KEY FINDINGS AND ISSUES:
Health and Long-Term Care Risks in Retirement

2007 RISKS AND PROCESS OF RETIREMENT SURVEY REPORT
Introduction and Background

Long and widely heralded, the baby boom generation’s aging to retirement is already underway. In 2008, those at the beginning of the baby boom generation reached the age at which they are eligible for early retirement under Social Security. As a result, issues of retirement security are posing an increasingly prominent challenge to the economy and to families with members already retired or facing retirement.

Among the issues of retirement security, perhaps none is felt more strongly than those related to health and long-term care. There is an old saying that “if you have your health, you have everything.” Needless to say, everyone wants and cherishes good health. Related to good health is access to and affordability of adequate health care and long-term care services. Issues of health become even more central as individuals age. This report provides key findings from the 2007 Risks and Process of Retirement Survey (2007 Survey), along with supplementary material, on how respondents view health care and long-term care risks in retirement.

Since 2001, the Society of Actuaries (SOA) has commissioned biennial research on public attitudes toward retirement through surveys conducted by Mathew Greenwald & Associates, Inc. and the Employee Benefit Research Institute (EBRI). The purpose of the 2007 Survey, the fourth in this biennial series, is to evaluate Americans’ awareness of retirement risk, how their awareness has changed recently, and how it affects the management of their finances. The 2001, 2003, 2005 and 2007 studies separately analyzed current retirees and those not yet retired, referred to in these reports as ‘pre-retirees.’

The 2007 Survey was conducted through telephone interviews of 801 adults age 45 to 80 (400 retirees, 401 pre-retirees) in the summer of 2007. Households were selected for participation from a nationwide targeted list sample. The margin of error for study results, at the 95% confidence level, is ±5 percentage points for questions asked of all retirees or pre-retirees.

The 2007 Survey applies to Americans on average, and does not provide specific insights into behaviors and values of high net worth individuals. Only 6% of the sample reported $1 million or more in savings and investments, although this was up from 2% in 2005. Five percent of pre-retirees and 6% of retirees report savings and investments between $500,000 and $1,000,000. Twenty-two percent of pre-retirees and 11% of retirees report household incomes of at least $100,000, up from 15% and 10%, respectively, from two years prior. At the low income end of the spectrum, 7% of pre-retirees and 19% of retirees report incomes below $25,000.

Four key findings reports related to the 2007 Survey are being produced. Besides this report on the risks of health and long-term care, key findings reports, one on the general risks of retirement and another on phases of retirement have been completed and are available on the SOA web site at www.soa.org. The fourth report from the 2007 Survey discusses retirement issues of special concern to women and will be available in the near future.

Finally, for a balanced perspective, the discussion sections in this report include input from all organizations that supported the studies and material from other related research.
Overview - The Current State of Health Care in the United States – A Primer

To understand the context of the views of pre-retirees and retirees on the affordability of health care, it is instructive to look at the current state of the overall U.S. health care system. Recent attention on the problems associated with the current system likely contributes to the mindset of survey respondents. The following is a primer on the system.

**Overall Cost** - In the U.S., health care is delivered and funded by a wide variety of providers and organizations. According to the national health expenditure data of the Centers for Medicare & Medicaid Services (CMS), health care spending in the U.S. represented approximately 16% of gross domestic product in 2007. For 2007, this figure translates into $2.25 trillion or $7,500 per person. The percentage spent is expected to increase in the short term according to most estimates. CMS estimates that the share will increase to nearly 20% by 2017.

**Structure** - From a structural standpoint, the system is composed of private and public sources of financing, with U.S. government programs accounting for about 45% of total financing. The largest governmental program is Medicare, covering roughly 40 million elderly and disabled individuals. The Medicare program faces serious financial challenges which threaten its solvency and sustainability. Expenditures for Medicare’s inpatient hospital services already exceed the tax revenues coming into the program to pay for those services. By 2019, Medicare’s Hospital Insurance Trust fund assets are projected to be depleted and tax revenues would cover only 78 percent of program costs. Furthermore, Medicare spending will consume ever-growing shares of the federal budget and economy as a whole.

Other governmental programs include Medicaid, which covers individuals and families with low incomes and resources, and TRICARE and the Veteran’s Administration, which provide care to military personnel and veterans. The U.S. system is unique among industrialized nations in that it does not provide universal coverage. Most individuals obtain health insurance to cover health care costs from their employers. In addition to coverage for active employees, employers may also provide health care plans for their retirees. However, the percentage of those who receive coverage from employers is declining. Directly related to the lack of universal coverage and declining employer coverage is the number of uninsured individuals. As a result, the U.S. Census Bureau estimates that the number of uninsured Americans was close to 47 million (16% of the population) in 2006.
Overview - The Current State of Health Care in the United States – A Primer (cont.)

Health Care Debate - Although health care spending per person in the U.S. is greater than in any other country in the world, there has been an ongoing debate for many years on how to fix what many see as fundamental problems with the system. Most of the debate revolves around three issues: access, affordability, and quality. Recent pressures on the system suggest that it will almost surely be one of the most visible domestic policy issues in 2009 and for the next several years.

