SOCIETY OF ACTUARIES

Managing the Impact of Long-Term Care Needs and
Expense on Retirement Security Monograph

Financing Future LTSS and Long Life through More Flexible 401(k)s and IRAs

By Karl Polzer

Copyright 2014 by the Society of Actuaries.
All rights reserved by the Society of Actuaries. Permission is granted to make brief excerpts for a published review. Permission is also granted to make limited numbers of copies of items in this monograph for personal, internal, classroom or other instructional use, on condition that the foregoing copyright notice is used so as to give reasonable notice of the Society's copyright. This consent for free limited copying without prior consent of the Society does not extend to making copies for general distribution, for advertising or promotional purposes, for inclusion in new collective works or for resale.

Actuaries
Risk is Opportunity.[sm]

Key Pieces of the Retirement Security Puzzle:

Financing Future LTSS and Long Life through More Flexible 401(k)s and IRAs

Karl Polzer

The author would like thank those who provided ideas and suggestions and/or reviewed drafts of this paper, including: Gretchen Alchema, G. Lawrence Atkins, Winthrop Cashdollar, Craig Copeland, John Cutler, Judy Feder, Howard Gleckman, Monica Healy, Peter Kemper, John O'Leary, Bill Marton, Joe Piacentini, James Poterba, Shanthi Ramnath, Eileen Tell, Jack VanDerhei, and Mark Warshawsky, as well as Society of Actuaries reviewers.

This paper proposes and evaluates changing 401(k) and individual retirement account (IRA) rules to address two major risks facing participants in defined-contribution (DC) retirement accounts: 1) the risk of outliving one's savings; and 2) the risk of having to pay substantial costs for long-term services and supports (LTSS). The proposal would allow retirees to invest a portion of their DC retirement savings for longer than under current tax rules and could also provide tax incentives for money withdrawn to pay for LTSS or long-term care insurance (LTCI). The proposed policy change addresses issues in both the retirement and LTSS financing policy arenas. At the conclusion, the author also briefly considers how such a policy change could play a role in a package of reforms that would increase retirement security by providing increased incentives for private savings for future LTSS costs accompanied by measured expansion of federal LTSS catastrophic coverage and income supports.

As policymakers seek ways to develop a more comprehensive, efficient and socially equitable system of financing the cost of future LTSS, increased flexibility to use retirement accounts for this purpose could play a key role. In its 2013 report to Congress, a philosophically divided Commission on Long-Term Care suggested two broad approaches to improving financing for LTSS: 1) improving coverage for those with few resources through expansion of social insurance; and 2) "creative financing efforts to affordably insure the risk of needing LTSS and encourage higher levels of savings."[1]

As part of its alternative approach of strengthening LTSS financing through private savings options for financial protection, the commission's final report suggested providing "a tax preference for long-term care policies through retirement and health accounts." Though empirically debatable, the report went on to say: "Allowing withdrawals from existing 401k, IRA, or Section 125 accounts to pay LTCI (long term care insurance) premiums or distributions would have minimal tax implications. The tax costs of incentivizing broader participation would be more than offset over time as those with private coverage draw on private rather than public resources to finance their care."[2]

While reserving judgment on potential federal cost impacts or savings to the Medicaid program, this paper explores potential strengths and weaknesses of a policy change that would allow the segregation of some 401(k) and IRA funds in special subaccounts or "LTSS/Longevity IRAs." In such an approach, owners of DC accounts planning retirement would be educated about the need to ensure that they have enough savings to cover ordinary living expenses while also providing a way to save and invest to cover the risk of needing LTSS and outliving their financial resources.

Background

Americans saving for retirement increasingly are doing so through a DC, 401(k)-style system[3] that presents major challenges for adequate savings and accurate planning. For one thing, this system is relatively new and most workers have not participated in it for their full working lives.

Despite the impact of the recent "great recession," DC accounts provide substantial retirement resources to a growing portion of Americans, particularly those with the highest incomes and assets. Assuming current Social Security benefits are not reduced, the Employee Benefit Research Institute (EBRI) recently estimated that "between 83 and 86 percent of workers with more than 30 years of eligibility in a voluntary enrollment 401(k) plan are simulated to have sufficient 401(k) accumulations that, combined with Social Security retirement benefits, will be able to replace at least 60 percent of their age-64 wages and salary on an inflation-adjusted basis."[4] However, major risks that the DC system presents include the following:

- People about to retire typically don't know how long they will live (longevity risk). In determining streams of payouts from their retirement savings, they face the risk of outliving their savings. The longer they live, the greater the risk that inflation may erode their savings and income, as well. At age 65, average life expectancy for women is 21.5 years, with 39 percent expected to live to age 90 and 5 percent to age 100.[5]
- Retirees also face the risk that they will need relatively large amounts of money for health care and LTSS not covered by Medicare or Medicaid. Most people are not even aware what these major public programs do and do not cover. These expenditures often occur near the end of life, but not always.

While most Americans can probably afford to cover the average cost of future LTSS costs, a minority can afford the cost of many years of intensive care and assistance with several activities of daily living, such as bathing, moving about, and dressing. According to seminal research cited by the LTC commission report, "the expected value of all paid LTSS for a person turning 65 in 2005 was $47,000, but the distribution of expenditures is highly skewed. Sixteen percent of the cohort could expect to use paid care valued at $100,000 or more over the course of their remaining years, and 12 percent could be expected to incur expenditures between $25,000 and $100,000. Forty-two percent of that cohort could expect no LTSS expenditures at all, either due

to lack of need or exclusive reliance on informal care."[6] A person turning 65 had a 20 percent chance of experiencing more than five years of impairment in daily living activities requiring help from family or paid care in his or her remaining lifetime; a 20 percent chance for needing such help for two to five years; a 12 percent chance of needing help for one to two years; and a 17 percent chance for less than one year; but this person also had a 31 percent chance of dying without any serious long-term care (LTC) need.[7]

Table 1

Distribution of Present Discounted Value of Lifetime LTC Expenditures for People Turning 65 in 2005

(Source: Kemper, P., H.L. Komisar and L. Alecxih. (2005/2006). Long-Term Care over an Uncertain Future: What Can Current Retirees Expect? *Inquiry, 42*, 335-350.)

Average Expenditures	% with Expenditures	Zero Expenditures	<$10K	$10K-$25K	$25K-$100K	$100K-$250K	$250K or more
$47,000	58%	42%	19%	8%	14%	11%	5%
Converted to 2014 dollars*							
Average Expenditures	**% with Expenditures**	**Zero Expenditures**	**<$12K**	**$12K-$31K**	**$31K-$122K**	**$122K-$305K**	**$305K or more**
$57,340	**58%**	**42%**	**19%**	**8%**	**14%**	**11%**	**5%**

*To generate a rough estimate of what the current risk distribution might be, numbers and ranges highlighted in red were converted from 2005 to 2014 dollars using a 1.22 conversion factor. (See: http://oregonstate.edu/cla/polisci/individual-year-conversion-factor-tables.) However, though roughly adjusted for inflation, the 2014 estimates do not reflect changes in other important factors including the cost, type, and intensity of services used and demographic shifts.

The U.S. Department of Health and Human Services' Office of the Assistant Secretary for Planning and Evaluation (ASPE) is in the process of updating the estimates of expected lifetime LTC expenditures done by Kemper, Komisar, and Alecxih (KKA). Preliminary estimates of expected lifetime LTC needs for persons turning age 65 in 2013 are roughly similar to the 2005 KKA estimates.[8]

Social Security Sets a Foundation

Nearly nine in 10 older Americans receive income from Social Security, according to the Pension Rights Center. Providing defined payouts indexed to keep up with inflation, Social Security sets the foundation for most Americans' retirement income, particularly for the cost of everyday living expenses. It also reduces the risk of not having enough to pay for future LTSS expenses. People can start Social Security benefits between the ages of 62 and 70. The National Academy of Social Insurance recently has pointed out that, by waiting until age 70 to take Social

Security, people increase their benefits by 76 percent compared with starting at age 62.[9] In 2013, average Social Security benefits for retired workers (see Table 2 below) could cover the cost of about one-fifth the national median cost of a semi-private room in a nursing home.[10] Converting 401(k) balances into lifetime annuities can augment Social Security payments, but the private annuity market faces significant challenges including interest rate volatility, administrative costs and adverse selection.[11]

Table 2

Average Social Security Benefits, 2013	
Average benefits for retired workers	**$15,132**
Average benefits received by a couple, both of whom were receiving benefits	**$24,576**
Average aged widow/widower benefit	**$14,568**

Source: Pension Rights Center website, April 5, 2014. See: http://www.pensionrights.org/publications/statistic/income-social-security#importance.

