155060.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/Highway_Safety_Older_Persons_Traffic_Law_Enforceme_155060.aspx)



TRB's Transportation Research Record: Journal of the Transportation Research Board 1865 examines the effects of a controlled auditory-verbal distraction task on older driver vehicle control; the effect of standard enforcement on safety belt citations in Michigan; the impact of yellow-interval timing on the frequency of red-light violations at urban intersections; and the effects of day length on sleep habits and subjective on-duty alertness in irregular work schedules.

**161. Human Performance, Simulation, User Information Systems, and Older Person Safety and Mobility (2004)**

[http://www.trb.org/SafetyHumanFactors/Blurbs/Human\\_Performance\\_Simulation\\_User\\_Information\\_Syst\\_154630.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/Human_Performance_Simulation_User_Information_Syst_154630.aspx)



TRB's Transportation Research Record: Journal of the Transportation Research Board 1843 presents characteristics of cell phone-related motor vehicle crashes in North Carolina, the sensory cause of railroad grade-crossing collisions, the effectiveness of ground-mounted diagrammatic advance guide signs for freeway entrance ramps, and consequences of driving reduction or cessation for older adults.

**162. Transportation in an Aging Society (2004)**

[http://www.trb.org/SafetyHumanFactors/Blurbs/Transportation\\_in\\_an\\_Aging\\_Society\\_154746.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/Transportation_in_an_Aging_Society_154746.aspx)



TRB's Conference Proceedings 27 -- Transportation in an Aging Society: A Decade of Experience includes the technical papers and reports from a 1999 conference that examined issues associated with achieving safer mobility for older persons. The issues discussed and papers presented at the meeting are judged to be important to the field and are being published so they are available to a broader audience.

**163. Highway Safety: Work Zones, Law Enforcement, Motorcycles, Trucks, Older Drivers, and Pedestrians (2003)**

[http://www.trb.org/SafetyHumanFactors/Blurbs/Highway\\_Safety\\_Work\\_Zones\\_Law\\_Enforcement\\_Motorcyc\\_152845.aspx](http://www.trb.org/SafetyHumanFactors/Blurbs/Highway_Safety_Work_Zones_Law_Enforcement_Motorcyc_152845.aspx)



Transportation Research Record (TRR) 1818 offers findings on road use behavior in Estonia; the typology of motorcycle crashes; truck crashes; the relationship between injury and fatality in aging road users; pedestrian collision prediction; and sidewalk design and accessibility for persons with disabilities. The TRR series is the Journal of the Transportation Research Board; individual TRRs, which are published on an irregular basis throughout the year, consist of collections of peer-reviewed papers on specific transportation subject areas and modes.

**164. Immunization Safety Review: Influenza Vaccines and Neurological Complications (2003)** [http://www.nap.edu/catalog.php?record\\_id=10822#description](http://www.nap.edu/catalog.php?record_id=10822#description)



Infection with the influenza virus can have a serious effect on the health of people of all ages, although it is particularly worrisome for infants, the elderly, and people with underlying heart or lung problems. A vaccine exists (the flu shot) that can greatly decrease the impact of influenza. Because the strains of virus that are expected to cause serious illness and death are slightly different every year, the vaccine is also slightly different every year and it must be given every year, unlike other vaccines.

The Immunization Safety Review committee reviewed the data on influenza vaccine and neurological conditions and concluded that the evidence favored rejection of a causal relationship between influenza vaccines and exacerbation of multiple sclerosis. For the other neurological conditions studied, the committee concluded the evidence about the effects of influenza vaccine is inadequate to accept or reject a causal relationship. The committee also reviewed theories on how the influenza vaccine could damage the nervous system. The evidence was at most weak that the vaccine could act in humans in ways that could lead to these neurological problems.

**165. Elder Mistreatment: Abuse, Neglect, and Exploitation in an Aging America (2002)** [http://www.nap.edu/catalog.php?record\\_id=10406](http://www.nap.edu/catalog.php?record_id=10406)



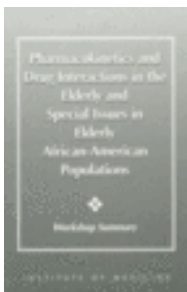
Since the late 1970s when Congressman Claude Pepper held widely publicized hearings on the mistreatment of the elderly, policy makers and practitioners have sought ways to protect older Americans from physical, psychological, and financial abuse. Yet, during the last 20 years fewer than 50 articles have addressed the shameful problem that abusers and sometimes the abused themselves want to conceal.

This report takes a giant step toward broadening our understanding of the mistreatment of the elderly and recommends specific research and funding strategies that can be used to deepen it. The book includes a discussion of the conceptual, methodological, and logistical issues needed to create a solid research base as well as the ethical concerns that must be considered when working with older subjects. It also looks at problems in determination of a report's reliability and the role of physicians, EMTs, and others who are among the first to recognize situations of mistreatment.

This report will be of interest to anyone concerned about the elderly and ways to intervene when abuse is suspected, including family members, caregivers, and advocates for the elderly. It will also be of interest to researchers, research sponsors, and policy makers who need to know how to advance our knowledge of this problem.

**166. Pharmacokinetics and Drug Interactions in the Elderly and Special Issues in Elderly African-American Populations: Workshop Summary (1997)**

[http://books.nap.edu/catalog.php?record\\_id=5854](http://books.nap.edu/catalog.php?record_id=5854)



Reports in the popular press about the increasing longevity of Americans and the aging of the baby boom generation are constant reminders that the American population is becoming older. Consequently, an issue of growing medical, health policy, and social concern is the appropriate and rational use of medications by the elderly.

In 1996, the National Institute on Aging and the National Institutes of Health (NIH) Office of Research on Minority Health requested that the Institute of Medicine (IOM) conduct a workshop study to examine research opportunities and barriers to research on pharmacokinetics, pharmacodynamics, and drug interactions in the elderly with attention to elderly African-American populations.