Proposed Solutions – A wide array of solutions has been proposed for the current system, ranging in magnitude of change from maintaining the status quo to a single payer, universal coverage system. One cluster of solutions proposes a combination of private markets and tax policy to address the problems. These solutions include refundable tax credits, expansion of HSAs (Health Savings Account) and greater competition to reduce costs. Another set of solutions maintains the current prominent role of employer plans and makes coverage available for the uninsured and small businesses through new plans, buy-ins, or purchasing pools. A single payer system is the focus of another cluster of solutions.

Key questions in formulating a solution include:

- How will the uninsured be covered and who will pay for them?
- What will be the role of employers?
- How much coverage will be provided in the program?
- How will utilization and costs be controlled?
- Will coverage be mandatory?
- How will individuals unable to obtain coverage through employment receive it?
- How much will the solution cost and how does it compare with costs in the current system?
Overview – Long-Term Care – Settings and Financing

Generally, health care refers to services provided for acute needs or prevention, while long-term care is more oriented toward everyday needs including hygiene, personal safety, and related tasks. As such, long-term care consists of a broad number of services that assist a person who has become physically or mentally disabled.

Settings - Traditionally, long-term care was most commonly associated with care that occurred in a nursing home. However, long-term care may occur in other settings as well and can be understood as a continuum of care with personal, home-based care with minimal assistance at one end and nursing home care on the other end. The following is a representative list of settings:

- Home health care
- Adult day care centers
- Assisted living facilities
- Continuing care retirement communities
- Nursing homes

The extent of care provided may vary in any of these settings. In addition, needed care may be provided primarily by family and friends, depending on the setting.

Financing – Long-term care can be financed through several different sources or a combination of them:

- Private, out-of-pocket financing – For those with sufficient means, long-term care could be financed entirely out of pocket from personal savings and resources. Given its potential cost, many are not in a position to finance long-term care solely in this manner.
- Private, long-term care insurance – Insurance coverage may be obtained through an employer or individual policy. Although policies vary widely, most benefits are triggered by needs related to what are known as “activities of daily living (ADLs)”: bathing, dressing, eating, transferring, and toileting. Policies typically pay a weekly or daily benefit after a waiting period and for a maximum period of time. Only about 5-10% of individuals have purchased a long-term care insurance policy.
- Public financing – Those with limited means may qualify for long-term care benefits under Medicaid. Coverage varies from state to state. Medicare generally does not pay long-term care benefits, yet many individuals have the misperception that it does.
Survey Results

The next several pages present findings from the 2007 Risks and Process of Retirement Survey on health and long-term care issues.
Health Care Risk
Among retirement risks, affordability of health care is the one most likely to worry pre-retirees.

Finding
While health care expenses cause significant worry among retirees, pre-retirees are even more likely to express concern about having to pay for health care in retirement. Seven out of ten pre-retirees are *very* or *somewhat* concerned about having enough money to afford adequate health care (69%), and six in ten are concerned about having enough to pay for long-term care (63%). Roughly half of retirees are concerned about both of these costs.

Both retirees and pre-retirees are much less likely to say they are concerned about not being able to rely on family members for assistance. About three out of ten pre-retirees (33%) and retirees (29%) are *very* or *somewhat* concerned about having assistance.

Discussion
General uncertainty over the future of employer provided health care benefits in retirement and the adequacy of Medicare are likely drivers of the differential in concern expressed by pre-retirees and retirees. Concerns about Medicare relate both to current gaps in coverage and the potential for reductions in the program. The percentage of employers providing health care benefits has been steadily declining for some time, while budgetary pressures on Medicare contribute to the uncertainty of future benefit levels. Retirees already accustomed to Medicare benefits may express less concern because of their familiarity with the process and level of benefits expected. Medicare pays for a very large share of acute care expenses and satisfaction with the program is high.

How concerned are you that . . . ?

<table>
<thead>
<tr>
<th>(Retirees, n=400; Pre-retirees, n=401)</th>
<th>Very concerned</th>
<th>Somewhat concerned</th>
</tr>
</thead>
<tbody>
<tr>
<td>You might not have enough money to pay for adequate health care</td>
<td>Retirees: 25%</td>
<td>Pre-retirees: 34%</td>
</tr>
<tr>
<td></td>
<td>26%</td>
<td>35%</td>
</tr>
<tr>
<td>(51%)</td>
<td>(69%)</td>
<td></td>
</tr>
<tr>
<td>You might not have enough money to pay for a long stay in a nursing home or a long period of nursing care at home</td>
<td>Retirees: 27%</td>
<td>Pre-retirees: 22%</td>
</tr>
<tr>
<td></td>
<td>25%</td>
<td>41%</td>
</tr>
<tr>
<td>(52%)</td>
<td>(63%)</td>
<td></td>
</tr>
<tr>
<td>You might not be able to rely on children or other family members to provide assistance</td>
<td>Retirees: 11%</td>
<td>Pre-retirees: 13%</td>
</tr>
<tr>
<td></td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>(29%)</td>
<td>(33%)</td>
<td></td>
</tr>
</tbody>
</table>

Source: 2007 Risks and Process of Retirement Survey
Managing Health Risk
Few turn to risk-reducing products other than supplemental health coverage.