Table 3

Median Social Security Benefits, by Age, 2011	
65 and older	**$13,376**
65-74	**$13,525**
75+	**$13,247**

Source: Pension Rights Center website, April 5, 2014

To pre-finance the risk of LTSS expenditures, people have three basic choices: 1) buying private LTCI; 2) paying directly through savings and other assets (“self-insuring” or self-funding); and 3) a combination of insurance and self-funding. It is important to include the self-funding option in the analysis, especially because, unlike health insurance after the Patient Protection and Affordable Care Act of 2010, LTCI still can be denied to would-be purchasers based on their health status.[12] (See endnote 12 for more detail.) Also, many people choose not to buy LTCI, primarily because they don’t think it’s worth the cost, but also for many other reasons.[13] Finally, most LTCI policies do not cover catastrophic expenses over a set dollar limit. Those failing to pre-finance the costs of LTSS and needing substantial services in later life in many instances face the possibility of having to spend down assets and reduce income to qualify for Medicaid if they cannot raise sufficient funds on their own.

The recent problems facing the LTCI market have been widely publicized. About 10 percent of the potential market of people age 50 and older has LTCI, according to the LTC commission report.[14] Over the past several years, issuance of new policies has dropped, many carriers have left the market, and many policies have experienced substantial premium increases.[15] The two tables below describe characteristics of individual LTCI policies, including average premiums for different age groups.[16] Despite recent challenges, LTCI remains an important financing option.

Table 4

Design Features for Individual LTCI Policies Bought in 2010[17]					
	Buyers' Age Category				
	<55	*55 to 64*	*65 to 69*	*70 to 74*	*75 plus*
% with Inflation Protection	71%	82%	75%	61%	22%
% with Home Care	100%	99%	98%	95%	91%
Average Annual Premium	$1,831	$2,261	$2,781	$3,421	$4,123

Source: "Who Buys Long-Term Care Insurance in 2010-2011?" AHIP, 2012

Table 5

Individual LTCI Policy Design, by Purchase Year[18]					
	2010	*2005*	*2000*	*1995*	*1990*
Nursing Home (NH) Average Policy Duration	4.8 years	5.4 years	5.5 years	5.1 years	5.6 years
Average Daily NH Benefit	$153	$142	$109	$85	$72
Home Health Care (HHC) Average Policy Duration	4.8 years	5.2 years	5.4 years	3.4 years	NA
Average Daily HHC Benefit	$152	$135	$106	$78	$36
Percent of Policies with Both NH and Home Care	95%	90%	77%	61%	37%
Average Annual Premium	$2,283	$1,918	$1,677	$1,505	$1,071

Source: "Who Buys Long-Term Care Insurance in 2010-2011?" AHIP, 2012

Tax Policy

Taxpayers who itemize can deduct specified amounts of LTCI premiums or the cost of LTSS as medical expenses to the extent that they contributed to total medical expenses exceeding a threshold of either 10 percent or 7.5 percent of adjusted gross income, depending on their age.[19] Expansion of the currently limited ability to deduct LTCI expenses could help expand coverage for people who have enough funds to buy it.

A feature of the tax code that may dampen accumulation of assets that can be used to finance LTSS late in life (or unpredicted longevity) is the requirement to begin drawing funds from IRAs and 401(k)-style accounts at about age 71 or face a potentially stiff penalty.[20] The formula that the Internal Revenue Service (IRS) uses to calculate "required minimum distributions" (RMDs) basically involves dividing DC account balances by a factor based on life expectancy each year. In theory, a lifetime payout formula based on average life expectancy could fall short for the older half of the population age distribution.

For example, most IRA and 401(k) account owners, including those without spouses and those with spouses not more than 10 years younger, who have a total balance of about $100,000 would have to withdraw about $4,000 at age 71 and similarly calculated amounts each year thereafter. As shown in the table below, if funds in the account are earning an average of 2 percent annually after inflation, minimum distributions remain roughly level, staying between $3,500 and $4,500 a year until age 96, then declining below $3,000 at age 100. After adding in a typical Social Security income of $14,000 (which falls between the median and the mean) annual income in this scenario would be roughly between $17,500 and $18,500 until age 96.

For a $100,000 401(k)-type account earning 4.5 percent in real-dollar terms, the RMD would rise to about $7,000 in a person's early 90s, and then decline back to about $4,000 at age 104. Adding in $14,000 of Social Security income, this person's income would range roughly from $18,000 to $21,000. So, a higher return on investment or interest rate can significantly increase retirement account yields. Many Americans may be surprised by the modest income streams that seemingly large accumulations of DC savings generate with conservative investment assumptions. Wealthier people with larger DC accounts may be able to tolerate higher risk in choosing asset allocations, and therefore enjoy higher average yields, than people with lower incomes and DC assets.

The administration recently took a significant step that could help DC account holders manage the risk of outliving their savings. On July 2, 2014, the Treasury Department and IRS published a final rule allowing conversion of part of DC account balances into longevity annuities with guaranteed lifetime payments. The new rules allow DC account holders to use up to 25 percent of their account balance or $125,000 (whichever is less) to buy a longevity annuity without tax

penalties that otherwise might result from noncompliance with existing minimum distribution rules.[21] In addition, the president's fiscal year 2015 budget includes a proposal that would eliminate RMD requirements for individuals whose aggregate IRA and retirement plan accumulations do not exceed $100,000.[22]

Table 6

Minimum Distributions from $100K 401(k) Accounts

Earning 2% and 4.5% Real Return on Investment (RoI)[23]

		2% RoI		4.5% RoI	
Age	**Distribution Period**	**Minimum Distribution**	**401(k) Balance**	**Minimum Distribution**	**401(k) Balance**
70	27.4		$100,000		$100,000
71	26.5	$3,849	$102,000	$3,943	$104,500
72	25.6	$3,911	$100,114	$4,105	$105,082
73	24.7	$3,973	$98,127	$4,272	$105,521
74	23.8	$4,035	$96,038	$4,446	$105,805
75	22.9	$4,098	$93,843	$4,625	$105,921
76	22	$4,161	$91,539	$4,812	$105,853
77	21.2	$4,204	$89,126	$4,981	$105,589
78	20.3	$4,267	$86,621	$5,179	$105,136
79	19.5	$4,308	$84,001	$5,357	$104,455
80	18.7	$4,347	$81,287	$5,538	$103,557
81	17.9	$4,384	$78,479	$5,722	$102,430
82	17.1	$4,420	$75,576	$5,910	$101,060
83	16.3	$4,453	$72,580	$6,100	$99,432
84	15.5	$4,483	$69,490	$6,292	$97,531
85	14.8	$4,480	$66,306	$6,442	$95,345
86	14.1	$4,473	$63,063	$6,589	$92,903
87	13.4	$4,460	$59,762	$6,731	$90,199
88	12.7	$4,442	$56,408	$6,868	$87,223
89	12	$4,417	$53,006	$6,998	$83,971
90	11.4	$4,347	$49,561	$7,056	$80,438
91	10.8	$4,270	$46,117	$7,100	$76,684
92	10.2	$4,185	$42,684	$7,129	$72,715
93	9.6	$4,091	$39,270	$7,139	$68,537
94	9.1	$3,943	$35,883	$7,051	$64,161
95	8.6	$3,788	$32,578	$6,940	$59,680
96	8.1	$3,625	$29,366	$6,804	$55,114
97	7.6	$3,455	$26,255	$6,643	$50,484
98	7.1	$3,276	$23,257	$6,453	$45,814
99	6.7	$3,042	$20,381	$6,139	$41,133
100	6.3	$2,807	$17,686	$5,804	$36,568
101	5.9	$2,572	$15,176	$5,449	$32,148
102	5.5	$2,337	$12,856	$5,073	$27,901
103	5.2	$2,063	$10,729	$4,588	$23,855
104	4.9	$1,804	$8,839	$4,109	$20,135

105	4.5	$1,595	$7,176	$3,721	$16,747

The diagrams below show RMDs for a $300,000 401(k) or IRA at two rates of return over a 35-year period.