## Science and Technology

**167. Nanotechnology and Oncology – Workshop Summary (2011)**

[http://www.nap.edu/catalog.php?record\\_id=13037](http://www.nap.edu/catalog.php?record_id=13037)

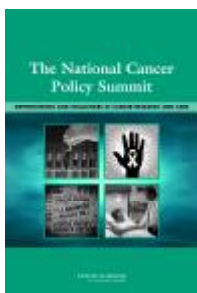


One way scientists are working to overcome challenges in cancer treatment and improve cancer care is through nanotechnology. Nanotechnology, engineered materials that make use of the unique physical properties, presents a new array of medical prospects that will revolutionize cancer prevention, diagnosis, and treatment practices. Giving new hope to patients, practitioners, and researchers alike, nanotechnology has the potential to translate recent discoveries in cancer biology into clinical advances in oncology. While public investments in

nanotechnology for cancer continue to increase, medical products based on nanotechnology are already on the market.

The National Cancer Policy forum held a workshop July 12-13, 2010, to explore challenges in the use of nanotechnology in oncology. *Nanotechnology and Oncology* evaluates the ongoing discussion on the role of nanotechnology in cancer as it relates to risk management, treatment, and regulatory policy. Assessments on nanomedicine and the physical properties of nanomaterials were presented during the workshop, along with an appraisal of the current status of research and development efforts.

**168. The National Cancer Policy Summit: Opportunities and Challenges in Cancer Research and Care** (2011) [http://www.nap.edu/catalog.php?record\\_id=13101](http://www.nap.edu/catalog.php?record_id=13101)



Many ongoing changes are likely to have an impact on cancer research and care. For example, technological advances are rapidly changing the way cancer research is conducted, and the recently passed healthcare reform legislation has many implications for cancer care. Technological advances are altering the way cancer research is conducted and cancer care is delivered, and the recently passed healthcare reform legislation has many implications for cancer care. There is a growing emphasis on molecularly targeted therapies, information technology (IT), and patient-centered care, and clinical cancer research has

become a global endeavor. At the same time, there are concerns about shrinking research budgets and escalating costs of cancer care.

Considering such changes, the National Cancer Policy Forum (NCPF) of the Institute of Medicine held a National Cancer Policy Summit on October 25, 2010. The Summit convened key leaders in the cancer community to identify and discuss the most pressing policy issues in cancer research and cancer care. *The National Cancer Policy Summit: Opportunities and Challenges in Cancer Research and Care* is a summary of the summit. The report explores policy issues related to cancer research, the implementation of healthcare reform, delivery of cancer care, and cancer control and public health needs. Expert participants suggested many potential actions to provide patient-centered cancer care, to foster more collaboration, and to achieve other goals to improve research and care.

**169. Extending the Spectrum of Precompetitive Collaboration in Oncology Research - Workshop Summary** (2010) [http://www.nap.edu/catalog.php?record\\_id=12930](http://www.nap.edu/catalog.php?record_id=12930)



Despite spending more time and money in developing novel therapeutics, the success rate for new pharmacologic treatments has been poor. Although the research and development expenditures have grown 13 percent each year since 1970 (a 50-fold increase), the number of new drugs approved annually is no greater now than it was 50 years ago. Over the past decade, skyrocketing costs and the complexity of the scientific knowledge upon which to develop new agents have provided incentives for alternative approaches to drug development, if we are to continue to improve clinical care and reduce

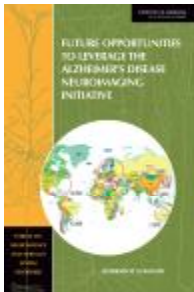
mortality. These challenges create opportunities for improved collaboration between industry, academia, government, and philanthropic organizations at each stage in new drug development, marketing, and implementation.



Perhaps the most appropriate initial step in addressing the need for collaboration is to consider more precompetitive relationships that allow sharing of scientific information to foster drug development. While these collaborative relationships in basic and preclinical research on drug targets and the early stages of clinical testing are acknowledged to be potentially important drivers for innovation and more rapid marketing of new agents, they also raise a number of concerns that must be addressed. For example, acknowledgment of academic productivity and independence and economic competitiveness must be considered and these challenges managed to foster a culture of collaboration. At the same time, regulatory issues, the need for standardization, and intellectual property concerns must be confronted if the current models for drug development are to be refined to encourage robust participation in precompetitive collaborations.

Recognizing the growing importance of precompetitive collaborations in oncology drug development, as well as the challenges these innovative collaborations pose, the National Cancer Policy Forum of the Institute of Medicine held a workshop on February 9 and 10, 2010. This book is a summary of the workshop proceedings.

**170. Future Opportunities to Leverage the Alzheimer's Disease Neuroimaging Initiative - Workshop Summary** (2010) <http://www.iom.edu/Reports/2010/Future-Opportunities-to-Leverage-Alzheimers-Disease-Neuroimaging-Initiative.aspx>



Nearly 5.3 million Americans are living with Alzheimer's disease, and 26.6 million people are affected worldwide. The Alzheimer's Disease Neuroimaging Initiative (ADNI), a public-private partnership, provides a publicly available, international database of clinical and imaging data to foster research and collaboration on Alzheimer's research worldwide. The Institute of Medicine held a workshop on July 12, 2010, to explore opportunities to use information from and partnerships formed because of ADNI to continue to improve the understanding and treatment of Alzheimer's disease.

**171. Grand Challenges of Our Aging Society: Workshop Summary** (2010) [http://books.nap.edu/catalog.php?record\\_id=12852#orgs](http://books.nap.edu/catalog.php?record_id=12852#orgs)



Aging populations are generating both challenges and opportunities for societies around the globe. Increases in longevity and improvements in health raise many questions. What steps can be taken to optimize physical and cognitive health and productivity across the life span? How will older people finance their retirement and health care? What will be the macroeconomic implications of an aging population? How will communities be shaped by the shift in age structure? What global interconnections will affect how each society handles the aging of its population?

To address these questions, the National Academies organized a symposium, summarized in the present volume, to determine how best to contribute to an evidence-based dialogue on population aging that will shape policies and programs. Presentations in the fields of biology, public health, medicine, informatics, macroeconomics, finance, urban planning, and engineering approached the challenges of aging from many different angles. The presenters reviewed the current state of knowledge in their respective fields, identifying areas of consensus

and controversy and delineating the priority questions for further research and policy development.