Finding
Pre-retirees and retirees have taken or plan to take similar actions to protect themselves financially against health risks. Nearly all pre-retirees (94%) and retirees (91%) say they currently maintain a healthy lifestyle or will do so. Three-quarters have or plan to have supplemental health coverage (75% pre-retirees, 74% retirees).
Fewer than half have saved or plan on saving specifically for health expenses. Four in ten say they have bought or will buy long-term care insurance. Just one in ten have arranged or will arrange for care in a retirement community.

Discussion
While maintaining healthy lifestyle habits is an admirable goal, in light of other research reporting increases in obesity, these high percentages may be more indicative of wishful thinking rather than tangible action. Furthermore, because a healthy lifestyle can only go so far in avoiding health care costs, it is clearly not a substitute for suitable health care coverage. Further research into the ultimate benefits of healthy lifestyle habits and the extent to which they are actually embraced would be both informative and beneficial for planning purposes.

Although four in ten say they have bought or will buy long-term care insurance, this percentage is much higher than other sources that indicate only 5-10% make this purchase. This is likely an instance of respondents with good intentions saying they will do something, without actually doing so.

To protect yourself financially, have you or do you plan to…?

<table>
<thead>
<tr>
<th>Action</th>
<th>(Retirees, n=400; Pre-retirees, n=401)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain healthy lifestyle habits</td>
<td>Retirees: 75%; Pre-retirees: 69%</td>
</tr>
<tr>
<td>Purchase supplemental health insurance or participate in an employer’s retiree health plan</td>
<td>Retirees: 28%; Pre-retirees: 28%</td>
</tr>
<tr>
<td>Save specifically for the possibility of having large health expenses or needing long-term care</td>
<td>Retirees: 33%; Pre-retirees: 16%</td>
</tr>
<tr>
<td>Buy long-term care insurance</td>
<td>Retirees: 28%; Pre-retirees: 17%</td>
</tr>
<tr>
<td>Move into or arrange for care through a continuing care retirement community</td>
<td>Retirees: 4%; Pre-retirees: 8%</td>
</tr>
</tbody>
</table>

Source: 2007 Risks and Process of Retirement Survey

2007 Society of Actuaries’ Key Findings: Health and Long-Term Care Risks in Retirement Report
Insurance Coverage
Many downplay insurance as a risk management tool in retirement.

Finding
Pre-retirees are more likely to feel it is very or somewhat important to buy insurance to protect against the financial consequences of unexpected events (71% vs. 61% of retirees). Retirees are more likely to feel it is not too or not at all important to buy insurance (35% vs. 26% of pre-retirees).

Discussion
Retirees have already adopted their risk management program of choice, or often, decided that they do not need to take further action. While this may prove to be short-sighted, they may be comfortable with the actions they have chosen. In contrast, pre-retirees likely still face these decisions. For many pre-retirees, access to adequate medical coverage is a key factor in the decision on the timing for their retirement.

Source: 2007 Risks and Process of Retirement Survey

How important do you think it is to buy insurance products to help protect against risks related to retirement?

Source: 2007 Risks and Process of Retirement Survey
Impact of Delayed Retirement
Much of added security from delayed retirement comes from continuing employer health coverage.

Finding
Pre-retirees are more likely than retirees to feel, in every way they were asked, that delayed retirement would increase their financial security in retirement.

Pre-retirees and retirees each feel that continuing to receive health insurance from their employer would most increase their financial security (59% and 32% a lot more secure, respectively).

Discussion
Employer provided health coverage is, indeed, extremely important for personal financial security, and it is not surprising that it is rated as the most important factor in increasing security. The other factors that were posed in the survey all are rated as primarily contributing only “a little” to security if retirement is delayed. The extent to which these other factors contribute to security depends on individual circumstances, but it is likely that many respondents have not evaluated these factors in-depth. Consequently, they may underestimate the impact that a postponement of retirement by three years has on these other factors.

How much, if at all, would each of the following have increased your financial security in retirement if you retired three years later? (Among those providing retirement age from primary occupation)

(Retirees, n=385; Pre-retirees, n=266)

Source: 2007 Risks and Process of Retirement Survey
Decline in Functional Status
A majority expect to experience some level of incapacity.

**Finding**
Pre-retirees are more likely than retirees to expect a period of no limitations during retirement. Six in ten pre-retirees expect to have an active stage of retirement (60%), compared to 52% of retirees. Pre-retirees are also more likely than retirees to expect some level of limitations. Over eight in ten pre-retirees expect to be somewhat limited and less active during retirement (84%), versus 72% of retirees.

Pre-retirees and retirees have similar expectations for experiencing greater incapacity. About two-thirds of pre-retirees (68%) and retirees (65%) expect to be severely limited and much less active.

