

The cost of retirement health care: Expectations and concerns of older workers

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Introduction

A major concern of older workers is the expected cost of health care in retirement. In order for individuals to effectively plan for the estimated income needed during their retirement years (and the “de-accumulation” phase of one’s lifecycle), they must properly take account of the assets needed to pay for expected health care expenditures throughout retirement. However, estimates of the money needed to cover health care costs in retirement can vary substantially, and attempts to estimate needs may prove daunting to many near retirees.¹

Two main drivers of higher lifetime retirement expenses are an increased number of years in retirement (associated with rising life expectancy) and the continued rise of health care costs relative to other retirement expenses. High expected medical expenditures during retirement raises a number of important issues. Are workers concerned about their future health care costs in retirement, and do they incorporate these concerns into their financial planning? Do workers save specifically for retiree health care costs? What resources are individuals planning to use in paying for these expenses? Having a good estimate of expected health costs in retirement and understanding the resources needed to finance these costs are important financial issues. Unfortunately, these issues are not often part of retirement planning for many individuals.

¹ See Fronstin and VanDerhei (2018) and Cubanski, et al. (2018) for some recent estimates of health care costs for retirees.

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This paper presents qualitative results from a survey of full-time workers, aged 50 and older, employed at one of fourteen higher education systems. The institutions selected for this study provide a diverse cross-section of retiree health benefits, ranging from no retiree health benefit, to a defined contribution benefit, to several types of traditional defined benefit retiree health plans. The survey results provide insights into the perceptions and concerns that faculty and staff had regarding their expected retirement health care expenses, given the retiree health care benefit they expect to receive. We provide survey evidence on how much individuals expect to spend on health care in retirement, if they are saving specifically for these costs, their concerns over financing their retiree health costs, and what methods or programs they plan to use to pay for out-of-pocket health care costs in retirement.

We find a high level of concern over the ability to pay for out-of-pocket health expenses in retirement. Concern is high across nearly all wealth levels and self-reported current health statuses. Despite this concern, most individuals have not saved specifically for their expected retiree health care costs, nor have they reviewed their employer-provided retiree health care benefits. Indeed, we find higher levels of ability-to-pay concern among those workers who have *not* reviewed their retiree health benefits. When asked what programs they expect to rely on to pay for out-of-pocket health care costs in retirement, the vast majority of individuals, at all asset levels, state they will rely primarily on Social Security and/or their retirement plan assets. However, we find that individuals with more assets also plan to utilize other sources of guaranteed income—primarily annuity income. And given Social Security’s progressive benefit payment structure, higher-lifetime-income workers should

plan on using other sources of guaranteed income when paying their needed retiree health care.

The next section provides an overview of the survey methodology. We then discuss various survey findings on benefit coverage, health care cost drivers, and concerns over paying for health care. We conclude with a short discussion on the implications of the findings.

Survey methodology

Our 2016 target sample population was workers, aged 50 and older, employed at one of thirteen higher education institutions and one higher education system. The institutions chosen are geographically distributed across the United States and capture a range of retiree health benefit coverages. Each employer in our sample sponsored a retirement program that included TIAA investment products. An online survey invitation was sent to 22,929 individuals, and 2,532 workers participated in the study (roughly 11%). The survey included questions about demographic characteristics, household income and wealth, perceived current and future household health status, retirement and health savings strategies, health care costs concerns, and financial acumen.

Sample characteristics

Table 1 provides selected demographic characteristics for our sample. The average age of a respondent was about 60.8 years, with two-thirds of the sample falling between the ages of 54 and 67. Women comprise 58% of respondents. About 71% of respondents were married or partnered, and about 18% of survey participants were previously married. Whites comprise 83% of the sample with Asians, Blacks, Hispanics, and other ethnic groups comprising 3%, 6%, 2%, and 3%, respectively.

Table 1. Sample demographic statistics

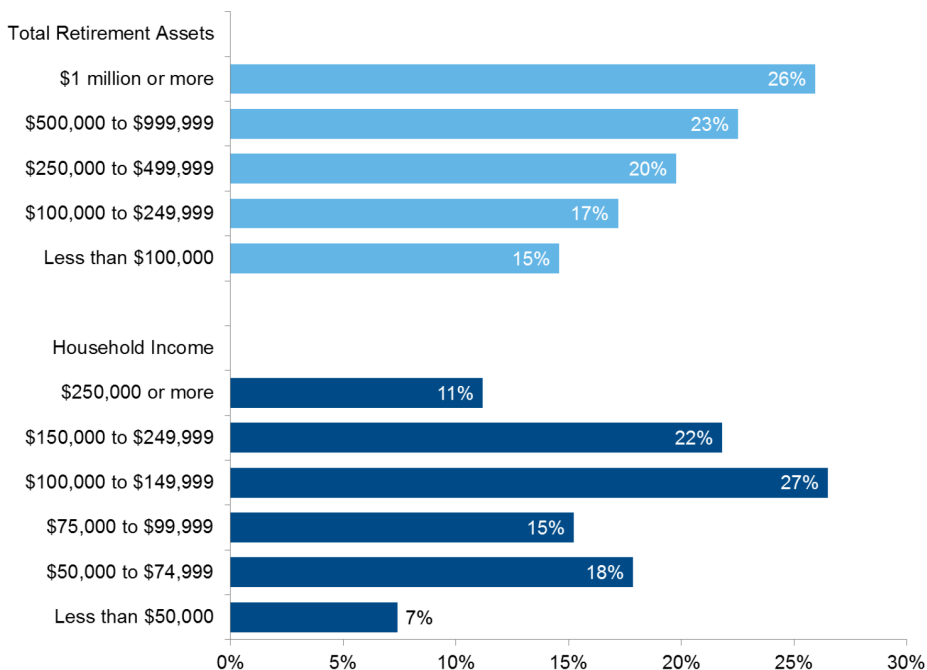
	Mean	Median	Std. Dev.	Obs
Age	60.78	60.17	6.53	2,532
Female	58%	-	-	2,532
Married/Living with a partner	71%	-	-	2,515
Divorced	14%	-	-	2,515
Never married	7%	-	-	2,515
Widowed	4%	-	-	2,515
White/Caucasian	83%	-	-	2,514
Asian	3%	-	-	2,514
Black/African-American	6%	-	-	2,514
Hispanic/Latino	2%	-	-	2,514
Other race/ethnicity	3%	-	-	2,514

Source: author calculations

Chart 1 provides information on the distributions on self-reported household income and retirement wealth. Given the age restrictions on our sample, it is not surprising to see that the median respondent tends to have higher average income and retirement assets compared to national statistics. Median household retirement assets fall in the range of \$250,000 to \$499,000.

However, we note that 49% of survey participants report assets of over \$500,000, with slightly more than one-quarter reporting assets in excess of \$1 million. Median household income falls in the \$100,000 to \$149,999 range. About one-third of respondents have higher household income, and about 40% report lower household income relative to the median.

Chart 1. Self-reported household retirement assets and income



n = 2,140 for assets, n = 2,297 for income.

