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How unpacking health care expenses can empower retirement savers

From the Field

Key Insights

- Personal factors such as age, health conditions, and insurance coverage have large impacts on health care expenses.
- Although out-of-pocket costs can be extreme in some cases, particularly late in life, Medicare premiums are the largest health expense for most seniors.
- Saving and investing efficiently, choosing the right insurance coverage, and having a plan for long-term care needs are essential steps for retirement savers.

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How much money is needed for health care in retirement? It's a question regularly asked by retirement savers, one that is often clouded by lifetime cost estimates and understandable fears over the price tag of long-term care (LTC) services. However, while health care expenses can pose a significant risk to some individuals' finances, data show that they are manageable for most older Americans.

Our analysis of real-world data suggests that personal factors such as health conditions, insurance coverage, and risk tolerance should guide most individuals in planning for future health expenses—rather than a blanket, "scared straight" approach of increased saving. In this paper, we unpack health care expenses in old age and explore strategies to help retirement savers optimize their financial planning based on individual considerations.

Background and methodology

To help people create a successful retirement income strategy that balances the need for current spending and future health care expenses, it is essential to understand the expense risks associated with certain ages, health conditions, events (such as nursing home visits), and other factors.

To that end, this paper offers our analysis of the Health and Retirement Study (HRS), a longitudinal national survey of older Americans.[1] We use data from HRS "core" surveys—biennial surveys of panel members in the study—and "exit" surveys—

[1] Specifically, our analysis used HRS core data from 2020. We also used the RAND HRS data file, a user-friendly version of the HRS produced by the RAND Corporation.

interviews with knowledgeable survivors following the deaths of panel members.[2]

Our analysis of the data focuses on three key areas:

1. How the distribution of health care expenses varies by type of insurance coverage
2. The incidence of different medical conditions among older Americans and their impact on expenses
3. The distribution of health care expenses at the end of life, particularly related to LTC

We also offer our perspective on how retirees should prepare for these expenses.

A differentiated approach to cost reporting

Importantly, our analysis reports health care expenses on an annual basis rather than as a lifetime (postretirement) sum. Principally, we believe that lump-sum estimates of health care expenses covering the entire duration of retirement can be misleading and are not useful for financial planning. Any type of expense incurred over a 20- to 30-year period can look daunting when totaled, and health care expenses are not incurred or prepaid as lump sums. Individuals must make their health care decisions based on their financial resources at any given point in time.

Moreover, our analysis intentionally separates premiums and out-of-pocket expenses. The former category composes the largest portion of most seniors' annual health care expenses (as Figure 1 illustrates), is predictable, and can be planned for easily—a fact masked by combined lifetime cost estimates.

A closer look at annual expenses

Both premiums and out-of-pocket expenses are positively skewed, clustering near the low end of the distribution range but growing more dispersed at the upper end. In other words, while annual health care expenses are similar and largely contained for most seniors, they can rise sharply for some—particularly in the case of out-of-pocket expenses.

While the positive skewness of out-of-pocket expenses may be inherent to the data distribution, the same phenomenon for premiums is likely influenced by income. Both Medicare Part B and Part D premiums are subject to an income-related monthly adjustment amount, which could increase premiums significantly for higher-income individuals.

Selecting the right amount of insurance

Medicare coverage selections can have a marked impact on annual expenses. While the total annual costs for traditional Medicare with Part D and Medicare Advantage with prescription drug coverage (MA-PD) plans are similar, the addition of Medigap to traditional Medicare raises these costs by roughly $2,000 at the median (50th percentile), driven by higher premiums (Figure 1).

Individuals who purchase Medigap coverage typically do so to limit out-of-pocket expenses, and the data show some evidence of that outcome, particularly at the 95th percentile. However, a deeper look reveals that out-of-pocket expenses at the median and even the 90th percentile are similar across the insurance combinations in Figure 1. This could occur if (1) people who get Medigap coverage consume more health care, (2) they purchase Medigap coverage because they expect greater health care needs, or (3) a mix of both.

[2] HRS exit interviews are typically held with a surviving spouse or child and help generate an accurate estimate of the health care expenses incurred at the end of life.

