

Strategic Healthcare Funding Via Health Savings Accounts: The Case for Bitcoin

Executive Summary

Healthcare costs continue to rise at an alarming rate, creating significant financial challenges for American retirees. Health Savings Accounts (HSAs) represent one of the most powerful tax-advantaged investment vehicles available, offering triple tax benefits that can substantially mitigate healthcare expenses. This white paper examines the evolution of HSAs, quantifies the growing burden of healthcare costs, and presents a compelling case for incorporating bitcoin as a strategic investment within HSA portfolios based on its strong properties of sound money.

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1. Evolution of Health Savings Accounts

Legislative Origins: Health Savings Accounts (HSAs) were created by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, taking effect on January 1, 2004. This enabled individuals with high-deductible health plans (HDHPs) to save pre-tax dollars for medical expenses. The rationale for creating HSAs stemmed from the desire to shift part of the burden and control of healthcare financing from government and employers to individuals, while offering strong tax incentives to encourage responsible saving and spending.

Over time, Congress has adjusted HSA rules to expand their use. By 2006-2008, annual contribution caps were increased and a \$1,000 “catch-up” contribution for those 55+ was added. The Affordable Care Act of 2010 preserved HSA tax benefits but tightened rules on over-the-counter item reimbursements. More recently, bipartisan momentum in Congress has



pushed for further expansion. The HSA Modernization Act of 2023 (H.R. 5687) would, if enacted, raise annual contribution limits to match HDHP out-of-pocket maximums and allow spouses to make combined catch-up contributions into one HSA³. (For example, in 2023 an HSA family contribution limit of \$7,750 would nearly double to \$15,000 under this proposal.³) These efforts signal recognition that HSAs can play a larger role in investment planning.

H.R.1 - One Big Beautiful Bill Act: The One Big Beautiful Bill Act, signed into law on July 4, 2025, includes provisions that expand the use and access to Health Savings Accounts (HSAs). Starting January 1, 2026, Bronze and Catastrophic plans offered on state insurance exchanges under the Affordable Care Act will be considered HSA-qualified, allowing approximately 7.2 million Americans currently covered under Bronze plans to contribute to an HSA. Additionally, HSA funds can be used tax-free to pay for periodic fees for direct primary care (DPC) arrangements with a monthly fee of \$150 (\$300 if covering multiple individuals), and DPC arrangements will not disqualify individuals from HSA eligibility. The bill also restores and makes permanent a safe harbor for pre-deductible telemedicine coverage, allowing HSA-qualified high-deductible health plans to offer this coverage without affecting HSA eligibility, effective retroactively to plan years beginning after December 31, 2024. These changes are a meaningful step forward for broader HSA access and characteristic of the historical trend for even greater benefits from these products.

Current HSA Landscape: Statutory limits are updated annually for inflation. For 2025, individuals can contribute up to \$4,300 (self-only coverage) or \$8,550 (family coverage) per year, with an extra \$1,000 catch-up allowed for those 55 or older⁴. To be HSA-eligible, a 2025 HDHP must have a deductible of at least \$1,650 (self) or \$3,300 (family), and annual out-of-pocket maximums cannot exceed \$8,300 (self) or \$16,600 (family)⁵. These limits have steadily grown, reflecting rising healthcare costs.

Employers have widely adopted HSAs: over half of U.S. employers now offer an HDHP/HSA option. By the end of 2024 there were 39 million HSA accounts (5% more than 2023) holding \$147 billion in assets (a 19% year-over-year increase)¹. A robust secondary market has also emerged with many HSA administrators now allowing investments in stocks, bonds, and other vehicles. Looking ahead, HSAs are on track for continued growth. Research firm Devenir projects the market will approach \$200 billion in assets by 2027 across over 45 million accounts⁶. As awareness spreads and account balances compound (especially those invested), HSAs are becoming not just spending accounts but significant *savings* vehicles. The HSA's triple-tax advantage: tax-deductible contributions, tax-free investment growth, and tax-free withdrawals for qualified expenses gives it a uniquely powerful wealth-building profile. After age 65,