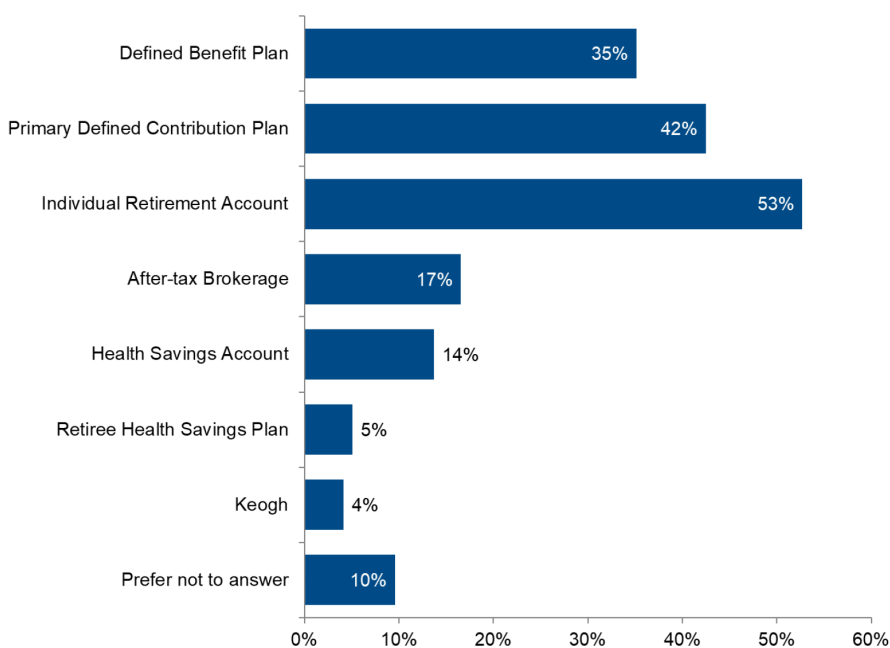
Retirement benefit plan coverages and participation

Workers are covered by a variety of retirement benefit plans. The most common benefit tends to be one that generates retirement income, either in the form of an employer-sponsored defined benefit (DB) or defined contribution (DC) plan. But households also have access to a variety of other retirement income programs, including individual retirement accounts (IRA), after-tax brokerage accounts, employer-sponsored retiree health savings plans (RHSP), or a health savings account (HSA). While some employer-sponsored programs have mandatory participation, many others are voluntary and require a person to opt-in to the program. For example,

a worker must have a high deductible health insurance plan in order to contribute to the HSA but is not required to have this type of insurance to take a distribution from the account. By comparison, a worker does not need to have health insurance at all to contribute to an RHSP. And both of these programs can be used to save specifically for retiree health care costs.

Chart 2 shows that about 42% of our respondents participated in a Primary DC plan and about 35% were covered by a DB plan. Around 53% reported having an IRA, and about 1 in 6 have an after-tax brokerage account. With respect to health specific retirement accounts, 14% have an HSA, but only about 1 in 20 have an RHSP.

Chart 2. Retirement program participation



n=2,440

Most participants in our sample participate in programs that generate multiple sources of retirement income. Table 2 provides additional information by looking at combinations of retirement income benefits. The main diagonal shows combinations where a participant has

only a single source of retirement income. For example, 9% of respondents have only a DB plan and 11% only a Primary DC plan. By comparison, 19% had a DB and an IRA, and nearly 1 in 4 had a Primary DC and an IRA.

Table 2. Retirement plan combinations

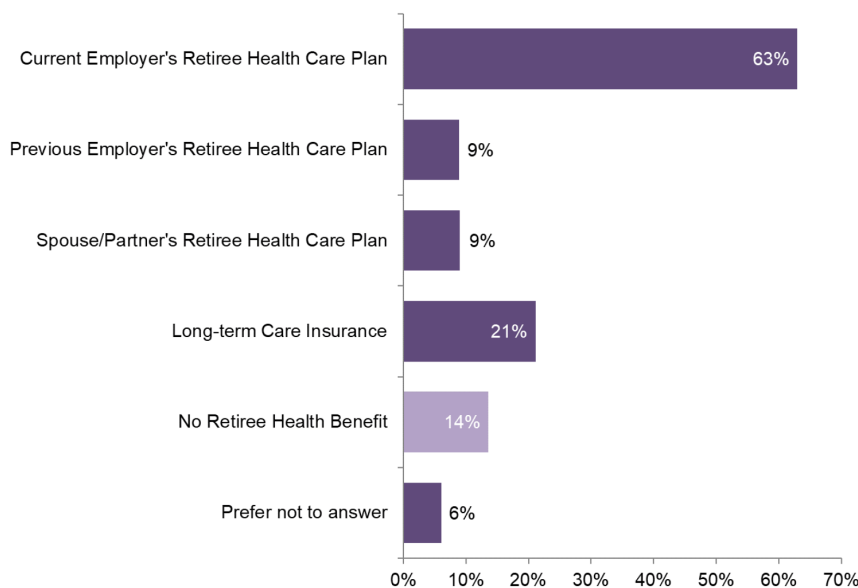
Retirement Plan Participation	DB	DC	IRA	RHSP	HSA	After Tax	Keogh
DB	9%						
Primary DC	10%	11%					
IRA	19%	23%	10%				
RHSP	1%	2%	3%	1%			
HSA	5%	7%	9%	1%	< 1%		
After-tax Brokerage	6%	8%	13%	1%	4%	< 1%	
Keogh	2%	2%	3%	0%	1%	1%	< 1%

n = 2,440

Compared to most sectors of the economy, workers in the higher education sector are substantially more likely to have an employer-provided retiree health benefit (Kaiser Family Foundation, 2017; Clark, 2015). Chart 3 shows that only 14% of respondents reported having no

retiree health benefit, and about 63% stated they are covered by their current employer's retiree health care plan. Around 18% reported they were covered by another employer's program, either through a previous employer or spouse.

Chart 3. Retiree health insurance benefit coverage



n = 1,904

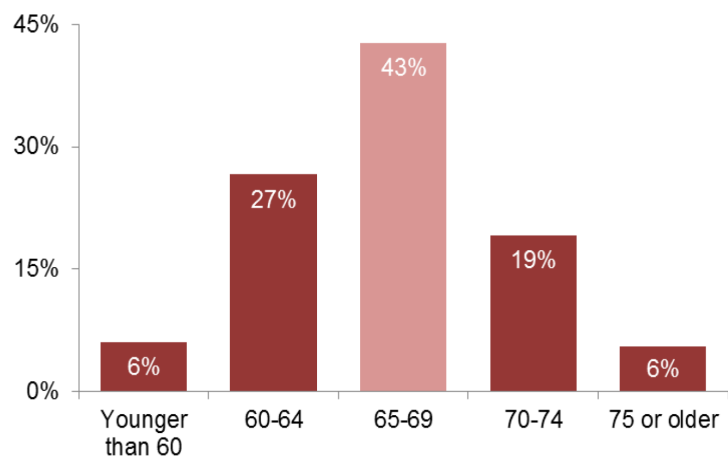
Potential impact of three individual factors on retirement health care costs

An estimate of retiree health care costs depends, in part, on three critical factors for each individual: actual retirement age, retirement health status, and life expectancy. Combined, these three factors provide the basis for a good estimate of average cost per year in retirement. We asked respondents whether they had a target retirement age and, if so, then what was that age. About 99% (2,496) of survey participants responded to this question, with 63% indicating that they had a target retirement age and 22% saying they might have a

target age. Another 3% responded they never intended to retire and 11% said they had never thought about it or preferred not to answer.