Figure 1

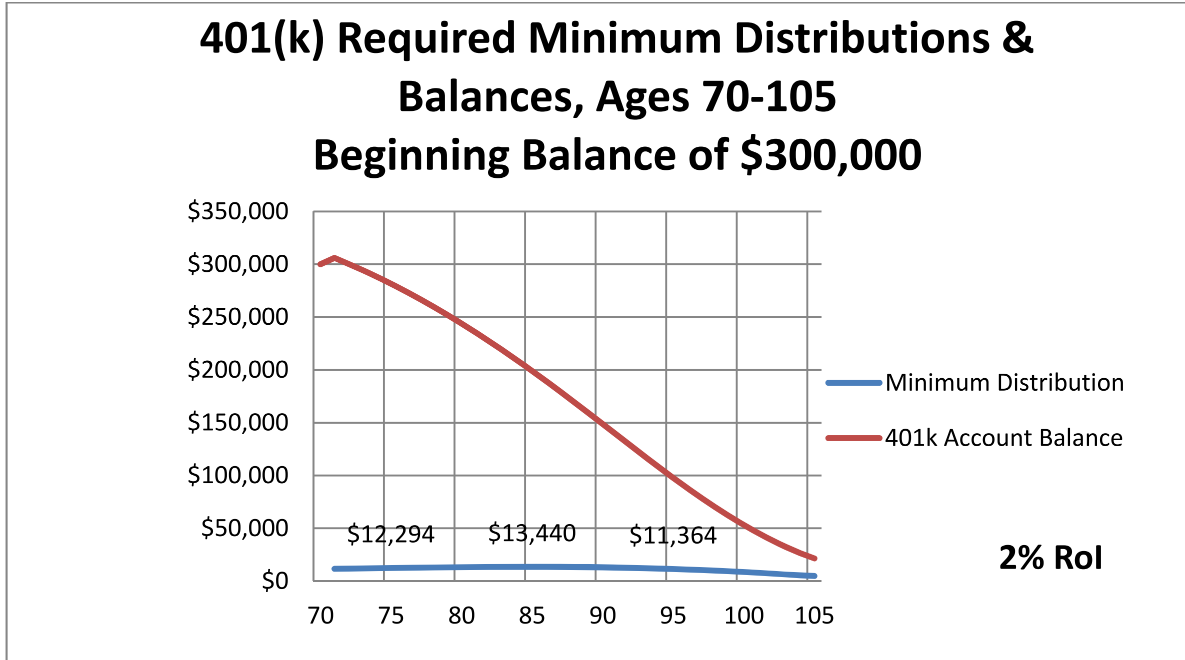
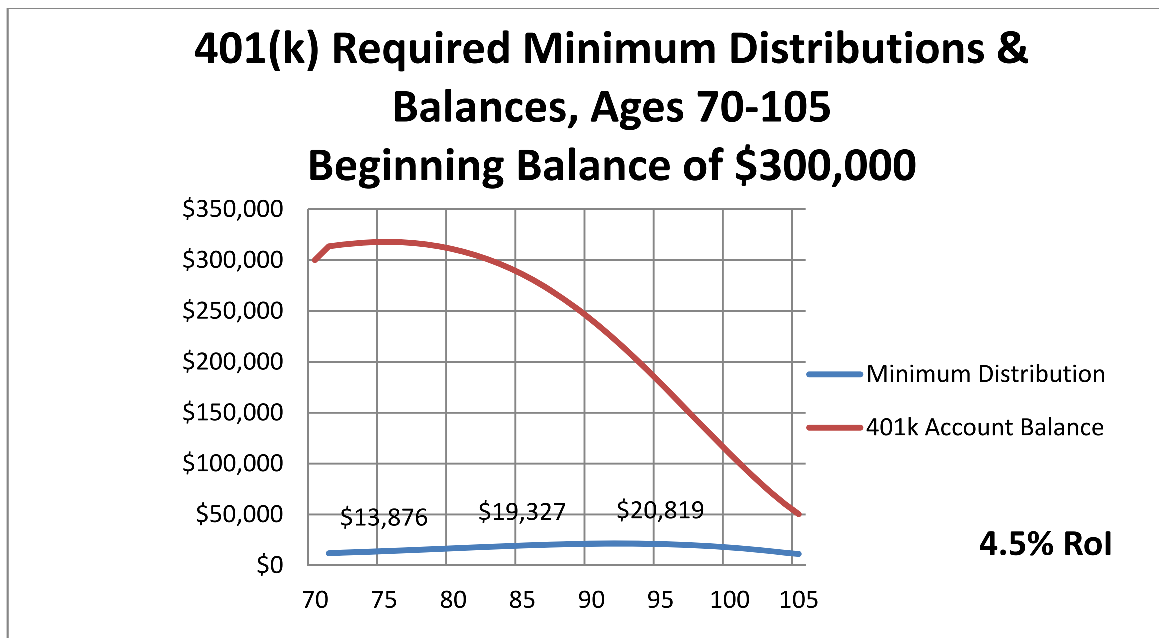


Figure 2



The Policy Proposal

Federal policymakers could incentivize greater savings to cover LTSS costs—and living expenses late in life—by changing DC plan rules in a few ways, including:

a. Allowing retirement savers to segregate a portion of their DC accumulation into an LTSS/longevity trust or to transfer such funds into a special LTSS/longevity IRA. Money could be put in accounts in lump sums or increments.

b. For these special accounts, deferring the minimum distribution taxation rules that would otherwise kick in at age 70 1/2, until a point in time of the account owner's choosing or his/her death, whichever came first. Money remaining in a special account at a person's death would be taxed as under current law.

c. Depending on policy priorities, policymakers could choose among a number of strategies regarding the taxation of money drawn from these special accounts to pay for LTSS and LTCI premiums. Funds withdrawn for LTSS or LTCI could be fully taxable or fully tax-exempt. If policymakers wished to create tax incentives that progressively reduced tax benefits for higher-income people, they could apply taxes in a way similar to the rough example in the table below:[24]

Table 7

Alternative (More Progressive) Tax Treatment of Funds Drawn from Accounts for LTSS or LTCI
(*levels set for illustrative purposes only and do not reflect current tax law*)

Account Owner's Tax Rate	Tax Treatment of Funds Used for LTSS or LTCI
>40%	Fully taxed
30%-39%	20% of funds spent tax free
25%-29%	40% of funds spent tax free
20%-24%	60% … tax free
15%-19%	80% … tax free
15% or less	Fully tax free

d. Providing retirement planning education to people wanting to set up special accounts, including counseling on the need for both: 1) lifetime income streams to meet everyday living costs; and 2) financial resources for managing the risk of LTSS costs and longevity risk.

e. Amounts placed in special accounts could be limited to a maximum percentage of all DC funds (say, 25 percent or 30 percent) and/or to a maximum level, say one or two times the average annual cost of nursing home care or an equivalent. However, earnings generated in the accounts could exceed the initial limit. (So, if the upper limit were set at $100,000, up to $100,000 could be moved to such an LTSS/longevity trust or account. Earnings generated by that investment could stay in the special account.) Funds removed from the accounts that are not spent on LTSS or LTCI would be taxed but without penalties related to minimum distributions.

Trade-offs: Balancing Current Needs, Future Income Streams and Long-term Risks

In essence, the proposed policy change would incentivize and facilitate deferring withdrawal of part of 401(k) retirement savings to pay for LTSS needed because of future disability or for any expenses if life turns out to be very long. The trade-off would be that people would have less to spend earlier in retirement. For example, reducing an overall 401(k) account balance from $100,000 to $75,000 to set up a special LTSS/longevity account of $25,000 would reduce the RMD from about $4,000 to about $3,000 at age 71. Similarly, reducing an account balance from $300,000 to $225,000 to set up a special LTSS/longevity account of $75,000 would reduce the RMD from about $12,000 to about $9,000 at age 71.

The first two tables below show how an initial investment of $75,000 or $150,000 in a special account at age 70 would grow at two rates of return (2 percent and 4.5 percent) under two scenarios: 1) no withdrawals and no purchase of LTCI (a "self-insured" strategy); and 2) paying an LTCI premium of $3,000 or $4,000.[25] Over 15 years, by *age 85*, with no withdrawals, a $75,000 special account would grow to $100,940 if earning 2 percent annually and to $145,146 if earning 4.5 percent annually. Over the same 15-year time period, an account paying an annual LTCI premium of $3,000 would end up with $49,060 if earning 2 percent annually and $82,794 if earning 4.5 percent annually.

Table 8
Special LTSS/Longevity Account or IRA Balances,
$75K Initial Investment (2014 Dollars) Starting at Age 70

	Self-Insured with No Withdrawals		***Paying $3K Annual LTCI Premium***	
	2% RoI	4.5% RoI	2% RoI	4.5% RoI
Age 70	$75,000	$75,000	$75,000	$75,000
Age 75	$82,806	$93,464	$67,194	$77,052
Age 80	$91,425	$116,473	$58,575	$79,608
Age 85	$100,940	$145,146	$49,060	$82,794
Age 90	$111,446	$180,879	$38,554	$86,764
Age 95	$123,045	$225,408	$26,955	$91,712

As shown in the table above, a person who invested $75,000 of a $300,000 401(k) at age 70 in a special LTSS/longevity account could draw $3,000 yearly to pay LTCI premiums from the special account with between $26,955 and $91,712 remaining in the special account at *age 95* if annual rates of return were between 2 and 4.5 percent. Assuming Social Security income of $14,000, this person would have a combined income of about $23,000 at age 71 if it included a minimum distribution of about $9,000.

As noted above, if such a special account holder chose not to buy LTCI, by age 85 the $75,000 would grow to somewhere between $100,000 and $145,000 if annual rates of return were between 2 and 4.5 percent. While this "self-insured" strategy could cover one year of nursing home care and possibly two, depending when LTSS costs occurred and on rates of return, it would not be sufficient to cover catastrophic costs above that threshold, particularly for the roughly 16 percent of people turning 65 who can expect lifetime LTSS expenditures of greater than $122,000 (see estimation on Table 1). A person with a "self-insured" strategy needing additional funds to pay for LTSS could also draw from other personal savings, housing equity through a reverse mortgage, or help from family members (either money or in the form of unpaid assistance). A useful tool to further augment this strategy would be buying catastrophic LTCI only (say for expenses above $200,000 or $300,000), but such a product is not currently available and, in some states, not allowed to be sold.