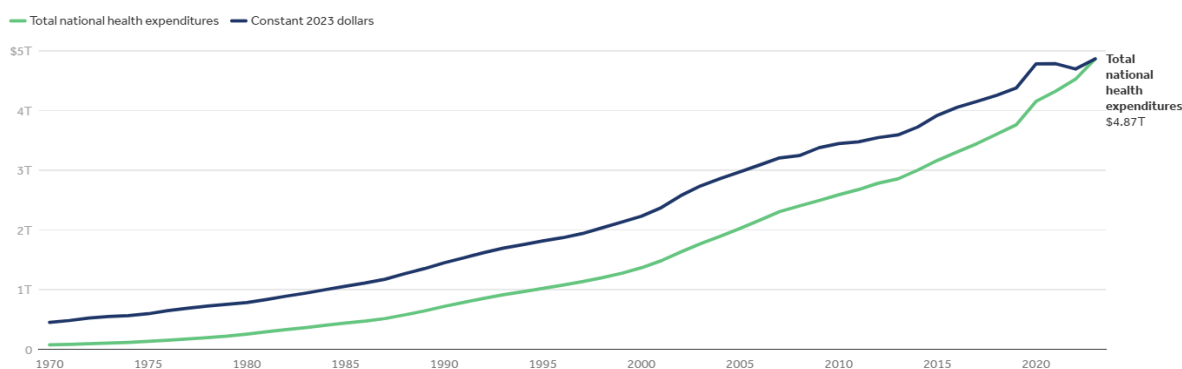
HSA funds can even be used for non-medical expenses (taxed as ordinary income, like a traditional IRA, but without any required minimum distributions). In short, HSAs have evolved from a niche consumer health product to a mainstream component for managing health care expenses and personal investment strategy.

2. The Rising Tide of Healthcare Costs

Healthcare costs represent one of the most unpredictable and significant financial burdens for Americans. National health expenditures (NHE) climbed 7.5% in 2023 to \$4.9 trillion, or \$14,570 per person, reaching 17.6% of U.S. GDP (7). This growth outpaced the overall economy and reflected a post-pandemic surge in use. Fidelity Investments estimates that a 65-year-old individual retired in 2024 will need about \$165,000 (after tax) to cover medical expenses in retirement (Medicare premiums, co-pays, etc.), nearly 5% more than the prior year's estimate (8). Moreover, this figure excludes long-term care. Long-term care can be financially ruinous on its own. According to the 2024 Genworth Cost of Care Survey, the national median cost for assisted living is \$70,800 per year, and a semi-private room in a nursing home averages \$111,325 per year (9). These costs have been rising at 7–10% annually, well above general inflation (9). An ill-timed need for long-term care can overwhelm even a well-funded 401(k).

Total health expenditures increased rapidly in 2023

Total national health expenditures, 1970-2023



Note: A constant dollar is an inflation adjusted value used to compare dollar values from one period to another.

Source: KFF analysis of National Health Expenditure (NHE) data • [Get the data](#) • [PNG](#)