Comparing annual expenses

(Fig. 1) Spending by Medicare coverage types, in U.S. dollars

	Traditional Medicare + Part D			Medicare Advantage with drug plan			Traditional Medicare + Part D + Medigap		
	Premium	OOP*	Total	Premium	OOP*	Total	Premium	OOP*	Total
Median	$3,100	$800	$4,300	$3,100	$800	$4,400	$5,100	$800	$6,400
90th percentile	$6,000	$4,000	$9,100	$5,800	$4,000	$8,800	$7,900	$3,900	$10,900
95th percentile	$7,400	$6,300	$11,200	$7,100	$6,400	$10,700	$9,200	$5,600	$13,100

Source: Author's calculations from the HRS, 2020.
* OOP is out-of-pocket expenses.
Note: All expenses are rounded to the nearest hundred and adjusted to 2024 dollars.

Quick checkup

To better understand the insurance-related aspects of this paper, it is helpful to have a basic understanding of the coverage options available under Medicare, the main insurer for Americans ages 65 and older. As shown in Figure 2, Medicare recipients can choose:

- Traditional Medicare (Parts A and B), with the option to add Part D and/or Medigap supplemental plans, or
- Part C, also known as Medicare Advantage, which provides comprehensive coverage

A portion of retirees have other supplemental coverage, such as Medicaid (for eligible low-income individuals and families), employer- or union-sponsored plans, or military plans (e.g., TRICARE or CHAMPVA). However, to keep the sample in our study broadly representative and to understand the maximum impact of various health conditions and events, we excluded individuals covered by these plans.

Considering quality, cost, and convenience, 87% of Medicare recipients report being satisfied with their health care.*

*Author's calculations from HRS, 2022.

The ABCs (and Ds) of Medicare coverage

(Fig. 2) Coverage options

Traditional Medicare

Part A
Covers inpatient services in hospitals and, for most people, does not have any additional premiums

Part B
Covers outpatient services and has a monthly premium that is subject to income

+ Medigap
Provides an optional supplement to traditional Medicare, reducing out-of-pocket expenses from copayments and coinsurance. Medigap plans are often combined with Medicare Part D coverage.

+ Part D
Provides optional, prescription drug coverage through private insurers and is changeable annually during open enrollment

or

Part C (Medicare Advantage)
Provides comprehensive coverage with additional benefits like dental and vision. These private plans generally include prescription drug coverage and may offer lower out-of-pocket costs with an annual maximum, though they often come with network restrictions and referral requirements

Previous research from Arapakis et al. (2023)[3] suggests the answer likely lies behind option 1. The authors report that, on average, Medigap buyers used an additional $2,300 of medical care, including what insurers paid to service providers but excluding premiums. They argue that this extra spending is consistent with moral hazard—i.e., Medigap buyers consume more health care because they face lower additional or out-of-pocket costs.

Key takeaway:
To avoid overspending or underspending on health care, individuals should carefully consider expenses related to each type of insurance, their anticipated health care needs, and health care network coverage before locking in any open enrollment selections.

[3] Arapakis, K., E. French, J.B. Jones, and J. McCauley (2023). "Insurance Purchases of Older Americans." Ann Arbor, MI. University of Michigan Retirement and Disability Research Center (MRDRC) Working Paper; MRDRC WP 2023-463. https://mrdrc.isr.umich.edu/publications/papers/pdf/wp463.pdf.

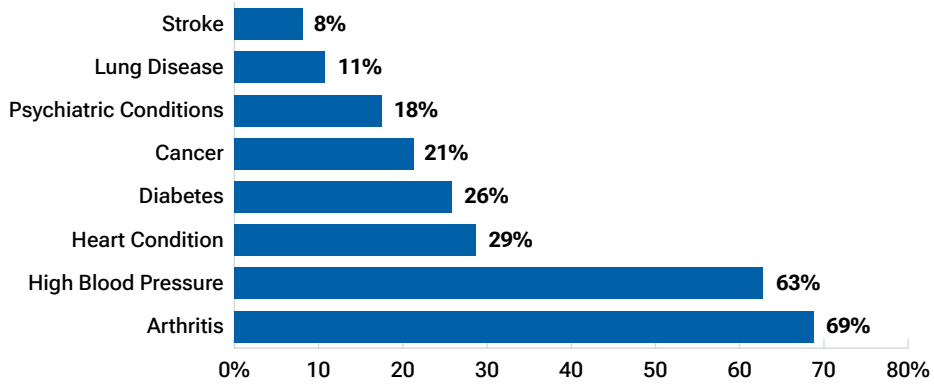
Analyzing health conditions

Next, we evaluate how common medical conditions impact out-of-pocket expenses.