As shown in Table 9 below, a person who invested $150,000 of a $600,000 401(k) at age 70 in a special LTSS/longevity account could draw $3,000 yearly to pay LTCI premiums from the special account with between $150,000 and $317,000 remaining in the special account at age 95 if annual rates of return were between 2 and 4.5 percent. Paying a $4,000 premium would result in a balance of between $118,000 and $273,000 at age 95, again depending on rates of return. Assuming Social Security income of $14,000, such a person would have a combined income of about $32,000 at age 71 if it included a minimum distribution of about $18,000.

If such a special account holder chose not to buy LTCI, by age 85 the $150,000 would grow to somewhere between $202,000 and $290,000 if annual rates of return were between 2 and 4.5 percent. Especially given the higher income level in this scenario, a self-insured strategy could cover at least two years of nursing home care and possibly up to four, depending on when LTSS costs occurred and rates of return.

Table 9

Special LTSS/Longevity Account or IRA Balances, $150K Initial Investment (2014 Dollars) Starting at Age 70

	Self-Insured with No Withdrawals		***$3K LTCI Premium***		***$4K LTCI Premium***	
	2% RoI	4.5% RoI	2% RoI	4.5% RoI	2% RoI	4.5% RoI
Age 70	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000
Age 75	$165,612	$186,927	$150,000	$170,515	$144,796	$165,044
Age 80	$182,849	$232,945	$150,000	$196,081	$139,050	$183,793
Age 85	$201,880	$290,299	$150,000	$227,940	$132,707	$207,156
Age 90	$222,892	$361,757	$150,000	$267,643	$125,703	$236,271
Age 95	$246,091	$450,815	$150,000	$317,120	$117,970	$272,554

Starting LTSS/longevity accounts earlier in life would give the funds more time to grow, and possibly make it easier to afford LTCI and meet underwriting requirements, allow people to take more investment risk with a higher yield, and allow people with lower accumulations to cover

more LTSS costs. As shown in Table 10 below, a person who invested $75,000 at age 60 in a special LTSS/longevity account could draw $2,000 yearly to pay LTCI premiums from the account with between $50,003 and $187,058 remaining in the account at age 95 if annual rates of return were between 2 and 4.5 percent. Paying a $3,000 premium would result in a balance of between $8 and $105,561 at age 95 assuming the same rate-of-return range. If the person chose not to buy LTCI, by age 80 the $75,000 would grow to somewhere between $111,446 and $180,879 if annual rates of return were between 2 and 4.5 percent. By age 85, the amount would grow to somewhere between $123,045 and $225,408 assuming the same range of rates of return.

Table 10

Special LTSS/Longevity Account or IRA Balances,
$75K Initial Investment (2014 Dollars) Starting at Age 60

Table 11

	Self-Insured with No Withdrawals		***$2K LTCI Premium***		***$3K LTCI Premium***	
	2% RoI	4.5% RoI	2% RoI	4.5% RoI	2% RoI	4.5% RoI
Age 60	$75,000	$75,000	$75,000	$75,000	$75,000	$75,000
Age 65	$82,806	$93,464	$72,398	$82,522	$67,194	$77,052
Age 70	$91,425	$116,473	$69,525	$91,896	$58,575	$79,608
Age 75	$100,940	$145,146	$66,353	$103,578	$49,060	$82,794
Age 80	$111,446	$180,879	$62,851	$118,136	$38,554	$86,764
Age 85	$123,045	$225,408	$58,985	$136,277	$26,955	$91,712
Age 90	$135,852	$280,899	$54,716	$158,885	$14,148	$97,878
Age 95	$149,992	$350,051	$50,003	$187,058	$8	$105,561

Special LTSS/Longevity Account or IRA Balances,

$50K Initial Investment (2014 Dollars) Starting at Age 60

	Self-Insured with No Withdrawals		***$2K LTCI Premium***		***$3K LTCI Premium***	
	2% RoI	4.5% RoI	2% RoI	4.5% RoI	2% RoI	4.5% RoI
Age 60	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Age 65	$55,204	$62,309	$44,796	$51,368	$39,592	$45,897
Age 70	$60,950	$77,648	$39,050	$53,072	$28,101	$40,784
Age 75	$67,293	$96,764	$32,707	$55,196	$15,413	$34,412
Age 80	$74,297	$120,586	$25,703	$57,843	$1,405	$26,471
Age 85	$82,030	$150,272	$17,970	$61,141	$0	$16,576
Age 90	$90,568	$187,266	$9,432	$65,252	$0	$4,245
Age 95	$99,994	$233,367	$6	$70,374	$0	$0

A 60-year-old who invested $50,000 in a special account, as shown in Table 11 above, could draw $2,000 yearly to pay LTCI premiums with between $6 and $70,374 remaining in the account at age 95 if annual rates of return were between 2 and 4.5 percent. Paying a $3,000 premium would result in an account balance of $0 sometime between age 80 and age 92. If the person chose not to buy LTCI, by age 80 the $50,000 would grow to somewhere between $74,297 and $120,586 at annual rates of return of between 2 and 4.5 percent. By age 85, the amount would grow to somewhere between $82,030 and $150,272 assuming the same range of rates of return.

Similar scenarios describing accounts started at ages 50 and 40 are presented in Appendix A.

The following two diagrams depict some of the financial trade-offs in minimum distributions and LTSS financing options posed by using $150,000 of a $600,000 DC account accumulation to start an LTSS/longevity account. The scenarios below assume real rates of return of 2 percent or 4.5 percent and level premiums of $4,000 for those opting to buy LTCI. Similar diagrams of more scenarios can be found in Appendix B.

