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An Overview of Healthcare Risks in Retirement

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White Paper

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Introduction

Households approaching retirement must account for a wide variety of risks to their financial security. They may live longer than planned and deplete their resources; they may experience unexpectedly high inflation; or they may receive unusually poor returns on their investments. Equally consequential is the risk that major expenses to ensure their physical well-being will drain their resources. This overview summarizes the economics literature on these healthcare risks, identifies questions that research to date has not addressed, and reports the results of two new surveys that explore the open questions.

In this paper, we use "healthcare" to refer to any health-related costs, whether they involve periodic medical care or long-term care. Both medical and LTC risks can be substantial in retirement. Each, however, has different implications for retirement planning. Both medical and LTC risk have two components – individual risk and general price risk. The individual risk is the likelihood that a retiree will actually face a medical shock or need LTC. The general price risk is the likelihood that prices for both types of healthcare services will grow considerably, eroding a person's retirement income over time. The difference between these two components is that individual risk can, theoretically, be insured by risk pooling, while general risk affects everyone and thus cannot be handled by pooling.

Individual medical risk among retirees is pretty well insured, as almost all Americans ages 65+ have Medicare. Additionally, most retirees also have Medigap or Medicare Advantage, which limits their annual out-of-pocket (OOP) spending.[1] Thus, despite the fact that medical costs are high, the *residual* individual-level risk for OOP medical spending is relatively low. Nevertheless, the small minority who do not top up basic Medicare coverage are still exposed to potentially high OOP medical costs.

The price for insuring against these individual risks, however, can be substantial and is growing steadily, reflecting the general increase in medical costs. So, while individual medical risks can be insured, the risk of price growth, and consequent premium growth, is large. It is not clear how retirees plan for this uninsurable risk.

LTC risks are the mirror image of medical risks in that individual risk is poorly insured, but general risk is unclear. While most people will need some form of care, the vast majority will only need moderate levels of care for limited periods of time. Family members often cover

[1] Over 70 percent of retirees have Medicare Advantage or a Medigap plan (Ochieng et al. 2023a).

the majority of care hours for people with moderate care needs. But, about 20 percent of retirees will need almost around-the-clock care for several years.[2] And, unlike medical risks, the market offers limited options to insure against LTC risks, so the individual risk remains high. Concerns about large late-life LTC expenditures can lead individuals to cling to their retirement assets and deprive themselves of consumption. Medicaid is available as the payer of last resort for LTC, but eligibility requires impoverishment, and planning how to become eligible with the least disruption to household finances is a complex problem.

In contrast to medical care, the general price risk for LTC is unclear. On one hand, the hourly wage for LTC providers has not risen very quickly historically. On the other hand, the low wages and tough working conditions for these workers have created excess demand for their services, which might lead to higher wages at some point.[3] In any event, the *unpredictability* of future LTC costs is modest, and depends mostly on the rising cost of low- and moderate-skill labor rather than the discrete and unforeseeable technological changes driving medical costs.

The rest of this overview proceeds as follows. The first section discusses medical risk, both individual and aggregate. The second section surveys the literature on LTC risk, again considering both individual and aggregate risk. The third section summarizes the literature on individual expectations of future LTC risk, as well as possible insurance or mitigation of risk. The fourth reports on a new household survey of individuals with $100,000 in investable assets to shed additional light on perceptions of healthcare risks and costs and compares these perceptions to data from the *Health and Retirement Study* (HRS). The fifth section looks at how the survey households plan to deal with uninsured risks and again compares their plans to: 1) general patterns reported in the HRS; and 2) specific responses of HRS individuals to a healthcare shock. The sixth section turns to findings from a survey of financial advisors to assess their understanding of their clients' healthcare risks and costs, the extent to which they discuss these issues with their clients, and the impact these discussions have on client behavior.

The final section concludes that healthcare costs pose significant risks to retirees. Individual medical risks are well-insured, but retirees still face fast-rising costs of medical care, which erode the quality of insurance and result in premiums that will take up an increasing share of their income over time. While LTC costs have not grown as fast as medical costs, individuals

[2] Belbase, Chen, and Munnell (2021a) (with authors' update) and Johnson and Dey (2022).
[3] For example, see Iezzoni, Gallopyn, and Scales (2019).

face the risk that they will need costly care for long periods of time. To make matters more complicated, many households also believe that Medicare will cover these costs, when, in fact, these risks are generally not insured by Medicare. While the existing literature provides some useful background, several gaps remain in understanding healthcare risks, such as whether households plan for these risks, what trade-offs they may make in handling the risks, and the role financial advisors play in all these decisions. Here, the surveys provide important insights. Specifically, households have a poor perception of their risks and costs and very few have taken steps to insure themselves against these risks. Advisors have a better sense of their clients' costs and risks but households with advisors are not better prepared – an interesting finding that clearly merits more research.

Medical Risk

Households entering retirement face an uncertain trajectory of medical spending over their remaining lives. Fortunately, much of this risk is insured by Medicare and supplemental insurance (in combination with Medicaid for those eligible for both programs). However, the large and growing aggregate cost of medical care presents risks even to households with good health insurance. The discussion first describes the lay of the land of health insurance for retirees, focusing on gaps in coverage due to cost sharing. It then turns to trends in premium increases, with a brief overview of factors driving those price hikes.

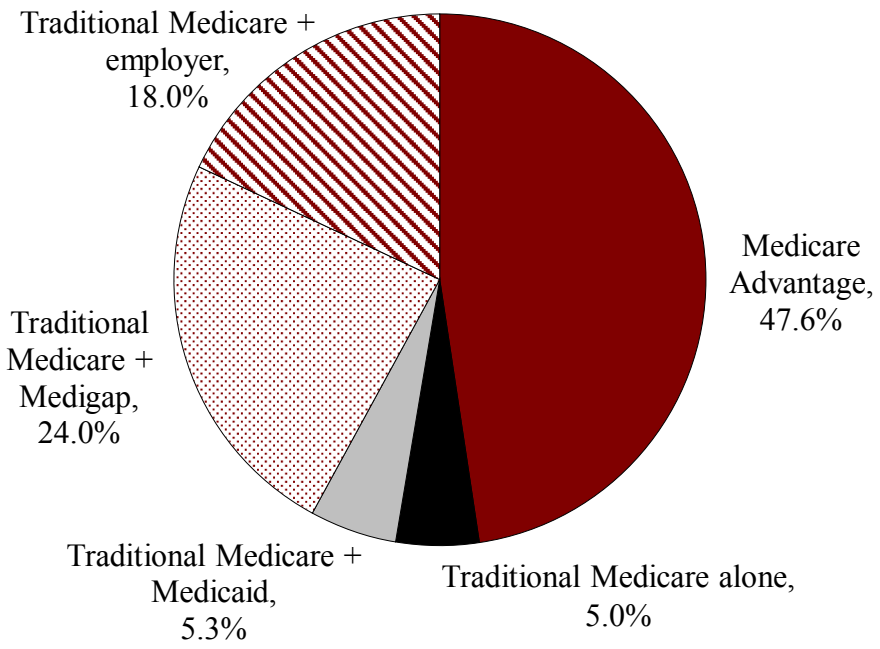
The Health Insurance Environment for Retirees

Virtually all Americans over age 65 have some form of health insurance, primarily through Medicare; only about 1 percent of over-65-year-olds in the United States are uninsured.[4] Such insurance is extraordinarily important for older adults. Medical spending at an individual level is high and extremely skewed towards a few individuals with very high expenses (Karlsson, Wang, and Ziebarth 2024). This distribution leads to immense underlying risk. In the absence of public insurance, market failures lead to severe underinsurance, particularly among retirees. Thus, the existence and robustness of public health insurance for seniors is a very valuable use of public resources (Wettstein 2020).

[4] See Tolbert, Drake and Damico (2023) and Lindstrom, Keisler-Starkey and Bunch (2024).

Of those over 65 with health insurance, about half were covered by a Medicare Advantage plan in 2021 (see Figure 1). The remainder typically had a combination of Traditional Medicare and supplemental coverage either from an employer (current or previous), a Medigap plan, or Medicaid. Only 5 percent of those over 65 were covered solely by Traditional Medicare.

Figure 1. *Sources of Senior Health Insurance, 2021*



Source: Authors' calculations from Ochieng et al. (2023a).

Traditional Medicare. Traditional Medicare is comprised of Parts A and B, covering hospital services and outpatient services, respectively. The 2003 Medicare Modernization Act added Part D, covering prescription drugs, but such plans are bought as stand-alone contracts with private insurers within the framework of Traditional Medicare.

The reason so few retirees rely on Traditional Medicare in isolation is that this arrangement would still leave them exposed to potentially ruinous medical cost risk. For instance, in Traditional Medicare, Part A has no premium for those who have a sufficient work history of 10 years (or if their spouse does), but patients face a deductible in 2024 of $1,632 for each stay. In addition, while inpatient stays of 1-60 days involve no further cost, patients face a $408/day co-pay for days 61-90, $816 for days 91-150, and the full cost after 150 days (subject

to a 60-day lifetime reserve, Medicare 2024).[5] The full cost of an inpatient day varies by facility, but the U.S. average in 2022 was $3,025/day (KFF 2024).[6]

In contrast to Part A, Part B of Traditional Medicare has a premium that depends on beneficiary income, ranging from $174/month to $594/month in 2024 (Medicare 2024). While only the highest-income households pay premiums at the top of that range, Part B has an annual deductible of $240 (in 2024) before any coverage. More importantly, Part B generally includes co-insurance, so a beneficiary must pay 20 percent of the cost of each service while Medicare pays 80 percent.[7] For expensive treatments, particularly for chronic conditions, even a 20-percent co-insurance requirement could translate into extremely high out-of-pocket (OOP) spending.

Finally, Part D plans vary widely in their premiums, cost-sharing, and lists of approved drugs (formularies). In 2024, base monthly premiums ranged from 0 (for a standard plan available nationwide) to $100/month (KFF 2023a); enrollees with higher incomes also pay an additional surcharge. Besides premiums, the benchmark plan structure has a number of phases of co-insurance: a deductible of $545; 25 percent co-insurance for expenditures between $545 and $12,447;[8] and catastrophic coverage completely covered by plans (20 percent) and Medicare (80 percent) for costs above that threshold (all in 2024).[9] This design effectively caps beneficiary OOP spending on prescription drugs at around $3,250 per year. Alternative structures by insurers are permitted, but they must be actuarially equivalent to the benchmark plan.

Medicare Advantage. As noted, most people do not rely solely on Traditional Medicare. An increasingly common alternative is Medicare Advantage (MA). These plans substitute Traditional Medicare with a plan purchased from a private insurance company. These private insurers are, in turn subsidized by Medicare – receiving a "rebate" of $2,329 per enrollee in 2024 above and beyond the average cost of covering the services included in Traditional Medicare.

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[5] The lifetime reserve of 60 days can be used throughout a patient's life, possibly across multiple discrete instances of institutionalization; each such day has a co-pay of $816/day.

[6] Costs also vary geographically. By state, the cheapest stays were in Mississippi ($1,425/day), while the most expensive were in California ($4,337/day).

[7] Certain services are exempt from the co-insurance, such as laboratory tests.

[8] Between $5,030 and $12,447, the manufacturers were required to cover 70 percent of brand-name drugs, with plans covering the remaining 5 percent. Plans covered the full balance of costs after co-insurance for generic drugs in this range of costs.

[9] A 5-percent co-insurance requirement in the catastrophic range was eliminated from 2024 by the Inflation Reduction Act.

This rebate also allows MA plans to offer coverage not included in Traditional Medicare, such as vision, hearing, or dental services. The vast majority of MA plans also cover prescription drugs (and are known as MA-PDs).[10]

The structure of MA plans can vary substantially in premiums, copays, coinsurance, and in the covered network of providers and formulary of prescription drugs. In terms of premiums, in 2024 two thirds of MA-PDs charged no premium above the standard Part B premium, and 19 percent offered a discount relative to that price (Freed et al. 2023). Virtually all beneficiaries have access to such a "free" plan in 2024. In fact, in 2023, 73 percent of beneficiaries paid no premium beyond the Part B premium, while 10 percent paid over $50/month, and 3 percent paid over $100/month. The average premium including those paying nothing (beyond the Part B premium) was $18.50/month (U.S. Centers for Medicare & Medicaid Services 2023a).

Regarding the benefit structure of MA plans, the majority are Health Management Organizations (HMOs), with limited provider networks. In 2024, this share stood at 56 percent, with the remainder being preferred provider organizations (PPOs). Overall, almost all MA enrollees in 2023 were in a plan that required some prior authorization for treatments and prescriptions (unlike Traditional Medicare; see Ochieng et al. 2023a). MA-PDs also generally have formularies that provide less generous coverage for expensive brand-name drugs.

A major advantage of MA plans is that they have annual OOP maximums for services covered by Parts A and B of Traditional Medicare. In addition, drug expenditures have also been effectively capped by the elimination of cost sharing in the catastrophic coverage range of drug costs. In 2023, MA plans must cap OOP annual costs to enrollees at $8,300 for in-network services and $12,450 for in- and out-of-network services combined. In practice, enrollees, on average, have even lower OOP maximums: in 2023, the average maximum for in-network services was $4,835, and $8,659 for in- and out-of-network services combined (Ochieng et al. 2023b). Nevertheless, even a $5,000 unexpected medical expenditure in a given year could be quite burdensome for the median retiree, with an annual income of around $48,000.[11]

Medigap and Employer Coverage. An alternative means of supplementing Traditional Medicare is through Medigap or retiree health plans. About one-quarter of all Medicare beneficiaries have a Medigap plan, while almost one-fifth enjoy some form of employer

[10] 89 percent in 2024 (Freed et al. 2023).
[11] Authors' calculations from the 2020 *Health and Retirement Study* (2020).

coverage alongside Medicare.[12] Both types of coverage typically work as secondary payers, covering costs that remain after Medicare pays its share.[13] Such plans limit the risk retirees face from co-payments, co-insurance, and deductibles in Traditional Medicare.

