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Consumers to the Rescue? A Primer on HDHPs and HSAs

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The rapid growth rate of per capita health costs in the U.S. has been a sore spot in economic forecasts for nearly a century.[1] From employer-provided health care to employer-sponsored health insurance to health maintenance organizations (HMOs) to today's latest products, U.S. health policy has evolved and, as a key driving force throughout this evolution, has long sought a tool that can limit annual health care expenditure growth to roughly the overall rate of inflation. A perennially hot topic in health policy is the combination of high-deductible health plans (HDHPs) with either a health savings account (HSA) or a health reimbursement account (HRA). HDHPs were born in the 1970s and became integrated alongside HSAs and HRAs into U.S. health and tax policy in the early 2000s. Many see them as crucial pieces of our health care system going forward. In this article, we examine the development of the HDHP and the HSA, the ideology behind them, current research on their impact on health care and some possible paths forward for both.

BRIEF HISTORY OF THE HIGH-DEDUCTIBLE HEALTH PLAN AND HEALTH SAVINGS ACCOUNT

The genesis of the HDHP in the U.S., particularly when paired with some form of tax-advantaged savings accounts such as an HSA or HRA, can be traced as far back as the 1970s to politically conservative groups such as the National Center for Policy Analysis (NCPA). The idea was embraced by many other groups and individuals, and HDHPs enjoyed broad bipartisan support and eventual enshrinement into the laws and tax code in the early 2000s. The history of HDHPs and HSAs is best viewed within two phases: before and after the 2003 Medicare Modernization Act (MMA).

Phase 1: Pre-MMA

Employer-provided health coverage has been a major part of how Americans receive health coverage ever since these benefits were excluded from taxation in the 1940s. Early benefit plans were often part of a single monolithic employee welfare plan, without much choice for employees. The earliest roots of HDHPs go back to the idea of consumer empowerment. These ideas began to manifest themselves as far back as the mid-1970s, with the birth of cafeteria plans that allowed employees to select the benefits that best met their individual needs.[2] At about the same time, the Internal Revenue Service (IRS) created a health version of the flexible spending account (FSA). Still in use today, these accounts allowed some consumer choice in purchasing health care, but they primarily attempted to address tax issues arising from increasing deductibles and copays—a purpose still shared by today's HSAs.

As health care costs rose over time, so too did the level of cost sharing in the form of deductibles, copays, and coinsurance. Part of this cost-sharing trend aimed to reduce costs for employers and other plan sponsors by shifting costs to employees. However, this strategy was also intended to align consumer costs with medical trends, reduce the effect of deductible leveraging and increase incentives for consumers to be thoughtful purchasers of health services.

Another approach beyond the FSA was the HRA. First included in benefit plans in the 1960s to reimburse employees for those health expenses outside traditional employer-sponsored coverage, the funds in an HRA can be used to reimburse an employee for qualified medical expenses. These types of "defined contribution" health accounts grew in prevalence before being formalized in IRS guidance in 2002. Health FSAs and HRAs share many similarities, including the ownership of account funds by the employer and the requirement that they be offered as part of an employee benefits package.[3] However, HRAs face fewer restrictions on account carry-forward and originally were not required to be offered as part of a group health plan sponsored by the employer.

In the mid-1980s, the medical savings account (MSA) was first proposed as a solution for Medicare's long-term funding crisis by then-NCPA president John Goodman (now considered the "father of the HSA"). In 1990, the NCPA organized a task force of think tanks, universities and research organizations that produced a report that advocated self-insuring smaller medical expenses (i.e., much higher deductibles).[4] Goodman and Gerald Musgrave expanded on that report in their 1992 book *Patient Power*.[5] Subsequently, and largely as a result of the NCPA's work and advocacy in the area, Congress introduced numerous bipartisan bills in 1992 aimed at creating MSAs. None of these bills passed at the federal level, but several states did introduce and pass MSA laws. These early plans were not particularly successful, because the member contributions were not tax-deductible. Through the Health Insurance Portability and Accountability Act of 1996 (HIPAA), Congress first allowed a pilot project of tax-advantaged MSAs for small businesses and