Figure 3

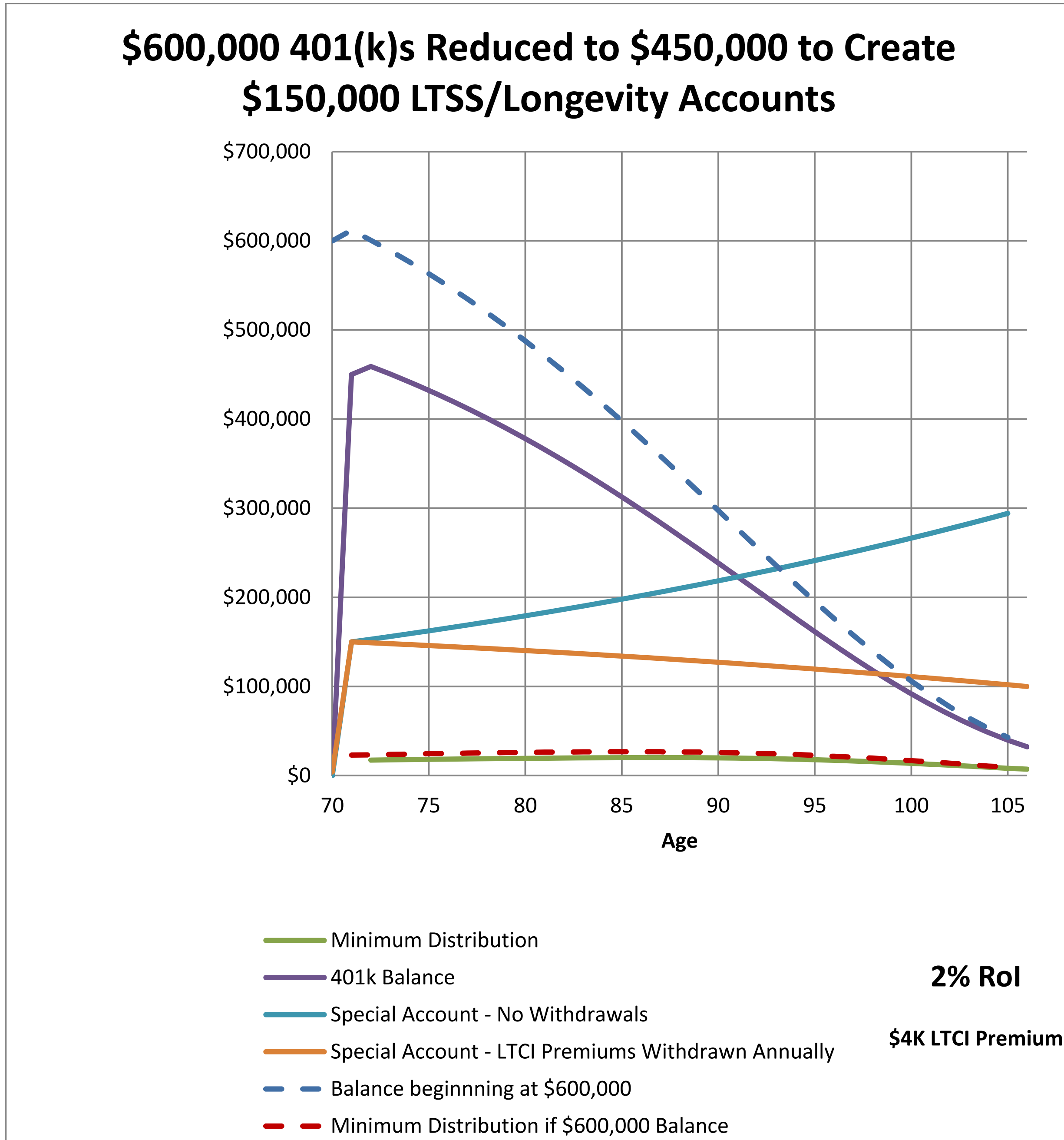
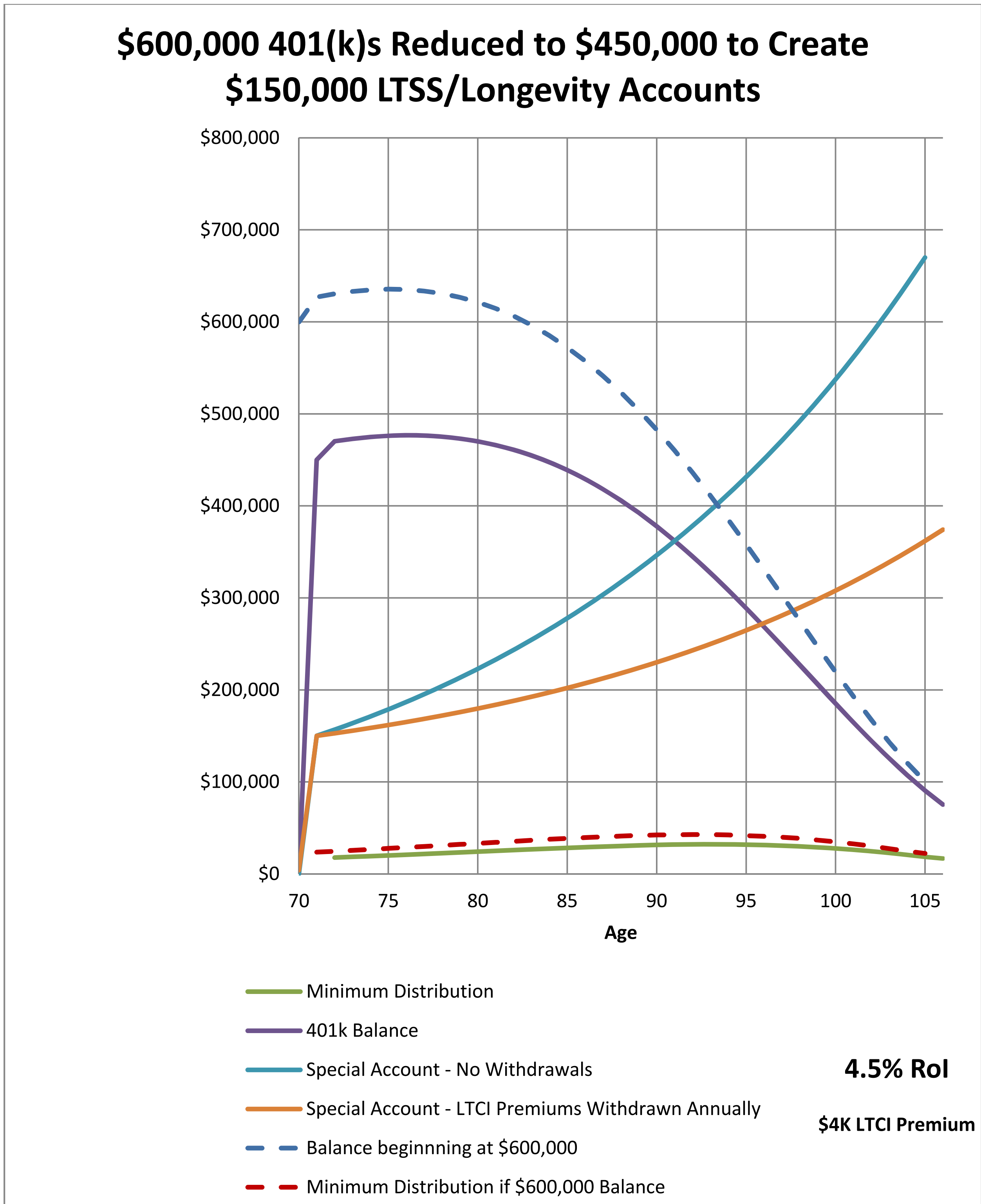


Figure 4



How Many People Could Benefit?

The examples above (and in Appendices A and B) show that, barring sudden drops in asset values, many retirees with $600,000 in 401(k) accounts could self-insure at age 70 and most could afford LTCI premiums by setting one-quarter of the funds in special LTSS/longevity accounts. Those with $300,000 401(k) balances setting aside $75,000 in a special account could afford substantial LTCI premiums and partially self-fund. For those with lesser accumulations, such special accounts could help them pay for LTCI premiums and/or some out-of-pocket LTSS expenses.

Starting earlier could help. An account holder's initial balances could be lower, LTCI premiums could be lower, and investment risk tolerance could be higher because of the longer investment time horizon. Those setting aside $75,000 by age 60 could afford LTCI insurance premiums until at least age 95 or self-fund between two and three years of nursing home costs by age 85. A $50,000 special fund started at age 60 could cover $2,000 annual premiums through age 95 in the scenario above.

A 50-year-old person starting a $50,000 account could cover LTCI premiums of $1,500 at least until age 95 and, if self-insuring, would have between about $100,000 and $233,000 in the account, depending on rate-of-return assumptions. A $50,000 account started at age 40 could cover $1,500 premiums until age 95 and possibly have substantial funds left over, depending on yields. If the 40-year-old chose not to buy LTCI, by age 85 the fund would have between $122,000 and $362,000 depending on return assumptions. A 40-year-old starting with a $35,000 account balance could pay $1,000 LTCI premiums until age 95 (and possibly $1,500 premiums), depending on yield assumptions. If the 40-year-old chose not to buy LTCI, by age 85 the $35,000 fund would grow to between $85,000 and $254,000 depending on return assumptions.

How many Americans would have sums like these to set aside in their DC plans? In 2010, average balances for all families having any type of 401(k)-like retirement account, including employer DC plans, Keoghs[26] and IRAs, were $173,232, according to an EBRI analysis of the 2010 Survey of Consumer Finances.[27] As shown on Table 12 below, in 2010 average balances for these types of accounts for families with a head of household age 55 to 64 were about $300,000 in 2010 dollars. If measuring them in 2014, it would not be surprising if balances were significantly higher as this age group will have spent more time saving and investing through DC accounts and also because asset values have risen during the recent economic recovery.

It should be kept in mind that the likelihood of having any type of retirement plan is highly correlated with family income. In 2010, only about 20 percent of families with less than $10,000 in income had any kind of retirement plan with a current or previous employer, or an IRA or Keogh plan, compared with about 94 percent of families with $100,000 of income or more. (The

percentage of families with any such retirement coverage for other income groups was: about 32 percent for families with $10,000 to $24,999 in income; 61 percent for families with $25,000 to $49,999 in income; and 80 percent for families with $50,000 to $99,000 in income.[28]) In 2010, 42 percent of households headed by someone age 60 to 64 had at least one IRA and 29 percent had at least one DC plan.[29] A large percentage of lower-income elderly rely primarily on Social Security.

Table 12

Average Total Balances for Families with Any Type of Defined-Contribution Retirement Plan or IRA, 2010	
Total	$173,232
Family Income	
Less than $10,000	insufficient sample size for reliable estimate
$10,000-$24,999	$46,661
$25,000-$49,999	$69,071
$50,000-$99,999	$91,850
$100,000 or more	$363,540
Age of Head of Household	
35-44	$85,156
45-54	$176,013
55-64	$297,903
65-74	$324,199
75+	$156,636
Net Worth Profile[30]	
Bottom 25%	$11,321
25-49.9%	$17,993
50-74.9%	$56,353
75-89.9%	$168,120
Top 10%	$644,444

Source: EBRI estimates from 2010 Survey of Consumer Finances (income and asset values in 2010 dollars)

Based on estimates of account balances above, one could assert that funding LTSS/longevity accounts with 25 percent of total retirement account balances could play a substantial role in pre-financing the cost of LTSS later in life, either through buying LTCI or self-funding, for about 20 percent of families with the largest asset levels. If families started early enough, it is possible that such accounts could help perhaps 30 to 35 percent of families with the largest retirement asset levels in this way. One could also argue that even those with very low DC retirement asset levels might benefit from being able to set aside some funds for longer to better sustain quality of life if they happen to live a long time.