The Individual Medical Risk to Retirement Security: OOP Costs

Overall, the vast majority of retirees are insured by plans featuring OOP maximums. Thus, the risk they face in any given year is bounded. This maximum spending, while not negligible, ensures that households can plan for medical shocks in the near future by setting aside a sufficient buffer. The complication is in planning for future years, and here some information on trends in OOP costs is helpful.

Over time, OOP spending per capita has risen from about $650 in 1970 to over $1,400 in 2022 (in 2022 dollars, McGough et al. 2023). However, the *share* of national health expenditures (NHE) that are paid OOP has declined dramatically since 1970, from 33 percent to 11 percent in 2022, with the difference taken up by an 8.5-percentage-point increase in private insurance, and, especially, a 21-percentage-point increase in public payers.

One cause for concern about the future is that, since 2008, costs per enrollee have grown much faster for private insurance (62 percent) than for Medicare (41 percent) and Medicaid (22 percent (McGough et al. 2023). For the many retirees relying on private insurance to supplement Medicare, such trends suggest possible hikes in premiums for those supplemental plans.

[12] A growing share of current workers have a Health Savings Account (HSA) or similar arrangement, rising from 4 percent in 2006 to 29 percent in 2023 (KFF 2023b). These accounts allow tax-free contributions (income, payroll, and capital gains) from employers and employees, but must be paired with an employer-provided High-Deductible Health Plan (HDHP). The policy goal of these arrangements is to reduce medical spending by exposing individuals to a high marginal price for moderate medical care utilization. However, a worker reaching age 65 with balances in an HSA may withdraw the money for any purpose, paying normal income taxes (as with a traditional 401(k)), or completely tax-free for medical expenditures. In fact, researchers have found that while the optimal use of HSAs is as general-purpose retirement savings (an even more tax-preferred 401(k)) with almost no link to medical spending at all (as long as individuals are not liquidity-constrained), few workers use them in this way (Leive 2022). As a consequence, HDHPs do not seem to reduce consumption of medical care, but rather simply finance an increasing quantity of it tax-free. In any event, in retirement the nominal link between HSAs and medical spending is further attenuated, as distributions are treated as equivalent to a 401(k) for non-medical spending.

[13] About half of employers offering retiree coverage do so through an MA plan. These are counted in Figure 1 as Medicare with employer coverage.

Aggregate Medical Costs and Premiums Over Time

The other component of medical risk is overall medical price growth, which tends to rise faster than inflation. While virtually all retirees have some form of health insurance and many households have supplemental insurance that limits cost-sharing, two risks remain. First, as prices rise, the quality of insurance available to them could erode. Practically, this means greater cost-sharing or higher premiums. Second, medical costs tend to rise faster than incomes over time, eating away at what is available for other expenses in retirement.

Health insurance relies on reducing risk through the law of large numbers. Whereas a single individual may face high or low medical costs over the next year, the average cost for thousands of individuals will likely be very close to the expected cost. This property allows insurers to sell plans charging a premium equal to this expected cost plus some additional charge allowing for administrative costs, profits, or some unexpected loss due to adverse selection – that sicker people tend to buy more generous health insurance.

However, certain risks cannot be insured in this way. When uncertainty exists regarding the very expectation of costs, no aggregation of individual shocks eliminates this risk. In the context of medical costs, both individuals and insurers (including the government) face the same risk: that the underlying costs will continue to rise rapidly. And because medical costs are so large in the aggregate, this presents a large and uninsurable risk to everyone, including retirees.

The primary way aggregate medical costs impact insured households is through insurance premiums. Such premiums generally reflect the expected cost of insuring the household, so they rise with the per capita cost of providing medical care. This pattern is true for private insurers, impacting Medigap, employer plans, and Medicare Advantage. However, the rise in premiums to accommodate rising costs also filters through to Traditional Medicare, where Part B premiums adjust annually so they cover 25 percent of expected costs (general revenue covers the balance of costs, U.S. Centers for Medicare and Medicaid Services 2024), and to stand-alone Part D plans when prescription drug costs rise. The increasing cost of providing medical care, measured by NHE, is the main reason premiums rise over time. Over a decades-long retirement, this large and unpredictable medical cost inflation can be hard to plan for.

As it turns out, NHE are not only large but also volatile. NHE were nearly $5 trillion in 2022, or 17.3 percent of GDP (U.S. Centers for Medicare & Medicaid Services 2023b). And, since 1962, they have grown faster than GDP in every decade. However, the extent to which

NHE has outpaced GDP growth varies substantially, from 3.2 percentage points faster in the 60s and 70s to just barely more in the last decade (Fiedler 2024).

This unpredictability, even more than the high level of costs, makes planning difficult. Indeed, the drivers of NHE tend to change over time, making it hard to predict NHE trends in the future. In the 1970s, hospitals were the main driver, while drugs were the fastest-growing category between 1980 and 2010. In the 2010s, it was physicians, while drugs have reclaimed the top spot since 2020 (McGough et al. 2023). Administrative costs are also increasing faster than the underlying medical costs in many contexts, such as hospital overhead (Kalman et al. 2015).[14] Variables that might lead to increasing administrative costs are very different than those contributing to specific service costs.

Another unpredictable driver of NHE is the development of new treatments. Rapid adoption of new pharmaceuticals, medical devices, or procedures is one of the leading drivers of rising medical costs (Norbeck 2013 and Matsumoto and Cho 2020). Even if an individual does not make use of new and expensive technologies, such costs are largely passed through to all Americans through higher private insurance premiums and higher taxes or liabilities devoted to public health programs. For example, in Medicare Part B, recent increases in drug spending have been largely due to adoption of newer, more expensive drugs, which raised overall costs despite a decline in drug utilization (San Juan Rodriguez et al. 2021).[15]

Nowhere is the cost of new drugs more apparent than in Part D premiums. The average Part D premium increased 21 percent between 2023 and 2024 alone (Cubanski and Damico, 2023). This increase, though, is likely to be lower once data include new enrollees and plan changes by current enrollees (Cubanski and Damico 2023).[16] Clearly, retirees cannot

[14] In the United States, for every office-based physician there are 2.2 administrators (Cutler and Ly 2011). One large physician group estimates it spends 12 percent of revenue on revenue collection (Blanchfield et al. 2010). For hospitals, the ratio of administrators to hospital beds is 1.5 in the United States, versus only 1.1 in Canada.

[15] Consensus on drivers of medical cost increases is notoriously hard to find, but researchers share a broad agreement that rapid technological advances are one of the leading causes (Norbeck 2013; Goyen and Debatin 2009). Nevertheless, new treatments also offset costs from poorer population health and substitute for less effective obsolete treatments, so that the impact of innovation on total spending is not as dramatic as headline numbers may suggest, and may even reduce overall spending (Civan and Koksal 2010). When new drugs expand treatment to populations and conditions that had no preexisting feasible medical interventions (e.g., development of the first generation of HIV drugs, or of Hepatitis C treatments), however, the rise in cost is less ambiguous. The relatively unrestrained adoption of medical innovation in the United States is one of the reasons medical costs grow faster here than in other countries (Bodenheimer 2005 and Kanavos 2013).

[16] The increase occurred despite the fact that the Inflation Reduction Act included a premium stabilization provision limiting the price increase of the base beneficiary premium to 6 percent between 2024 and 2029. This base premium

accommodate persistent year-over-year premium increases of this magnitude, although currently the absolute premiums for stand-alone Part D plans are manageable, $48/month in 2024.

Furthermore, a large share of recent Part B premium increases are attributable to new treatments as well. Premiums have increased substantially, from $105/month in 2015 to $175/month in 2024. More broadly, Part B premiums have more than tripled since 2002, and often involve annual increases well beyond general price inflation (Neuman, Cubanski, and Freed 2022). The large premium hikes of the last few years come in spite of the fact that enormously costly new drugs for Alzheimer's disease are not yet generally covered (Munnell and Hubbard 2022). And Alzheimer's treatments are far from the only, or even the most promising, class of new drugs currently approaching widespread availability, sometimes with extremely high list prices. GLP-1 agonists – such as Ozempic, Wagovy, and other diabetes or weight loss drugs – come with a price tag often exceeding $1,000/month, must be taken permanently and, most concerningly, are aimed at the 42 percent of American adults suffering from obesity (Stierman et al. 2021).

The Bottom Line of Retiree Medical Expenditures

Medical expenditures are fundamentally high and uncertain. In the absence of insurance, a 65-year-old would face a reasonable chance of financial ruin due to medical costs: uninsured individuals would face a 5-percent chance of incurring more than $443,000 of medical expenses over their lifetime (in 2024 dollars, Webb and Zhivan 2010). However, given the extensive insurance coverage of seniors, the risk after insurance is far more moderate (Arapakis et al. 2021).[17] Nevertheless, for middle-income households, medical costs eat up a large share of income, with average OOP spending of $4,274/year in 2014, of which two-thirds were insurance premiums (McInerny, Rutledge, and King 2017). This spending represented about one-third of Social Security income and 18 percent of total income. Medicare Part D and subsequent reforms have likely improved the situation somewhat since then.

is based on the bids plans submit to Medicare to cover the benchmark Part D plan, and may be different than the actual premium paid by enrollees, who may have plan structures different than the benchmark.

[17] Arapakis et al. (2021) find $67,000 of residual lifetime healthcare spending for the average 65-year-old, and $138,000 for a 65-year-old at the 90th percentile of healthcare spending. These estimates actually understate the extent of insurance because they also include LTC spending, which is virtually uninsured.

An important characteristic of medical costs that any retirement planning must contend with is that these costs grow with age. Because of the cost-sharing present in all health insurance arrangements, this pattern means that retirees need to plan for a rising trajectory of costs as time goes by, even though premiums do not vary with age. Moreover, costs tend to be particularly high in late life; fully one-quarter of Medicare costs going towards individuals in their final year of life (Einav et al. 2018).[18] The backloading of medical costs to late life is one of the theorized reasons for lack of demand for stable lifetime income, such as annuities, which are not well-structured to accommodate large increases in spending (see Arapakis and Wettstein 2023 for an overview of explanations for lack of take-up of annuities).

Importantly, the risk that cannot be insured is that of premiums rising. Medicare Parts B and D premiums have tended to increase faster than inflation over the past few decades. Even since 2021, a period over which NHE growth has been relatively modest, these premiums have seen increases of over 14 percent and 20 percent, respectively, in some years. Retirees may be moderately well-insured against a large medical expenditure in a given year, but compounding increases of unpredictable size in premiums can erode their disposable income in ways that strategies besides health insurance are necessary to address. Identifying such strategies is one of the focuses of the surveys that will accompany this review of current knowledge.

Long-Term Care Risk

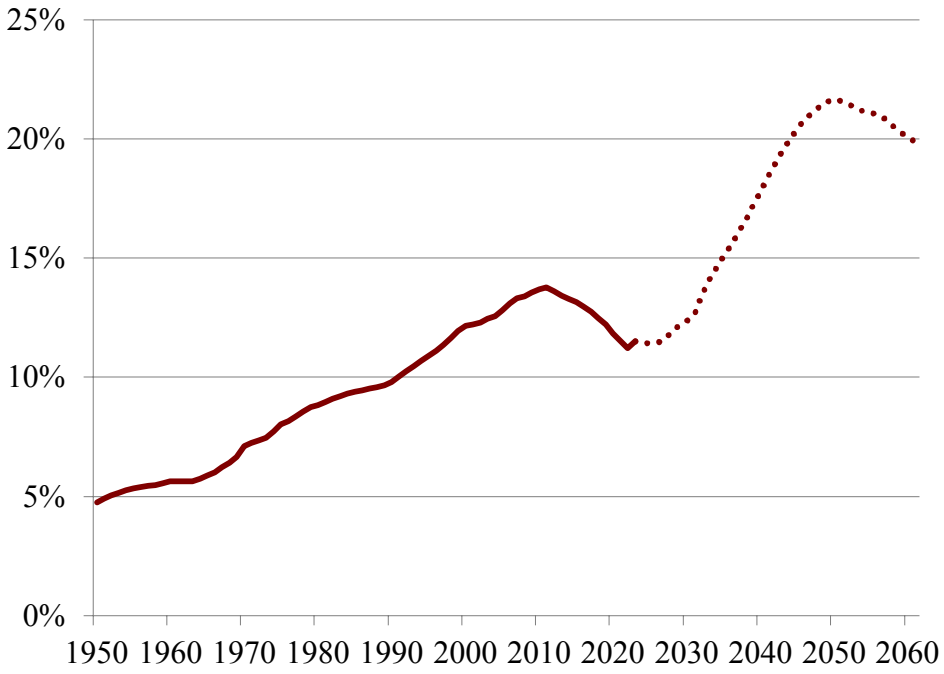
Of course, medical costs are just one component of such late-life spending. The other big late-life expenditure is LTC costs. The first part of this discussion describes the background of current LTC costs. The second explores the individual risk component of these costs, and assesses the (limited) insurance market for this risk and the role informal care plays in limiting the LTC cost burden on retirees. The third part explores the general risk component of LTC costs in late life.

[18] As these authors point out, the fact that spending tends to be extremely high in the last few months of life is no indication that this spending is wasteful – since individuals cannot know they are approaching their final days except in retrospect.

Background on Current Costs

As noted, LTC risks are the mirror image of medical risks, in that individual risk is poorly insured and the general price risk is unclear. Currently, the U.S spends $228-$293 billion per year on LTC, with formal paid care comprising about half of the cost. This spending equates to roughly 1.5 percent of GDP and has grown steadily since the 1990s (Gruber and McGarry 2023). Aggregate LTC spending is likely to grow in the future due to the rapid increase in the population over age 85 – the group most likely to need LTC (see Figure 2).

Figure 2. *Share of U.S. 65+ Population that Is Over 85, 1950-2061*



Source: OECD Population Projections (2024).