the self-employed. Under this pilot, the total number of Archer MSAs allowed was 750,000,[6] but only a small portion were ever purchased due to restrictions on them.[7] HIPAA defined the cost sharing for plans eligible to have an Archer MSA, formally creating HDHPs and distinguishing HDHPs from plans with high cost sharing—a distinction that would be carried forward to the broader commercial market alongside the HSA.

Although the Archer MSA was short-lived (the program ended in 2005 nationwide, except for California), it set the stage for the advent of the HSA, which was introduced in 2003 by the MMA.

Phase 2: Post-MMA

In 2003, President George W. Bush signed the MMA. Although the title and the bill itself dealt predominantly with Medicare, the HSAs it introduced were not available to Medicare participants.[8] The HSA represented a significant improvement over the Archer MSA. Under the legislation, HSAs were made a permanent feature of the tax code, were available to anyone purchasing a qualifying HDHP and could be funded by both employer and employee. As the value of the HDHP/HSA combination has become more broadly recognized, enrollment has continued to climb[9]—despite some health policy experts' expectations that the Affordable Care Act (ACA) would slow HSA growth.

ANATOMY OF THE HDHP/HSA COMBINATION

As HDHPs and HSAs moved from the realm of health care reform theory to the U.S. Internal Revenue Code, both acquired specific definitions that must be met in order to receive the benefits that came with that formalization.

What Makes an HDHP?

What makes an HDHP different from a major medical policy? First, an HDHP has a specific meaning under the IRS code that governs the tax deductibility of the accompanying HSA. The IRS releases cost-sharing requirements each year for a plan to be HDHP-qualified. For 2019, the IRS defines HDHPs as health plans "with an annual deductible that is not less than $1,350 for self-only coverage or $2,700 for family coverage, and the annual out-of-pocket expenses (deductibles, co-payments, and other amounts, but not premiums) do not exceed $6,750 for self-only coverage or $13,500 for family coverage."[10] These limits do not apply to out-of-network services. The annual deductible and out-of-pocket expenses are subject to inflation each year, though the HDHP out-of-pocket maximum is significantly lower than the maximum allowed under the ACA (which is $7,900 for self-only coverage for 2019).[11,12] The table in Figure 1 shows the HDHP limits for benefit years 2015 through 2019.

Second, an HDHP has limited first dollar coverage. For both medical and pharmacy services, individuals usually need to pay the full allowed cost (i.e., billed charges net of any insurer discounts) for services provided, up to the plan deductible. The only notable exception is that certain preventive care benefits can be covered by an HDHP prior to reaching the deductible,[13] potentially with a copay or other cost sharing. Many services covered by HDHPs are subject to coinsurance after the deductible is met, while some require copays for select services. Once the individual meets the out-of-pocket maximum, the plan will pay 100 percent of the allowed cost. By law, an HDHP cannot cover costs for nonpreventive prescription drugs until the deductible is met.

To illustrate typical HDHP cost sharing, assume that a theoretical HDHP has a $2,000 deductible, 25 percent member coinsurance, a $6,750 out-of-pocket maximum and no copayments for self-only coverage. If an individual incurs $8,000 in allowed claims, that individual will pay the first $2,000 (which is subject to the deductible) and $1,500 in coinsurance (25 percent of the next $6,000 in allowed claims), for a total cost sharing of $3,500. This calculation is very similar to that of a typical non-HDHP employer plan, though a non-HDHP would likely result in fewer costs for the individual as the deductible may be lower and certain services may be subject to copays only.