Another source of data is a 2007 National Bureau of Economic Research study supported by a grant from the U.S. Social Security Administration. This study estimated that, in cohorts reaching age 65 for persons owning a 401(k), average 401(k) assets would be about $100,000 in 2006, $200,000 in 2017, and $300,000 in 2025 in 2000 dollars at historical rates of equity return.[31] If converted to 2014 dollars, these estimates of average 401(k) assets would be about $139,000 in 2006, $278,000 in 2017, and $417,000 in 2025. Removing five years of earnings to account for the impact of the great recession, which began after the estimates were made, would adjust the estimates of average 401(k) assets to about $139,000 in 2011, $278,000 in 2022, and $417,000 in 2030 in 2014 dollars.[32]

Benefits and Costs of the Policy Change

Benefits: The primary benefit of the proposed policy change would be increased flexibility to use 401(k) funds to cover the risk of needing LTSS and/or of living a long time. Education provided in conjunction with setting up a special account, or earlier, would help retirees consider important factors including potential LTSS costs, the need to cover everyday costs of living throughout retirement, inflation risk, and the possibility of living a long time. A change in tax policy could provide subsidization of LTSS for both those self-insuring and those insuring these costs.

For those wishing to buy LTCI and eligible to buy it, the special account could provide a financial vehicle that increases the likelihood of being able to keep paying premiums over the years—thereby reducing the risk of lapsing, while having the benefit of pooling risk. For those self-insuring LTSS risks, the accounts could provide a vehicle for planning and diversifying the investment of funds set aside for this purpose to include equities, real estate, and other types of assets. The regulatory structure governing LTCI largely confines insurance companies to investing in bonds. LTCI premiums have been highly sensitive to interest rate assumptions[33] and recent low interest rates have played a major role in market instability.

For both those buying LTCI and those not, accumulations in the accounts not spent on LTSS could be withdrawn to improve the quality of life in other ways late in retirement. From a psychological standpoint, the accounts provide people with a way to put aside funds to pay for

the future possibility of both a positive outcome (long, healthy life) along with a negative outcome (major disability requiring paid services), which, as a combination, might be more attractive for many than simply insuring or saving against the possibility of a negative outcome. In general terms, the accounts also provide a way to "tilt" payouts from 401(k)s more toward the later years of retirement in contrast to lump-sum distributions or level-funded income streams, such as typical annuities or RMDs at low rates of return.

While deferring the RMD in the special accounts to a point in time of the owner's choosing and providing a tax break for monies withdrawn to pay for LTSS costs would increase federal government expenses, the growth of private expenditures for LTSS flowing from these new incentives would delay or displace the need for Medicaid funding for some people. Increased savings and private investment going toward the cost of LTSS and longevity would give more people increased choice of services, care settings and lifestyle options, as compared to reliance on Medicaid and the accompanying need to reduce income and assets. Choice and availability of home and community-based services (HCBS) options, for example, vary widely among state Medicaid programs. An argument can be made that even modest growth in private pay for nursing home care could help maintain price and quality benchmarks in markets currently dominated by public payment, which many argue is far below market value.

Costs and risks: As stated above, the primary cost of the policy change would be lost or deferred federal tax revenue. While some members of the Commission on Long-Term Care were optimistic about the ability of tax subsidies for private options to be fully offset by Medicaid savings, such savings would depend on policy details and behavioral responses that researchers and analysts have not yet well estimated.

The proposal also would increase the complexity of the 401(k) system and possibly some administrative costs. Its consumer education requirement would carry a modest cost that might be offset by less reliance on government programs later. Without such education, providing a tax break for pre-funding LTSS and longevity risks might induce some people to divert funds they need to sustain the quality of everyday living throughout their retirement. It could be argued that allowing the funds to grow longer without taxation could be used by wealthy people simply as a tax dodge[34] or lead people to make overly risky investment choices. These issues could be addressed by policy designs including providing relatively more subsidies to lower-income people, creating special financial instruments geared to help people manage investment volatility, limiting investment choices to certain types of balanced or indexed funds, and setting upper limits on tax-advantaged funds.

A strong argument can be made that placing enough money in a special account to cover future LTSS costs would leave a person vulnerable to investment risks such as sudden fluctuations in the price of equities or major economic downturns. The same critique applies to the underlying DC retirement system in general. As noted above, investment choices could be designed to mitigate these risks, especially as people near the age where the risks of needing services

increase. Investment risk is also a reason to limit the amount that can be put in special accounts to make sure that a person retains enough other resources to cover the cost of everyday living.

Counterarguments to this concern could include that if a person lost most of the funds in the special account due to the timing of a major recession, then he or she wouldn't be too much worse off than if they chose not to risk the money and enjoyed a marginally higher standard of living over the years. Also, if the country entered a major economic downturn and unemployment levels were high, then the cost of LTSS would probably be lower than anticipated, as would be the availability of unpaid family members or others to provide services in cooperative arrangements. A booming economy and tight labor market, on the other hand, might increase inflation risk and support the case for increased investment risk and returns to cover rises in labor and living costs.

Allowing people to set up special LTSS/longevity accounts could act as a hedge against sudden value fluctuations in their main IRA or 401(k) account, since the investment time horizon for the sub-account is longer. In a sense, the special account could act as a "reserve gas tank" to the main retirement account. As discussed later, the federal government could help reduce individuals' risk by helping them to annuitize a portion of funds in special accounts at favorable interest rates, particularly for people with low to modest means.

Table 13 below considers a scenario in which $100,000 is placed in the special account and the market value of the account drops to $50,000 shortly thereafter.

Table 13
Special LTSS/Longevity Account or IRA Balances,
$100K Initial Investment (2014 dollars) Starting at Age 60
If Balance Drops by 50% in Year One

	Self-Insured with No Withdrawals		***$2K LTCI Premium***		***$3K LTCI Premium***	
	2% RoI	4.5% RoI	2% RoI	4.5% RoI	2% RoI	4.5% RoI
Age 60	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Age 65	$55,204	$62,309	$44,796	$51,368	$39,592	$45,897
Age 70	$60,950	$77,648	$39,050	$53,072	$28,101	$40,784

Age 75	$67,293	$96,764	$32,707	$55,196	$15,413	$34,412
Age 80	$74,297	$120,586	$25,703	$57,843	$1,405	$26,471
Age 85	$82,030	$150,272	$17,970	$61,141	$0	$16,576
Age 90	$90,568	$187,266	$9,432	$65,252	$0	$4,245
Age 95	$99,994	$233,367	$6	$70,374	$0	$0

Above, a 60-year-old invests $100,000 in a special account (thereby reducing his or her annual retirement income) and the special account balance within a few months drops to $50,000. After this shock, the person could draw $2,000 yearly to pay LTCI premiums with between $6 and $70,374 remaining in the account at age 95 if annual rates of return were between 2 and 4.5 percent. Paying a $3,000 premium would result in an account balance of $0 sometime between age 80 and age 92. If the person chose not to buy LTCI, by age 80 the $50,000 would grow to somewhere between $74,297 and $120,586 at annual rates of return of between 2 and 4.5 percent. By age 85, the amount would grow to somewhere between $82,030 and $150,272 assuming the same range of rates of return.

How This Policy Approach Might Fit into LTSS and Retirement Financing Reform

Creating LTSS/longevity accounts as described above could play an important role in either of the major financing reform alternatives put forth by the Commission on Long-Term Care. Providing new market incentives for people to buy LTCI and a tax preference for LTSS expenditures from DC accounts are key planks of the commission's alternative approach to strengthen LTSS financing through private options for financial protection.

LTSS/longevity accounts could also play a pivotal role in the commission's "Approach B" of strengthening LTSS financing through social insurance, which is a mixed strategy that both expands the government's financing role while also increasing personal responsibility. The commission offered two possible social insurance models: 1) creating a comprehensive LTSS benefit under Medicare; or 2) creating a basic LTSS benefit within Medicare or new federal program to insure only catastrophic risk and making clear that people are responsible for covering costs below that threshold.

Federal catastrophic coverage could dovetail well with LTSS/longevity accounts by limiting the financial risk for people either choosing to buy LTCI, self-insure, or follow a combined strategy. If people knew they only had to cover two or three years of major LTSS costs, for example, it would be easier for those with moderate incomes to pre-finance all or a major portion of these risks, especially if they started saving and investing early. To mitigate federal government costs,

federal catastrophic coverage could feature income-adjusted premiums or benefits, or could feature larger coverage "holes" for those with more Social Security income.

Even with the help of federal catastrophic coverage, many, if not most, people will lack resources or willingness to save for LTSS. Therefore, under such an approach, Medicaid or other publicly financed coverage should still be provided for costs below the catastrophic threshold, though financial eligibility might be tightened for those with ample means (and possibly loosened for those having little). Federal catastrophic coverage could also relieve states of financial burdens either in the form of a new all-federal program or by supplementing current federal Medicaid matching rates for populations generating catastrophic costs.