While population aging increases aggregate LTC costs, it does not necessarily mean that households will have to pay higher prices. Per capita LTC costs will not be impacted if aggregate growth in LTC spending growth is largely due to population aging. The burden of LTC for older households will depend on the intensity of care needs and duration.

Individual Risk of Long-term Care Expenses

Most older adults will have some LTC needs. In fact, only about 20 percent will get by scot-free (see Table 1). However, among the 80 percent who will need some LTC, needs vary dramatically in both intensity and duration. About 40 percent will have high-intensity needs for more than a year.[19]

Table 1. *Lifetime Probability of a 65-Year-Old Needing LTC, by Duration and Intensity*

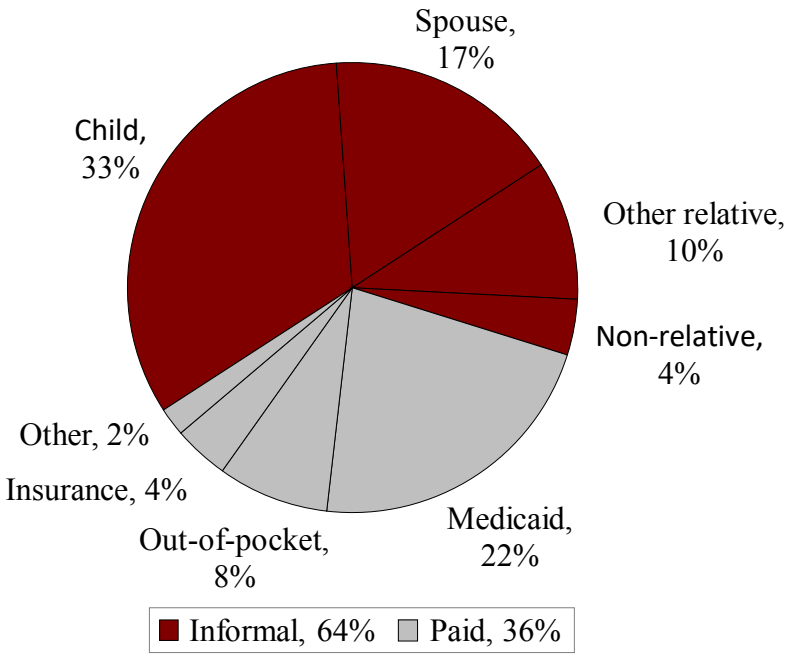
Duration	None	Intensity		
		Low	Middle	High
0-1 years		10%	5%	14%
1-3 years	18%	5%	3%	20%
3+ years		5%	2%	18%

Source: Authors' update of Belbase, Chen, and Munnell (2021a).

Households can provide for these care needs in two ways (see Figure 3). The more common way is unpaid informal care provided by family members. The less common way is paid formal care, financed either out-of-pocket or through long-term-care insurance or Medicaid.

[19] This estimate is consistent with Favreault and Dey (2016), Belbase et al. (2021a), and Johnson and Dey (2022).

Figure 3. *Percentage of Total Caregiving Hours Provided to Individuals Ages 65+, by Source*



Source: Belbase, Chen, and Munnell (2021b).

Those with low or moderate care needs may be able to rely mostly on family, but those with high-intensity care needs, particularly for multiple years, will likely need to supplement informal care with some paid formal care.

Alzheimer's Disease and Related Dementias. Many of those who fall into the high-intensity, long-duration care needs group have Alzheimer's Disease or related dementias (ADRD). Providing care for those with ADRD is expensive because these individuals often need around-the-clock supervision and can live for many years with the disease. Estimates for total ADRD costs report wide ranges and are mostly more than a decade old.[20] One recent study estimates that the total cost for those with ADRD is over $92,000 a year (Nandi et al. 2024). These costs include those paid by public and private insurance and the value of unpaid family care. In fact, about 40 percent of the estimated cost is from the replacement cost of informal caregivers (what it would cost to hire formal care in the absence of family caregivers). OOP costs for women with ADRD – compared to costs for women without ADRD – are more than double that for men, partly because women are less likely to have a spouse who can provide

[20] See review by Fisherman et al. (2019).

supplemental care and therefore are more likely to require paid and institutional care (Oney, White, and Coe 2022).

Currently, ADRD affects 5.7 million Americans, and the caseload is projected to grow to 13 million by 2050 (Mathews et al. 2019). Fortunately, the incidence of ADRD has declined across most demographic groups. Women, non-Hispanic Whites, Blacks, and those with no cerebrovascular conditions have experienced the largest declines (Freedman et al. 2018). Studies have attributed this decline to an increase in higher education and treatments for stroke, hypertension, diabetes, and obesity, which are risk factors (Langa et al. 2017).[21] Incidence among those with lower educational attainment, however, remains high – they are both more likely to be impaired and spend a much longer time in care (Crimmins et al. 2018).

Finally, individual risk does not represent the full scope of exposure to LTC. For coupled households, LTC risk in retirement is not only about the potential care needs of each spouse, but the LTC risks of both spouses. If one spouse has moderate or high-care needs, households may spend down a substantial portion of assets to supplement informal family care. Additionally, end-of-life OOP costs tend to be high (McGarry and Schoeni 2005). Consequently, surviving spouses, particularly women, can have fewer resources to support their remaining life and their own care needs should they arise.

Insurance Options for LTC. Despite the high cost of LTC, most households do not have private insurance. The LTC insurance market, unlike medical care, offers limited protection against LTC risks, so the individual risk remains high. Currently, only about 7.5 million people have LTC insurance in the United States, representing around 3 percent of adults or 15 percent of those ages 65 and older (Gruber and McGarry 2023 and American Association of Long-term Care Insurance 2020).[22] Some surveys show that a higher share of respondents, particularly younger respondents, believe they have LTC insurance. This misperception may be because

[21] Several studies have suggested that declines in dementia over time are at least partially attributable to gains in education (Chen and Zissimopoulos 2018; Langa et al. 2017; Noble et al. 2017; Satizabal et al. 2016; and Sheffield and Peek 2011). Several studies have found that educational attainment and other socioeconomic factors moderate ADRD incidence across groups (Weuve et al. 2018; Yaffe et al. 2013; Rodriguez et al. 2018; and Keohane et al. 2023).

[22] The market for private stand-alone LTC insurance peaked in the early-2000s. Over time, many insurance providers have dropped out of the market or consolidated. By the early 2010s, many of the large insurers in the market stopped selling LTC policies. Recently, there has been some increase in LTC policies that are combined with life insurance or annuities (Spillman et al. 2020).

many people mistakenly believe their private health insurance or disability insurance will provide LTC.

Many researchers have examined why the market for LTC insurance is so limited. One reason is that many retirees assume Medicare covers LTC costs, when it does not (see more detailed discussion below). Another is a lack of trust in insurance companies.[23] Finally, the costs of policies and premium growth are both high (Brown et al. 2012). Benefits are also often limited to certain amounts per day and number of days per year, falling short of full potential costs (Gruber and McGarry 2023). Those who purchase LTC insurance tend to be wealthier and also tend to have less access to informal care (Mommaerts 2016).[24]

Medicaid, the public insurance program targeted at low-income individuals, has become a default insurer for catastrophic costs. Research has found that about two-thirds of the wealth distribution should, optimally, plan to rely on Medicaid for their LTC insurance needs given the costs and limitations of the private LTC insurance market (Brown and Finkelstein 2008).[25] However, planning how to become eligible with the least disruption to household finances is a complex problem. In 2024, the income limit for Medicaid eligibility for those ages 65+ is typically around $2,800 ($5,600 for couples) and the asset limit is typically $2,000 ($3,000 for couples), but varies by state. Qualifying for Medicaid generally requires spending down the household's personal resources.[26]

Even as the payer of last resort, Medicaid is projected to cover only two-fifths of LTSS expenditures for 65-year-olds today (see Figure 4). Out-of-pocket costs are a close second. Clearly, without Medicaid, many older Americans would fall short of their LTC needs. Of

[23] Friedberg et al. (2023) show that about a quarter of older LTC policyholders let their policies lapse, forfeiting all benefits. Those with cognitive impairments are more likely to let their policies lapse and they are also the ones most likely to need care, leading to "advantageous selection" (the opposite of adverse selection) for the insurance companies.

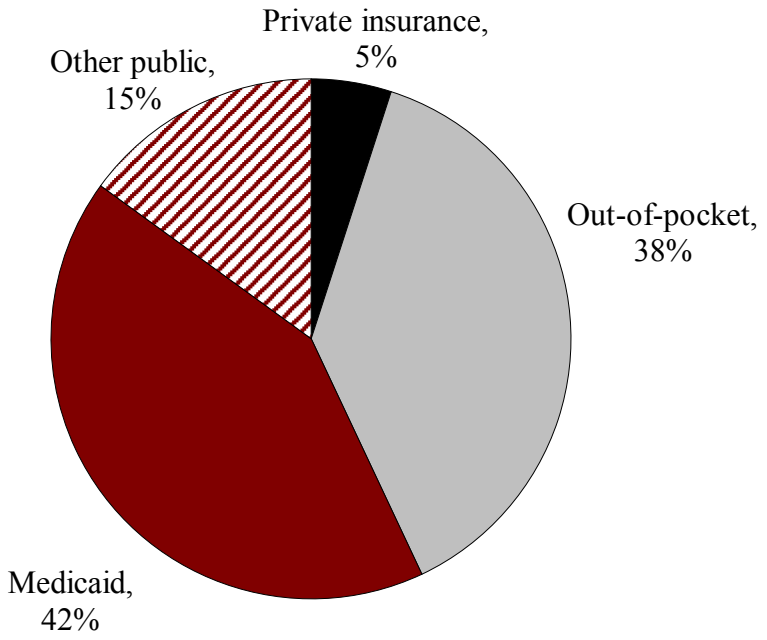
[24] Interestingly, those with insurance are not in worse health (Finkelstein and McGarry 2006). Two groups purchase LTC insurance – those who expect to use more care than average and those who are particularly risk averse. The latter population is healthier than average, a canonical example of advantageous selection.

[25] The share optimally relying on Medicaid for LTC insurance has likely declined since 2008, however, as Medicaid eligibility requirements do not keep pace with wage inflation, while Social Security benefits and some private pensions do.

[26] For households where one spouse is still living in the community, their house can be exempt from the Medicaid asset limits. In some states, the community-living spouse's 401(k) or IRA assets can also be exempt. Additionally, a certain amount of the couple's income is protected to prevent spousal impoverishment, although the rules vary by state.

course, it is important to remember that more than 60 percent of total care is provided by unpaid caregivers.

Figure 4. *Percentage of Long-term Care Financing by Source, Projections for Those Turning 65 in 2021-2025*



Source: Johnson and Dey (2022).

In recent years, state and federal governments have tried to partner with private plans to incentivize private LTC insurance, and these efforts show promise for limiting catastrophic individual LTC risks. Under these policies, individuals who purchase private LTC policies can deduct the premiums from their taxes and may qualify for Medicaid even if they have assets above the Medicaid limit. People who purchase these plans can preserve some of their assets – typically up to the limits paid for by private insurance companies – while receiving coverage from Medicaid if LTC costs surpass policy limits (Gruber and McGarry 2023). In other words, if the private insurance company limits coverage to $200,000, Medicaid coverage will exempt that amount of assets.[27] These private-public joint policies increase LTC insurance take-up, reduce

[27] Lifetime policy limits for LTC insurance are typically defined by a daily maximum up to a certain number of years. For example, policies could be defined as a maximum of $175 a day for up to 3 years.

Medicaid spend down, and can help households preserve some of their assets (Costa-Font and Raut 2021). Furthermore, spending on LTC, as on medical care, can entitle households to income tax deductions if the annual spending is sufficiently high. While this new innovation is promising, it is too soon to determine whether it will substantially increase the share of households purchasing long-term care insurance.

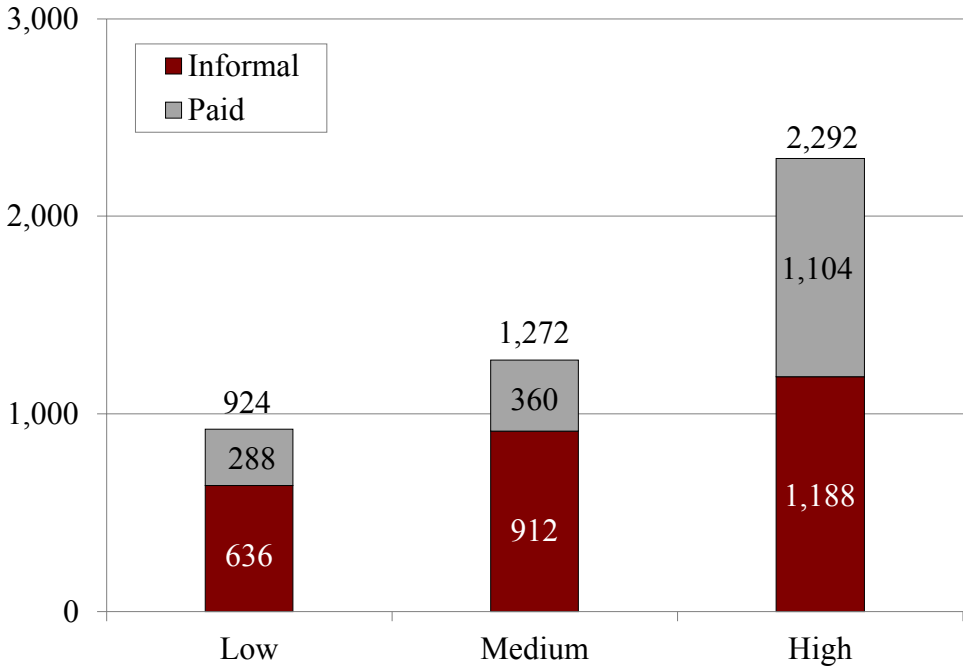
General Risks for Paying for LTC

How much retirees might have to set aside for LTC risks not only depends on the individual risks of needing care but also the general price risks. The cost of LTC has grown substantially over the past decades (de Meijer et al. 2013; Hagen 2013; and Redfoot and Favreault 2018). Several factors contribute to the general cost risk of LTC going forward, including the price of formal care, the shift from institutional care to home-based care, and the supply of informal care. While all these factors may push prices up over time, the extent to which these increases are unpredictable, and therefore "risky," is unclear.