Chart 4 shows the distribution of target retirement ages for those who said “yes” or “maybe” when asked if they had a target. The median and mean target retirement age is about 66. The mode target age was 65 (16%), which coincides with Medicare eligibility. There were also clusters of reported target ages at the Social Security early retirement benefit age of 62 (12%) and maximum retirement benefit age of 70 (12%).

Chart 4. Target retirement ages



n = 2,020

Around two-thirds of respondents plan to retire no later than the Social Security full retirement age. This is a substantially higher percentage compared to recent surveys of tenured faculty (Yakoboski, 2015), but not surprising as our sample includes both faculty and staff. While 25% of respondents expect to work until at least age 70, research also suggests they are likely to retire before their target retirement age. The most recent Employee Benefit Research Institute (EBRI) Retirement Confidence Survey reported that approximately one-third of workers expect to retire at age 70 or older, but over 90% of retirees reported retiring before age 70 (EBRI,

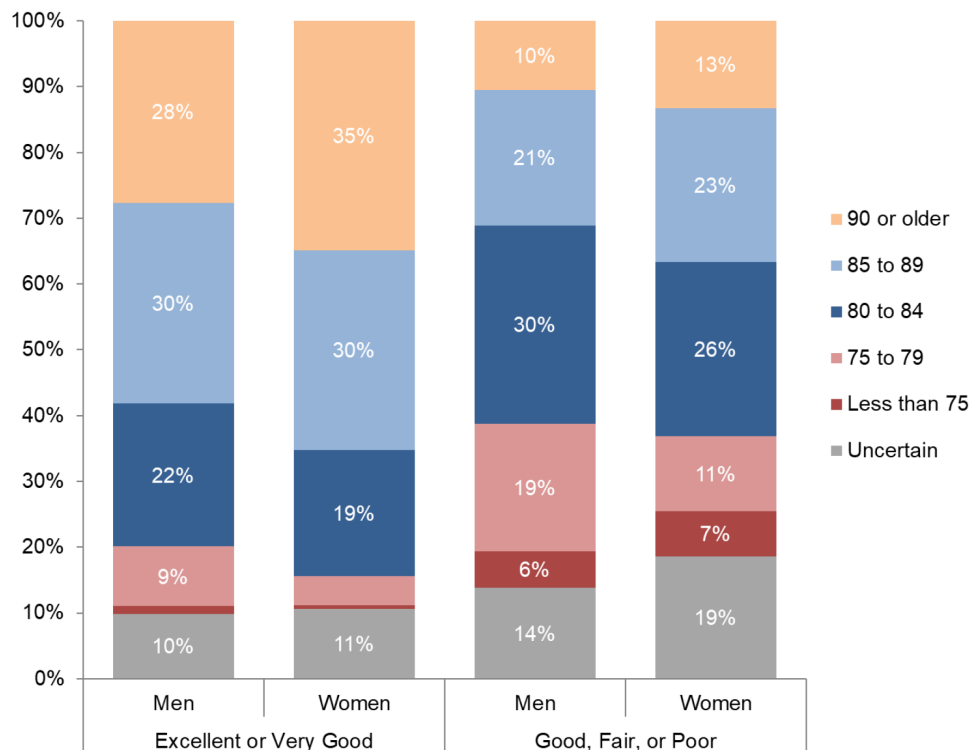
2019). This type of overestimation of retirement age can result in under-saving for retirement health costs, putting retirees at risk for outliving resources.

Chart 5 provides statistics on life expectancy by gender and self-reported current health status. For both men and women, those indicating “Very Good” or “Excellent” health tend to expect to live significantly longer compared to those reporting “Good,” “Fair,” or “Poor” health. About 62% of those reporting Very Good or Excellent health expect to live beyond 85, with about 32% expecting to live beyond 90. These self-estimates are consistent with

actuarial life tables. For example, the age 65 remaining life expectancies for all men and women were 17.81 and 20.36 years, respectively, in 2015.² And research by Chetty, et al. (2016) indicates that individuals in

households with higher-than-average income can expect to live relatively longer.

Chart 5. Life expectancy and self-reported health status



n = 1,485 for Excellent or Very Good health; n = 926 for those indicating Good, Fair, or Poor health.

Expectations and concerns over financing retirement health care

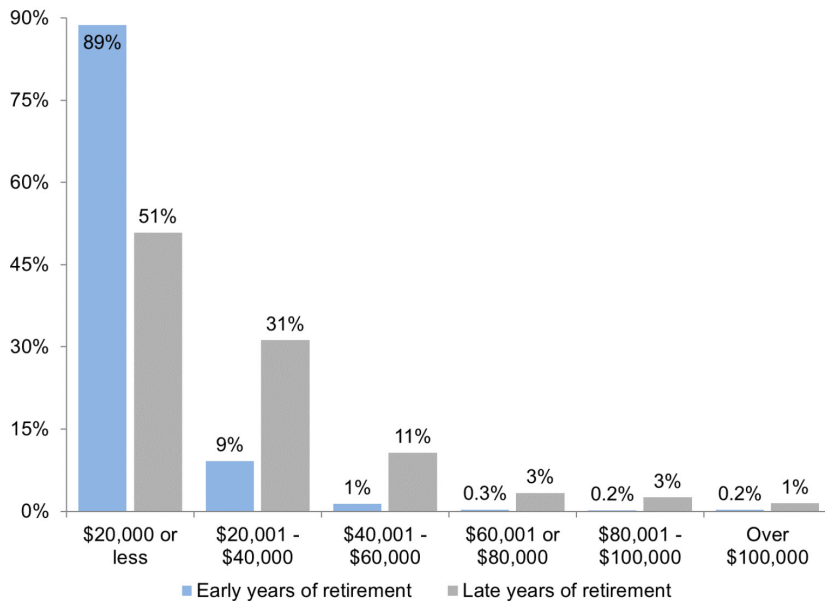
A good financial plan should include consideration of paying for retiree health care costs. We asked individuals about their expected health expenditures in retirement. Chart 6 shows that almost nine in ten individuals (89%) expect early retirement out-of-pocket health expenditures to be under \$20,000 per year. This proportion falls significantly when we ask about health costs in later years of retirement, with only 51% of individuals

expecting health expenditures of less than \$20,000, and about 18% expecting to pay at least \$40,000 per year. The modal response is consistent with recent estimates from EBRI (Fronstin and VanDerhei, 2019). They estimate that a 65-year-old Medicare beneficiary couple with median prescription drug expenses would need between \$183,000 and \$301,000 in assets to have between a 50% to 90% chance of covering their expected health care expenses in retirement.³

² Social Security life tables, 2015 <https://www.ssa.gov/oact/STATS/table4c6.html> (accessed November 19, 2019).