Policy analysts increasingly are reaching across governmental silos to explore financing reforms that integrate responses to issues concerning retirement security, LTSS, health care, and other policy areas, including tax and budget strategies. The Bipartisan Policy Center's recently established "Commission on Retirement Security and Personal Savings,"[35] for example, has a component looking at LTSS financing. Broadening the scope of inquiry may facilitate developing packages of reforms that can be put on the political bargaining table to help people of all income levels. Given the political difficulty of raising federal spending, well-targeted policy changes benefiting a wide range of people might have a chance of enactment. Such approaches needn't be "one size fits all." With limited public funds available, some income groups might benefit most from reducing LTSS financing risks, while others might benefit more from policies designed to stabilize or support retirement income levels.

A policy strategy of providing federal catastrophic coverage for LTSS could be augmented by raising the Supplemental Security Income (SSI) maximum payment level, which is set at $8,657 annually for 2014, to the federal poverty level ($11,670 in 2014) or somewhere above. Thus, social insurance could be expanded by raising the income floor in conjunction with lowering the LTSS risk ceiling. (A table showing federal poverty levels is in Appendix C.) Higher SSI levels could help states finance room and board costs for people receiving Medicaid in HCBS settings such as assisted living facilities and group homes, which are less costly than nursing homes. One also could question why the federal government provides eligible aged, blind and disabled people with SSI at levels that leave them officially impoverished. Very few states provide substantial SSI supplements. As has been suggested in the past, SSI could be raised without altering the status of the Social Security Trust Fund since SSI is financed through general revenues.[36]

So far, retirement policymakers have paid much more attention to how DC funds are accumulated than to how accumulations can be most efficiently and fairly distributed. In developing a package of financing reforms to help people across all economic levels, in order to help people with moderate or modest means who wish to put money aside in LTSS/longevity accounts and also control their investment risk, the federal government could annuitize or help annuitize savings in special accounts. Strategies such as these also could be used to augment

Social Security income in general, particularly for low-income retirees. For example, the federal government could offer to annuitize (or guarantee) at above-market rates enough savings, whether tax-preferred or not, to bring a person's retirement income up to the poverty level or higher.[37] Median Social Security income, which was $13,376 for people 65 and older in 2011, is only marginally above the federal poverty guidelines for a single person. Longevity risk also could be reduced through income and/or disability supplements triggering at an advanced age (say 90 or 95).

If policymakers decide not to expand catastrophic social insurance to cover LTSS, another option would be to allow the private sale of catastrophic LTCI or stop-loss insurance for catastrophic costs above a certain threshold. Private catastrophic policies could also facilitate the use of LTSS/longevity accounts by capping risk.

The policy approach explored in this paper falls in line with most of the principles articulated in a recently released Society of Actuaries study[38] synthesizing a range of expert views on how to approach LTSS financing reform. Published in April 2014, the "Land This Plane" study concluded that LTSS financing needs a systematic overhaul with both private insurance and social insurance as parts of the solution. Reporting that more than 90 percent of the interviewed experts said that the government needs to be a part of the financing solution, the SOA paper also noted that "(t) here was overwhelming strong support for a national LTC awareness program and for tax incentives to support the purchase of LTCI products as key ways the government should encourage and incent a more effective LTC system."

The SOA report also stressed that using retirement savings accounts to fund LTC protection should be incentivized, stating: "Panelists overwhelmingly favored the idea of modifying federal tax rules to enable funds in tax-deferred savings accounts (401(k), 403(b) and IRA accounts) to be used on a tax-free and penalty-free basis to fund LTC protection products, including LTCI. Panelists agreed that tax incentives are an attractive way to encourage consumers to leverage existing savings mechanisms to protect against the costs of LTC."

Conclusions and Observations

While DC plans increasingly are the predominant way Americans save for retirement, many, if not most, plan participants risk both outliving their savings and not having enough to cover LTSS costs. Lack of awareness of these major financial risks, and current tax rules incentivizing withdrawals beginning just after age 70, make it more difficult for people to save and invest in order to prepare to meet these risks. As they plan for retirement, people could benefit from education on how to balance the need for streams of income to cover everyday retirement living expenses with the risk of living a long time and LTSS costs. Preparing for these needs and risks poses trade-offs between meeting current needs, having adequate income streams covering an unknown number of years, and preparing for the possibility of large expenses for LTSS.

Based on available estimates of DC account balances, if people could fund the proposed "LTSS/longevity" accounts with 25 percent of their total DC account assets, these special accounts could play a substantial role in pre-financing the cost of LTSS—either through buying LTCI or self-funding—for about 20 percent of families with the largest DC asset levels. If people started these accounts early enough, it is possible that they could help more people cover a substantial portion or all LTSS costs. Even those with very low DC retirement asset levels might benefit from being able to set aside some funds for longer to better sustain quality of life if they happen to live a long time.

Creating LTSS/longevity accounts also could play an important role as policymakers explore packages of reforms that attempt to help people who are financially able to take personal responsibility for financing LTSS while expanding social insurance for those lacking the means to do so. Establishing federal catastrophic coverage could dovetail well with LTSS/longevity accounts by limiting individuals' financial risk. If people knew they only had to cover three years of major LTSS costs, for example, it would be easier for those with moderate incomes to finance all or a major portion of these risks, especially if they started saving and investing early.

Incentivizing private savings for LTSS and long life through tax incentives would increase federal costs but could also reduce Medicaid costs. Federal government costs could be mitigated by tilting tax advantages toward middle- and lower-income people and away from those with higher incomes. While using money in the DC retirement system to finance LTSS would be most advantageous to people with higher incomes and retirement savings levels, such a policy change could be part of a package of policy changes targeted to benefit people across the economic spectrum.

Endnotes

[1] Commission on Long-Term Care Report to Congress, Sept. 30, 2013, p. 6.

[2] Commission on Long-Term Care Report to Congress, Sept. 30, 2013, p. 63.

[3] According to the 2010 Survey of Consumer Finances, about 38 percent of U.S. families included a participant in a retirement plan sponsored by a current employer. Among families with employee retirement coverage, a significant shift occurred from 1992 to 2010 away from defined-benefit plans toward DC plans. Over this period, the percentage of families with a participant in only a defined-benefit plan decreased (from 40 percent to 17.9 percent), while the percentage of families participating in only a DC plan rose (from 37.5 percent to 61.3 percent). Source: Craig Copeland, "Individual Account Retirement Plans: An Analysis of the 2010 Survey of Consumer Finances," EBRI Issue Brief, no. 375, September 2012, p.6.

[4] "The Role of Social Security, Defined Benefits, and Private Retirement Accounts in the Face of the Retirement Crisis," Employee Benefit Research Institute, January 2014.

[5] "When Should I Take Social Security Benefits?" Virginia Reno, Jasmine Tucker and Elisa Walker, National Academy of Social Insurance, February 2014.

[6] Commission on Long-Term Care Report to Congress, Sept. 30, 2013, p. 23. Original source: Kemper, P., Komisar, H.L., and Alecxih, L. (2005/2006). Long-Term Care over an Uncertain Future: What Can Current Retirees Expect? *Inquiry*, 42, 335-350.
[7] Kemper, P., Komisar, H.L., and Alecxih, L. (2005/2006). Long-Term Care over an Uncertain Future: What Can Current Retirees Expect? *Inquiry*, 42, 335-350.
[8] The table below is an approximate replication of Kemper, Komisar and Alecxih (KKA) using 2013 data and assumptions. A couple of important caveats: These data are based on the claims experience from an insured population adjusted to the entire population and also the definition of LTC need is more conservative than the one used by KKA.

Expected Long-Term Care Need for Persons Turning Age 65 in 2013

	Life Expectancy at Age 65[a]	Average Years of LTC Need[b,c]	Percent of Cohort with any LTC Need	Distribution by Years of LTC Need (Percentage of Cohort)				
				None	< 1 Year	1-2 Years	2-5 Years	> 5 Years
Men	17.5	1.8	52%	48%	25%	10%	12%	5%
Women	20.2	2.5	64%	36%	22%	10%	20%	12%
Total	18.8	2.2	58%	42%				

[a] Average life expectancy for individuals age 65 was calculated using mortality rates from the 2012 Social Security Trustees Fund.

[b] Based on HIPAA LTC Triggers: 2+ ADLs and/or severe cognitive impairment.

[c] Average years of LTC need for an individual if they become benefit-eligible. Assumed claim age of 82 and future claim days after recovery for more than 180 days are not included.

[9] See: http://www.nasi.org/sites/default/files/research/BRIEF_When_Should_Take_Social_Security.pdf.
[10] According to the "Genworth 2013 Cost of Care Survey," the national median rate for a semi-private room in a nursing home was $207 daily—or about $75,555 a year. See: "Executive Summary: Genworth 2013 Cost of Care Survey," Genworth Financial, Inc., and National Eldercare Referral Systems, LLC (CareScout): https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/131168_031813_Executive%20Summary.pdf.
[11] For a discussion of issues related to annuities, see: Jeffrey Brown, "How Should We Insure Longevity Risk in Pensions and Social Security" from "The Future of Social Insurance: Incremental Acton of Fundamental Reform?" Peter Edelman, Dallas Salisbury and Pamela Larson, editors, National Academy of Social Insurance, 2002, Washington, D.C., p. 148.