Family members often cover the majority of care hours for people with low and moderate care needs and supplement the efforts with paid caregivers as care needs increase.[28] Older Americans with high-intensity needs receive about half of their care hours from paid caregivers compared to about 30 percent for individuals with low- or medium-intensity needs (see Figure 5).

[28] See also Spillman (2009); Johnson and Wiener (2006); Spillman and Pezzin (2000); Wolff and Kasper (2006); and Freedman and Spillman (2014).

Figure 5. *Median Annual Hours of Total Care Received by Individuals 65+, by Type of Care and LTSS Intensity*



Source: Belbase, Chen, and Munnell (2021b).

Formal care, however, is expensive; the average cost of a home health aide was $33/hour in 2023 (Genworth 2023).[29] Supplemental paid care for someone with high-intensity needs would cost more than $35,000 a year ($33 per hour x 1,104 care hours).[30] The cost for just one year of supplemental care is more than the total annual income for about half of older Americans and more than the total net worth for about one-fifth (Gruber and McGarry 2023), but not all of this care is paid for by families out-of-pocket. Assisted living facilities and nursing homes are even more expensive, costing around $64,000 and $117,000 a year, respectively, largely because their price includes room and board. Going forward, paid care is likely to be unattainable for a larger share of households as the costs of formal caregivers have grown faster than inflation.[31]

Rising formal care costs are driven largely by the shortage of qualified workers and increasing need for specialized care (Spillman et al. 2020). Both nursing homes and home

[29] Not all of the cost goes directly to caregiver wages. Often times, home health networks, administrators, and travel costs can take a substantial portion of the total cost.
[30] This estimate is from Belbase, Chen, and Munnell (2021b).
[31] According to the 2023 Genworth Cost of Care Survey, the costs of a homemaker and home health aides grew by 7 percent and 10 percent, respectively, between 2022 and 2023.

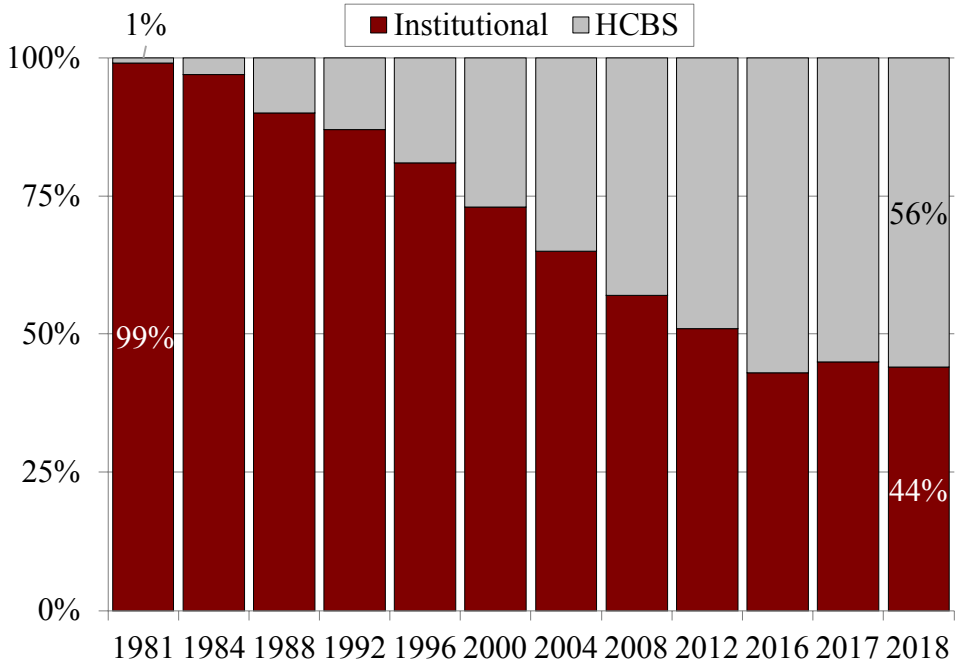
healthcare agencies employ workers of varying skills. The most skilled are registered nurses, followed by licensed practical nurses, then nurses' aides – with aides requiring no formal education and minimal training. Yet, to date, wages for LTC workers are low, particularly among nurses' aides. The workforce is also disproportionally composed of people of color and immigrants. Finding enough workers for these low-wage jobs, often without benefits, will become increasingly difficult (Kaye and Williamson 2014 and Houser, Fox-Grage, and Ujvari 2018). As wages for low-skill workers generally have risen since the pandemic, wages for LTC workers have risen as well to attract labor even though this sector has not benefited particularly from the productivity gains.[32]

Fortunately, some studies suggest that the shift from nursing home care to home and community-based services (HCBS) in recent decades may help slow the price trends for formal care. Although not always the case, HCBS can be more cost-effective than nursing home care (Spillman, Allen, and Favreault 2021). These services can also provide older adults with the specialized care they need. At nursing homes, most care providers are nursing aides, while only 12 percent are registered nurses. At home health agencies, however, the majority of workers are highly skilled registered nurses and only a quarter are nursing aides (Gruber and McGarry 2023 and Sengupta et al. 2022).

HCBS is not only an option for retirees who pay for care OOP. Medicaid has increasingly shifted to covering more home-based care (see Figure 6). The expansion of Medicaid HCBS spending reduces spending on institutional care (Muramatsu et al. 2007 and Guo et al. 2015).

[32] This pattern is an example of so-called Baumol's cost disease (Baumol 2012); see Siliciani (2013) for a short review of the literature in the context of LTC.

Figure 6. *Medicaid Spending on Institutional Care vs Community-based Care, 1981-2018*



Source: Gruber and McGarry (2023).

Supply of Informal Care. Family and other informal caregivers are crucial for LTC recipients' ability to remain in the community (Spillman, Allen, and Favreault 2021). Family caregivers provide about three-fifths of total care hours for older adults (Belbase, Chen, and Munnell 2021b and Commission on Long-term Care 2013).

Demographic changes and structural changes will likely impact the role of informal care going forward (Spillman, Allen, and Favreault 2021). After spouses, adult children provide much of the care for aging parents. Declines in fertility, the rise in divorce, and other changes in family structure all reduce the supply of informal caregivers (King and Scott 2005; Brown and Lin 2012; Stepler 2017; Brown and Wright 2017; and Wettstein and Zulkarnain 2019).[33] Additionally, the share of retirees with extended family or other community support systems has been declining for three decades (U.S. Congress Joint Economic Committee 2019), potentially due to the decline of membership in communities that provide social or civic engagement – such

[33]Fertility rates in the United States have declined from three children to two children per woman over the past couple of generations (Munnell, Chen, and Sanzenbacher 2018).

as unions, churches, or local political parties.[34] In fact, one study estimated that about one-fifth of retirees are "elder orphans" with limited family and community support. A reduction in informal care would increase reliance on formal care and potentially the likelihood of older Americans experiencing unmet needs, increasing LTC risks.

Additionally, children and other relatives will be limited in how much care they can provide if they live far away. The share of retirees with children who lived within 10 miles fell from 68 percent to 55 percent between 1994 and 2004 (U.S. Congress Joint Economic Committee 2019). However, some studies suggest the growth in remote work, even before the pandemic, may help children remain closer to their parents even as they pursue job opportunities (Chokshi 2017; Radu 2018; and Gohringer 2017).

A further complication in predicting future LTC needs is the changing labor force participation of women. On the one hand, higher labor force participation among women reduces the number of hours of care a spouse or a daughter may be able to provide. On the other hand, working more years will allow women to gain better financial footing and increases the likelihood they will have some resources for formal paid caregiving (Span 2011).

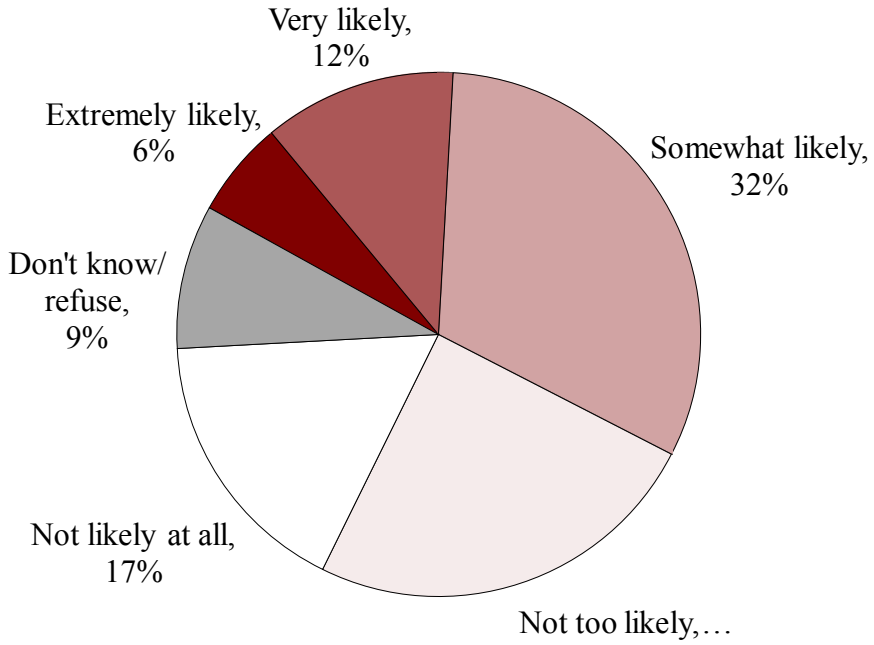
Expectations of Long-Term Care Needs and Financing

Given the many variables involved in predicting LTC needs, the question is whether individuals have realistic expectations of their exposure to this risk and whether they have a good understanding of who bears the cost, if those risks arise.

Expectation of Needs. Some surveys ask respondents about their expected LTC needs. A 2016 survey by The Associated Press-NORC Center for Public Affairs Research included the question: *"How likely do you think it is that you will personally require ongoing living assistance some day?"* The responses are shown in Figure 7.

[34] Extended family and community networks are defined as having relatives and good friends living nearby and attending church regularly.

Figure 7. *Self-Reported Likelihood of Requiring Ongoing Living Assistance, 2016*



Source: The Associated Press-NORC Center for Public Affairs Research (2016).

These responses are somewhat consistent with the updated estimates from Belbase, Chen, and Munnell (2021a) if "extremely likely" and "very likely" (18 percent) could be viewed as equivalent to needing 3+ years of care at medium or high intensity (20 percent, see Table 1). At the other extreme, "not likely at all" (17 percent) is close to "None" (18 percent).

On a more targeted question**,** a 2014 survey sponsored by the Department of Health and Human Services (Khatutsky et al. 2017) asked respondents about the probability of their needing to move to a nursing home sometime in the future. About 40 percent rated their chances of eventually needing to move to a nursing home as 50 percent or higher.[35] While this estimate is high, it was lower than the estimated risk reported by Hurd, Michaud, and Rohwedder (2013) from the *Health and Retirement Study*.

Only a few studies compare self-assessed LTC risks with objective risks of needing care, and the topic usually emerges in the context of LTC insurance. Finkelstein and McGarry (2006) use data from the HRS to compare individual perceptions of needing nursing home care in the

[35] The sample consisted of more than 15,000 individuals ages 40-70, weighted to reflect the non-institutionalized population in terms of gender, age, race/ethnicity, education, income, and census region.

next five years with actual outcomes. The results showed that, in aggregate, respondents had a reasonably good sense of their future nursing home needs in the next five years – most likely because these older respondents already had some health issue.[36]

Self-assessments may be good in aggregate, however, but not at the individual level. For example, Boyer et al. (2019) compared older Canadians' subjective LTC risks with objective risks along three dimensions – needing help for at least one activity of daily living, needing access to a nursing home, and living to age 85. The researchers found large gaps between perceptions and realities among individuals. Certain characteristics – such as being from Quebec, being female, each additional child, and having an employer pension – were linked to people underestimating their LTC risks. But it is less clear how these characteristics jointly impact misperceptions and whether certain groups are more likely to underestimate or overestimate their risks. It is also not clear whether individual misperceptions arise because people do not understand the likelihood of needing care in general or because they do not realize their individual characteristics make them more or less likely to need care.[37]

Expectation of Who Covers LTC Costs. Even if older households had a good sense of their own risks of needing LTC, they can still have misperceptions of who bears the costs. Particularly, several surveys from the past decade have found that many households mistakenly believe that Medicare covers the cost of LTC, when in fact it does not.

The most recent comprehensive survey – addressing a series of issues regarding the affordability of LTC – was conducted by KFF in 2022. In addition to documenting that few older Americans have had a conversation with loved ones about how they would get help with care and how they would pay for it, the survey revealed "a fair amount of confusion about how LTC is financed." This finding rests on responses to two questions:

1) *"As far as you know, which government program is the primary source of health insurance for low-income people who need nursing care or home care over a long period of time?"* (See Table 2.)

[36] For a further look at expected healthcare needs in the HRS, see Chen, Munnell and Gok (2025 forthcoming).
[37] For example, assume three people with a 20 percent, 50 percent, and 80 percent chance of needing high intensity care at older ages. Misperceptions can arise because they are unaware that, on average, 50 percent of people will need high levels of care. Or, they may all think their individual risks are equal to aggregate risks (50 percent). But the person with a 20-percent risk would be substantially overestimating their risk while the person with an 80-percent risk would be substantially underestimating their risk.