³ This amount increases to \$303,000 for a couple with a 90% chance of covering health care expenses in retirement with prescription drug expenses in the 75th percentile.

Chart 6. Annual expected out-of-pocket health care expenses



n = 1,635 for early years; n = 1,318 for later years

We asked people if they were concerned about having enough savings to pay for out-of-pocket retirement health care costs, and 63% of individuals responded they were concerned or very concerned. We analyzed their responses conditional on whether they had reviewed their retiree health care coverage. Concern from individuals who had reviewed their retiree health plan was 48%, significantly less than the 68% who said they had neither reviewed their retiree health coverage nor had thought about it.

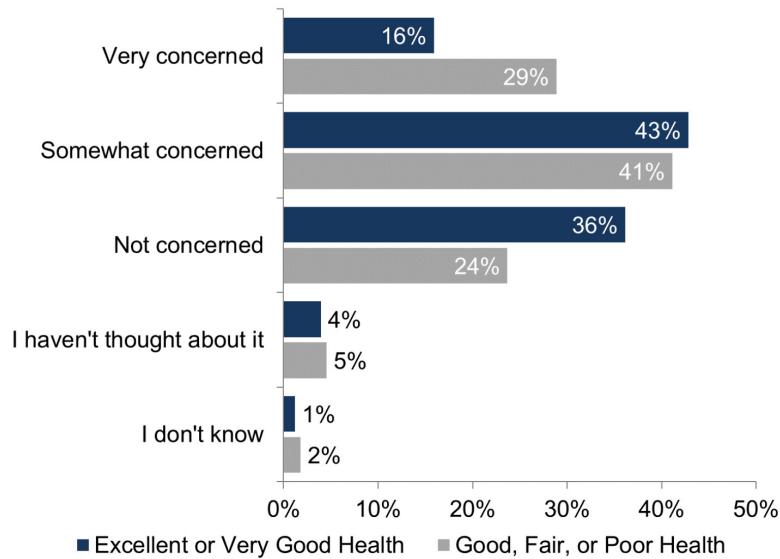
Chart 7 shows retiree health care cost concerns over different time horizons, conditional on current self-reported health status. We posed questions over three periods: early retirement, later retirement, and end-of-life. As before, we delineate those who indicated “Excellent” or “Very Good” health into one group, and those indicating “Good,” “Fair,” or “Poor” health into another

group. Of the latter group, 70% indicated they were either very or somewhat concerned about being able to pay health care costs early in retirement. More than four in five (83%) admitted to being concerned with having enough savings to pay late retirement health costs, and a slightly lower proportion (77%) expressed concern over running out of resources due to chronic or end-of-life health care costs.

Survey respondents reporting excellent or very good health status were less likely to be concerned with having adequate resources throughout retirement. This is particularly true in early retirement, with only 16% being very concerned and 36% having no concerns. While the proportion with concerns rises for later retirement, those reporting better health were significantly less concerned about running out of resources due to chronic or end-of-life health care costs.

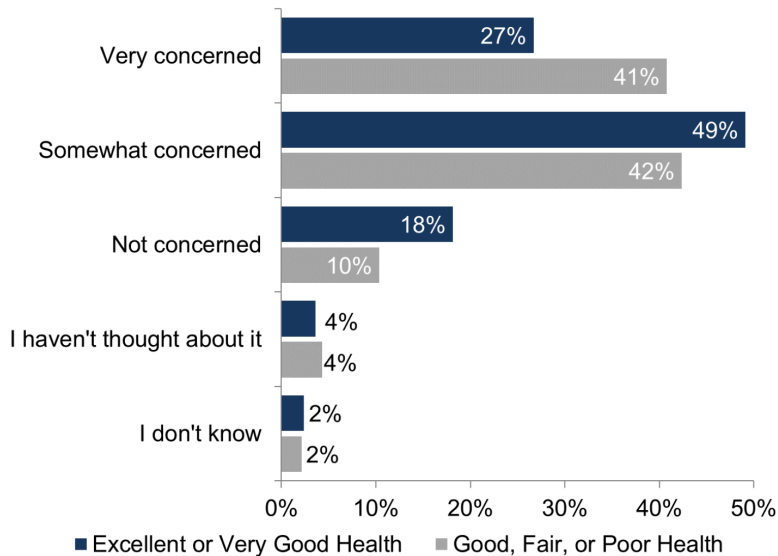
Chart 7. Concern about retiree health costs by self-reported health status

Panel A. In early years of retirement



n = 2,443

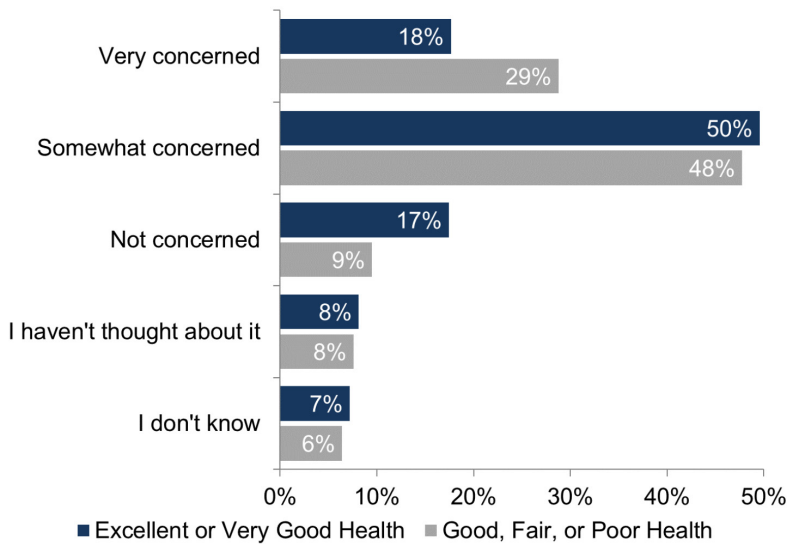
Panel B. In later years of retirement



n = 2,444

Chart 7. Concern about retiree health costs by self-reported health status (continued)