- 172. Mental, Neurological, and Substance Use Disorders in Sub-Saharan Africa: Reducing the Treatment Gap, Increasing Quality of Care - Workshop Summary** (2010) <http://www.iom.edu/Reports.aspx?Topic1={C7C4B78C-62B6-438F-97A6-114348CC1C29}>



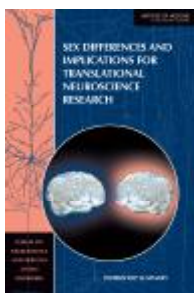
Millions of people in sub-Saharan Africa suffer from mental, neurological, and substance use (MNS) disorders, and most do not have the resources to obtain treatment. The Uganda National Academy of Sciences and the Institute of Medicine hosted a workshop to discuss the state of care for MNS disorders in sub-Saharan Africa.

- 173. A National Cancer Clinical Trials System for the 21st Century: Reinvigorating the NCI Cooperative Group Program** (2010) [http://www.nap.edu/catalog.php?record\\_id=12879](http://www.nap.edu/catalog.php?record_id=12879)



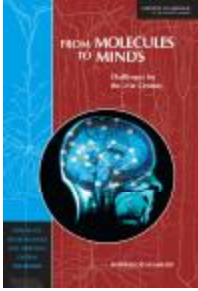
The National Cancer Institute's (NCI) Clinical Trials Cooperative Group Program has played a key role in developing new and improved cancer therapies. However, the program is falling short of its potential, and the IOM recommends changes that aim to transform the Cooperative Group Program into a dynamic system that efficiently responds to emerging scientific knowledge; involves broad cooperation of stakeholders; and leverages evolving technologies to provide high-quality, practice-changing research.

- 174. Sex Differences and Implications for Translational Neuroscience Research - Workshop Summary** (2010) [http://www.nap.edu/catalog.php?record\\_id=13004](http://www.nap.edu/catalog.php?record_id=13004)



Biological differences between the sexes influence not only individual health but also public health, biomedical research, and health care. The Institute of Medicine held a workshop March 8-9, 2010, to discuss sex differences and their implications for translational neuroscience research, which bridges the gap between scientific discovery and application.

- 175. From Molecules to Minds: Challenges for the 21st Century. Workshop Summary** (2008) [http://www.nap.edu/catalog.php?record\\_id=12220](http://www.nap.edu/catalog.php?record_id=12220)



Neuroscience has made phenomenal advances over the past 50 years and the pace of discovery continues to accelerate. On June 25, 2008, the Institute of Medicine (IOM) Forum on Neuroscience and Nervous System Disorders hosted more than 70 of the leading neuroscientists in the world, for a workshop titled "From Molecules to Minds: Challenges for the 21st Century." The objective of the workshop was to explore a set of common goals or "Grand Challenges" posed by participants that could inspire and rally both the scientific community and the public to consider the possibilities for neuroscience in the 21st century.

The progress of the past in combination with new tools and techniques, such as neuroimaging and molecular biology, has positioned neuroscience on the cusp of even greater transformational progress in our understanding of the brain and how its inner workings result in mental activity.

This workshop summary highlights the important issues and challenges facing the field of neuroscience as presented to those in attendance at the workshop, as well as the subsequent discussion that resulted.

As a result, three overarching Grand Challenges emerged:

- § How does the brain work and produce mental activity? How does physical activity in the brain give rise to thought, emotion, and behavior?
- § How does the interplay of biology and experience shape our brains and make us who we are today?
- § How do we keep our brains healthy? How do we protect, restore, or enhance the functioning of our brains as we age?

**176. The National Academies Keck Futures Initiative: The Future of Human Healthspan: Demography, Evolution, Medicine, and Bioengineering, Task Group Summaries (2008)** [http://books.nap.edu/catalog.php?record\\_id=12084](http://books.nap.edu/catalog.php?record_id=12084)



An individual's healthspan can be defined as the length of time an individual is able to maintain good health. In 2007, over one hundred experts and researchers from public and private institutions across the nation convened to find new ways of addressing the human healthspan and the elusive nature of aging. Experts in public health, bioengineering, neuroscience and gerontology discussed how stress and lifestyle influence the decline of health at older ages. Other discussions focused on the integration of technology in the quality of life, gerontology, regenerative medicine and life expectancy with regard to social and behavioral traits. Still, other groups explored topics such as the cellular and molecular mechanisms of biological aging, the effects of exercise on the human healthspan, and changes in social context to enhance functional status of the elderly. Most importantly, experts agreed that it was imperative to ensure that the elderly have access to medical services by establishing relationships with health care and insurance providers.

**177. A Strategy for Assessing Science: Behavioral and Social Research on Aging (2006)** [http://books.nap.edu/catalog.php?record\\_id=11788](http://books.nap.edu/catalog.php?record_id=11788)



*A Strategy for Assessing Science* offers strategic advice on the perennial issue of assessing rates of progress in different scientific fields. It considers available

knowledge about how science makes progress and examines a range of decision-making strategies for addressing key science policy concerns. These include avoiding undue conservatism that may arise from the influence of established disciplines; achieving rational, high-quality, accountable, and transparent decision processes; and establishing an appropriate balance of influence between scientific communities and agency science managers. *A Strategy for Assessing Science* identifies principles for setting priorities and specific recommendations for the context of behavioral and social research on aging.

**178. Enabling America: Assessing the Role of Rehabilitation Science and Engineering**  
(2005) <http://www.iom.edu/Reports.aspx?Topic1={C7C4B78C-62B6-438F-97A6-114348CC1C29}>



The most recent high-profile advocate for Americans with disabilities, actor Christopher Reeve, has highlighted for the public the economic and social costs of disability and the importance of rehabilitation. Enabling America is a major analysis of the field of rehabilitation science and engineering. The book explains how to achieve recognition for this evolving field of study, how to set priorities, and how to improve the organization and administration of the numerous federal research programs in this area.

The committee introduces the "enabling-disability process" model, which enhances the concepts of disability and rehabilitation, and reviews what is known and what research priorities are emerging in the areas of:

- § Pathology and impairment, including differences between children and adults.
- § Functional limitations--in a person's ability to eat or walk, for example.
- § Disability as the interaction between a person's pathologies, impairments, and functional limitations and the surrounding physical and social environments. This landmark volume will be of special interest to anyone involved in rehabilitation science and engineering: federal policymakers, rehabilitation practitioners and administrators, researchers, and advocates for persons with disabilities.