People who think they will live a long time are more likely to annuitize savings than people who think they will live a short time. Since individuals seeking insurance know more about their health status than insurers do, insurers must raise the price of annuities to account for this. Since Social Security is a mandatory program, adverse selection issues such as this are less of a problem than in a voluntary system.

[12] A study by the American Association for Long-Term Care Insurance shows how the probability of being denied LTCI coverage based on health status increases with age: http://www.aaltci.org/long-term-care-insurance/learning-center/are-you-even-insurable.php.

Percentage of Applicants Declined Coverage (Individual Policies)	
Age of Applicant	**Average Declined Coverage**
Under 50	7.3%
50 to 59	13.9%
60 to 69	22.9%
70 to 79	44.8%
80 and Older	69.8%

Source: American Association for Long-Term Care Insurance website: http://www.aaltci.org/long-term-care-insurance/learning-center/are-you-even-insurable.php, May 28, 2014.

[13] "Who Buys Long-Term Care Insurance in 2010-2011?" AHIP, 2012.

[14] Commission on Long-Term Care Report to Congress, Sept. 30, 2013, p. 27. Original source: Brown, J.R., and A. Finkelstein (2004). Supply or Demand: Why Is the Market for Long-Term Care Insurance So Small? National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w10782.

[15] Commission on Long-Term Care Report to Congress, Sept. 30, 2013, p. 27.

[16] It should be noted that the information in the tables does not reflect the entirety of the LTCI market, including group products. It also does not reflect the recent growth of products combining LTCI and life insurance. For example, see:
http://www.limra.com/Posts/PR/News_Releases/LIMRA_Study__Individual_Life_Combination_Products_Record_Fifth_Consecutive_Year_of_Double-Digit_Growth_in_2013.aspx?cid=RSSNewsCenter.

[17] "Who Buys Long-Term Care Insurance in 2010-2011?" AHIP, 2012, p. 27.

[18] "Who Buys Long-Term Care Insurance in 2010-2011?" AHIP, 2012, pages 23-24.

[19] http://www.irs.gov/taxtopics/tc502.html **Topic 502—Medical and Dental Expenses, IRS website, downloaded, April 1, 2014: "**If, for a taxable year, you itemize your deductions on Form 1040, Schedule A (PDF), you may be able to deduct expenses you paid that year for medical and dental care for yourself, your spouse, and your dependents. For years beginning after December 31, 2012, you may deduct only the amount by which your total medical expenses exceed 10% of your adjusted gross income or 7.5% if you or your spouse is 65 or older. The 7.5% limitation is a temporary exemption from January 1, 2013 to December 31, 2016 for individuals age 65 and older and their spouses. You figure the amount you are allowed to deduct on Form 1040, Schedule A. For more information, see Questions and Answers: 2013 Changes to the Itemized Deduction for Medical Expenses."

IRS Publication 502, *Medical and Dental Expenses*, contains additional information on medical expenses, including who will qualify as your dependent for purposes of the deduction and how you figure and report the deduction on your return.

[20] See: http://www.irs.gov/Retirement-Plans/Plan-Participant,-Employee/Retirement-Topics---Required-Minimum-Distributions-(RMDs) [link not available as of 10/21/14] Retirement Topics—Required Minimum Distributions (RMDs),**IRS website, downloaded, April 1, 2014.** After age 70 1/2, if you do not take any distributions from most types of DC accounts, or if the distributions are not large enough, you may have to pay a 50 percent excise tax on the amount not distributed as required. Also see: http://www.irs.gov/Retirement-Plans/RMD-Comparison-Chart-(IRAs-vs.-Defined-Contribution-Plans), downloaded Aug. 14, 2014.

[21] Federal Register, Vol. 79, No. 127, July 2, 2014, p. 37633. Also, see: "Treasury Green Lights Longevity Annuities in 401(k)s and IRAs," *Forbes*, July 1, 2014, downloaded from Web July 25, 2014 at

http://www.forbes.com/sites/ashleaebeling/2014/07/01/treasury-green-lights-longevity-annuities-in-401ks-and-iras/.

[22] Personal correspondence with Treasury Department staff, Aug. 13, 2014. Also see: http://www.plantemoran.com/services/Tax/Documents/fy-2015-budget-proposals.pdf, downloaded Aug. 14, 2014.

[23] Scenarios depicted in this paper showing RoI are expressed in real-dollar terms. The choices of rates of return—2 percent and 4.5 percent—are intended to present conservative and optimistic real rates of return for funds with blends of asset types. In later tables, LTCI insurance premiums subtracted from insured consumers' special accounts are assumed to stay constant and to have the cost of anticipated inflation built into their pricing.

[24] A more progressive approach to providing favorable tax treatment could help reduce the cost of the proposal to the federal government.

[25] LTCI premiums used in various scenarios in this paper are rough estimates based on age and intended to be somewhat conservative.

[26] Keogh plans are tax-deferred retirement plans for self-employed people and/or workers of unincorporated businesses.

[27] Craig Copeland, "Individual Account Retirement Plans: An Analysis of the 2010 Survey of Consumer Finances," EBRI Issue Brief, no. 375, September 2012, p.15.

[28] Craig Copeland, "Individual Account Retirement Plans: An Analysis of the 2010 Survey of Consumer Finances," EBRI Issue Brief, no. 375, September 2012, p.11.

[29] James Poterba, slides presented at Bipartisan Policy Center meeting, "Retirement Security: What's Working and What's Not?" Washington, D.C., July 30, 2014.

[30] The 2010 Survey of Consumer Finances calculates net worth by dividing the total value of household financial and non-financial assets by the total value of household debt. For more information on the survey's variables, see: http://www.federalreserve.gov/econresdata/scf/scf_2010.htm.

[31] James Poterba, Steven Venti and David Wise, "New Estimates of the Future Path of 401(k) Assets," in James Poterba, editor, *Tax Policy and the Economy, Volume 22* (Chicago: University of Chicago Press, 2008), pages 43-80.

[32] In personal correspondence, Professor Poterba noted that these estimates were prepared before the financial crisis that began in 2008, which both reduced 401(k) balances for existing account holders and depressed the flow of contributions to these accounts. Shifting the estimates of future 401(k) balances "out" by five years is a crude way of accounting for these effects.

[33] According to "Who Buys Long-Term Care Insurance in 2010-2011? (AHIP, 2012), annual premiums for newly issued policies increased between 2005 and 2010—from $1,918 to $2,283. Lower voluntary lapse and interest rate assumptions primarily drove this premium change, although changes over time in the benefit designs chosen by buyers and their average age also affected premiums. According to the study, a "1 percentage point change in the interest rate assumption (e.g. a 5 percent assumption instead of a 4 percent assumption) will cause a premium at age 55 to increase by about 10 to 15 percent." p. 25.

[34] Controlling this incentive is a principal reason RMDs exist, according to Treasury staff.

[35] See: http://bipartisanpolicy.org/projects/economic-policy-project/personal-savings.

[36] Kilolo Kijakazi, "Low-Wage Earners: Options for Improving Their Retirement Income," from "The Future of Social Insurance: Incremental Acton of Fundamental Reform?" Peter Edelman, Dallas Salisbury and Pamela Larson, editors, National Academy of Social Insurance, 2002, Washington, D.C., p. 67.

[37] To control federal expenditures and target subsidies to the lowest-income people, guaranteed interest rates could be inversely related to amounts annuitized. Regardless of whether rates are guaranteed, federally managed or sponsored annuitization also could provide stability to individuals withdrawing from DC accounts by reducing investment volatility. Investment risk has been a major challenge for sponsors of employee defined-benefit plans who have far more resources and knowledge than individuals managing their own DC accounts. For an example of how company plans are handing off risk, see: "Why More Companies Want to Wipe Pensions off Their Books," *Washington Post*, p. A16, July 24, 2014.

[38] See "Land This Plane: A Delphi Research Study of Long-Term Care Financing Solutions," John O'Leary, Society of Actuaries, 2014, on the SOA website at http://www.soa.org/Research/Research-Projects/Ltc/research-2014-ltp-ltc.aspx. Using the Delphi method, the study polled a diverse group of actuaries, public policy experts, regulators, and insurance industry executives, to explore their opinions on a wide range of LTC financing issues and potential solutions. According it its executive summary: "The study explored key macro issues such as the role of

government, the role of private insurance, the need for social insurance, the regulatory environment, and the future of Medicaid. It also examined a range of insurance product concepts that may provide more affordable LTC financing options. Product ideas included a high-deductible plan to provide catastrophic coverage, a short-term care insurance concept to provide affordable transitional coverage, a Medicare-like social insurance option, and participatory LTC plans including “mutual long-term care,” and “universal long-term care.” The study also examined the ideas of a national LTC savings plan, a national LTC reinsurance program, as well as changes to the federal tax code and the National Association of Insurance Commissioners (NAIC) Model Act.”