Table 2. *Percentage Identifying Different Programs as Main Source of Coverage for Low-Income People in Nursing Homes*

Program	Ages	
	18-64	65+
Medicaid	49%	66%
Medicare	45	29
Some other program	6	3

Source: Hamel and Montero (2023).

2) *"If you or a family member had a long-term illness or disability and had to go into a nursing home, how would the bill mainly be paid?"* (See Table 3.)

Table 3. *Percentage Believing Source Would Cover Long-Term Nursing Home Care If They Needed It*

Source	Age	
	50-64	65+
Medicare	25%	45%
Private health insurance	17	9
Medicaid	14	6
Personal income or savings	10	18
Financial help from family	1	1
Long-term care insurance	1	3
Not sure	31	15

Source: Hamel and Montero (2023).

The responses to these two questions reveal considerable confusion about the source of payment for LTC. In terms of low-income individuals, while about half of working-age adults (49 percent) correctly answer that Medicaid is the primary source of health insurance, 45 percent incorrectly pointed to Medicare. Even among those ages 65 and older – a group covered by Medicare, 29 percent incorrectly responded that Medicare provides this coverage. When adults are asked about their own or a loved one's potential LTC needs, 25 percent of those 55-64 and 45 percent of those 65+ assume that Medicare would pay the bill.

Another recent assessment comes from the Associated Press/NORC Center for Public Affairs.[38] This 2021 survey is the most recent to focus on sources of support. Specifically, the

[38] Beginning in 2013, the Associated Press/NORC Center for Public Affairs has interviewed a nationally representative sample of individuals ages 40 and older regarding their understanding of LTC, their perceptions of needing care, the likely cost of such care, and what sources they intend to rely on to pay for long-term care needs.

survey asked "…, *how much do you think you will rely on each of the following sources to support any care you need as you get older?*" Table 4 reports the percentage who expect to rely "completely" or "quite a bit" on each source. Again, Medicare tops the list of sources; Medicaid is considerably down the list. Interestingly, this survey also includes unpaid family care in the list of options, and respondents dramatically underestimate the extent to which they will rely on unpaid care.

Table 4. *For Those Ages 40+, Percentage Who Expect to Rely "Completely" or "Quite A Bit" on Each Source, 2021*

Source	Percentage
Medicare	49%
Savings	48
Social Security	47
Future income	27
A pension	26
Medicaid	25
Unpaid care from family	17
Long-term care insurance	15

Source: Associated Press/NORC Center for Public Affairs (2021).

Other smaller-scale surveys also found similar results. Surveys conducted by The Nationwide Retirement Institute (2023) and Connecticut Long-term Care Needs Assessment (2007) also found between 40-50 percent of respondents thought Medicare would pay for LTC needs should they arise.

In short, misperceptions about the likelihood of needing LTC and who bears the cost for it play an important role in how households plan for LTC risks in retirement. A large share mistakenly believes that Medicare will cover their future LTC needs, which could leave many exposed to large individual risks. The confusion may be because Medicare does cover post-acute nursing home stays for up to 100 days. Medicare, however, does not cover LTC when non-medical services are the only care people require; many analysts exclude Medicare entirely when describing LTC payers (Hado and Komisar 2019). As the following section suggests, these misperceptions likely underpin the survey responses of households about the risks and costs of healthcare shocks.

Survey Results on Perceptions of Healthcare Risks and Costs

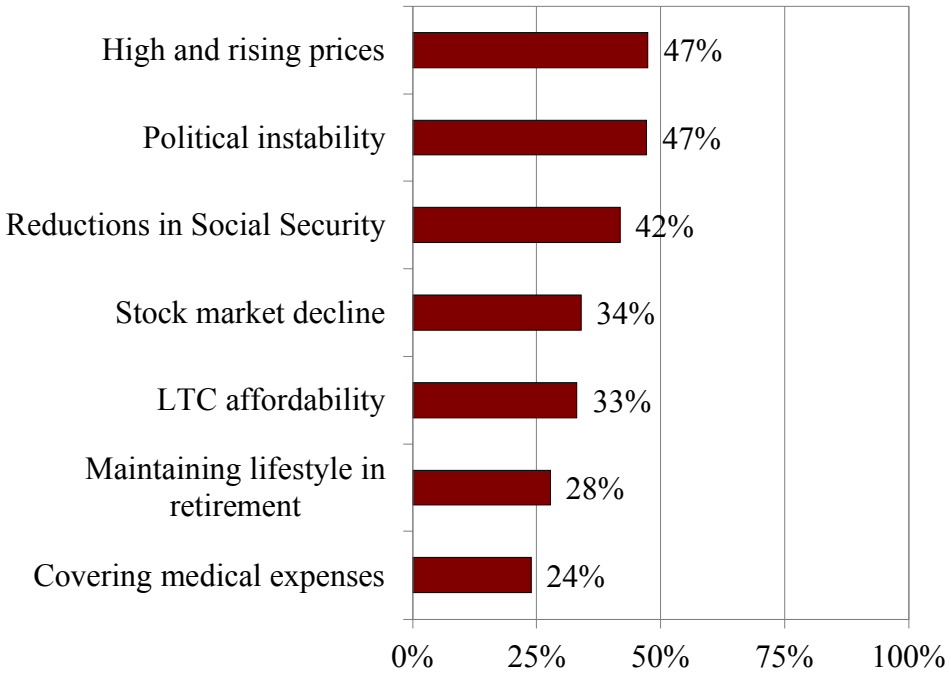
To help fill gaps in the existing literature on how pre-retirees and retirees perceive healthcare risks and costs, the analysis now summarizes the results of a new household survey. In July 2024, Greenwald Research interviewed online 508 individuals ages 48-78 with at least $100,000 in investable assets. In the case of married/partnered individuals, the survey participant must at least share financial decision-making responsibilities. The survey asked participants about their perceived likelihood of experiencing a medical shock or needing extensive LTC, as well as the potential cost of these events.

The responses are then compared to the actual experiences of older adults in the HRS to determine whether even these more affluent households have a good sense of the likelihood of their shocks and their uninsured risks. The HRS is conducted biennially and is representative of the U.S. population over age 50 and their spouses. This analysis limits the HRS sample to those with $100,000+ in investable assets to be consistent with the Greenwald Research survey. The HRS includes numerous questions on health outcomes as well as healthcare expenditures.

Concerns About Healthcare Risks Generally

Before looking at the specific responses, it is interesting to note that medical and LTC needs were low on most respondents' list of concerns (see Figure 8). This finding is consistent with other studies showing older households rank healthcare worries quite low (see Hou 2020).

Figure 8. *Percentage of Respondents Who Are Worried or Very Worried about Various Retirement Risks*



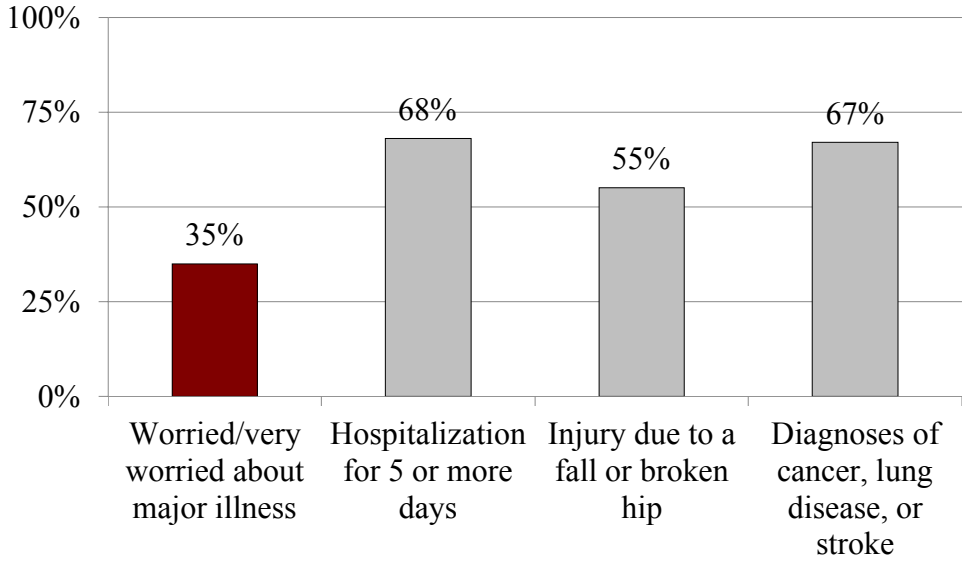
Source: Authors' calculations from the 2024 Greenwald Research household survey.

Respondents were then asked whether they were concerned about having a major illness, developing LTC needs, or having cognitive impairment. Interestingly, only about a third of them were concerned with any of these risks.

In reality, households are much more likely to experience a major illness than the 35 percent predicted by survey participants (see Figure 9).[39] But the financial implications for households in underestimating their risk of a medical shock may not be that severe because, as discussed above, most of these costs are insured.

[39] Actual risk is calculated for a sample of household heads born in 1931-1941 who had $100k in investable assets (in 2023 $), who were not in a nursing home or on Medicaid during their first interview, and who have died since or have been interviewed at least once after age 80. The risks are for the household (incidence for either spouse) and exclude hospitalizations right before death.

Figure 9. *Worries about Major Illness versus Actual Risk of Major Medical Events*

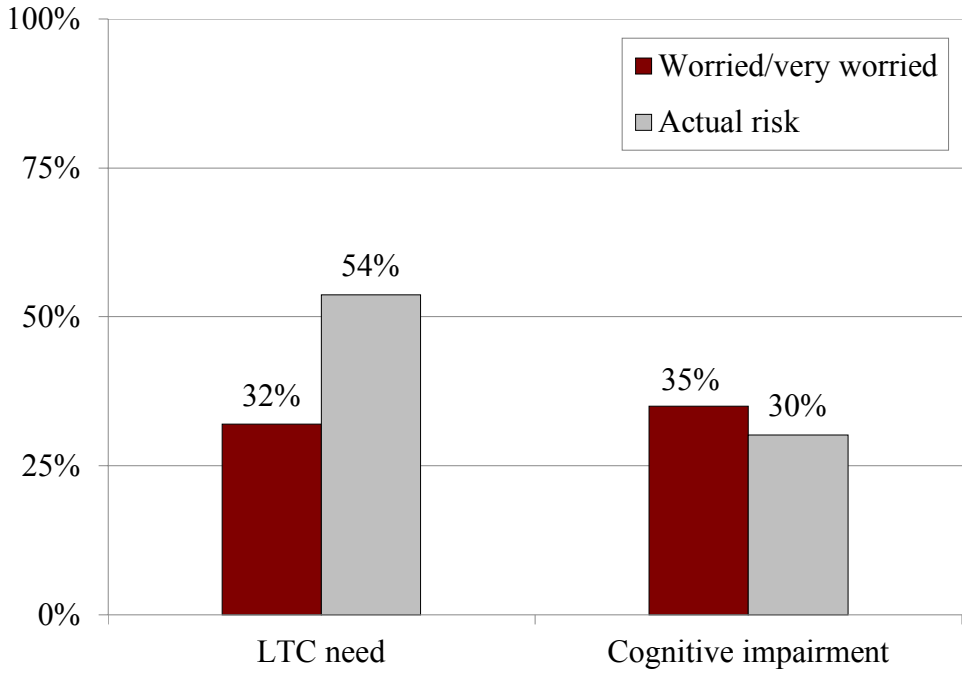


Note: For details of calculations, see Footnote 39.
Sources: Authors' calculations from the 2024 Greenwald Research household survey; RAND *Health and Retirement Study* (HRS) *Longitudinal File* (1992-2020v2); and University of Michigan HRS (1992-2020).

LTC costs, on the other hand, are not well-insured, and only 32 percent of households are worried about developing LTC needs. In reality, over half of households ages 65+ will need some high-intensity care (see Figure 10).[40] On the other hand, participants' assessment of the risk of cognitive impairment is very close to reality.

[40] These numbers are slightly higher than the share of individuals who will have high-intensity needs in Table 1 because they represent household-level risks while Table 1 represents individual-level risks.

Figure 10. *Worries about LTC Need and Cognitive Impairment versus Actual Risk*



Notes: "LTC need" is defined as requiring some high-intensity care. For details of the calculations, see Footnote 39.
Sources: Authors' calculations from the 2024 Greenwald Research household survey and Chen, Munnell, and Gok (2025 forthcoming).

Perceptions of Healthcare Costs

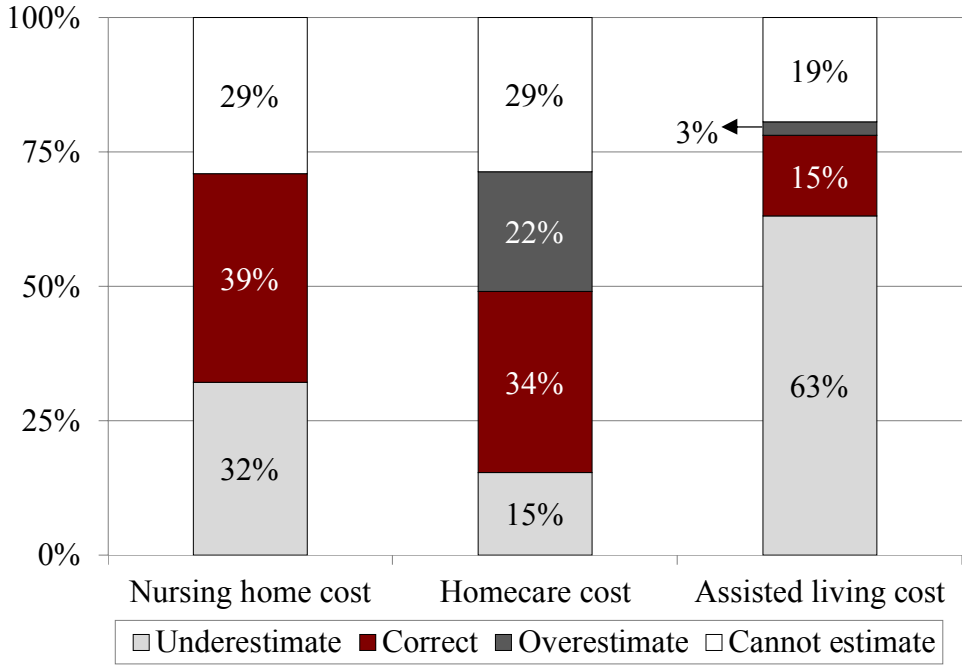
Having a good estimate of the likelihood of healthcare needs as one ages is only half of the retirement planning equation. The other important component is having a good sense of how much these needs might cost.