**179. Technology for Adaptive Aging** (2004)  
[http://www.nap.edu/catalog.php?record\\_id=10857](http://www.nap.edu/catalog.php?record_id=10857)



Emerging and currently available technologies offer great promise for helping older adults, even those without serious disabilities, to live healthy, comfortable, and productive lives. What technologies offer the most potential benefit? What challenges must be overcome, what problems must be solved, for this promise to be fulfilled? How can federal agencies like the National Institute on Aging best use their resources to support the translation from laboratory findings to useful, marketable products and services?

*Technology for Adaptive Aging* is the product of a workshop that brought together distinguished experts in aging research and in technology to discuss applications of technology to communication, education and learning, employment, health, living environments, and transportation for older adults. It includes all of the workshop papers and the report of the committee that organized the workshop. The committee report synthesizes and evaluates the

points made in the workshop papers and recommends priorities for federal support of translational research in technology for older adults.

**180. Fulfilling the Potential of Cancer Prevention and Early Detection: An American Cancer Society and Institute of Medicine Symposium (2004)**

[http://books.nap.edu/catalog.php?record\\_id=10941](http://books.nap.edu/catalog.php?record_id=10941)



In this report, the American Cancer Society (ACS) and the Institute of Medicine (IOM) present a one-day symposium that was held at the Institute to further disseminate the conclusions and recommendations of the Institute's National Cancer Policy Board report, *Fulfilling the Potential of Cancer Prevention and Early Detection*. The symposium was led by the Director of the National Cancer Institute (NCI), the Chief Executive Officer of the American Cancer Society, and the President of the IOM.

**181. Fulfilling the Potential for Cancer Prevention and Early Detection (2003)**

[http://books.nap.edu/catalog.php?record\\_id=10263](http://books.nap.edu/catalog.php?record_id=10263)



Cancer ranks second only to heart disease as a leading cause of death in the United States, making it a tremendous burden in years of life lost, patient suffering, and economic costs. *Fulfilling the Potential for Cancer Prevention and Early Detection* reviews the proof that we can dramatically reduce cancer rates. The National Cancer Policy Board, part of the Institute of Medicine, outlines a national strategy to realize the promise of cancer prevention and early detection, including specific and wide-ranging recommendations. Offering a wealth of information and directly addressing major controversies, the book

includes:

- A detailed look at how significantly cancer could be reduced through lifestyle changes, evaluating approaches used to alter eating, smoking, and exercise habits.
- An analysis of the intuitive notion that screening for cancer leads to improved health outcomes, including a discussion of screening methods, potential risks, and current recommendations.
- An examination of cancer prevention and control opportunities in primary health care delivery settings, including a review of interventions aimed at improving provider performance.
- Reviews of professional education and training programs, research trends and opportunities, and federal programs that support cancer prevention and early detection.

This in-depth volume will be of interest to policy analysts, cancer and public health specialists, health care administrators and providers, researchers, insurers, medical journalists, and patient advocates.

**182. Immunization Safety Review: Influenza Vaccines and Neurological Complications (2003)** [http://www.nap.edu/catalog.php?record\\_id=10822#description](http://www.nap.edu/catalog.php?record_id=10822#description)



Infection with the influenza virus can have a serious effect on the health of people of all ages, although it is particularly worrisome for infants, the elderly, and people with underlying heart or lung problems. A vaccine exists (the flu shot) that can greatly decrease the impact of influenza. Because the strains of



virus that are expected to cause serious illness and death are slightly different every year, the vaccine is also slightly different every year and it must be given every year, unlike other vaccines.

The Immunization Safety Review committee reviewed the data on influenza vaccine and neurological conditions and concluded that the evidence favored rejection of a causal relationship between influenza vaccines and exacerbation of multiple sclerosis. For the other neurological conditions studied, the committee concluded the evidence about the effects of influenza vaccine is inadequate to accept or reject a causal relationship. The committee also reviewed theories on how the influenza vaccine could damage the nervous system. The evidence was at most weak that the vaccine could act in humans in ways that could lead to these neurological problems.

**183. Testosterone and Aging: Clinical Research Directions (2003)**

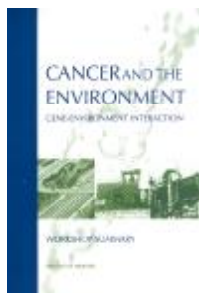
[http://www.nap.edu/catalog.php?record\\_id=10852](http://www.nap.edu/catalog.php?record_id=10852)



Popular culture often equates testosterone with virility, strength, and the macho male physique. Viewed by some as an antiaging tonic, testosterone's reputation and increased use by men of all ages in the United States have outpaced the scientific evidence about its potential benefits and risks. In particular there has been growing concern about an increase in the number of middle-aged and older men using testosterone and the lack of scientific data on the effect it may have on aging males. Studies of testosterone replacement therapy in older men have generally been of short duration, involving small numbers of participants and often lacking adequate controls. *Testosterone and Aging* weighs the options of future research directions, examines the risks and benefits of testosterone replacement therapy, assesses the potential public health impact of such therapy in the United States, and considers ethical issues related to the conduct of clinical trials. Testosterone therapy remains an attractive option to many men even as speculation abounds regarding its potential.

**184. Cancer and the Environment: Gene-Environment Interactions (2002)**

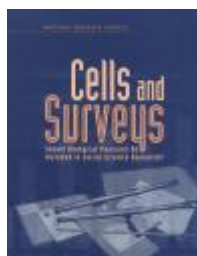
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Cancer is the second leading cause of death in the United States and results in more than half a million deaths each year. In the 1990s, we began to see a downward trend in cancer death rates with an increased survival rate of cancer patients. Most of the increase in survival rates can be attributed to earlier detection through screening programs and advances in chemotherapy. However, what these positive trends mask is the fact that the incidence of some cancers is still on the rise.