Because many people suffer from overlapping conditions, we ran a multivariate regression analysis with additional controls for age, gender, race, education, and total assets. The results (in Figure 3b) show that almost all of the health conditions shown in Figure 3a have a statistically significant effect on out-of-pocket costs.

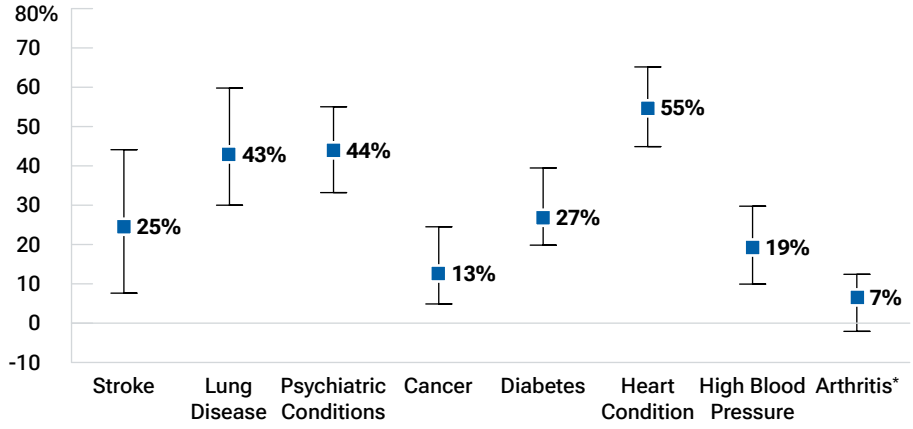
Incidence and financial impact

(Fig. 3a) Incidence of common medical conditions among Medicare recipients



Source: Author's calculations from the HRS, 2020.
Note: The incidence rates are calculated using the HRS core sample. If someone suffered from one of these conditions and passed away, then they are excluded from the sample.

(Fig. 3b) Marginal impact of medical conditions on annual out-of-pocket expenses



Source: Author's calculations from the HRS, 2020.
*Statistically insignificant at p=0.05
Note: For each condition, the chart highlights the median value within a wider range of the data set.

Heart conditions are associated with the largest increases in out-of-pocket spending, raising annual expenses by 55% on average. This is followed by psychiatric conditions, which include nervous conditions such as dementia, and lung disease. The marginal estimates show that annual out-of-pocket expenses could increase significantly for those who experience a new diagnosis.

> "Heart conditions are associated with the largest increases in out-of-pocket spending, raising annual expenses by 55% on average.

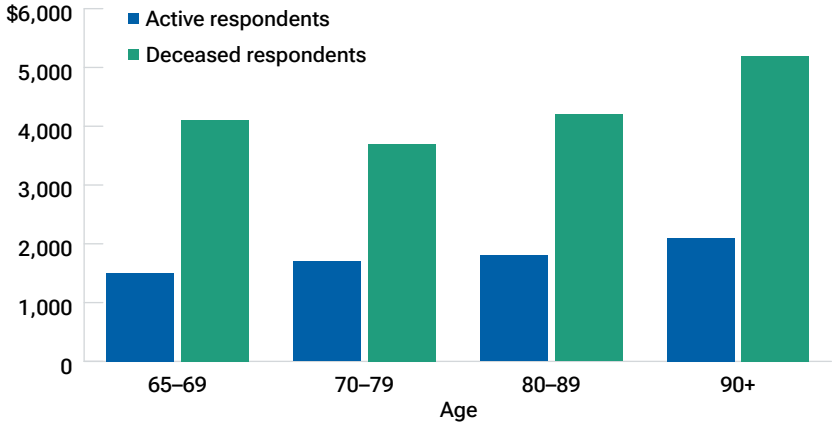
Can't sugarcoat late-life expense risk

Yet, in terms of out-of-pocket expenses, nursing home visits and other LTC services pose an even greater threat to some individuals. This risk is concentrated; while median nursing home expenses in the last year of life are $0, among individuals who pass away after age 90, 5% spend $116,000 or more, according to HRS data.