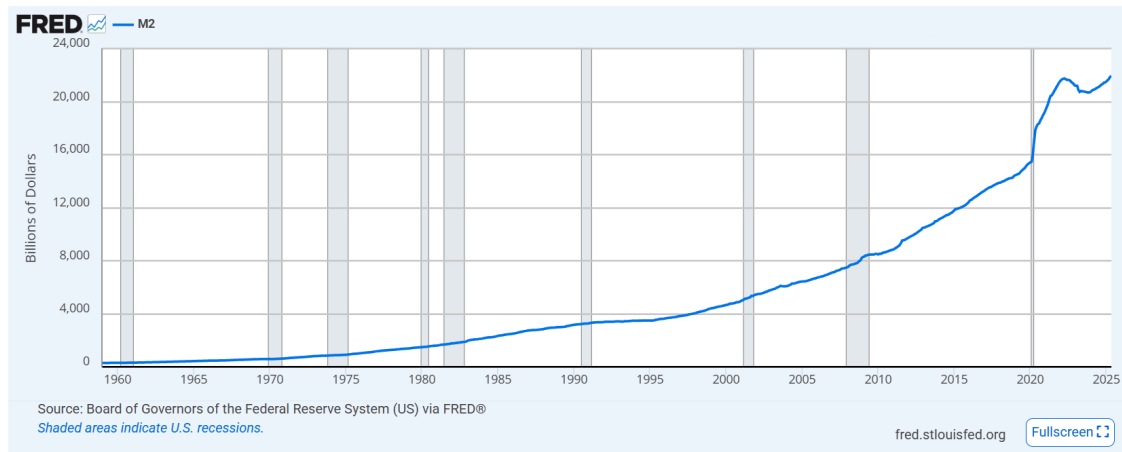
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Healthcare Inflation and Drivers: U.S. healthcare spending has consistently grown faster than GDP and general CPI for decades. In 2020, NHE jumped 9.7% in a single year (boosted by pandemic-related spending). Even as of 2023, health spending growth (7.5%) far exceeds core inflation. Several structural factors drive this relentless trend:

- **Administrative Overhead:** An estimated 15–30% of U.S. health expenditures are administrative costs (billing, insurance paperwork, etc.), far higher than in other countries¹⁰. The complex multi-payer system (Medicare, Medicaid, countless private insurers) leads to duplication and waste. For example, insurers on the ACA exchanges denied 19% of in-network claims in 2023 on average (ranging from 1% to 54% by insurer) (10). Each denial often triggers manual appeals and resubmissions, adding friction for providers and patients alike.
- **Insurance Profit Paradox:** The Affordable Care Act's medical loss ratio (MLR) rule caps insurers' profit margins at 15–20% of premiums. While intended to curb excess profit, this also means insurers can increase absolute profits by *riding* medical inflation rather than resisting it. For instance, a company that keeps a consistent 15% margin on premiums earns more dollars of profit when premiums (and underlying costs) rise. In effect, the industry's incentives do not align with cost containment, as payers and providers negotiate for prices to increase year after year to satisfy shareholders. Patients and employers ultimately bear the higher costs through premiums and out-of-pocket payments.
- **Monetary Expansion:** The broader economic environment has also fueled medical price growth. Since 2000, the U.S. money supply (M2) has exploded by roughly 350% (from about \$4.7 trillion to over \$22 trillion in 2025)¹¹. This rapid monetary expansion contributes to price inflation in many sectors, most evidently in healthcare, where true productivity gains have lagged. Abundant liquidity and low interest rates enabled consolidation in hospital markets and private equity investment in healthcare, often resulting in higher prices for services. Essentially, *when the dollar is debased, anything of real value (like medical care) becomes more expensive in dollar terms.*





The growth in the M2 money supply mirrors the growth in national healthcare expenditures.

The outcome of these dynamics is a system that places an ever-greater strain on consumers. The U.S. now spends more than double per capita what other high-income nations spend on health care, yet with worse average outcomes in metrics like life expectancy. U.S. life expectancy fell from 78.8 years in 2019 to 76.4 in 2021, ¹¹, a drop not fully recovered back up to 78.4 in 2023 ⁽¹⁶⁾, due in part to COVID-19 but also reflecting entrenched issues (e.g., chronic disease, social determinants).