**185. Cells and Surveys: Should Biological Measures Be Included in Social Science Research? (2001)**

[http://www.nap.edu/catalog.php?record\\_id=9995](http://www.nap.edu/catalog.php?record_id=9995)

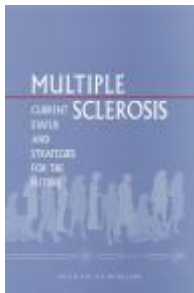


What can social science, and demography in particular, reasonably expect to learn from biological information? There is increasing pressure for

multipurpose household surveys to collect biological data along with the more familiar interviewer-respondent information. Given that recent technical developments have made it more feasible to collect biological information in non-clinical settings, those who fund, design, and analyze survey data need to think through the rationale and potential consequences. This is a concern that transcends national boundaries. *Cells and Surveys* addresses issues such as which biologic/genetic data should be collected in order to be most useful to a range of social scientists and whether amassing biological data has unintended side effects. The book also takes a look at the various ethical and legal concerns that such data collection entails.

**186. Multiple Sclerosis: Current Status and Strategies for the Future (2001)**

[http://www.nap.edu/catalog.php?record\\_id=10031](http://www.nap.edu/catalog.php?record_id=10031)



Multiple sclerosis is a chronic and often disabling disease of the nervous system, affecting about 1 million people worldwide. Even though it has been known for over a hundred years, no cause or cure has yet been discovered-but now there is hope. New therapies have been shown to slow the disease progress in some patients, and the pace of discoveries about the cellular machinery of the brain and spinal cord has accelerated.

This book presents a comprehensive overview of multiple sclerosis today, as researchers seek to understand its processes, develop therapies that will slow or halt the disease and perhaps repair damage, offer relief for specific symptoms, and improve the abilities of MS patients to function in their daily lives.

The panel reviews existing knowledge and identifies key research questions, focusing on:

- § Research strategies that have the greatest potential to understand the biological mechanisms of recovery and to translate findings into specific strategies for therapy.
- § How people adapt to MS and the research needed to improve the lives of people with MS.
- § Management of disease symptoms (cognitive impairment, depression, spasticity, vision problems, and others).

**187. New Horizons in Health: An Integrative Approach (2001)**

[http://www.nap.edu/catalog.php?record\\_id=10002](http://www.nap.edu/catalog.php?record_id=10002)



*New Horizons in Health* discusses how the National Institutes of Health (NIH) can integrate research in the social, behavioral, and biomedical sciences to better understand the causes of disease as well as interventions that promote health. It outlines a set of research priorities for consideration by the Office of Behavioral and Social Sciences Research (OBSSR), with particular attention to research that can support and complement the work of the National Institutes of Health. By addressing the range of interactions among social settings, behavioral patterns, and important health concerns, it highlights areas of scientific opportunity where significant investment is most likely to improve national and global health outcomes. These opportunities will apply the knowledge and methods of the behavioral and social sciences to contemporary health needs, and give attention to the chief health concerns of the general public.

**188. Summary of a Workshop on Research in Multiple Sclerosis (2001)**

[http://books.nap.edu/catalog.php?record\\_id=10116](http://books.nap.edu/catalog.php?record_id=10116)



More than 50 invited experts representing international organizations supporting MS research participated in an April, 2001, workshop held in Washington D.C. to advance research recommended by the report, *Multiple Sclerosis: Current Status and Strategies for the Future*. This workshop summary presents the reports from each breakout group and summarizes the plenary session discussion. For clarity, the recommendations are grouped slightly differently from the grouping in the report.

**189. The Aging Mind: Opportunities in Cognitive Research (2000)**

[http://www.nap.edu/catalog.php?record\\_id=9783](http://www.nap.edu/catalog.php?record_id=9783)



Possible new breakthroughs in understanding the aging mind that can be used to benefit older people are now emerging from research. This volume identifies the key scientific advances and the opportunities they bring. For example, science has learned that among older adults who do not suffer from Alzheimer's disease or other dementias, cognitive decline may depend less on loss of brain cells than on changes in the health of neurons and neural networks. Research on the processes that maintain neural health shows promise of revealing new ways to promote cognitive functioning in older people. Research is also showing how cognitive functioning depends on the conjunction of biology and culture. The ways older people adapt to changes in their nervous systems, and perhaps the changes themselves, are shaped by past life experiences, present living situations, changing motives, cultural expectations, and emerging technology, as well as by their physical health status and sensory-motor capabilities. Improved understanding of how physical and contextual factors interact can help explain why some cognitive functions are impaired in aging while others are spared and why cognitive capability is impaired in some older adults and spared in others. On the basis of these exciting findings, the report makes specific recommendations that the U.S. government support three major new initiatives as the next steps for research.

**190. Developing Technologies for Early Detection of Breast Cancer: Summary of Public Workshop #2 (2000)** [http://books.nap.edu/catalog.php?record\\_id=10011](http://books.nap.edu/catalog.php?record_id=10011)



In November 1999, the Institute of Medicine, in consultation with the Commission on Life Sciences, the Commission on Physical Sciences, Mathematics, and Applications, and the Board of Science, Technology and Economic Policy initiated a one-year technology assessment study on emerging technologies for the early detection of breast cancer. The committee's mandate was twofold: (1) to review emerging technologies that could potentially aid in earlier detection of breast cancer and (2) to recommend priorities for bolstering the technology development, evaluation, and adoption process, with the goal that such development could

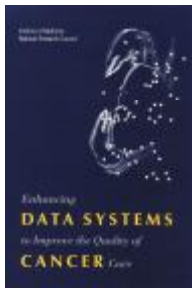
reduce breast cancer burden and deaths. As part of its charge, the committee held two workshops. This report is a summary of the second of the two workshops.

**191. Developing Technologies for Early Detection of Breast Cancer: A Public Workshop Summary (2000)** [http://books.nap.edu/catalog.php?record\\_id=9893](http://books.nap.edu/catalog.php?record_id=9893)



In November 1999, the Institute of Medicine, in consultation with the Commission on Life Sciences, the Commission on Physical Sciences, Mathematics, and Applications, and the Board on Science, Technology and Economic Policy launched a one year study on technologies for early detection of breast cancer. The committee was asked to examine technologies under development for early breast cancer detection, and to scrutinize the process of medical technology development, adoption, and dissemination. The committee is gathering information on these topics for its report in a number of ways, including two public workshops that bring in outside expertise. The first workshop on “Developing Technologies for Early Breast Cancer Detection” was held in Washington DC in February 2000. The content of the presentations at the workshop is summarized here. A second workshop, which will focus on the process of technology development and adoption, will be held in Washington, DC on June 19–20. A formal report on these topics, including conclusions and recommendations, will be prepared by the committee upon completion of the one-year study.