Moreover, out-of-pocket expenses increase significantly at the end of life. Figures 4a and 4b show the differences in annual out-of-pocket expenses between the HRS core (respondents who were alive) and exit (respondents who passed away) surveys for the same age groups.

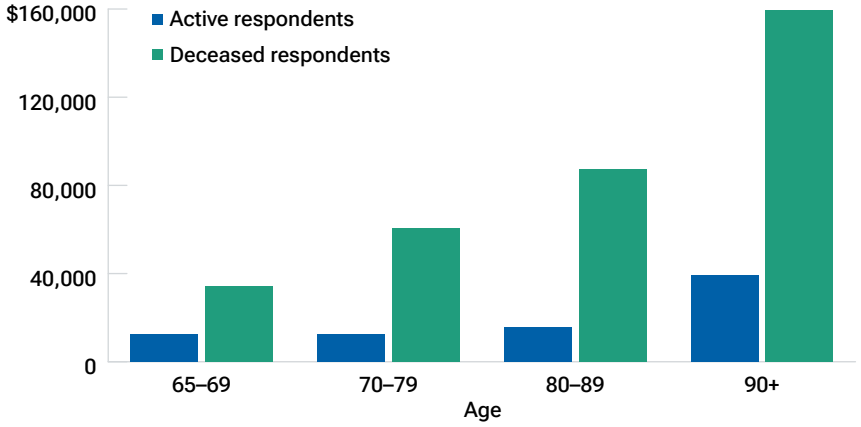
Expense gaps revealed in core and exit surveys

(Fig. 4a) Comparing median out-of-pocket expenses



Source: Author's calculations from the HRS, 2020 core and 2014–2020 exit surveys.
Note: All expenses are rounded to the nearest hundred and adjusted to 2024 dollars.

(Fig. 4b) Comparing 95th percentile of out-of-pocket expenses



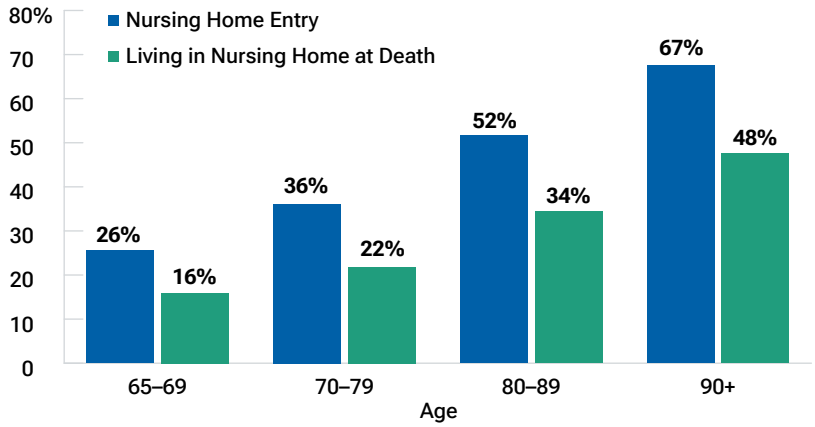
Source: Author's calculations from the HRS, 2020 core and 2014–2020 exit surveys.
Note: All expenses are rounded to the nearest hundred and adjusted to 2024 dollars.

What's driving late-life expense risk?

Nursing home and other LTC stays contribute significantly to the rise in out-of-pocket expenses at the end of life. Usually, Medicare only covers these stays up to 100 days in skilled nursing facilities, and the stays must follow qualifying hospitalization. According to LIMRA, an insurance marketing and research association, only 3%–4% of Americans age 50 or older pay for LTC insurance (LTCI) even though these stays can be very costly without coverage.[4] The rates vary by state and type of facility, but the national median for a full-year semiprivate room in 2025 exceeds $110,000.[5]

Nursing home and other LTC entries at the end of life

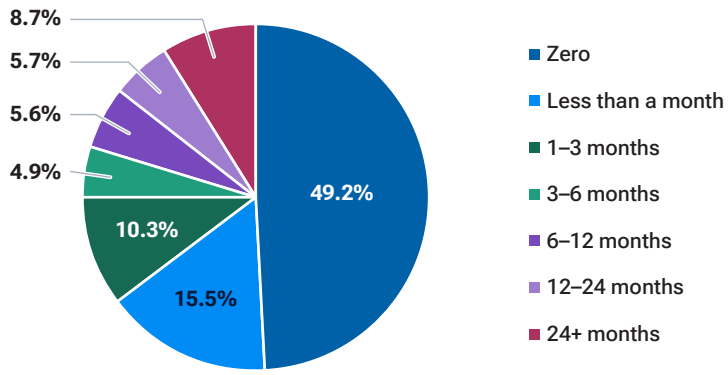
(Fig. 5) Percentages of outgoing HRS panel members by category and age group



Source: Author's calculations from the HRS 2014–2020 exit surveys.