The cost of medical care contributes to significant financial distress: about 530,000 Americans file for bankruptcy each year at least partly due to medical bills or illness-related work loss ¹². Meanwhile, more than 100 million people (41% of adults) are currently carrying medical debt of some kind¹³. Unpaid medical bills are the largest source of debt in collections on U.S. credit reports. For those on Medicare, coverage gaps are a serious concern. Medicare Parts A and B have no out-of-pocket maximum, potentially exposing beneficiaries to unlimited costs in a severe illness. Supplemental Medigap or Advantage plans help, but at the price of additional premiums and often narrower networks. Medicare also does not cover most dental, vision, hearing, or long-term care needs, leaving individuals to pay those entirely out-of-pocket or with separate insurance. This interplay of incomplete coverage and rising costs explains why Fidelity's \$165k estimate for retirement healthcare can actually be an underestimate for many households. Importantly, healthcare cost inflation is not just an abstract percentage, it compounds over a retirement period. A couple retiring at 65 today could see their medical expenses inflate 5–7% annually. Over 20 years, that could roughly triple their annual healthcare spending by age 85. This presents a moving target that retirees must plan for, and yet most do not. Traditional “safe” investments like bonds or annuities often



fail to keep pace with this medical inflation, meaning even diligent savers risk losing ground in terms of healthcare purchasing power.

Summary: The American healthcare system's inefficiencies, coupled with macroeconomic inflationary forces and declining health status of Americans, make medical costs a uniquely challenging liability, particularly for aging retirees. HSAs, with their tax-free accumulation, are one of the few tools specifically designed to combat this: they let money grow unencumbered, ideally outpacing healthcare inflation. However, achieving sufficient growth within an HSA is easier said than done in today's markets, hence the search for higher-yielding, inflation-resistant assets to hold in these accounts. Ultimately, we will not fix healthcare until we fix the money.

3. Bitcoin as an HSA Investment (and Spending) Strategy

Bitcoin may seem unconventional in a health finance context, but its properties as money align remarkably well with the challenges outlined above. Next, we will examine bitcoin's performance profile and its potential role in mitigating healthcare inflation risk.

Performance and Diversification: Since its inception in 2009, bitcoin has delivered exceptional long-term returns. Even accounting for several deep drawdowns, bitcoin's compound annual growth rate has been on the order of 60-70%+ per year over the past decade (e.g., nearly 200% CAGR for the 10-year period ending 2021)¹⁴. By comparison, the broad U.S. stock market (S&P 500) has returned about 13% annually over the last 10 years (with dividends reinvested)¹⁵, and gold has managed roughly 4–5% annually in that time frame. Bitcoin's performance has markedly outpaced traditional assets, albeit with higher volatility. A small allocation to bitcoin historically would have greatly boosted the growth of a portfolio, compensating for rising costs elsewhere.

For example, \$10,000 invested in bitcoin in 2013 would be worth tens of millions of dollars today; no other asset or index comes close to that appreciation (¹⁴). Of course, past performance is no guarantee of future results. Bitcoin's early exponential growth is slowing as the asset matures and its market capitalization grows. Yet even in recent years, with broader adoption, bitcoin has shown strength: it posted a 63% gain in 2023 and an additional 80% gain in the first half of 2024, outperforming equities in the inflationary post-COVID environment. Bitcoin has now ranged between \$100K-\$110K per bitcoin in mid-2025. Correlation-wise, bitcoin has often exhibited low or even negative correlation with stocks and bonds over multi-year periods. This makes it an intriguing diversifier for an HSA which might otherwise be limited to stocks, bonds, or cash. The main caveat is volatility: bitcoin can and has dropped over 50% in fiat terms



over short periods, which means timing and sizing are critical in a practical strategy (discussed in Section 4).