**192. Enhancing Data Systems to Improve the Quality of Cancer Care (2000)** [http://books.nap.edu/catalog.php?record\\_id=9970](http://books.nap.edu/catalog.php?record_id=9970)

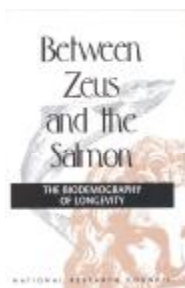


One of the barriers to improving the quality of cancer care in the United States is the inadequacy of data systems. Out-of-date or incomplete information about the performance of doctors, hospitals, health plans, and public agencies makes it hard to gauge the quality of care. Augmenting today's data systems could start to fill the gap.

This report examines the strengths and weaknesses of current systems and makes recommendations for enhancing data systems to improve the quality of cancer care. The board's recommendations fall into three key areas:

- § Enhance key elements of the data system infrastructure (i.e., quality-of-care measures, cancer registries and databases, data collection technologies, and analytic capacity).
- § Expand support for analyses of quality of cancer care using existing data systems.
- § Monitor the effectiveness of data systems to promote quality improvement within health systems.

**193. Between Zeus and Salmon: The Biodemography of Longevity (1997)** [http://books.nap.edu/catalog.php?record\\_id=5740](http://books.nap.edu/catalog.php?record_id=5740)



Demographers and public health specialists have been surprised by the rapid increases in life expectancy, especially at the oldest ages, that have occurred since the early 1960s. Some scientists are calling into question the idea of a fixed upper limit for the human life span. There is new evidence about the genetic bases for both humans and other species. There are also new theories and models

of the role of mutations accumulating over the life span and the possible evolutionary advantages of survival after the reproductive years.

This volume deals with such diverse topics as the role of the elderly in other species and among human societies past and present, the contribution of evolutionary theory to our understanding of human longevity and intergenerational transfers, mathematical models for survival, and the potential for collecting genetic material in household surveys. It will be particularly valuable for promoting communication between the social and life sciences.

**194. Pharmacokinetics and Drug Interactions in the Elderly and Special Issues in Elderly African-American Populations: Workshop Summary (1997)**

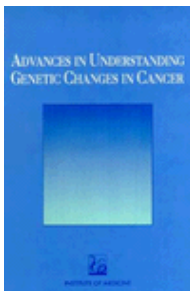
[http://books.nap.edu/catalog.php?record\\_id=5854](http://books.nap.edu/catalog.php?record_id=5854)



Reports in the popular press about the increasing longevity of Americans and the aging of the baby boom generation are constant reminders that the American population is becoming older. Consequently, an issue of growing medical, health policy, and social concern is the appropriate and rational use of medications by the elderly.

**195. Advances in Understanding Genetic Changes in Cancer: Impact on Diagnosis and Treatment Decisions in the (1992)**

[http://books.nap.edu/catalog.php?record\\_id=1965](http://books.nap.edu/catalog.php?record_id=1965)



The past 20 years have seen a rapid increase in our understanding of the biology of cancer. And, advances in understanding the genetics of cancer are beginning to have an impact on the clinical management of malignant disease. Many of the genetic changes that underlie malignant transformation of cells and/or that distinguish malignant clones can be used as markers to diagnose, monitor, or characterize various forms of cancer.

The purpose of this volume is to assess the current status of genetic testing in cancer management both from the standpoint of those tests and genetic markers that are presently available and from the perspective of genetic approaches to cancer testing that are likely to have an impact on cancer management in the near future.

**196. Extending Life, Enhancing Life: A National Research Agenda on Aging (1991)**

[http://books.nap.edu/catalog.php?record\\_id=1632](http://books.nap.edu/catalog.php?record_id=1632)



Americans are living longer than ever before. For many, though, these extra years have become a bitter gift, marred by dementia, disability, and loss of independence.



197. **Human Factors Research Needs for an Aging Population** (1990)

[http://books.nap.edu/catalog.php?record\\_id=1518#orgs](http://books.nap.edu/catalog.php?record_id=1518#orgs)



This book describes the demographic, sociological, and ecological background of the aging society, identifies human factors problems associated with aging, summarizes currently relevant information, and recommends directions for research. It suggests a program of research and technology development for the purpose of ameliorating the effects of functional changes that accompany the aging process and provides a basis for additional research and application of human factors engineering data to the design of environments in which aging people must function.

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**Working at Older Ages**

198. **When I'm 64** (2006) <http://www7.nationalacademies.org/dbasse/Aging.html>



When I'm 64 explores what we know about how behavior changes as people age and poses intriguing research questions whose answers can expand our knowledge. The recommended research areas are geared to both practical issues in everyday life and to fields that have unusual promise for making significant advances in understanding the psychological mechanisms that underlie behavior. The report also looks at the question of whether being socially engaged affects our cognitive abilities, as well as the effects that stereotypes about aging have on the older population—and the younger one. As the “baby boomers” enter late life, these issues will play increasingly major roles in all aspects of the U.S. economy and society.

199. **Health and Safety Needs of Older Workers** (2004)

[http://books.nap.edu/catalog.php?record\\_id=10884](http://books.nap.edu/catalog.php?record_id=10884)



Mirroring a worldwide phenomenon in industrialized nations, the U.S. is experiencing a change in its demographic structure known as population aging. Concern about the aging population tends to focus on the adequacy of Medicare and Social Security, retirement of older Americans, and the need to identify policies, programs, and strategies that address the health and safety needs of older workers. Older workers differ from their younger counterparts in a variety of physical, psychological, and social factors. Evaluating the extent, causes, and effects of these factors and improving the research and data systems necessary to address the health and safety needs of older workers may significantly impact both their ability to remain in the workforce and their well being in retirement.

*Health and Safety Needs of Older Workers* provides an image of what is currently known about the health and safety needs of older workers and the research needed to encourage social policies that guarantee older workers a meaningful share of the nation's work opportunities.