While individual medical risk is well insured, the big risk is general price risk. Yet, only a third of survey respondents were worried about rising Medicare costs. Fortunately, Part D (prescription drug) premiums have remained relatively steady.

LTC costs, of course, are not well insured, which makes it more important that individuals have a sense of these potential costs. Figure 11 shows that only 39 percent of older households could correctly estimate the cost of a nursing home, 34 percent for home care services, and only 15 percent for assisted living facilities.[41]

[41] Since LTC costs vary substantially across geographic area, the calculations are based on a broad range of estimated costs. Respondents are categorized as being correct if they estimate that nursing home costs are at least $75,000 per year, homecare costs are between $20-$50 per hour ($45,760-$114,400 per year), and assisted living costs are between $50,000-$150,000 per year.

Figure 11. *Percentage of Respondents Who Correctly Estimate Average Annual LTC Costs*



Note: For details of the calculations, see Footnote 41.
Source: Authors' calculations from 2024 Greenwald Research household survey.

In short, misperceptions about who bears the cost of LTC may play an important role in how households plan for risks in retirement.

How Retirees Cope with Uninsured Healthcare Costs

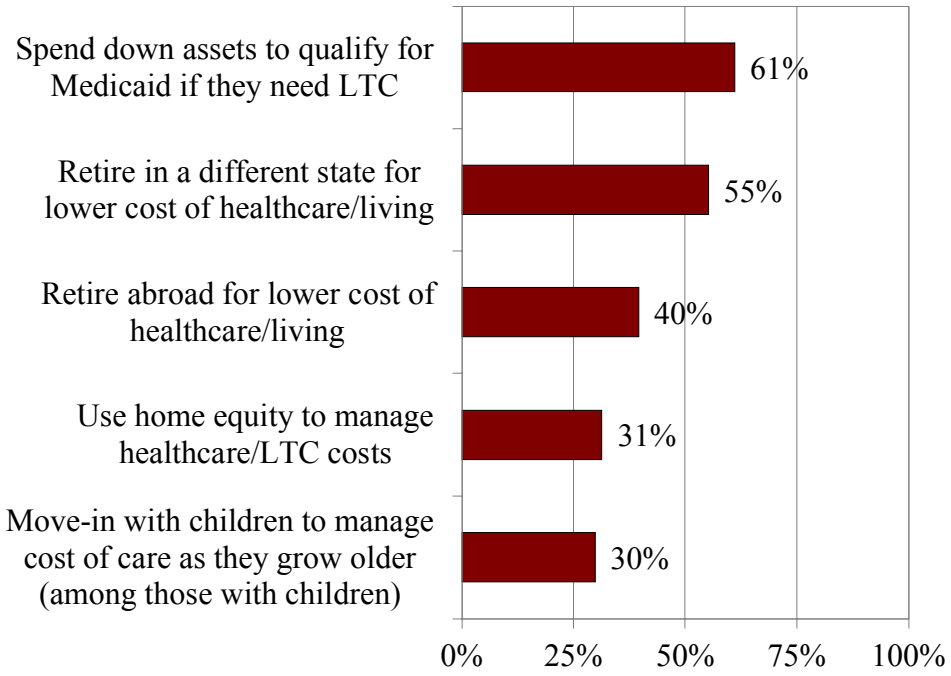
The implications of households underestimating their healthcare risks is that they may not have the resources to cover the costs. Without the appropriate insurance or resources, older households may have to make substantial adjustments or consider less-preferred options. The following discussion reports on the contingency plans for respondents in our household survey and then uses the HRS to assess the reasonableness of their plans by: 1) documenting general patterns reported in the HRS and 2) estimating specific responses of HRS individuals to a healthcare shock.

How Households Think They Might Cope

When asked what contingency plans they might consider if they could not afford their medical or LTC expenses, over 60 percent said that would consider spending down to qualify for Medicaid (see Figure 12). Almost half said they would consider moving to a lower-cost area,

and 40 percent suggested they might even move abroad. Only 30 percent anticipated using home equity to cover their costs, and roughly the same share thought they might move in with their children. Many of these options may not be realistic.

Figure 12. *Percentage of Respondents Making or Considering Various Changes*



Note: Data show the percentage of those who have already made, have considered making, or may consider making various changes.
Source: Authors' calculations from 2024 Greenwald Research household survey.

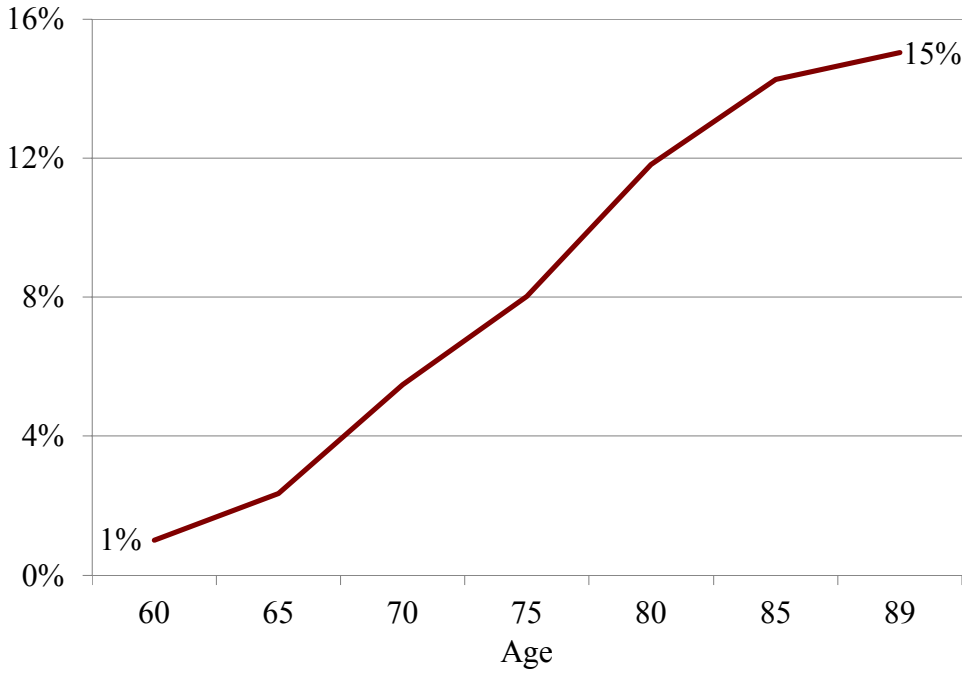
Comparing Plans to Patterns in the HRS Population

The following discussion compares the prevalence of the Medicaid, home equity, and living-with-children options with actual patterns in the HRS.

Spend Down to Medicaid. As noted earlier, many older households who believe they can always fall back on Medicaid may not realize that the program's income and asset limits require impoverishment. Among households with more than $100,000 in investable assets, like those in our survey, almost none would qualify based on the standard income rules because their Social Security benefit and defined benefit income would put them above the limit. Even in states with slightly higher limits for long-term care, 70 percent of households in our sample would not qualify. In reality, only 15 percent of households with more than $100,000 in initial assets will

actually end up on Medicaid, compared to the 60 percent of households who think that spending down to Medicaid is an option for them (see Figure 13).

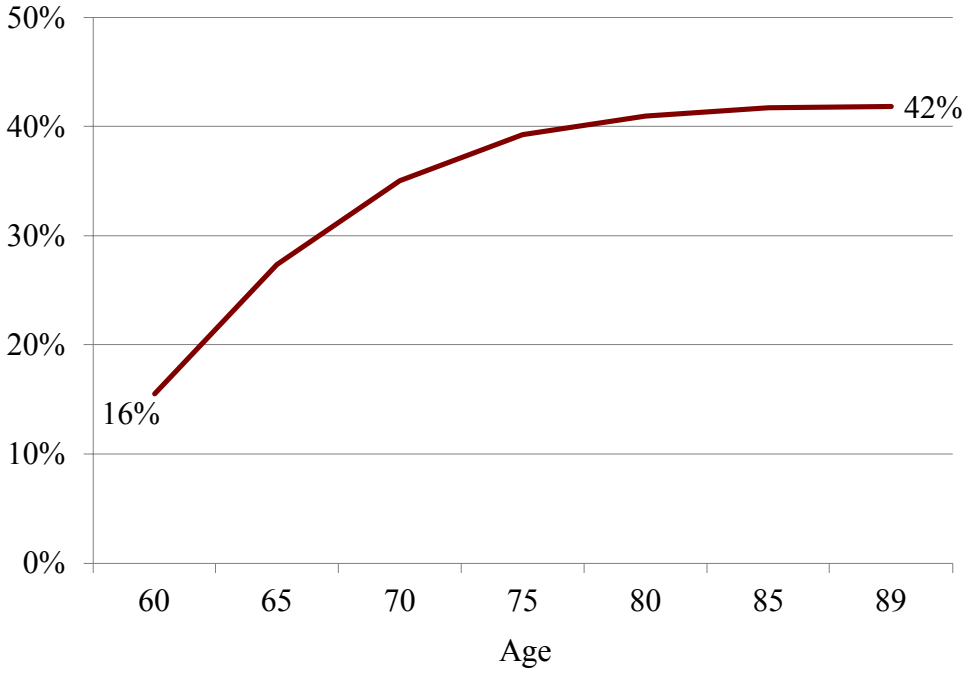
Figure 13. *Cumulative Likelihood of Having Medicaid, by Age*



Note: Sample is only among households with more than $100,000 in investable assets at their first interview.
Sources: Authors' calculations from RAND HRS *Longitudinal File* (1992-2020v2) and HRS (1992-2020).

Tapping Home Equity. One of the least popular contingency options for financing healthcare costs is tapping home equity. Less than a third of households said they would consider it. However, in reality, over 40 percent will tap home equity in retirement – either by getting a second mortgage, applying for a home equity line of credit or other loans against the house, or downsizing and moving to a less valuable house (see Figure 14).

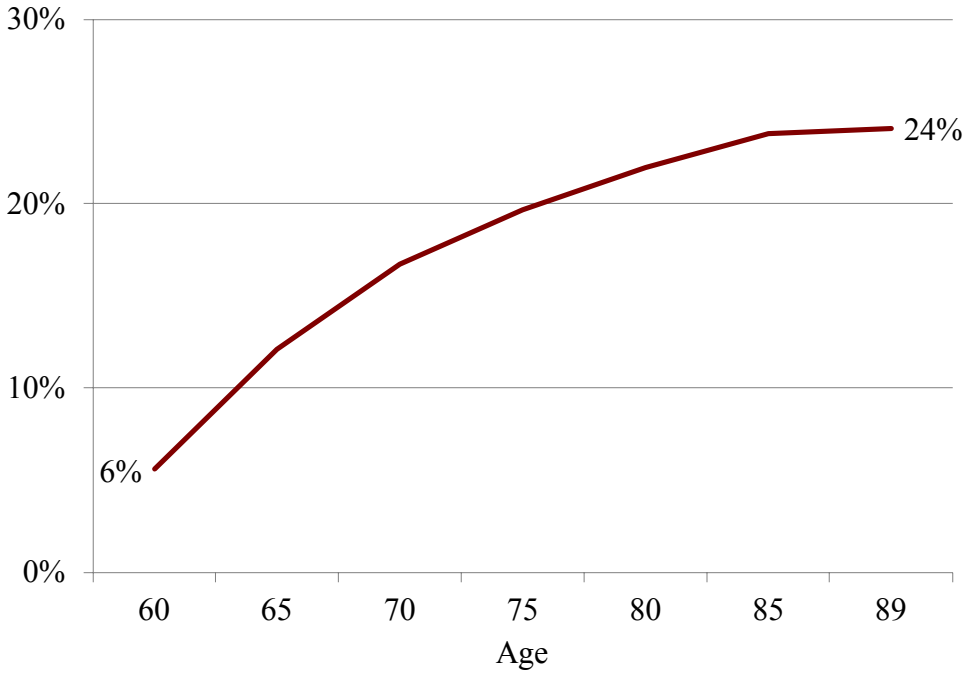
Figure 14. *Cumulative Likelihood of Tapping into Home Equity, by Age*



Notes: Sample is only among households with more than $100,000 in investable assets at their first interview. Tapping home equity includes any instances of second mortgage, home equity line of credit or similar loans against a house, as well as downsizing (selling a home and buying a cheaper home within a 3-year range).
Sources: Authors' calculations from RAND HRS *Longitudinal File* (1992-2020v2) and HRS (1992-2020).

Living with Children. Finally, another unpopular option for managing healthcare needs among respondents is moving in with children. Again, less than a third say they would consider this option. Interestingly, in the real world, only about a quarter of older households in our wealth group end up living with their children (see Figure 15). So, this option does seem like the least preferred back-up if plans fail.

Figure 15. *Cumulative Likelihood of Moving in with a Child or a Child Moving in with Them if Household Has Kids, by Age*



Note: Sample is only among households with more than $100,000 in investable assets at their first interview.
Sources: Authors' calculations from RAND HRS *Longitudinal File* (1992-2020v2) and HRS (1992-2020).

How Retirees Respond to a Healthcare Shock

In addition to documenting the general patterns across the HRS population, a separate analysis, also based on the HRS, looked at how the Medicare-covered population ages 65+ responds to a healthcare shock. Again, to be consistent with the Greenwald Research online survey, the analysis focuses on those with $100,000+ in investable assets.