Panel C. Because of chronic or end-of-life retiree health costs

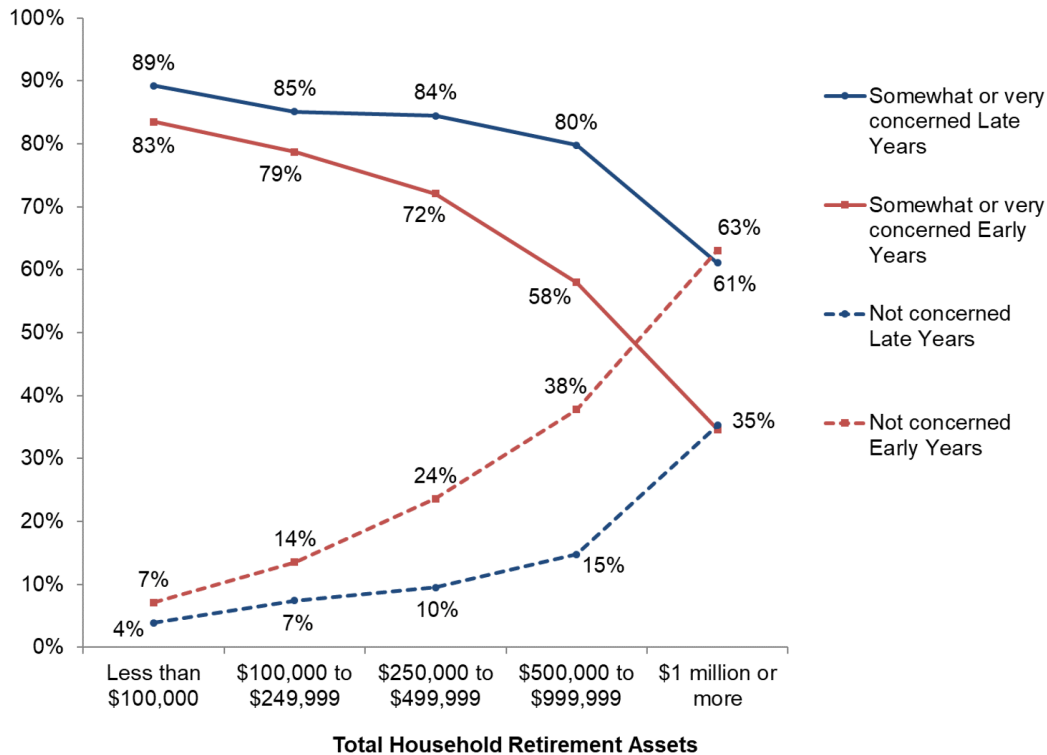


n = 2,427

Those in very good or excellent health might expect lower health care costs in retirement due to expecting their current health status to last through retirement. But these workers could also expect to have more assets to pay for retirement health care due to lower spending on current health care. To gain insight into potential wealth effects, we examined concern by self-reported household wealth levels. Chart 8 provides statistics on health care cost concerns, in early and later years of retirement, by total retirement household assets. As expected, those with fewer assets tend to be significantly more likely to have concerns about paying for retiree health care costs, both for early and later retirement years. Those in the lowest asset group (\$100,000 and below) were more than twice as likely to express concern about their ability to pay early retirement years' health costs compared to people in the highest asset group (\$1 million or more).

For most asset categories for both early and later years of retirement, the majority of individuals are either somewhat or very concerned about retiree health costs. Only in early years for households with assets of \$1 million or greater are less than half (35%) concerned. Even among those households with at least \$1 million in assets, only 35% were *not* concerned about out-of-pocket health expenses in later years of retirement. These high levels of concerns across wealth levels could be due to uncertainty over a number of factors, including future health care benefits, future health status, remaining life expectancy, or the growth of health care costs.

Chart 8. Concern over ability to pay



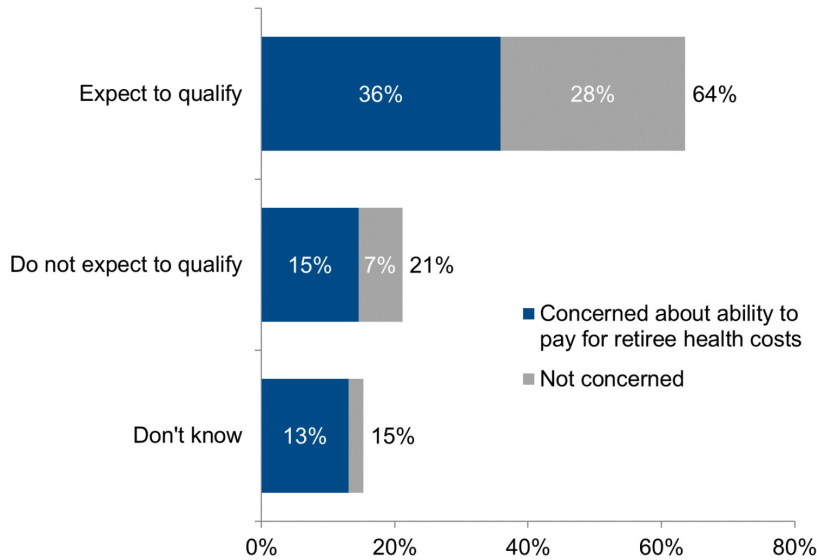
n = 2,118 for early years; n = 2,119 for later years.

Qualifying for and reviewing retiree health benefits

The long-term national trend has been a steady decline in the proportion of firms offering employer-based retiree health benefits. Recent surveys by the Kaiser Family Foundation (2017) found that only about 25% of firms with more than 200 employees offered a retiree health benefit. Given the high level of concern regarding retiree health care costs, we asked survey respondents if they expected to receive an employment-based retiree health benefit and, if yes, had they reviewed the structure of the

benefit. Chart 9 shows that 64% of individuals surveyed expect to qualify for employer-based retiree health coverage. Only one in five respondents said they do not expect to qualify, with 15% reporting they did not know if they qualified for a retiree health benefit. About half (56%) of individuals expecting to qualify were concerned about paying for retiree health costs overall, significantly less than compared to those not expecting to qualify (69% are concerned) or individuals who do not know (85% are concerned).

Chart 9. Qualifying for retiree health benefits and concern about retiree health costs

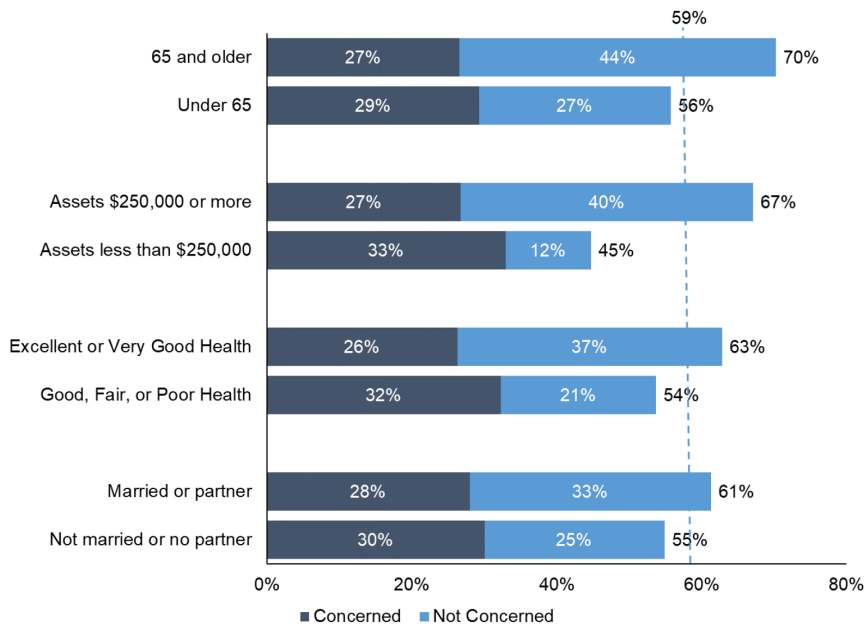


n = 1,964

We next asked those respondents expecting to qualify for employer-based retiree health benefits if they had reviewed these benefits. Given that people in our sample are nearing retirement age, we expect them to have a strong incentive to review the structure of their retiree health care coverage, regardless of whether the coverage is through their current employer, a previous employer, or a spouse/partner’s employer. Chart 10 shows the proportion of individuals who have reviewed their retiree health coverage, conditional on several characteristics. Overall, 59% of respondents indicated they had reviewed their retiree health benefit coverage.