**200. Technology for Adaptive Aging (2004)**

[http://www.nap.edu/catalog.php?record\\_id=10857](http://www.nap.edu/catalog.php?record_id=10857)

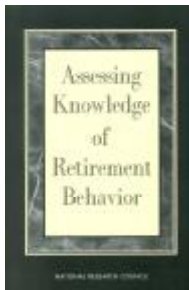


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*Technology for Adaptive Aging* is the product of a workshop that brought together distinguished experts in aging research and in technology to discuss applications of technology to communication, education and learning, employment, health, living environments, and transportation for older adults. It includes all of the workshop papers and the report of the committee that organized the workshop. The committee report synthesizes and evaluates the points made in the workshop papers and recommends priorities for federal support of translational research in technology for older adults.

**201. Assessing Knowledge of Retirement Behavior (1996)**

[http://www.nap.edu/catalog.php?record\\_id=5367](http://www.nap.edu/catalog.php?record_id=5367)



This book brings together in one volume what researchers have learned about workers, employers, and retirees that is important for formulating retirement income policies. As the U.S. population ages, there is increasing uncertainty about the solvency of the Social Security and Medicare systems and the adequacy of private pensions to provide for people's retirement needs. The volume covers such critical behaviors as workers' decisions to retire, people's choices of saving over consumption, and employers' decisions about hiring older workers and providing pension and health care benefits. Also covered are

trends in mortality, health status, and health care costs that are key to projecting the likely costs and effects of alternative retirement income security policies and a strategy for combining data and research knowledge into a policy modeling framework.

**202. Ending Mandatory Retirement for Tenured Faculty: The Consequences for Higher Education (1991)**

[http://books.nap.edu/catalog.php?record\\_id=1795](http://books.nap.edu/catalog.php?record_id=1795)



The proportion of older faculty is increasing nationwide. This book offers guidance not only for dealing with the elimination of mandatory retirement in higher education but also for current retirement-related issues facing all colleges and universities.

*Ending Mandatory Retirement* addresses such questions as: Do the special circumstances of higher education warrant the continuation of mandatory retirement? How would an increase in the number of older faculty affect individual

colleges and universities and their faculty members? Where there are undesirable effects, what could be done to minimize them?

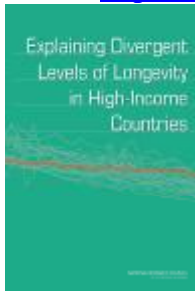
The book contains analyses of early retirement programs, faculty performance evaluation practices, pension and benefit policies, tenure policies, and faculty ages and retirement patterns.

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## International Perspectives on Aging

### 203. **Explaining Divergent Levels of Longevity in High-Income Countries** (2011)

<http://www7.nationalacademies.org/cpop/Projects.html>



Over the last 25 years, life expectancy at age 50 in the U.S. has been rising, but at a slower pace than in many other high-income countries, such as Japan and Australia. This difference is particularly notable given that the U.S. spends more on health care than any other nation. Concerned about this divergence, the National Institute on Aging asked the National Research Council to examine evidence on its possible causes.

According to *Explaining Divergent Levels of Longevity in High-Income Countries*, the nation's history of heavy smoking is a major reason why lifespans in the U.S. fall short of those in many other high-income nations. Evidence suggests that current obesity levels play a substantial part as well. The book reports that lack of universal access to health care in the U.S. also has increased mortality and reduced life expectancy, though this is a less significant factor for those over age 65 because of Medicare access. For the main causes of death at older ages -- cancer and cardiovascular disease -- available indicators do not suggest that the U.S. health care system is failing to prevent deaths that would be averted elsewhere. In fact, cancer detection and survival appear to be better in the U.S. than in most other high-income nations, and survival rates following a heart attack also are favorable.

*Explaining Divergent Levels of Longevity in High-Income Countries* identifies many gaps in research. For instance, while lung cancer deaths are a reliable marker of the damage from smoking, no clear-cut marker exists for obesity, physical inactivity, social integration, or other risks considered in this book. Moreover, evaluation of these risk factors is based on observational studies, which -- unlike randomized controlled trials -- are subject to many biases.

### 204. **International Differences in Mortality at Older Ages: Dimensions and Sources**

(2010) <http://www7.nationalacademies.org/cpop/Divergent%20Trends%20Project.html>



In 1950 men and women in the United States had a combined life expectancy of 68.9 years, the 12th highest life expectancy at birth in the world. Today, life expectancy is up to 79.2 years, yet the country is now 28th on the list, behind the United Kingdom, Korea, Canada, and France, among others. The United States does have higher rates of infant mortality and violent deaths than in other developed countries, but these factors do not fully account for the country's relatively poor ranking in life expectancy.

*International Differences in Mortality at Older Ages: Dimensions and Sources* examines patterns in international differences in life expectancy above age 50 and assesses the evidence and arguments that have been advanced to explain the poor position of the United

States relative to other countries. The papers in this deeply researched volume identify gaps in measurement, data, theory, and research design and pinpoint areas for future high-priority research in this area.

In addition to examining the differences in mortality around the world, the papers in *International Differences in Mortality at Older Ages* look at health factors and life-style choices commonly believed to contribute to the observed international differences in life expectancy. They also identify strategic opportunities for health-related interventions. This book offers a wide variety of disciplinary and scholarly perspectives to the study of mortality, and it offers in-depth analyses that can serve health professionals, policy makers, statisticians, and researchers.

205. **Mental, Neurological, and Substance Use Disorders in Sub-Saharan Africa: Reducing the Treatment Gap, Increasing Quality of Care - Workshop Summary** (2010) <http://www.iom.edu/Reports.aspx?Topic1={C7C4B78C-62B6-438F-97A6-114348CC1C29}>



Millions of people in sub-Saharan Africa suffer from mental, neurological, and substance use (MNS) disorders, and most do not have the resources to obtain treatment. The Uganda National Academy of Sciences and the Institute of Medicine hosted a workshop to discuss the state of care for MNS disorders in sub-Saharan Africa.

206. **Preparing for the Challenges of Population Aging in Asia: Strengthening the Scientific Basis of Policy Development** (2010) <http://www7.nationalacademies.org/cpop/CommitteePublications.html>



*Preparing for the Challenges of Population Aging in Asia* discusses the challenges posed by a rapidly aging population and identifies needed research to help policymakers better respond to them. While the percentage of elderly people in nearly every nation is growing, this aging trend is particularly stark in parts of Asia. Projections indicate that the portion of the population age 65 and older will more than triple in China, India, and Indonesia and more than double in Japan between 2000 and 2050, based on data from the United Nations. Moreover, this demographic shift is coinciding with dramatic economic and social changes in Asia, including changing family structures and large-scale migrations from rural to urban areas.