Monetary Properties of Bitcoin: Why might an asset like bitcoin belong in a health savings account? The answer lies in bitcoin's fundamental monetary characteristics:

- **Fixed Supply (Disinflationary):** Bitcoin's supply is algorithmically capped at 21 million, making it immune to monetary debasement. New supply decreases over time (the "halving" events every four years cut the issuance rate). This scarcity is the polar opposite of fiat currency expansion. If excessive money printing is a root cause of nominal healthcare inflation, bitcoin provides a direct hedge. Indeed, if one measures U.S. healthcare costs *in bitcoin terms*, many services have become cheaper over the last decade. (e.g., the cost of one year in a nursing home was around 230 bitcoin in 2014 and is under 3 bitcoin in 2024, due to bitcoin's appreciation.)
- **Decentralization and Censorship Resistance:** Bitcoin operates on a decentralized ledger not controlled by any government or company. This means policy changes or political events cannot directly dilute its value or seize holdings. For an individual worried about the solvency of Medicare, changes in coverage, or future tax hikes (to fund Medicare/Medicaid deficits), holding some wealth in bitcoin offers an uncorrelated store of value outside the traditional financial system.
- **Liquidity and Portability:** At its core, bitcoin is peer-to-peer electronic cash (17). Bitcoin can be liquidated in seconds on global exchanges, 24/7. It can be sent anywhere in the world in minutes for negligible cost. This is valuable for Americans who may split time in multiple countries or need to cover an unexpected procedure abroad. It also means an HSA holding bitcoin can raise cash for medical bills at any time, even on a weekend or holiday when traditional markets are closed.
- **Programmability (Layer-2 Payments):** Through innovations like the Lightning Network, bitcoin enables instant, low-fee microtransactions. This holds promise for healthcare billing. Patients could use Bitcoin's Lightning Network to pay providers directly, *bypassing* many intermediaries, while reducing transaction fees for merchants anywhere from 3 to 10% (18). For example, a telehealth visit could be paid for in real-time, automatically, for a few thousand sats (short for satoshis, fractions of a bitcoin) over Lightning— with no claims nor collections. Several medical providers and pharmacies have started accepting bitcoin via Lightning,



citing lower fees than credit cards and no chargeback risk. In the long run, this direct-pay capability, with immediate and final settlement, could reduce the administrative overhead that currently bloats U.S. healthcare costs.

- **Low Time Preference Culture:** There is a trend among many individuals who own bitcoin whereby saving in the asset tends to encourage a *low time preference* mindset, meaning valuing the future more relative to the present. Anecdotally, many bitcoin savers report that as they see their BTC appreciate, they become less inclined to frivolously spend and more focused on long-term planning. If widespread, this mindset could lead to healthier lifestyles (to protect one's future self) and more demand for cost transparency in healthcare. While hard to quantify, this cultural shift aligns with the idea of "healthcare self-sovereignty," where individuals take proactive control of their health and finances in tandem.

In sum, bitcoin offers appreciation potential, inflation hedging, and a possible catalyst for system reform (via direct payments), making it uniquely suited to address the retirement healthcare funding crisis. It essentially turns the problem on its head: instead of healthcare costs inflating away your savings, an asset that grows in purchasing power can outpace the costs. However, effectively integrating bitcoin into an HSA requires a prudent strategy, which we address next.

4. Implementation Considerations and Risk Management

In practice, adding bitcoin to an HSA must be done thoughtfully. Below are key considerations and recommendations for those pursuing this strategy:

Sizing the Allocation: considering bitcoin's historical performance, it need not constitute a large portion of the HSA to have a material impact. Historical modeling suggests that even a modest *allocation of 5–10%* of the HSA to bitcoin would have significantly improved return outcomes in the past. This range allows meaningful exposure without unduly jeopardizing the portfolio's stability. Everyone should assess their risk tolerance, but generally the goal is to hedge healthcare inflation, not to speculate. Even a 5% allocation, if bitcoin were to continue to greatly outperform, could be the difference in covering a nursing home stay 20 years from now.

Choosing the Investment Vehicle:



Volatility Management: The volatility of bitcoin in terms of dollars can be managed by blending it with more stable assets and by maintaining a *liquidity buffer*. One sensible practice is to keep a few months' worth of expected medical expenses in cash or short-term bonds within the HSA (or in regular savings), separate from the bitcoin portion. That way, if bitcoin experiences a downturn at the same time you incur a medical bill, you can avoid selling BTC at a low price. For example, a 60-year-old might decide to hold \$10,000 in an HSA money market (to cover near-term needs) and allocate the excess (above that cushion) into bitcoin.