Around 70% of individuals age 65 and older had reviewed their coverage and were significantly more likely to have done so compared to those under age 65. And this group was significantly less likely to show concern over retiree health care costs, with 62% of those 65 and older having reviewed coverage not concerned compared to 48% of those under age 65. Likewise, those in better health, with more assets, or living with a spouse/partner were significantly more likely to have reviewed their coverage compared to other groups. These groups were also relatively less likely to have concern over retiree health care costs.

Chart 10. Concern and review retiree health benefit coverage

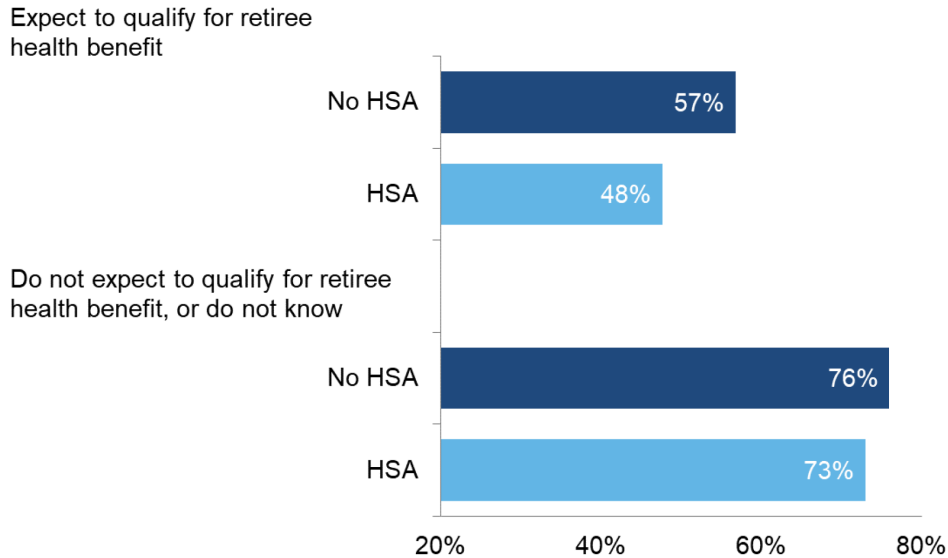


n = 1,231 for health status; n = 1,233 for marital status; n = 1,091 for assets; n = 1,236 for age and overall.

Our survey evidence shows that those with better understanding of their future benefits have less concern about future costs. Another question is whether workers in a current high deductible health plan, which incentivizes price sensitivity, have less concern. Chart 11 shows the percentage of individuals concerned depending if they expect to qualify for an employment-based retiree health benefit and if they have a Health Savings Account (HSA) (which requires a high deductible health plan). We find concern over retiree health costs varies by HSA participation and employment-

based retiree health benefit. Regardless of whether an individual has a retiree health care plan or not, a smaller percentage of individuals with an HSA report concern about retiree health costs, and this is significantly smaller for individuals expecting a retiree health benefit—a decrease of nearly 10 percentage points. Having an HSA may nudge individuals to be more astute consumers of, and savers for, health care—thus decreasing overall concern for retiree health costs.

Chart 11. Concern by expected retiree health benefit and HSA account



n=274 for an HSA; n=1,636 for No HSA.

Paying for retiree health care expenses

Most survey respondents report concern over paying for retirement health care costs, regardless of whether they are covered by a retiree health benefit. Given this high level of concern, we would expect many respondents to save specifically for expected retirement health care costs and to have a plan for what sources of income to use in covering their health expenses. Saving specifically for or designating specific income sources to cover retiree health care expenses can be viewed as forms of mental accounting and may induce individuals to better save for retiree health care needs and incorporate these expenses into their financial planning.⁴

We asked individuals if they save specifically to cover expected retiree health care expenses. Overall, only 17% of respondents said they save specifically to cover expected retiree health costs. We find saving behavior is related to concern over health costs in retirement, with

53% of savers having indicated concern, significantly less than among non-savers (65%). Engaging in specific savings aimed at financing retiree health costs may reduce concern of near retirees.

Chart 12 provides overall responses by certain characteristics. Men were significantly more likely to save specifically compared to women. By similar proportions, older workers were more likely to save specifically for retiree health care compared to younger workers. Almost twice as many individuals in households with total retirement assets of \$250,000 or more save than those with assets under \$250,000. However, even among the higher asset group, more than four in five individuals did not save specifically for retiree health costs. While we find differences in the same direction for income, they are smaller and only marginally significant. Interestingly, those most likely to save specifically were those individuals who had reviewed their retiree health coverage, with about one in four saving for retirement

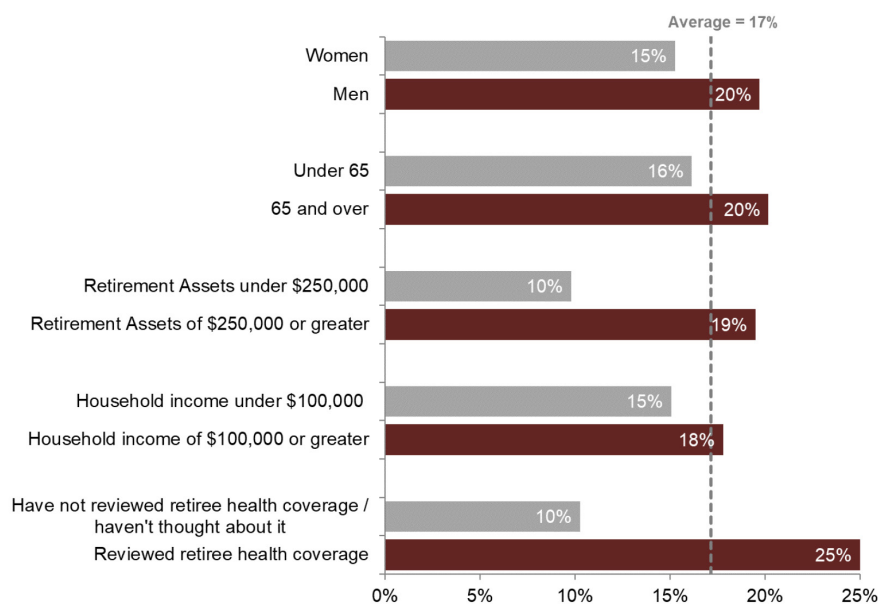
⁴ For a discussion on mental accounting and how saving for retirement cost separately can increase savings, see Thaler (1990).

health care expenses. Finally, our analysis indicates the likelihood of saving did not vary significantly by current health status or marital status.