Frequency of LTC stays

(Fig. 6) Stays of different lengths at the end of life



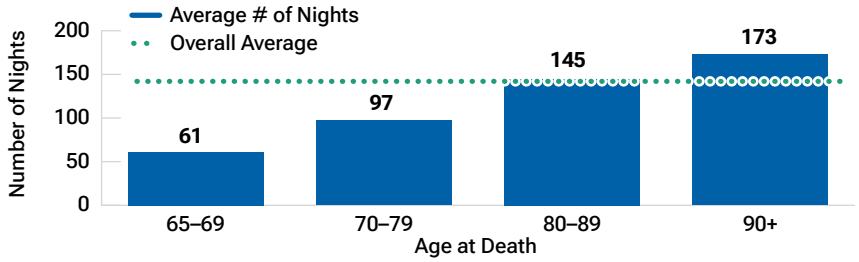
Source: Author's calculations from the HRS 2014–2020 exit surveys.

As one might expect, the odds of a nursing home or other LTC stay rise significantly with age. Two-thirds of those who passed away after age 90 had a nursing home entry in the last two years of life, and nearly half of individuals over 90 lived in such a facility at the time of their death (Figure 5). Because our sample excludes individuals covered by Medicaid, these percentages are likely higher for the overall population.

[4] Source: https://www.limra.com/en/newsroom/industry-trends/2024/limra-five-reasons-to-discuss-long-term-care-insurance-options-with-your-clients/
[5] Source: https://www.seniorliving.org/nursing-homes/costs/

Duration of LTC stays

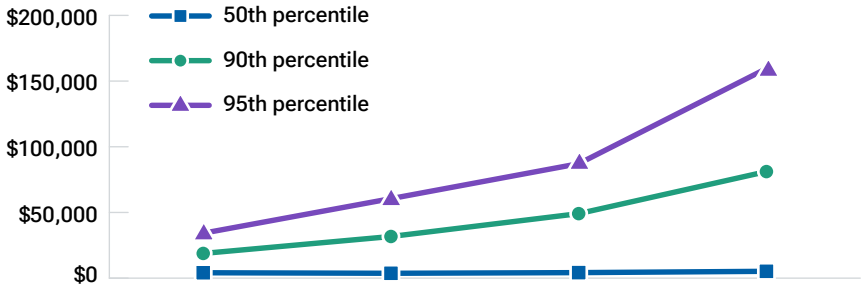
(Fig. 7) Average (conditional) length of LTC stays at the end of life



Source: Author's calculations from the HRS 2014–2020 exit surveys.
Note: The overall average was calculated using the entire exit sample; it does not represent the mean of the four category averages shown in the chart columns.

Out-of-pocket expenses can rise sharply with age

(Fig. 8) Distribution of annualized out-of-pocket expenses (in U.S. dollars) at the end of life, by age group

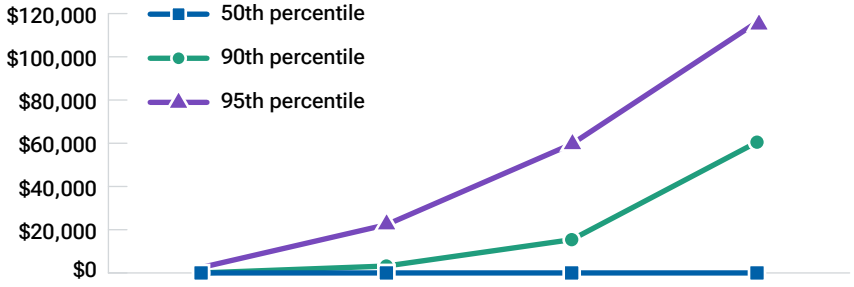


Age Groups	65–69	70–79	80–89	90+
50th percentile	$4,100	$3,700	$4,200	$5,200
90th percentile	$18,800	$31,700	$49,100	$81,100
95th percentile	$34,200	$60,500	$87,100	$159,500

Source: Author's calculations from the HRS 2014–2020 exit surveys.
Note: All expenses are rounded to the nearest hundred and adjusted to 2024 dollars.