**Discussion**
This is the first time the risk survey has asked respondents whether they expected to experience a decline in functional status. The results illustrate that many individuals are aware of the potential of such decline. However, it also conveys that others may not be preparing for it. This lack of preparation is consistent with remarks made in a series of focus groups on how retirees handle post-retirement risks. Many of the focus group participants expressed a passive, “whatever will be, will be,” view on post-retirement risks, rather than embracing advance preparation.

---

**Do you think you will have a time in retirement when…?**

<table>
<thead>
<tr>
<th></th>
<th>Pre-retirees (n=401)</th>
<th>Retirees (n=400)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your abilities and needs are about the same as before you retired</td>
<td>60%</td>
<td>52%</td>
</tr>
<tr>
<td>You are somewhat less able to do things you used to do and your needs are somewhat different</td>
<td>72%</td>
<td>65%</td>
</tr>
<tr>
<td>You are much less able to do things you used to do and your needs are very different</td>
<td>84%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Source: 2007 Risks and Process of Retirement Survey
Use of Services
Dependence on family or community services is expected to increase.

**Finding**
Pre-retirees and retirees have similar expectations for needed services in the somewhat limited, less active stage of retirement, with one exception. Pre-retirees are more likely to expect to rely on family or community services (59%) than are retirees (46%).

Pre-retirees are more likely than retirees to expect they will need family or community assistance, paid assistance, home modifications, and nursing care by the time they reach the least active, most limited stage.

**Discussion**
The results of this question provide insight into the types of changes and needs that can be encountered as functional limitations occur. In terms of addressing needs, most long-term care today is provided by family and friends on an informal basis. It appears that expectations of using paid help are much more prevalent than is the current reality. As the results show, respondents expect to pay for help fairly close to how often they expect to rely on family and friends.

I’m going to ask about some ways your needs might change during this time. Do you think you will need…?
(Among those experiencing each stage)

<table>
<thead>
<tr>
<th></th>
<th>Less Active Stage</th>
<th>Least Active Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Retirees (%)</td>
<td>Pre-retirees (%)</td>
</tr>
<tr>
<td></td>
<td>(n=284)</td>
<td>(n=337)</td>
</tr>
<tr>
<td>To modify your home or move to a home that is more livable</td>
<td>48</td>
<td>56</td>
</tr>
<tr>
<td>To depend on your family or community services for assistance</td>
<td>46</td>
<td>59</td>
</tr>
<tr>
<td>To pay someone to provide assistance</td>
<td>41</td>
<td>46</td>
</tr>
<tr>
<td>Nursing home or home health care</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Source: 2007 Risks and Process of Retirement Survey
Impact on Expenses
About half anticipate that functional limitations will increase expenses.

Finding
Among those expecting to experience the second, somewhat limited stage of retirement, pre-retirees are more likely to think they will need less money (17% vs. 6% of retirees). Among both pre-retirees and retirees who expect to spend time in the third, most limited stage of retirement, both expect similar levels of expenses. The majority of retirees and pre-retirees expect to need more money, but it is still only about half of each group.

Discussion
This issue merits further study with the results revealing gaps in knowledge and the need for more planning. The results shown for phase three seem to be quite inconsistent with what respondents expect to need in terms of help. Paid help, assisted living, and nursing homes are very expensive unless covered by long-term care insurance or Medicaid. Yet, many may have the misperception that Medicare will cover much more than it does, or may not be aware of the costs.

During this time [second or third stage], do you think you will need more money, less money, or about the same amount of money as before to cover your expenses? (Among those expecting to experience each stage)

Source: 2007 Risks and Process of Retirement Survey
Health Status

Pre-retirees are more likely to rate their health better than are retirees.

Finding
Nearly six in ten pre-retirees rate their health as excellent or very good (59%), while just half of retirees feel the same (50%). Similar proportions of pre-retirees (29%) and retirees (27%) say they have good health. One-quarter of retirees rate their health as fair or poor (23%), compared to just 11% of pre-retirees.

Discussion
It is very likely that workers in poor health retire considerably earlier, which would explain why pre-retirees are relatively more healthy than retirees. In addition, health status naturally shifts with age, with older respondents encountering poorer health. Generally speaking, self-declarations of health status may not be an accurate reflection of overall health. In part, respondents may judge their health based on their ability or inability to perform certain work or leisure activities. As such, personal preference may dictate the response, rather than an objective assessment of overall physical and mental health.

In general, how would you rate your health?

Source: 2007 Risks and Process of Retirement Survey
Related Issues and Research

The next several pages present related issues and supplementary material.
Employer Provided Retiree Health Care – a declining trend…

For Americans over age 65, Medicare is the primary source of acute care medical coverage. For Americans under age 65, employer coverage is the primary source of coverage for the greatest number. Traditionally, larger employers allowed retirees and spouses to continue their coverage, at least to Medicare eligibility. Many also provided Medicare supplements.