Long-Term Outlook: From a strategic viewpoint, the ideal scenario is that bitcoin's growth outpaces healthcare cost inflation over the long run. This *has* been the case historically: for example, over the last decade, medical costs might have roughly doubled in dollar terms, whereas bitcoin's value increased dozens of times over. Even if future returns are more modest, bitcoin could still act as "insurance" against an upside shock in medical inflation (e.g., if a new expensive therapy becomes widespread or if a currency depreciation drives up dollar-priced care). There is also a conceivable positive feedback loop: if enough individuals adopt bitcoin-based healthcare saving, leading to increased spending of bitcoin payment for services, it could pressure the healthcare industry to become more price-transparent and efficient, potentially *slowing* healthcare inflation. Combined with HSAs triple tax advantage, bitcoin holders in an HSA need not worry about capital gains taxes when it comes time to spend on medical eligible goods and services. Over time and with increased adoption of bitcoin payments acceptance by merchants, this speaks to bitcoin's disruptive potential in any market with heavy intermediation.

Case Example: Consider a 40-year-old HSA owner who plans to max out contributions for 25 years until age 65. Suppose she contributes the family maximum (around \$8,000 per year currently) and invests aggressively. If she put just 10% of each year's HSA contribution into bitcoin and the rest into a standard 60/40 stock-bond mix, what might happen? In a scenario where stocks return 7% annually and bitcoin, say, 20% annually (far below its historical rate), her HSA could grow to roughly \$1.2 million by age 65, instead of maybe \$900,000 without bitcoin. That extra ~\$300k could be the buffer that covers long-term care or extra years of longevity. Naturally, if bitcoin underperforms or crashes, her HSA could end up somewhat smaller than the all-traditional portfolio, but because the allocation was small, the downside is limited. Now if that 40 year old maxes out his bitcoin allocation at 100% each year, at a 25% annual growth rate would have \$3.75M at retirement age of 65. This asymmetric payoff, limited downside, potential significant upside, is often cited as a rationale for including bitcoin in a portfolio.



Conclusion

Health Savings Accounts provide a tax-advantaged foundation for meeting Americans' healthcare costs, but the magnitude of those costs demands creative investment solutions. Integrating bitcoin into HSA portfolios offers a promising approach to amplify the growth of healthcare savings and preserve purchasing power in the face of medical inflation. This strategy aligns with the reality that the status quo is untenable: Americans are projected to spend *hundreds of thousands of dollars* per person on healthcare over a lifetime (primarily in retirement), and traditional assets may not keep up. Bitcoin, with its sound-money properties and historical outperformance, could be the linchpin of a novel approach—one that not only benefits individual savers but also pressures the system toward positive change. When patients hold appreciating, debasement-resistant assets and start demanding transparent, direct value for their spending, healthcare providers and insurers may be forced to compete and innovate in ways they currently do not.

Bitcoin in HSAs represents a step toward healthcare self-sovereignty: taking control of the financial means to care for oneself. It is a convergence of personal finance and personal health empowerment and responsibility. Short-term volatility is the price of admission, but for those with a long-term view, the potential rewards, in both monetary and systemic terms, are massive. By leveraging the HSA's tax shelter and bitcoin's growth, Americans can build a buffer against the oppressive costs of care and perhaps, collectively, drive a healthier future where staying well doesn't mean going broke.



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HealthCare.gov insurers denied about 19% of in-network claims in 2023. Denial rates varied widely (1% up to 54% among reporting insurers). Notably, less than 1% of denied claims were appealed by consumers. This administrative friction illustrates inefficiencies in the insurance system. ↩ ↩₂

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