In general, the proportion of those who save specifically for health care expenses in retirement is low. These results are not surprising because many households calculate the amount of income needed in retirement

based on simple heuristics, such as percentage of pre-retirement income. Thereby, retiree health costs (or other costs) are not likely to be specifically considered. And out-of-pocket retiree health costs can vary substantially across households depending on the age of retirement, health status, Medicare eligibility, and employment-based retiree health coverage, among other factors.

Chart 12. Saving for health care expenses in retirement



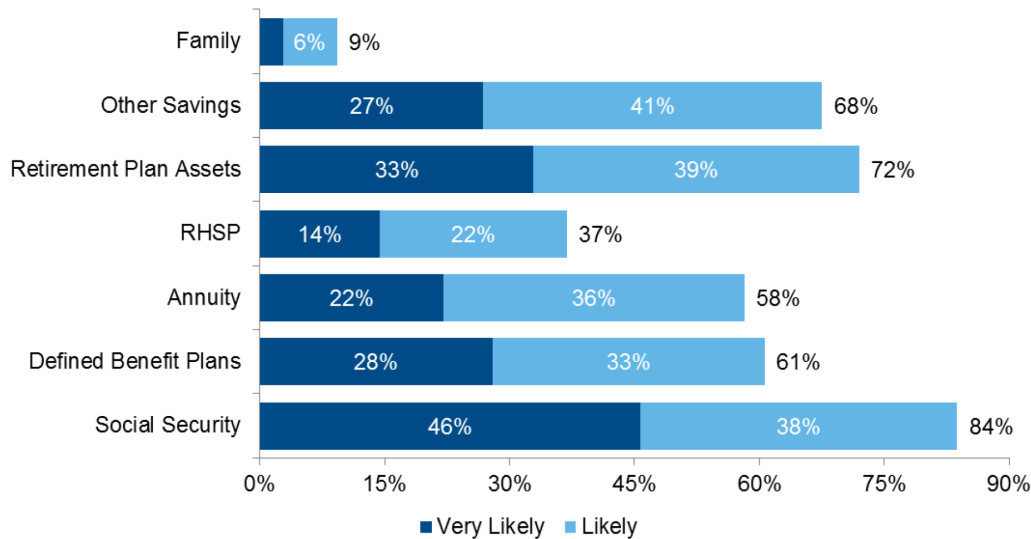
n = 2,388 for gender, age, and overall; n = 1,484 for reviewing health coverage, n=2,177 for assets, n=2,208 for income.

A main goal of this research is to understand how households expect to pay for their retiree health care costs. We asked respondents how likely they were to rely on the following resources: Social Security payments, Defined Benefit Plan income, Annuity income, Retiree Health Savings Plan (RHSP), Retirement Plan Assets, Other Savings, and Family members. The first three resources are forms of guaranteed income that provide high certainty of ability to pay. The next three are retirement asset sources that can be cashed out to pay for expenses, but with the caveat that these funds are generally subject to asset market risk.

Chart 13 shows the percentage of individuals answering “Likely” or “Very Likely” to use each resource. Social

Security was the most selected source of payment, both by those responding very likely (46%) and overall (84%). Retirement Plan Assets and Other Savings, resources which may contain market risk, were the next two most likely sources of income. But most individuals also responded that they were likely to rely on annuities or defined benefit plan income, both sources of guaranteed income, when paying for retiree health care. About 37% of respondents said they were likely to use an RHSP. This lower proportion is not surprising because this type of program is relatively new and there is not widespread coverage. Fewer than one in ten expected to rely on family members to help cover retiree health care costs.

Chart 13. Likelihood of using various resources for retiree health care costs



n = 2,434 for Social Security; n = 1,862 for DB Plan; n = 1,756 for Annuity; n = 1,530 for RHSP; n = 1,931 for Plan Assets; n = 1,807 for Other Savings; n = 1,367 for Family.

While most respondents indicate a strong reliance on guaranteed sources of income to pay for retiree health expenses, most said they also plan to use resources (e.g., retirement plan assets) that may be subject to asset market volatility. Given that health care is a necessity, a strong financial plan should use, to the extent possible, low-risk (guaranteed) income resources when paying for retiree health care costs. Households with low levels of retirement income and assets should be most likely to rely on guaranteed income, in particular Social Security. Households with greater wealth, however, may feel they are more capable of handling short-term market volatility and have greater ability to bear health care consumption risks.

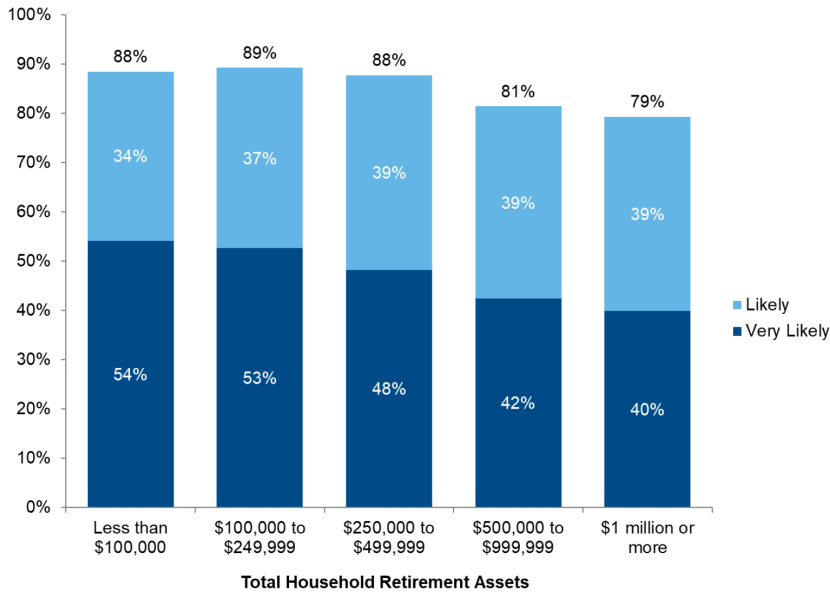
Chart 14, Panels A, B, and C, show the likelihood of using guaranteed income resources by household assets. Panel A shows expected reliance on Social Security. While all asset groups have a high likelihood of using Social Security, smaller-asset groups signaled the strongest likelihood to use this resource when paying for retiree health care costs. This may be a lifetime income effect—near retirees who have relatively low lifetime income tend to have few assets and may have limited resources beyond Social Security. By contrast, high

lifetime income households tend to have greater wealth and are less reliant on Social Security.