Figure 1
HDHP Cost-Sharing Limitations

	Self-Only Coverage		Family Coverage	
Benefit Year	Minimum Deductible	Out-of-Pocket Maximum	Minimum Deductible	Out-of-Pocket Maximum
2015	$1,300	$6,450	$2,600	$12,900
2016	$1,300	$6,550	$2,600	$13,100
2017	$1,300	$6,550	$2,600	$13,100
2018	$1,350	$6,650	$2,700	$13,300
2019	$1,350	$6,750	$2,700	$13,500

Limitations on HDHP deductibles and out-of-pocket limits are updated annually by the IRS. Values shown were published in IRS Revenue Procedures 2014-30, 2015-30, 2016-28, 2017-37, and 2018-30.

The interaction between individual expenditures, HDHP minimum deductibles and out-of-pocket maximums becomes more complicated for family coverage. HDHPs with self-only deductibles below the family minimum deductible ($2,700 in 2019) are required to administer an aggregate deductible. That is, family members would be liable for the full allowed amount of services provided until the family deductible has been met in total, meaning that the first member of the family with claims could be responsible for meeting the entire family's deductible before moving into the coinsurance corridor. All else equal, an aggregate deductible results in higher member liability and lower plan premiums.

However, if the self-only deductible is greater than the family minimum deductible, an embedded deductible approach could be used, where each member of the family is subject to the lesser of their own individual deductibles and the remainder of the family deductible. In this case, the first member of the family with claims would be responsible for meeting only their own deductibles prior to moving into the coinsurance corridor. Even in HDHPs with aggregate deductibles and out-of-pocket maximums, the total cost sharing incurred for each family member must stay below the ACA's out-of-pocket maximum for an individual family member ($7,900 in 2019).

What Makes an HSA?

By design, HDHPs expose enrollees to significant up-front costs in addition to premium payments. In return, they include savings accounts dedicated to paying for health expenditures, including deductibles and coinsurance under the HDHP. By far, the most common type of account is the HSA, although the HRA is also in use. Health FSAs are still common and can be "stacked" with an HSA in certain cases, but these are more popular with non-HDHP enrollees and are sometimes targeted specifically for vision and dental services.

HSAs allow those individuals or families whose only comprehensive medical coverage is through an HDHP to save money for health care expenses on a pretax basis. Deposits can be made up to an annual maximum (illustrated in Figure 2) by both the employer and the employee, and amounts can be used for a variety of medical expenses—not just those under the HDHP.

If deposits are made through an employer's payroll process, the amounts are deductible from payroll taxes as well as personal income tax, so that tax treatment of these contributions is identical to employer and employee contributions to group health plan premiums. Deposits made outside of payroll are still exempt from personal income tax but do not reduce payroll taxes. This means health expenses paid for by an HSA enjoy first dollar deductibility from income whereas expenses otherwise

Figure 2
HSA Contribution Limits

	Self-Only Coverage	Family Coverage
Benefit Year	Maximum Contribution	Maximum Contribution
2015	$3,350	$6,650
2016	$3,350	$6,750
2017	$3,400	$6,750
2018	$3,450	$6,900
2019	$3,500	$7,000

Limitations on HSA contributions are updated annually by the IRS. Values shown were published in IRS Revenue Procedures 2014-30, 2015-30, 2016-28, 2018-27, and 2018-30.

paid for out of pocket are only deductible when they exceed 7.5 percent of income, per IRS regulation. This tax preference is designed to encourage enrollees to adopt HDHPs and HSAs in lieu of more traditional coverage.

As mentioned earlier, the HSA balance is owned by the enrollee and remains in the account, potentially accruing interest, regardless of when the funds are deposited or where the enrollee chooses to obtain medical coverage in the future. Many HSA accounts also have an investment feature and function more like retirement accounts when the balance reaches a certain threshold. Any such investment growth accumulates tax-free. As long as funds in the HSA are used for eligible medical expenses, they remain tax-free at the time of withdrawal, which is a more favorable tax treatment than retirement account withdrawals.