LTC expenses can surge late in life

(Fig. 9) Distribution of nursing home/LTC expenses (in U.S. dollars) in the last year of life, by age group



Age Groups	65–69	70–79	80–89	90+
50th percentile	$0	$0	$0	$0
90th percentile	$0	$3,200	$15,400	$60,500
95th percentile	$2,500	$22,300	$59,600	$116,000

Source: Author's calculations from the HRS 2014–2020 exit surveys.
Note: All expenses are rounded to the nearest hundred and adjusted to 2024 dollars.

The eventual costs of LTC depend on how long people stay in these care facilities. Figure 6 shows that nearly half of the exit sample did not have any overnight stay, while 8.7% reported a stay that lasted more than two years. LTC stays at the end of life lasted 145 nights on average but lengthened for older age groups (Figure 7). People who passed away between ages 65 and 69 had an average stay of 61 nights, while those who passed away in their 90s had an average stay of 173 nights.

Expense differences late in life are notable at the medians but grow even more pronounced at the top end of the distribution. For example, among individuals ages 90 and older, the 95th percentiles for the core and exit samples are $39,300 and $159,500, respectively.

Key takeaway:
LTC expense risks can be significant but are highly concentrated. The length and, consequently, the price of these stays tend to rise with age, climbing sharply for individuals over 90.

Separate strategies for premiums and out-of-pocket costs

The uncertainty surrounding future health conditions and expenses can make planning challenging, but establishing separate saving strategies for premiums and out-of-pocket expenses is a good start. Since health insurance premiums are relatively stable and known in advance, they can be easily included in a budget or income plan.

Possible payment approach	Considerations
– Use monthly income source(s) to pay premiums	– Account earmarked for out-of-pocket expenses should be replenished periodically
– Use a dedicated savings account or other pool of assets to pay out-of-pocket expenses	– Individuals who are in poor health or are more risk averse may want to plan for a higher range of out-of-pocket expenses (e.g., 90th or 95th percentiles for their type of insurance)

Optimizing savings and liquidity

Health savings accounts (HSAs) are an excellent way to save for health care expenses in retirement. These accounts are triple-tax advantaged—that is, income is not taxed when contributed to an HSA, investments grow tax-deferred, and withdrawals are tax-free if the funds are used for qualified medical expenses[6].

- Tax-free HSA withdrawals can be used to pay Medicare premiums—but not Medigap premiums—and qualified out-of-pocket expenses.
- If an individual is currently saving for retirement and has access to an HSA, they can consider using it for long-term investment purposes.
- Individuals who are already retired and have some savings in an HSA should consider keeping a portion of their HSA balance in cash to pay for near-term qualified health care expenses.

Establishing LTC resources

Retirement savers who are concerned about LTC needs should consider LTCI if they don't want to self-insure. However, LTCI premiums are high, and there could be risks around the financial health of the insurer.

For people who don't have enough assets to protect, Medicaid might be preferrable over other ways of covering LTC risk.

Smarter planning through a risk-aware approach

Retirement savers may feel sticker shock when seeing the potential costs of health care in retirement. But the reality is that these expenses are a combination of regular, predictable costs that can be easily budgeted for and, for most people, a smaller component of variable expenses that can be managed through savings. By having a strong grasp of their personal health conditions, insurance options, and expense risks, individuals can confidently plan for their future health care needs.

What we're watching next

In the absence of more comprehensive LTCI coverage at the federal level, some states have started their own LTCI programs. For example, the state of Washington has developed a public, mandatory LTCI program called the WA Cares Fund, which is slated to begin providing benefit coverage in July 2026. The program is funded by payroll taxes and covers custodial LTC expenses up to a lifetime benefit cap of $36,500 (adjusted annually for inflation). As these programs become more established, we will need to analyze their impact and monitor whether more states adopt similar approaches.

[6] HSA annual contribution limits apply. HSAs can only be used in conjunction with an HSA-eligible health plan. State and/or local taxes might apply. Additional restrictions could apply.

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