The HRS includes questions on healthcare expenses by type: doctors, hospitals, prescription drugs, outpatient surgery, and dental costs on the medical front; and nursing home care and home care on the LTC front – these healthcare expenses are used to define "medical shock" and "LTC shock." Individuals are considered to have had a medical shock in a given year if spending was in the top ten percent of medical out-of-pocket expenses in that year. For LTC, because out-of-pocket spending is relatively rare, a shock is defined as having any LTC-related spending. Individuals with multiple years of high spending are considered to have had the shock in the first year, with the subsequent years viewed as related to the initial event. This

process yields nearly 1,500 unique individuals in the LTC shock group and around 4,000 in the medical shock group. All amounts are inflated to 2023 dollars.

To analyze the effects of shocks, one must contend with the fact that the households bearing such large costs are not similar to those without shocks. They may have had poorer health their whole lives, lack sufficient insurance coverage due to preexisting conditions or a lack of resources, or simply have different risk preferences. Such differences are hard to control for statistically in a regression. To address this problem, the analysis compares those who experience a shock in a given year to those who will experience the shock at some time in the near future.[42] Thus, the analysis involves matching the group of individuals suffering a shock with a "control" group of individuals experiencing the same type of shock four years later.

The analysis explores four ways in which a large healthcare expense could affect an individual's life. The first is the decision to enroll in Medicaid. The second is any impact on household assets – overall, residential, and non-residential – with an eye toward assessing if the shock leads to downsizing to fund the expense. The third is the effect on an individual's expectations about leaving a bequest.[43] Finally, the fourth involves a change in living arrangements, such as moving in with children to more easily receive care.

Before looking at how people respond to large financial shocks, some descriptive data relating to the sample and to the magnitude of the healthcare expenditures provide a useful backdrop. Table 5 presents the mean demographics for the two "shock" groups. These two samples are broadly similar, except that those suffering an LTC shock have a mean age of 82 compared to 76 for those with a medical shock. In addition, the medical-shock group tends to have somewhat more education, higher wealth and, correspondingly, greater expectations of leaving large bequests.[44]

[42] This approach follows that developed by Fadlon and Nielsen (2021). To implement this approach, we focus on the years 2002-2016. 2002 was the first year the HRS split out medical and LTC expenses, which we use to define a "shock." Looking at shocks through 2016 ensures that we observe sufficient years following a shock to consider effects lasting two years after the event. The research design requires observation of outcomes for four years further out to provide a comparison group, taking the analysis through the most recent wave of the HRS in 2022.

[43] See Jones et al. (2020).

[44] Part of the difference in wealth and education may itself stem from the fact that households suffering an LTC shock are older, and were born in earlier cohorts. Thus, they have likely drawn down more of their wealth and came of age in periods when lower educational attainment was the norm.

Table 5. *Demographics of HRS Respondents 65+ with $100,000 in Investable Assets, by Shock*

Variable	LTC shock (N=1,396)	Medical shock (N=3,993)
Age	82	76
College graduate	24%	31%
On Medicaid	4	2
Total wealth	$819,900	$1,253,200
Non-housing wealth	587,300	903,200
Primary residence value	232,800	343,300
Probability of >$100,000 bequest	52%	60%
Live with children	5	4
Live <10 miles from children	50	50

Sources: Authors' calculations from RAND (HRS) *Longitudinal File* (1992-2020v2) and HRS (1992-2020).

Table 6 displays mean OOP costs in the year of the shock for those with an LTC shock and those with a medical shock. Overall, annual costs are quite high and similar for both samples – about $11,000. The standard deviation (SD) of these costs is also large – an individual who is one standard deviation above the mean would face nearly $30,000 of expenses in the shock year.[45] Roughly two-thirds of LTC expenses are nursing homes; within medical care, about half of expenses are for prescription drugs. This finding is not surprising given that many of these shock years occurred before Medicare Part D. Interestingly, while the medical group has much higher medical than LTC spending, the converse does not hold for the LTC sample. That group actually faces higher medical than LTC costs, showing that individuals facing large LTC expenses typically also bear large medical expenses at the same time.

[45] Healthcare costs also tend to be persistent, so the initial shock may well be an indication of further expenses to come. Hubbard, Skinner, and Zeldes (1995) find that healthcare spending has an autoregressive coefficient of 0.9; while, more recently, De Nardi, French, and Jones (2010) find a similar persistence of 0.922.

Table 6. *Healthcare Spending of HRS Respondents Age 65+ with $100,000 in Investable Assets, by Shock*

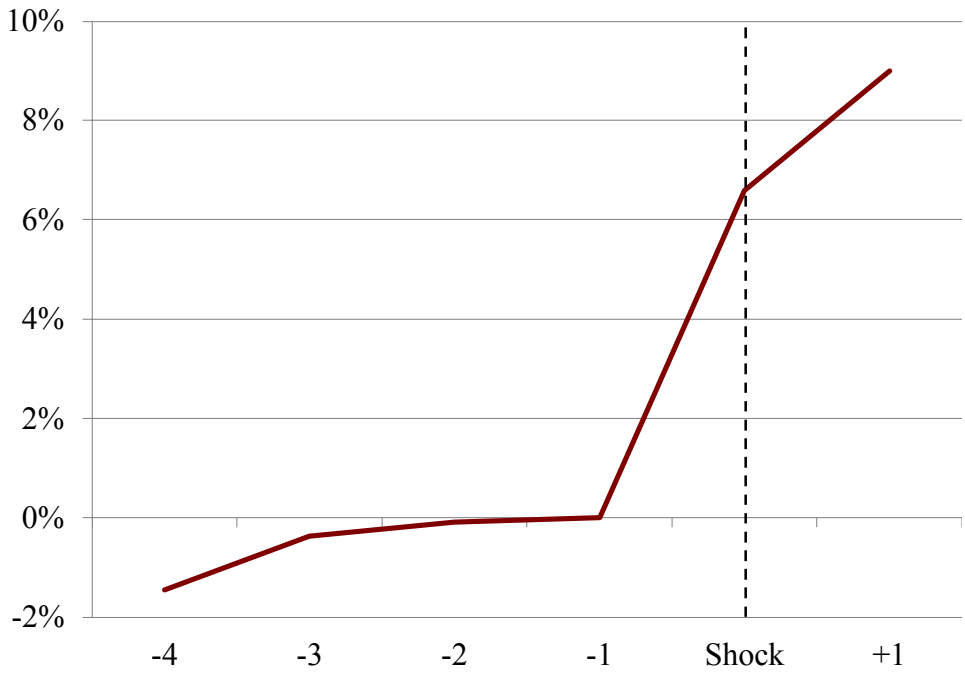
Cost category	LTC shock (N=1,396)		Medical shock (N=3,993)	
	Mean	SD	Mean	SD
Total OOP	$10,443	$17,851	$11,937	$18,854
Total LTC OOP	4,875	14,637	651	7,149
Nursing home	3,104	-	383	-
At-home services	1,770	-	268	-
Special facilities	297	-	94	-
Total medical OOP	5,271	8,403	11,192	17,237
Hospitals	1,621	-	1,423	-
Doctor visits	1,076	-	1,510	-
Dental costs	667	-	1,760	-
Outpatient surgery	131	-	449	-
Prescription drugs	1,776	-	6,050	-

Sources: Authors' calculations from RAND HRS *Longitudinal File* (1992-2020v2) and HRS (1992-2020).

With this context in mind, the next three figures show the impacts of an LTC shock on a variety of outcomes.[46] First and most striking, Figure 16 shows that the share of individuals covered by Medicaid increases dramatically, by 6.6 percentage points, in the year of the LTC shock, and increases yet again the following year to 9 percentage points above the comparison group. These increases are enormous in relation to the baseline rate of Medicaid coverage in this population of 4 percent before the shock. Furthermore, prior to the shock, the shock and control groups move in parallel, as evidenced by the lack of significant differences in years -4 to -1. Thus, these findings suggest that the LTC shock was the *reason for* the increase in Medicaid enrollment.

[46] Full regression results for all these figures are in Appendix Table A1 of Chen, Munnell, and Wettstein 2025a).

Figure 16. *Percentage of Respondents Who Experience an LTC Shock on Medicaid, Pre- and Post-Shock*



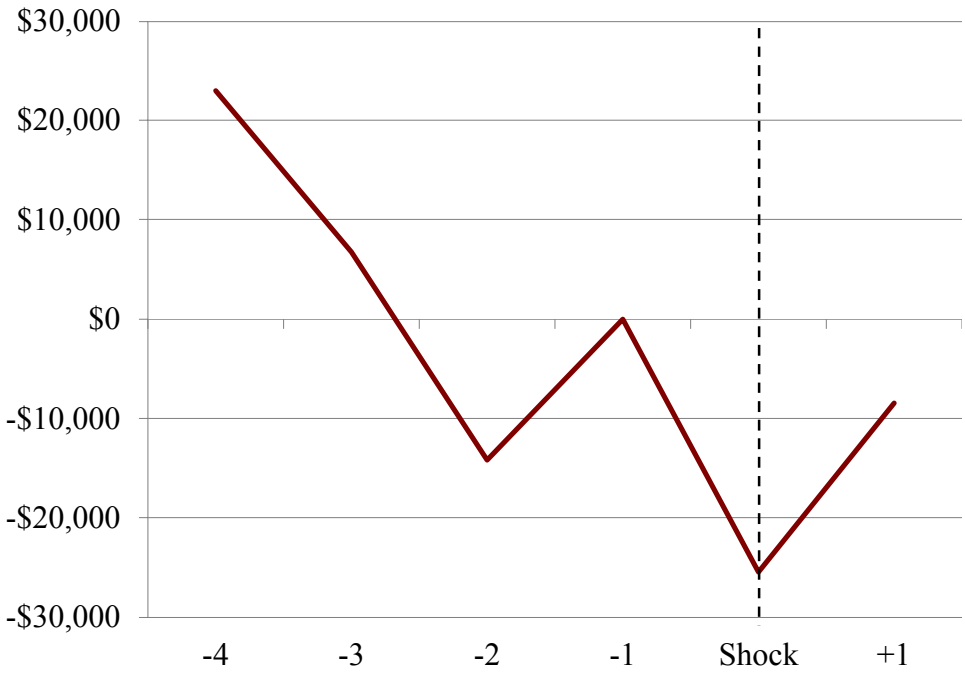
Sources: Authors' calculations from RAND HRS *Longitudinal File* (1992-2020v2) and HRS (1992-2020).

Medicaid, however, is not a good solution for most households, since it requires the household to forfeit virtually all its wealth. So, as noted above, it is quite surprising that 61 percent of respondents in the online survey said that they would consider spending down assets to qualify for Medicaid, when in fact about 15 percent end up on Medicaid.

At the same time, few survey respondents expected to tap their home equity to cover costs. In fact, though, the net worth of households hit by an LTC shock declined in the year of the shock by $78,200, relative to the comparison group. And the estimated decline in the value of the primary residence in Figure 17 suggests households do draw down their home equity to finance LTC shocks.[47]

[47] This pattern is consistent with analysis by Poterba, Venti, and Wise (2011) showing households rarely tap home equity – except when moving into a nursing home or near death. More broadly, our own recent work also finds that over 40 percent of older households will eventually tap their home equity (Chen, Munnell, and Wettstein 2025b).

Figure 17. *Primary Residence Value of Respondents Who Experience an LTC Shock, Pre- and Post-Shock*



Sources: Authors' calculations from RAND HRS Longitudinal File (1992-2020v2) and HRS (1992-2020).

Another way individuals can finance LTC is by reducing the amount they set aside for bequests. Some economists have argued that bequests are a luxury good (a good that people buy disproportionately more of as their income increases) and, as such, holding assets in reserve for bequests if individuals do not need much LTC is complementary to using such reserves to finance that care.[48] The results are consistent with this model: the individuals in the analysis reduce their expected probability of leaving bequests of $100,000 or more, as a result of an LTC shock (see Figure 18). The decline is modest in magnitude, at 4 percentage points, but such probability questions are notoriously insensitive as respondents tend to round their answers substantially.[49]

[48] Lockwood (2018).

[49] See Hendren (2013). That said, the results show no impact on expected bequests of $500,000 or more, although the small expected mean probability of leaving such bequests to begin with suggests little room for these expectations to fall.

Figure 18. *Self-Reported Probability of Leaving More Than $100,000 in Bequests of Respondents Who Experience an LTC Shock, Pre- and Post-Shock*

Sources: Authors' calculations from RAND HRS *Longitudinal File* (1992-2020v2) and HRS (1992-2020).

Finally, some comfort can be taken in the fact that the results show no evidence of individuals suffering an LTC shock moving in with their children or of moving closer to their children (or their children moving closer to them). This pattern is consistent with the distinct preference of respondents in the survey to only move in with their kids as a last resort.[50] Of course, the analysis here can only track households up to four years following the shock, and longer-run adjustments may include moving in with kids; the analysis here is consistent with the finding in Figure 15 that 24 percent of individuals end up living with their children.

In sum, individuals seem to have three main methods of absorbing LTC shocks in practice: drawing down wealth (particularly their home equity); possibly as a consequence, reducing their intended bequests, at least for modest bequest sizes; and falling back on the quintessential safety net, Medicaid. All of these results are qualitatively similar when the sample is not restricted to households with more than $100,000 in financial assets.[51]

[50] The results showed no change in LTC insurance status either in anticipation of the LTC shock or in its wake (at which point coverage is likely to be denied). Some evidence of loss of private health insurance coverage shows up in the wave preceding the LTC shocks – possibly consistent with denial of coverage following severe shocks, as is common in Medigap plans (Boccuti et al. 2018).

[51] These results are available in the full paper (Chen, Munnell, and Wettstein 2025a).