HRAs and health FSAs are other types of tax-advantaged savings accounts. Both HRAs and health FSAs are only available in conjunction with employer-sponsored health plans, while HSAs can be used with individual coverage as well. The table in Figure 3 summarizes key features of HSAs, HRAs and FSAs.

THE THEORY OF HDHPS

The designers of HDHPs attempted to balance consumer empowerment and responsibility with the potential impacts of the high deductible and the presence of the tax-preferred account.

Consumer Choice and Empowerment

A major tenet of HDHPs is encouraging individuals to take greater responsibility in selecting health services and controlling costs. As costs have increased steadily over the years, employers have shifted a larger share of claim payment responsibility to employees in order to keep their own costs down. The belief is that by "having skin in the game" individuals will be more conscientious about their behaviors, such as comparing prices between hospitals, physicians and pharmaceuticals and saving for future expenses. Theoretically, this behavior should help control costs in the present and may even limit future premium increases, as individuals will be more selective in the care they seek. Some have suggested, however, that future premium increases may actually be larger if care is avoided today and results in more catastrophic care needs later on. Examples of consumer behavior among individuals enrolled in HDHPs include the following:

- **Saving for health care services.** Because unused funds are owned by the HSA enrollee and are not lost, this encourages regular deposits into the account even if future health care expenses are not anticipated.

Figure 3
Comparison of Savings Accounts

Feature	HSA	HRA	FSA
Who owns the account?	Employee/individual	Employer	Employer
Who can contribute?	Employee/individual and employer	Employer	Employee and employer
Are contributions tax-deductible?	Yes	Yes; contributions made by employer are excluded from gross income	Yes, except long-term care contributions made by employer
What are the contribution limits?	See Figure 2	Unlimited*	$2,700 in 2019
Can the funds roll over to the next year?	Yes	Yes, but not required and commonly forfeited at employment termination	Yes, but not required; most employers have an annual "use-it-or-lose-it" policy
What distributions are tax-free?	Medical, prescription drugs, dental, vision, long-term care premiums, Medicare premiums	Medical, prescription drugs, dental, vision, health insurance premiums, long-term care premiums and expenses*	Medical, prescription drugs, dental, vision
What distributions are not eligible?	Amounts covered under another health plan (subject to penalties)	Amounts covered under another health plan	Health insurance premiums, long-term care premiums or expenses, amounts covered under another health plan
Is an HDHP required?	Yes	No, but can be used with HDHP	No, but can be used with HDHP

*Contributions to qualified small employer HRAs (QSEHRAs) are limited to $4,950 for self-only coverage and $10,000 for family coverage. Currently, only QSEHRAs can be used to pay individual market premiums. Like other HRAs, QSEHRAs can also be used to cover expenses but must be integrated with an individual market policy and were created through the 21st Century Cures Act in December 2016. A proposed rule to allow large employers to pay for individual market premiums via an HRA was released on October 23, 2018, and is not covered in this article.

- **Selecting a more appropriate treatment venue, such as using urgent care instead of the emergency room.** Because enrollees are exposed to significant first dollar cost sharing, the benefits of finding a lower-cost provider or treatment accrues directly to them. There are many consumer tools that facilitate this process.

- **Avoiding unnecessary care.** Similarly, "shopping" may lead an enrollee to forgo treatment for minor ailments or avoid those treatments that have marginal benefit.

- **Selecting generic prescription drugs instead of higher-cost, brand-name prescription drugs.** In addition to the direct impact of lower costs, generic drug prices tend to grow more slowly than brand drug prices, so continued use of generic substitutes can lead to compounded savings.

- **Comparing quality ratings of providers.** Online tools for quality rankings of providers are also growing and becoming more sophisticated.