In response to rising health care costs, accounting rules that require these costs to be recognized like pension costs over the working lifetime of employees, and greater pressures on the bottom line, many employers have discontinued or trimmed their retiree health care coverage. Some of the changes have included:

- Terminating coverage upon employee eligibility for Medicare.
- Increasing the periods of employment required for plan eligibility and not permitting the addition of new dependents after retirement.
- Increasing retiree contributions, deductibles and co-payments.
- For pre-65 retirees, implementing design changes in parallel with those for active employees.

The Kaiser Family Foundation 2007 Employer Health Benefits Survey provides insights into recent trends. The following are selected highlights of the findings:

- Thirty-three percent of large firms (200 or more workers) that offer health benefits to their workers offer retiree coverage in 2007, down from 66% in 1988.
- Most large firms that offer retiree benefits offer them to early retirees under the age of 65 (92%). A lower percentage (71%) of large firms offering retiree benefits offers them to Medicare-age retirees.

The Employee Benefit Research Institute (EBRI) explored retiree health benefits in its Issue Brief “The Impact of the Erosion of Retiree Health Benefits on Workers and Retirees,” Number 270, March 2005. It noted that from 1997 to 2002, the percentage of early retirees with retiree health coverage declined from 39.2% to 28.7%. The actual decline in coverage may be greater because the absence of coverage is a deterrent to retirement.

One of the greater challenges facing employees is that added savings are needed to pay for their share of the cost of health care, whether coverage is offered or not. Most companies do not have any dedicated programs to help employees save for these costs, but this is an issue attracting increased attention.
Cost Estimates for Health Care and Long-Term Care Needs in Retirement

As was noted on the previous page, employer coverage for health care costs in retirement is declining. Nevertheless, many workers may simply assume that coverage for health care premiums will continue in retirement. This assumption can lead to a lack of planning for both these costs and long-term care costs.

To provide perspective on the relative magnitude of these expenses in retirement, it is helpful to review cost estimates from different sources.

Health Care Costs

- According to a 2008 estimate by Fidelity Investments, health care costs will run, on average, $225,000 in total for a 65-year-old couple over the course of their retirement. Since the Fidelity estimate was first calculated in 2002, the annually produced figure has risen by 41%, with an average annual increase of 5.8%. For all years of the estimates, it is assumed that individuals do not have employer-sponsored retiree health care coverage and includes expenses associated with Medicare Part B and D premiums, Medicare cost-sharing provisions, and prescription drug out-of-pocket costs.

- Using similar coverage assumptions as Fidelity Investments, The Center for Retirement Research at Boston College projects that an average American couple retiring in 2010 at age 65 will need nearly $206,000 to cover health care expenses over the rest of their lifetimes. This total increases to $284,000 for couples retiring in 2020.

- The Employee Benefit Research Institute (EBRI) used a Monte Carlo simulation model to produce a comprehensive set of 2008 estimates of health care costs in retirement for a couple aged 65. Through use of Monte Carlo methodology, EBRI provides a range of values that vary based on the assets needed to cover the costs 50%, 75%, and 90% of the time. As such, the estimates show how much is needed depending on how much risk a couple would like to assume. A major driver of the range is the assumption of the couple’s prescription drug expenses, with high drug expenses driving the upper bound. For a couple without employer based coverage, who purchase a supplemental Medicare policy, and who have Medicare Part D for drug coverage, the cost estimates vary between $194,000 - $635,000, on average, depending on the risk assumed and prescription drug use.

- Note: None of the above estimates include long-term care costs.
Cost Estimates for Health Care and Long-Term Care Needs in Retirement (continued)

Long-Term Care Costs

- In his paper, “Estimates of the Incidence, Prevalence, Duration, Intensity, and Cost of Chronic Disability among the U.S. Elderly,” presented at the 2008 SOA Living to 100 Conference, Professor Eric Stallard provides estimates of the costs of LTC services. For a 65-year-old, the lifetime expected costs of long-term care services differ substantially by gender, with $29,000 for a male versus $82,000 for a female. These figures represent the expected cost for all 65 year olds, whether or not they actually use services. These figures also include home/community care and institutional care, and are given in constant 2000 dollars. In other work presented by Stallard, average lifetime costs of 65 years olds actually using LTC services were estimated at $127,000 for a male and $158,000 for a female. Those individuals who are categorized with the highest lifetime costs average $300,000 - $750,000, depending on the assumptions that Stallard uses.

- According to Fidelity Investments, a 65-year-old couple needs $85,000 on average to cover insurance costs for long-term care such as nursing home stays. Fidelity based its estimate on a joint long-term care insurance policy issued by a major insurance carrier on a 65 year-old couple in moderately good health. The figure represents the present value of 17 annual premium payments of $6,710. The policy would provide reimbursement benefits of at least $624,000 for long-term care costs incurred by the couple.

Average Costs versus Variability of Costs

The cost figures presented in this discussion have focused primarily on estimates of the average costs that may be encountered by individuals and couples. Actual spending on health care is quite skewed. According to a Kaiser Family Foundation Fact Sheet, about ten percent of individuals account for over 60% of spending on health services; over 20% of health spending is for 1% of the population. At the other end of the spectrum, the one-half of the population with the lowest health spending accounts for just over 3% of spending.