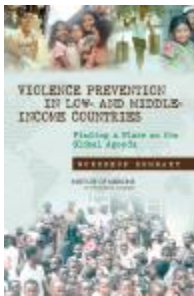
These trends raise critical questions about how nations can develop policies that best support health and economic well-being in large and growing populations at older ages. Governments in Asia still have time to determine the best ways to respond to the unfolding demographic transformation, but taking advantage of this window of opportunity will require new research to shed light on the status and needs of the aging population. Currently the research base on aging in this region is relatively underdeveloped. This book identifies several key topics for research to inform public policy, including changing roles in the family; labor force participation, income, and savings; and health and well-being of the public.

207. **Sex Differences and Implications for Translational Neuroscience Research - Workshop Summary** (2010) <http://www.iom.edu/Reports.aspx?Topic1={C7C4B78C-62B6-438F-97A6-114348CC1C29}>



Biological differences between the sexes influence not only individual health but also public health, biomedical research, and health care. The Institute of Medicine held a workshop March 8-9, 2010, to discuss sex differences and their implications for translational neuroscience research, which bridges the gap between scientific discovery and application.

208. **Violence Prevention in Low- and Middle-Income Countries: Finding a Place on the Global Agenda. Workshop Summary** (2008) <http://www.iom.edu/Reports.aspx?Topic1={C7C4B78C-62B6-438F-97A6-114348CC1C29}>



The current state of science in violence prevention reveals progress, promise, and a number of remaining challenges. In order to fully examine the issue of global violence prevention, the Institute of Medicine in collaboration with Global Violence Prevention Advocacy, convened a workshop and released the workshop summary entitled, *Violence Prevention in Low- and Middle-Income Countries*.

The workshop brought together participants with a wide array of expertise in fields related to health, criminal justice, public policy, and economic development, to study and articulate specific opportunities for the U.S. government and other leaders with resources to more effectively support programming for prevention of the many types of violence. Participants highlighted the need for the timely development of an integrated, science-based approach and agenda to support research, clinical practice, program development, policy analysis, and advocacy for violence prevention.

209. **Cancer Control Opportunities in Low- and Middle-Income Countries** (2007) [http://books.nap.edu/catalog.php?record\\_id=11797](http://books.nap.edu/catalog.php?record_id=11797)



Cancer is low or absent on the health agendas of low- and middle-income countries (LMCs) despite the fact that more people die from cancer in these countries than from AIDS and malaria combined. International health organizations, bilateral aid agencies, and major foundations—which are instrumental in setting health priorities—also have largely ignored cancer in these countries.

This book identifies feasible, affordable steps for LMCs and their international partners to begin to reduce the cancer burden for current and future generations. Stemming the growth of cigarette smoking tops the list to prevent cancer and all the other major chronic diseases. Other priorities include infant vaccination against the hepatitis B virus to



prevent liver cancers and vaccination to prevent cervical cancer. Developing and increasing capacity for cancer screening and treatment of highly curable cancers (including most childhood malignancies) can be accomplished using "resource-level appropriateness" as a guide. And there are ways to make inexpensive oral morphine available to ease the pain of the many who will still die from cancer.

**210. Aging in Sub-Saharan Africa: Recommendations for Furthering Research (2006)**

[http://www.nap.edu/catalog.php?record\\_id=11708](http://www.nap.edu/catalog.php?record_id=11708)



In sub-Saharan Africa, older people make up a relatively small fraction of the total population and are supported primarily by family and other kinship networks. They have traditionally been viewed as repositories of information and wisdom, and are critical pillars of the community but as the HIV/AIDS pandemic destroys family systems, the elderly increasingly have to deal with the loss of their own support while absorbing the additional responsibilities of caring for their orphaned grandchildren.

*Aging in Sub-Saharan Africa* explores ways to promote U.S. research interests and to augment the sub-Saharan governments' capacity to address the many challenges posed by population aging. Five major themes are explored in the book such as the need for a basic definition of "older person," the need for national governments to invest more in basic research and the coordination of data collection across countries, and the need for improved dialogue between local researchers and policy makers.

This book makes three major recommendations: 1) the development of a research agenda 2) enhancing research opportunity and implementation and 3) the translation of research findings.

**211. Preparing for an Aging World: The Case for Cross-National Research (2001)**

[http://www.nap.edu/catalog.php?record\\_id=10120](http://www.nap.edu/catalog.php?record_id=10120)

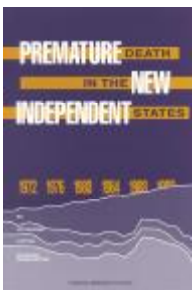


Aging is a process that encompasses virtually all aspects of life. Because the speed of population aging is accelerating, and because the data needed to study the aging process are complex and expensive to obtain, it is imperative that countries coordinate their research efforts to reap the most benefits from this important information.

*Preparing for an Aging World* looks at the behavioral and socioeconomic aspects of aging, and focuses on work, retirement, and pensions; wealth and savings behavior; health and disability; intergenerational transfers; and concepts of well-being. It makes recommendations for a collection of new, cross-national data on aging populations data that will allow nations to develop policies and programs for addressing the major shifts in population age structure now occurring. These efforts, if made internationally, would advance our understanding of the aging process around the world.

**212. Premature Death in the New Independent States (1997)**

[http://www.nap.edu/catalog.php?record\\_id=5530](http://www.nap.edu/catalog.php?record_id=5530)



In recent years there have been alarming reports of rapid decreases in life expectancy in the New Independent States (former members of the Soviet Union). To help assess priorities for health policy, the Committee on Population

organized two workshops--the first on adult mortality and disability, the second on adult health priorities and policies. Participants included demographers, epidemiologists, public health specialists, economists, and policymakers from the NIS countries, the United States, and Western Europe. This volume consists of selected papers presented at the workshops. They assess the reliability of data on mortality, morbidity, and disability; analyze regional patterns and trends in mortality rates and causes of death; review evidence about major determinants of adult mortality; and discuss implications for health policy.