- **Negotiating prices with providers, particularly for costs under the deductible.** Lower cost-sharing requirements under many plans do not encourage enrollees to investigate or question provider charges as they have little stake in the outcome. In contrast, enrollees with HDHPs are exposed to potentially more out-of-pocket costs and "own" the money in their HSA (though not money in their HRA) so their interest in the outcome of a discussion with providers related to their charges is likely much greater.

- **Improving their own health and taking other illness avoidance measures.** If enrollees make the connection between better health and lower out-of-pocket costs, the combination of the HDHP and an HSA provides incentives for the enrollee to reap the benefits of any health improvement activities they might undertake.

Paired with an HDHP, an HSA is an important vehicle for saving for future health services. Employers may contribute to the HSA on employees' behalf, and employee contributions are usually automatically deducted from paychecks and deposited into the HSA throughout the year. Because individuals are able to see the funds in their HSAs, they may be more careful about spending.

At the same time, consumers with urgent care needs may not have the time to engage in proactive consumer behaviors, such as shopping for lower-cost alternatives, but will still be exposed to the initial brunt of these costs. Individuals with higher-cost chronic care needs are more likely to hit their out-of-pocket limit, in which case cost considerations are less likely to be a part of their decision-making process. For those with known medical conditions, the total of premiums plus the out-of-pocket limit, cash flow timing and provider access are more likely to shape plan selection; plan design and account funds are much less likely to have an impact on the actual care received and costs incurred.

Is "High" Actually High?

In theory, an HDHP should balance the minimum deductibles against the expected cost. For instance, an HDHP could lose its effectiveness with a relatively low deductible, as individuals will not be as cost-conscious. Alternatively, an HDHP with a relatively high deductible could result in individuals paying the full cost of health care services except for truly catastrophic, large-dollar claims (balanced by lower up-front spending on premiums).

We analyze various deductible levels against continuance tables to determine the amount of claims subject to an HDHP's deductible level. Figure 4 summarizes the probability that claims are higher than the deductible for a typical enrollee in a commercial health plan. Continuance tables are based on the Milliman *Health Cost Guidelines* and reflect an assumed market average discount on nationwide billed charges.

Figure 4
Claims vs. Deductible

Deductible	Probability Claims Exceed the Deductible
$1,000	53%
$1,350	48%
$1,500	45%
$2,000	40%
$2,500	35%
$3,000	32%
$5,000	24%
$10,000	15%

For more information on the *Milliman Health Cost Guidelines*, see *http://www.milliman.com/Solutions/Products/Resources/Health-Cost-Guidelines/Health-Cost-Guidelines---Commercial/*.

Using our assumed discounts, an individual has a 48 percent chance of having at least $1,350 in claims, while a deductible level of $3,000 (slightly higher than the family minimum deductible) would be met by only 32 percent of individuals. However, these percentages can vary significantly by expected utilization. To the extent that HDHPs result in decreased utilization with respect to a typical employer plan, these plans would show a lower probability that individuals meet a given deductible.

Plans with better-than-average discounts, plans in less expensive regions or plans with lower-than-average morbidity will see fewer enrollees meet deductibles, while plans with lower-than-average discounts, plans in more expensive regions or plans with better-than-average morbidity will see more enrollees meet deductibles. Regardless of reimbursement level, geographic area or morbidity level of enrollees, as the deductible increases further, the individual pays an ever-higher percentage of claims and has more of an incentive to minimize costs. In the end, the "high-ness" of a deductible will depend on the individual's level of utilization and its associated costs.

Impact of HDHPs and Savings Accounts on Claims

Ultimately, a member's insurance use is determined not only by the deductible level of that person's plan but also by the funding received from the employer or personally invested in the account. Because the employer solely funds the HRA or FSA and those funds are less portable, people are more likely to behave in a way that uses the dollars in an HRA or FSA more freely than the dollars that they have personally invested in their HSAs.