It is important to remember that while average estimates are a helpful gauge, many individuals will incur health care and long-term costs that significantly exceed the averages. Therefore, averages are only one aspect of understanding the risk of health and long-term care costs. The next page discusses work that has looked at the variability of costs and what are known as “health shocks.”
The Impact of the Uncertain Health Care Costs on Retirement

Besides predictable costs in retirement, large and unplanned health care expenses can cause significant declines in household resources. Using the terminology “health shocks” to describe these unplanned health expenses, Professors Vickie Bajtelsmit and Scott Harrington have reviewed research into the impact of these shocks on retirees and how they may be of particular importance for the Baby Boom Generation.

Their paper, “Expectations versus Reality: The Impact of Uncertain Health Care Costs on Retirement,” includes the following observations:

- There is a great deal of uncertainty about future health care costs in retirement. Much of this uncertainty stems from the difficulty of calculating the expected costs because of factors such as the extent of insurance coverage, health care inflation, and variability of investment returns. This complexity is further compounded by the fact that prior health status is not necessarily a good predictor of health in retirement.

- Households age 65 and over spend a greater share of total expenditures on health care, than the average household age 45-54. Using data from the Consumer Expenditure Survey, Bajtelsmit and Harrington calculate health care expenditures to be 14.6% of the total for households age 65 and over vs. 5.0% for those age 45-54.

- Health shocks are relatively common, even for young retirees. Broadly defined, a health shock is an abrupt change in health status or the onset of specific health conditions. To estimate the occurrence of a health shock, Bajtelsmit and Harrington note that researchers have used data from the Health and Retirement Study (HRS). The HRS conducts waves of the survey every two years with the same panel of respondents. Between 1995 and 2002, the number of respondents with existing severe conditions ranged from 57.6% to 64.3% and 7.6% to 9.5% of households experienced the onset of a new health condition between each wave of the survey.

- Health shocks impact retirement dates, household income, consumption, wealth, and asset allocation. Not surprisingly, a health shock may force retirement earlier than planned. Consequently, income is impacted and can cause a more rapid spend down of assets.

- Pre-Retirement households are not particularly well-prepared to meet the demands of these future costs, due to declines in employer-sponsored insurance and inadequate savings.
Periods of Disability in Old Age

Quality of life in old age is the primary goal for most retirees with good health care and the ability to pay for it topping the list of concerns of many seniors today. Other reports in this series have documented that only a small percentage of the elderly have a good understanding of life expectancy and the financial aspects of planning for it. Fewer still have thought in terms of how much of their retired lives they may be incapacitated and the added burden that entails. Indeed, until recently, even actuaries and other professionals addressing this issue were dealing with limited data and relatively crude methodology to analyze the problem.

At the Society of Actuaries 2008 Symposium on Living to 100, Professor Eric Stallard presented results from his pioneering research to quantify disability among the U.S. elderly population and to estimate its costs. Using the National Long-Term Care Surveys (NLTCS) from 1984, 1989 and 1994, of seniors covered under Medicare, Professor Stallard has stratified that population according to ability to perform various activities of daily living (ADLs) and cognitive impairment status into those who are still healthy and those in progressively severe stages of disability. From his calculation of transition rates from healthy to the various stages of disability, and from these stages to death, he decomposes life expectancy at age 65 and 85 into the following estimates of how much time will be spent in each stage:

<table>
<thead>
<tr>
<th></th>
<th>Remaining Life Expectancy</th>
<th>In Healthy State</th>
<th>Mild/Moderate Disability</th>
<th>Severe Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male 65</td>
<td>15.3</td>
<td>12.3</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Female 65</td>
<td>19.4</td>
<td>13.6</td>
<td>3.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Male 85</td>
<td>5.7</td>
<td>2.9</td>
<td>1.0</td>
<td>1.8</td>
</tr>
<tr>
<td>Female 85</td>
<td>7.2</td>
<td>2.5</td>
<td>1.7</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Stallard draws attention to his estimate that at age 65 almost 20% of life expectancy remaining for males, and 30% for females, will be spent in disability, about evenly split between the mild or moderate stage and the severe stage. The situation changes dramatically by 85, at which age males can expect to spend almost half and females two-thirds of their remaining lives in disabled status. It should be noted that these figures represent averages and are subject to variability across individuals.
Periods of Disability in Old Age (continued)

Using data from NLTCS, Stallard estimates the expected lifetime cost of long-term care from age 65 for these periods of chronic disability, in constant 2000 dollars, at $29,000 for males and $82,000 for females, with 92% of these amounts for each sex incurred during the severe disability stages.