In contrast to the impacts of LTC shocks, the impacts of medical shocks are actually very limited. No statistically significant impact is found on any of the outcomes, with the exception of the expected chance of leaving a bequest of $100,000, which is marginally significant at the 10-percent level. This sharp contrast to the impact of LTC shocks is puzzling given that the magnitude of the financial hit in the year of the shock is similar for both types of shocks. A possible explanation is the persistence of shocks – while a medical shock is likely predictive of some future expenses, an LTC shock is much more likely to indicate a permanently elevated level of future expenditures. This difference in expected future costs is compounded by the fact that health insurance is never exhausted, while LTC insurance typically has lifetime limits.[52]

The bottom line from this analysis of contingency plans is that most individuals do not have a clear idea of how they are likely to respond to an LTC shock. Most will not be eligible for Medicaid, so they will have to draw on existing wealth – including their home equity – and will be forced to rethink how much they can bequeath to their children. The remaining question is the extent to which financial advisors are better informed and can help their clients make more realistic plans.

The Role of Financial Advisors

About two-thirds of the households surveyed work with a financial advisor. An important question is whether advisors have a better sense of healthcare risks and costs. And if so, do households with an advisor have a better sense of their risks and make better plans? To answer this question, Greenwald Research fielded an advisor survey, an online survey of 401 financial professionals, in late July and early August of 2024.[53] Once again, the results from this survey are compared to actual experiences of older households in the HRS.

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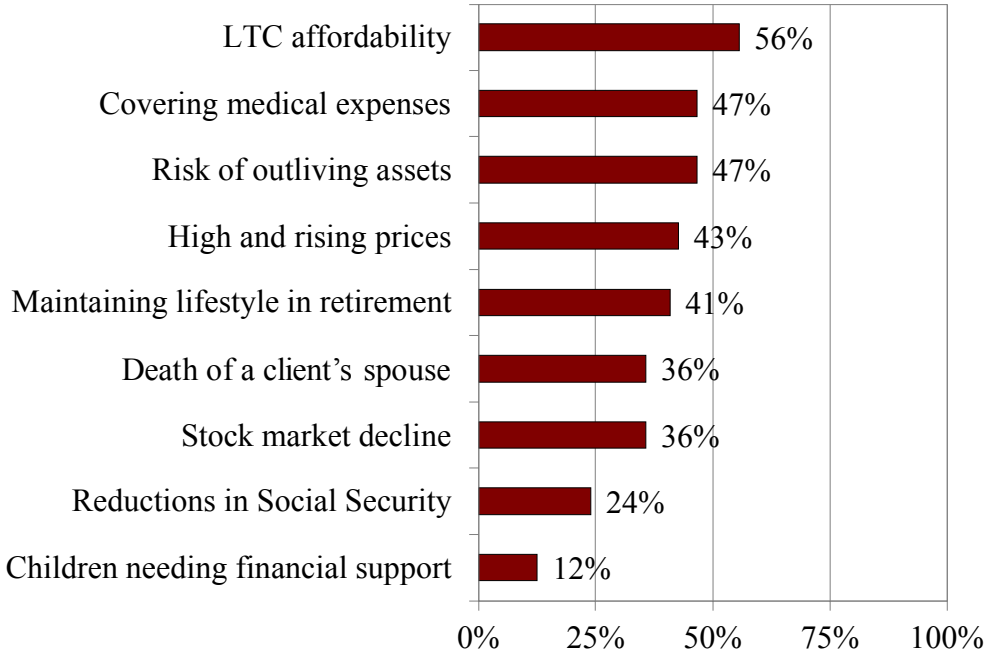
[52] Medicare OOP maximums reset every year – except in the lifetime limits on extended hospital stays which, incidentally, provide a close substitute for some medically necessary LTC. In contrast, LTC insurance, to the extent it exists, is typically limited to a small number of years of coverage. Therefore, the risk of future LTC costs is understated by the average of such future costs. That LTC shocks entail greater adjustments from affected individuals is, therefore, perhaps not surprising.

[53] Respondent qualifications included the following criteria: 1) currently work as a financial professional; 2) work with a national full-service broker-dealer, regional broker-dealer, independent broker-dealer, RIA, bank broker-dealer, or insurance broker-dealer; 3) been a financial professional for at least three years; 4) derive at least 50 percent of income from individual sales; 5) have at least $30 million in AUM; 6) make recommendations directly to clients; 7) at least 40 percent of clients are ages 50+; and 8) serve at least 75 clients.

Unlike the households, financial advisors surveyed think that LTC affordability or covering medical costs are the biggest risks their clients face to ensuring a secure retirement (see Figure 19). Almost three-fifths of advisors believe that LTC affordability is a major risk to their clients' financial security compared to just 33 percent of older households. Similarly, almost half of advisors are worried about their clients covering medical expenses compared to just 24 percent of survey respondents.

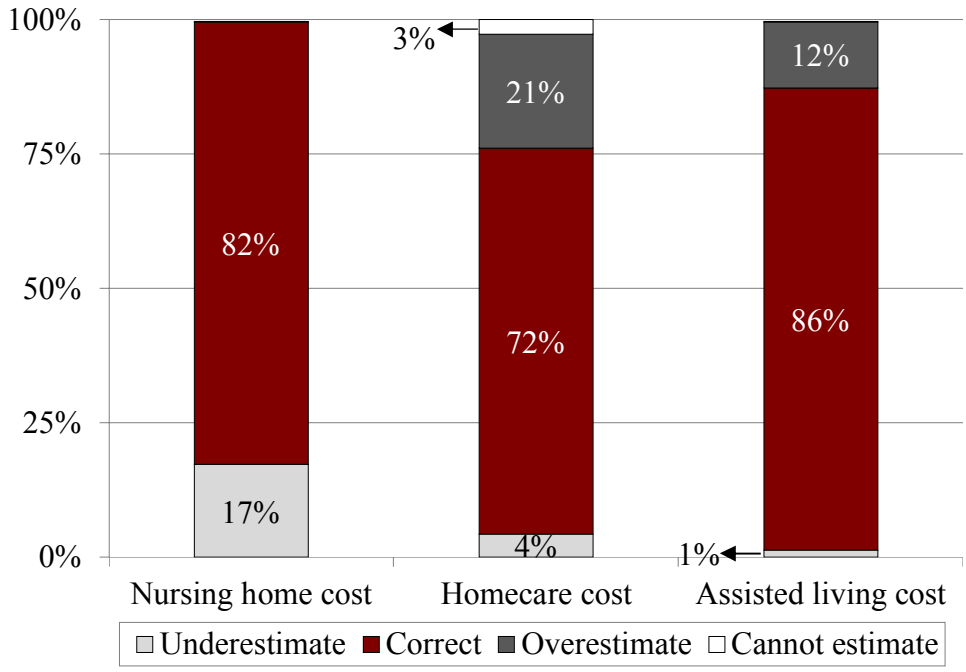
Figure 19. *Percentage of Advisors Who Think Various Items Are a Major Risk to Clients' Financial Security*



Source: Authors' calculations from 2024 Greenwald Research advisor survey.

The advisors also have a pretty good sense of how much various LTC services cost, with over 80 percent estimating the correct range for nursing home and assisted living costs (see Figure 20). Advisors were slightly less knowledgeable about home care costs but, even then, nearly three-quarters of advisors provided a good estimate. Moreover, roughly 90 percent of advisors were at least somewhat confident about their cost estimates.

Figure 20. *Percentage of Advisors Who Correctly Estimate LTC Costs*



Notes: For details of the calculations, see Footnote 41.
Source: Authors' calculations from 2024 Greenwald Research advisor survey.

Despite the fact that financial advisors have a pretty good sense of costs, older households with advisors do not seem to have a better sense of their risks. In fact, those with advisors are even less worried about their risks and their ability to cover the cost of major healthcare shocks (see Table 7).

Table 7. *Percentage of Respondents Who Are Worried or Very Worried About Various Healthcare Risks in Retirement, With and Without a Financial Advisor*

	Has a financial advisor	
	Yes	No
Incidence		
Cognitive impairment (incl. spouse)	34%	38%
Having a major illness	30	44
Developing LTC need	25	44
Cost		
LTC affordability	31	49
Medicare or Medicare Advantage cost inflation	30	46
Cost of major illness	19	45
Sample size	319	189

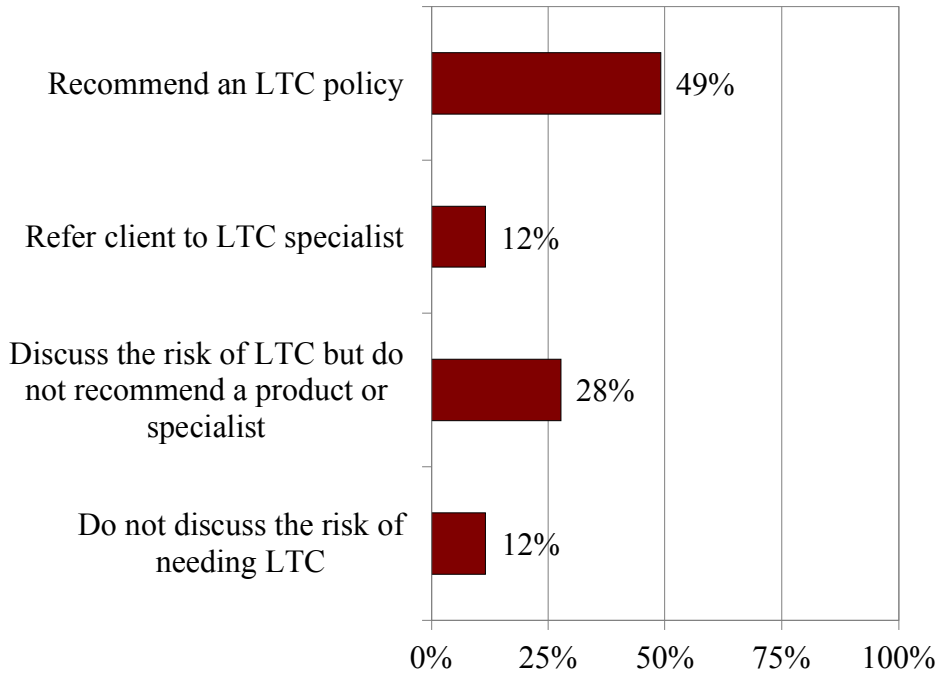
Source: Authors' calculations from 2024 Greenwald Research household survey.

One reason may be that households with a financial advisor are more prepared to handle the risks. For example, they could have LTC insurance, be wealthier, and/or be married and have children who may be able to take care of them. However, regression analysis shows that even after controlling for LTC insurance, wealth, marital status, and other demographic characteristics, those with an advisor are still less concerned about their healthcare risks than those without.

A second reason may be that financial advisors are not discussing these risks with their clients. However, survey results show that the vast majority of advisors at least discuss LTC risks with their clients and over 60 percent either recommend a policy or recommend their clients to a professional who is more knowledgeable about LTC insurance products (see Figure 21).

If advisors do indeed discuss LTC risks with clients, a third reason for low client knowledge could be that they rely on the advisors to understand these issues for them and do not focus on absorbing the information.

Figure 21. *LTC Strategies Advisors Discuss with Their Clients*



Source: Authors' calculations from 2024 Greenwald Research advisor survey.

A key unanswered question then is why advisors, despite their own knowledge and awareness, have very little impact on how older households view these risks. Studies on the impact of financial advisors on retirement security have largely focused on their roles in helping clients make investment decisions.[54] A few limited studies have shown that financial advisors can be helpful in guiding households to set savings goals.[55] However, virtually no research has focused on how financial advisors can help their clients manage the large spending risks from medical and, particularly, LTC needs in retirement. This area is ripe for future research.

[54] A number of papers have examined the role of financial advisors on household finances, with mixed results: (Shapira and Venezia 2001; von Gaudecker 2015; Hackethal, Haliassos, and Jappelli 2012; Kramer 2012; and Chalmers and Reuter 2020). Advisors could help clients manage risks by diversifying their portfolios (Goetzmann and Kumar 2008; French and Poterba 1991; and Grinblatt and Keloharju 2001) or reducing risks during financial downturns (Liu, Finke, and Blanchette 2024).

[55] See Kim et al. (2018) and Marsden et al. (2011).

Conclusion

Healthcare costs pose significant risks to retirees. On the medical front, insurance is almost ubiquitous but two risks remain: the quality of insurance, particularly cost sharing, may change over time; and insurance premiums tend to rise faster than retiree incomes over time. Both of these risks are long-term threats to financial security for households trying to plan decades into the future.

On the LTC side, general costs for care have not grown as fast as medical care but a large share of households will likely face enormous bills, suffer through unmet needs, or fall into the "safety net" of Medicaid. This latter option prevents the most extreme deprivation in terms of unmet LTC needs, but requires impoverishment. Many households also have misperceptions about who will pay for LTC needs should they arise and mistakenly believe that Medicare will provide significant LTC coverage. This misperception could expose many households to the large individual risks of LTC. As LTC needs typically arise late in life, this risk, as with medical care, is one that looms over the horizon for households planning their retirements.

Overall, a vast literature explores the risks posed to retirement security from healthcare expenses and whether people are worried about these risks. However, important gaps remain. From the perspective of near-retirees and retirees, it is not clear: 1) whether the right people are worried about the right risks; 2) whether they have taken the steps to protect themselves from these risks, either by buying more insurance, dedicating financial resources, or cutting back on expenses; and 3) what their plans may be if these protections are not enough.

The results of a new online household survey show that even older households with $100,000 in investable assets tend to underestimate their healthcare risks in retirement and have very little sense of how much medical shocks or LTC services may cost. The implications of older households underestimating healthcare risks is that many may have to make substantial adjustments or consider unpalatable options. The majority of older households say they would spend down to Medicaid and prefer to preserve their home equity. In reality, many end up tapping home equity and only a minority end up on Medicaid.

Advisors, on the other hand, have a better sense of the prevalence and costs, according to a separate new survey. Interestingly, older households who work with advisors do not seem to know more about these risks or costs than those without an advisor. It is not clear why advisors have little impact on their clients' perceptions.

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