In the case of either HSAs or HRAs/FSAs, the associated HDHP has an assumed reduction in utilization as members try to avoid the additional out-of-pocket costs subject to their deductibles. However, the inclusion of employer-funded amounts offsets some of the assumed utilization savings as the member is not truly responsible for all out-of-pocket costs until the deductible is met. Figure 5 outlines the utilization reductions and offsetting utilization increases for certain combinations of deductible and coinsurance for HDHPs and savings accounts, respectively, based on the Milliman *Health Cost Guidelines*. Account funding is likely to be on the lower side of the cited ranges if the employee owns the account (in other words, if the account is an HSA), but on the higher side if an employer-owned account such as an HRA or FSA is used.

For example, if an average member had costs of $400 per member per month (PMPM) before utilization adjustments, we would expect a $3,000 deductible with 20 percent member coinsurance would reduce the utilization and thus the associated costs to $372 PMPM ($400 × 0.930), resulting in a $28 PMPM reduction from utilization adjustments alone. However, if the plan had an associated account balance of $1,500 annually, the costs would be expected to lie between $7.44 ($372 × 0.02) and $18.60 ($372 × 0.05) PMPM higher than without the funded amount, and likely toward the lower end when the account is an HSA and toward the higher end otherwise.

The utilization adjustments outlined here assume that all types of members have an equal likelihood of selecting an HDHP plan with an HRA/FSA/HSA balance. However, research shows that healthier members or members with higher incomes are more likely to select HDHP plans because they have the expectation that the savings in premium will be greater than the additional cost sharing.[14] The potential for antiselection is particularly relevant in the individual market, where enrollees can always select their own plans, or in employer markets where employees are given the choice between an HDHP and a richer plan design (that is, a plan with lower member cost sharing). Because of the opportunity for selection bias, employers who offer employees a choice between HDHPs and richer plans should ensure that there is a sufficient premium differential among the plans to control the risk of antiselection. Employers should also recognize that offering plan choices drives overall aggregated costs upward due to employees' financial incentives to select the plan that is expected to work best for them.

HDHP Prevalence in the Market

Based on studies by America's Health Insurance Plans (AHIP), the number of enrollees in HSA-qualified HDHPs has grown from approximately 1 million in 2005 to more than 20 million in 2016.[15] Two-thirds of enrollment in 2005 was in the individual market, but enrollment in HSA-qualified HDHPs grew significantly in the large-group market so that now almost four out of every five HDHP enrollees are in the large-group market. Individual market HSA-qualified HDHP enrollment growth continues, but enrollment gains have been much more gradual.

Employers in both the small- and large-group markets have incentives to offer HSA-eligible HDHPs, as these plans shift costs to employees while theoretically reducing their use of services. However, incentives are different in the individual market,

Figure 5
Allowed Cost Impact of Plan Design and Account Funding

Deductible	Member Coinsurance	Impact of Plan Design	Impact of Account Funding*
$1,350	0%	4%	1%–4%
$3,000	20%	−7%	2%–6%
$6,000	40%	−15%	1%–7%

*Assumes plan funding is equal to 50 percent of the plan deductible.
For more information on the *Milliman Health Cost Guidelines*, see *http://www.milliman.com/Solutions/Products/Resources/Health-Cost-Guidelines/Health-Cost-Guidelines---Commercial/.*

as enrollees may select their own carrier and plan, with a wider variety of benefit richness since the ACA's implementation of metallic tiers starting in 2014. Also, individual market enrollees generally pay some or all of their own premiums, though many market participants are eligible for federal premium tax credit subsidies that can significantly reduce the cost of coverage. In general, one might expect the individual market's transition to less healthy, older and lower-income enrollees with more benefit design choices to result in selection of richer benefit designs, as are seen in employer coverage. However, with the exception of those with incomes under 200 percent of the federal poverty level (who qualify for rich variations of silver plans with highly subsidized cost sharing), the general trend has been toward leaner plan designs such as HDHPs. This phenomenon results from a number of other factors, including (1) the high cost of unsubsidized or lightly subsidized premiums, (2) premium tax credit leveraging that can make premiums for bronze plans and lower-cost silver plans appear disproportionately attractive because they are indexed to the second-lowest-cost silver plan, (3) the tax, portability and ownership qualities of HSAs and (4) age curve compression, which can often make older enrollees better off with leaner plan selections, even upon a worst-case scenario analysis.[16] Silver and bronze plans are very popular on the individual market for all of these reasons, and many of them are HDHPs.