Findings earlier in this Report suggest that half or fewer seniors anticipate the decline in their functional status that Stallard’s research predicts as likely at some stage of their retirement. An even smaller number report having actually purchased long-term care insurance or intending to do so as a way to offset the costs that attend such decline. The relatively high percentage of retirement spent in disabled status, especially by women, and its high attendant cost, suggest that much more emphasis be given this issue if seniors expect to maintain their quality of life. Research in this area is still in the early stages, and further insights might be gained by more detailed socio-economic stratification in future Society of Actuaries surveys in this series and studies of the effects of positive lifestyle habits on the time that retirees can expect to spend in a healthy state.

2. These life expectancy values are fractionally higher for females, and at 65 also for males than those shown in the Society of Actuaries 2006 Longevity Report in this series, the differences reflecting the populations and time frames covered.
3. Stallard’s paper details three categories of severe disability according to ADL loss and cognitive impairment status. These are combined here.
Managing Health Care and Long-Term Care Risks

Certain results reported earlier illustrate that individuals may be overly optimistic regarding health and long-term care risks. These results include self-reported health compared to current obesity levels, intentions to purchase long-term care insurance versus actual usage, and perceptions that families and community services will provide long-term care versus their actual ability to deliver these services. Every retiree needs realistic strategies to address the risks of high expenses for both medical and long-term care expenses. These risks must be addressed separately, since Medicare and most medical insurance policies do not pay for long-term care expenses, but it is theoretically possible for non-professionals to provide these services.

The first line of defense is to adopt a healthy lifestyle, through proper nutrition, exercise, stress management and eliminating smoking and other substance abuse. This may significantly reduce the odds of experiencing the most expensive conditions, including those that eventually may require long-term care. If all Americans could adopt a healthy lifestyle, then demand for medical and long-term care services would drop substantially, reducing cost pressures and increasing the capacity of the system to provide care for the remaining citizens who still need it.

Since a healthy lifestyle does not eliminate expensive illnesses, retirees still need a strategy to pay for services when they are necessary. As they plan for acute medical care expenses, workers retiring before eligibility for Medicare at age 65 should assess whether they are eligible for employer-provided medical insurance, which is increasingly less common. If not, the next option is to purchase individual health insurance, which may not be feasible, either due to high premiums or pre-existing conditions. Some states offer special pools for individuals unable to obtain health insurance. After attaining age 65, Medicare significantly pays for a substantial portion of acute care. Most individuals choose to supplement Medicare with other coverage. Premiums for added coverage are significantly less than for under 65 coverage and insurance cannot be denied due to pre-existing conditions. Other strategies include continued work to obtain medical insurance until Medicare eligibility, or using COBRA coverage as a bridge for up to 18 months until other coverage can be obtained. However, premium rates for COBRA tend to be quite high.

Long-term care insurance is one good way to address long-term care costs when severely disabled. If insurance is not purchased, individuals should realize that they are self-insuring. In this case, individuals should consider whether it is realistic to rely on family members who are close by and have the time and ability to provide these services. If not, then it is necessary to investigate if it is realistic to rely on community services and to understand that all assets must be spent before qualifying for Medicaid. Medicaid has both asset and income limits that vary by state. One potential strategy is to use home equity as a reserve to pay for long-term care expenses if and when they occur, either by selling the house to realize the gain, or by obtaining a reverse mortgage. This strategy requires not significantly tapping home equity for other purposes.
Managing Health Care and Long-Term Care Risks (continued)

Education is an added and desirable strategy. It is beneficial to learn about the range of suitable medical treatments when care is needed including prescriptions for generic drugs, the options for delivering long-term care, and various provisions in medical and long-term care insurance policies. There is tremendous variation in the costs of different options and their ability to meet an individual’s needs. Understanding and evaluating the various options available will make for better decision-making and managing of these risks.
Conclusions

We are fortunate to be living in an era of miraculous advances in medical science and increasing life expectancy. With these advances, severe conditions that once crippled lives and were thought incurable are now treatable, or in some cases, fully curable. Yet, major health events and diminishing physical and mental capabilities critically impact the financial security of older Americans. Costly new treatments and additional years spent in retirement requiring round the clock care can translate into significantly more dollars expended toward these needs. As this report has described, the provision and financing of health care and long-term care benefits is a major issue confronting all stakeholders in the U.S. health care system and reverberates throughout the entire economy.

In light of the current environment, it is not surprising that retirees and pre-retirees are concerned about risks related to financing health care and long-term care costs. These concerns can be linked to several factors:

- Inflation is rapidly driving up these costs.
- For those who have insurance, significant gaps in coverage may still exist.
- There is uncertainty about the future of Medicare and employer sponsored retiree coverage, and the share of the cost borne by individuals is increasing.
- Relatively few individuals have coverage for long term care costs, or the means to finance them directly from their own resources.