Panels B and C provide information on the likelihood to use income from an annuity and a defined benefit plan, respectively, to pay for retiree health care. Beginning with Panel B, with the exception of the smallest asset group, over 50% of respondents said they were likely to rely on annuity income to pay for retiree health care costs. As with reliance on Social Security, these relative response rates may be due to those with higher assets having higher lifetime income, and being less reliant on Social Security due to the progressive nature of benefit payments. If households tend to be risk averse and health care is viewed as a necessity, then it makes sense for higher income households to rely on other sources of guaranteed income when paying for retiree health care costs. In Panel C, we find reliance on a DB plan income decreases with total household assets, especially in households with at least \$500,000 in assets. This may be due to a tendency for workers covered by a DB plan to have lower DC retirement assets due to the structure of their employer-sponsored retirement program.

Chart 14. Reliance on guaranteed income sources to pay for retiree health care

Panel A: Social Security



Panel B: Annuity

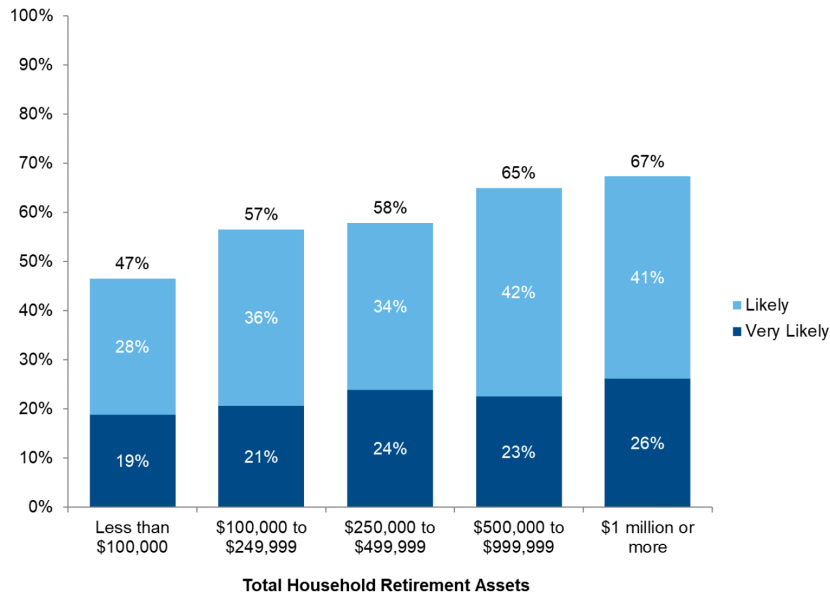
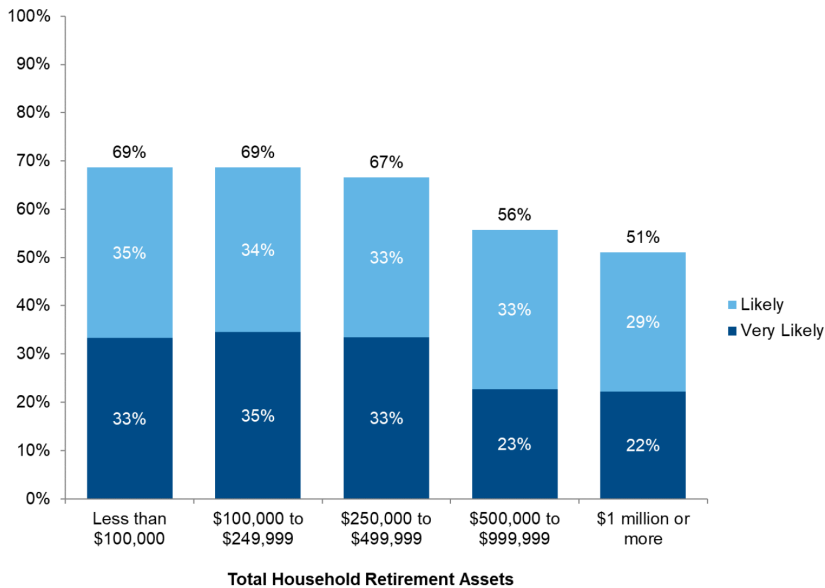


Chart 14. Reliance on guaranteed income sources to pay for retiree health care (continued)

Panel C. Defined Benefit



n = 2,078 for Social Security; n=1,580 for DB plan; n = 1,497 for Annuity

Concluding thoughts

A major concern of older workers is the expected cost of health care in retirement. This paper presented qualitative results from a survey examining the concern for ability to pay for retiree health care and plans on how to cover those expenses. Our results show that a high proportion of individuals, across all levels of household assets, have substantial concern about their ability to pay for out-of-pocket health costs in retirement, especially in later years of retirement. This increases substantially for those individuals who indicate that their current health status was only “good” or worse, had lower asset levels, or had not reviewed their retiree

health benefit. We find limited variation in the way individuals plan to pay for these future out-of-pocket health costs, with a high percentage of individuals expecting to rely on Social Security as a source of payment. A result of concern is that only slightly more than half of respondents had reviewed their retiree health benefit coverage. We contend that programming that provides workers with a better understanding of promised retiree health benefits would help households develop stronger strategies for improving and ensuring their financial well-being throughout retirement. Employer-based solutions, education, and programming are critical in this effort because many individuals still obtain their retiree health benefits from employers.

References

- Chetty, R., Stepner, M., Abraham, S., Lin, S., Scuderi, B., Turner, N., Bergeron, A., and Cutler, D. (2016). "The Association Between Income and Life Expectancy in the United States, 2001-2014." *Journal of the American Medical Association*, 315(16), 1750-1766.
- Clark, R. (2015). "Retiree Health Insurance and the Retirement Plans of College and University Faculty." *The Journal of Retirement*, 2(3), 55-66.
- Cubanski, J., Orgera, K., Damico, A., and Neuman, T. (2018). "The Financial Burden of Health Care Spending: Larger for Medicare Households than non-Medicare Households." The Henry J. Kaiser Family Foundation, *Data Note* (March 2018). <https://www.kff.org/medicare/issue-brief/the-financial-burden-of-health-care-spending-larger-for-medicare-households-than-for-non-medicare-households/> (accessed June 5, 2018).
- EBRI (2019), Retirement Confidence Survey, "2019 RCS Fact Sheet #2: Expectations About Retirement." Employee Benefit Research Institute, 2019. https://www.ebri.org/docs/default-source/rcs/2019-rcs/rcs_19-fs-2_expect.pdf (accessed November 13, 2019).
- Fronstin, P. and VanDerhei, J. (2019). "Savings Medicare Beneficiaries Need for Health Expenses in 2019: Some Couples Could Need as Much as \$363,000." *EBRI Issue Brief*, No. 481 (Employee Benefit Research Institute, May 2019).
- Kaiser Family Foundation (2017). "Employer Health Benefits: Annual Survey 2017." <https://www.kff.org/health-costs/report/2017-employer-health-benefits-survey/> (accessed June 5, 2018).
- Thaler, R. (1990). "Anomalies: Saving, Fungibility, and Mental Accounts." *Journal of Economic Perspectives*. 4(1), 193-205.
- Yakoboski, P. (2015). "Understanding the faculty retirement (non)decisions." TIAA-CREF Institute, *Trends and Issues*, June 2015.

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