As described in this report, there is much more coverage currently provided for acute health care needs, than long-term care. Furthermore, while the majority of Americans have coverage for acute health care costs, almost 47 million remain uninsured. What the future will bring in terms of structural change to the overall health care system remains to be seen and may vary widely. In the meantime, it is clear that living a healthy lifestyle can reduce the risk of high health care costs and improve quality of life. Yet, a healthy lifestyle is not a substitute for adequate health care coverage. It is our hope that this report serves as a catalyst for individuals to explore their coverage options and plan for these costs, while making best use of their available resources.
Acknowledgements

This report was prepared with input and assistance from the Project Oversight Group:

Vickie Bajtelsmit
Barbara Butrica
Ruth Helman
Dawn Helwig
Connie Lam
Sandy MacKenzie
Anna Rappaport
John Turner

The portions of the report that extended beyond the survey were written by Mike Cowell, Ruth Helman, Anna Rappaport, Steven Siegel, John Turner, and Steven Vernon with input from the Oversight Group and staff.

The views and opinions expressed in this report are those of the authors and do not necessarily reflect those of the Project Oversight Group.

To Obtain a Copy of the Complete Survey Report
Glossary

ADEA—The Age Discrimination in Employment Act, 1967 and as subsequently amended.

Baby Boomers; Baby Boom Generation—Those born in the U.S. from 1946 through 1964.

Defined Benefit Plan—A retirement plan in which the pension benefit is expressed as a monthly or other periodic amount based on a formula typically reflecting earnings and years of service.

Defined Contribution Plan—A retirement plan in which the benefit is expressed as a lump sum amount based on the accumulation of employer and employee contributions with investment earnings. Many of these plans allow employees to save on a pre-tax basis with an employer matching contribution.

Full Retirement Age—Defined by Social Security as the age at which monthly retirement benefits are available in full without reduction for early retirement. For birth cohorts through 1937, this has been established at 65. For those born in 1938, full retirement age for Social Security is currently set at 65 years and two months, increasing an additional two months for each subsequent birth year, reaching age 66 for those born from 1943 through 1954. It increases again by two months for each subsequent birth year after 1954, reaching age 67 for those born in 1960 and after.

Health Shocks—An abrupt change in health status or the onset of specific health conditions. Health shocks may impact retirement dates, household income, consumption, wealth, and asset allocation.

High Income—An arbitrary amount of income or earnings which, for the purpose of these reports, is assumed to be in excess of $100,000 annually for a family of two.

High Net Worth—An arbitrary amount of retirement savings, including defined contribution pension account balances, aggregating $1 million or more for a family of two.

Inflation—Annual increase in the Consumer Price Index as measured by the U.S. Bureau of Labor Statistics; it may be for all consumer items, or for specific subsets such as medical care.

Joint and Survivor Annuity—An annuity issued on two individuals under which payments continue in whole or in part until the second of the two dies (also called joint life annuity).

Life Expectancy—The average future remaining lifetime for a cohort of people at a specific age. For all Americans, life expectancy at birth in 2005 was 78; for females 80, and for males, 75. At age 65, life expectancy for males is 17 years, and for females, 20 years. Source: U.S. Bureau of Census Tables.
Glossary

**Normal Retirement Age**—For most traditional defined benefit pension plans, this has been established as 65, the same age at which full Social Security benefits were available for birth cohorts through 1937. See also, ‘Full Retirement Age.’

**Phased Retirement**—There is no standard agreed upon definition of phased retirement. It is used to describe such arrangements as working part-time before retirement or retiring and then taking a new job, becoming self-employed or working on a limited basis for a former employer. Viewed broadly, it may include reducing one’s work schedule before retirement, changing duties at normal retirement age, working part-time in retirement or some combination of approaches to gradually phase out of the labor force. The definition of phased retirement is typically limited to situations where a partial pension payment is available or to a situation where the individual is working for the same employer as before.

**Pre-retiree**—Anyone still in the work force who has reached an arbitrary age—typically set around 50—at which planning for retirement begins to become a serious prospect. For the purposes of the 2007 Survey, pre-retirees are at least age 45.

**Qualified Plan**—A pension plan under which contributions meet certain standards set by the IRS to be tax deductible for the plan sponsor and are tax-deferred to the participant. These plans are subject to numerous rules in order to maintain the favorable tax status.

**Retiree**—Traditionally, a person who, having attained a certain age—often, but not necessarily normal retirement age—has left the labor force, with no expectation of returning. Today, many retirees leave full-time work, but continue with some work. As retirement is changing, there is no clear definition of retirement, and self-declaration of status produces varying definitions when based on labor force participation criteria. Others tend to consider themselves retired if they are collecting retirement benefits. For the purposes of the 2007 Survey, respondents were considered retirees if they classified themselves as retired in an employment status question or were employed, but responded that they had retired from a primary occupation.

**Retirement**—This is generally defined as exiting from one’s job or occupation, typically at an age at which the individual has no expectations of returning full-time to the labor force. For the purposes of the 2007 Survey, retirement is based on exit from a primary occupation or the self-definition of respondents.

**Reverse Mortgage**—An arrangement in which a homeowner borrows against home equity and receives regular monthly tax-free payments from the lender. Also called reverse-annuity mortgage or home equity conversion mortgage.

**Risk**—Exposure to the probability of an event that will occur with certainty, but with unknown timing—death—or that may or may not occur, such as accident, sickness, becoming disabled or outliving one’s assets.