The most recent market shift in the implementation of HDHPs and HSA-like accounts has been in the Medicaid market. Several states, including Indiana and Arkansas, implemented HSA-style accounts where Medicaid beneficiaries make monthly contributions.[17] However, states have struggled to pinpoint the segments of the Medicaid population to cover through these programs, in part due to concerns about whether Medicaid recipients behave similarly to commercial market enrollees when faced with an account-based health plan.

THE PRACTICE OF HDHPS

Studies conducted over the past 10 years attempted in various ways to measure the impact of HDHPs on claim costs, quality of care, consumer behavior and financial burdens. A majority suggest HDHPs have favorable effects. However, several studies refute this point or run contrary to other research. This section summarizes some of this research.

Claim Costs

Several studies have found cost savings in the form of reduced health expenditures between 5 percent and 15 percent for HDHPs:

- A 2011 study analyzed claim and enrollment data for more than 800,000 households and found that families with HDHPs spent 14 percent less on health care compared to similar families in non-HDHPs.[18]

- A 2010 study analyzed more than 75,000 members over three years and found HSA enrollees spent between 5 percent and 7 percent less than non-HSA enrollees.[19]

- A 2015 study analyzed 13 million employees and found that employers who offered HDHPs had 5 percent lower health costs than employers who did not offer HDHPs.[20]

Additionally, a 2013 study tracked data over four years from two large employers—one with an HDHP and one without—to analyze the impact of HDHPs on costs. The study found that the large employer with the HDHP experienced 0.26 fewer physician office visits, 0.85 fewer prescriptions filled and 0.018 more emergency room (ER) visits per enrollee per year.[21] However, the data provided do not show whether the reductions in office visits and prescriptions are related to unnecessary care or whether the utilization reduction may result in health complications in the future. At least one study indicates that reduced utilization occurs in preventive care, which is a key concern surrounding HDHPs.[22] Reduced health care utilization, including preventive care, has also been found to be a function of plan design features.[23]

While the majority of studies point to lower costs with HDHPs, a few studies support different conclusions. Some have observed that the use of HDHPs has not resulted in any change in

costs and that various utilization decreases for chronic disease sufferers are not associated with statistically significant cost reductions.[24,25]

On a raw level, HDHP cost savings are primarily driven by three factors: (1) the relative health of individuals selecting the different plans, (2) the utilization impact arising strictly from plan design and funding, and (3) cost savings resulting from increased consumer engagement. Most early studies of HDHP savings did not separate these, but more recent studies often make some effort to address savings based on health status and selection versus other drivers.[26] Additionally, HDHPs have not shown a clear ability to bend the cost curve beyond their impact in the initial year of adoption, though savings over non-HDHP coverage appear to be retained from year to year.

Consumer Behavior and Health Outcomes

A 2016 study measured consumer behaviors among *individuals* enrolled in HDHPs and found the following (with their prevalence in parentheses):[27]

- Saving for future health services (40 percent).
- Comparing prices (14 percent).
- Comparing quality (14 percent).
- Negotiating prices for services (6 percent).

However, consumers' behaviors may be to the detriment of their health. As we noted earlier, several studies indicated varying degrees of reduced preventive care. If consumers forgo preventive care, health conditions may worsen and lead to higher costs in the future.[28] A majority of employers' spending on preventive care goes toward cancer screenings and cancer prevention such as mammograms, colonoscopies and HPV vaccinations. If less use of preventive care comes with missed opportunities for early cancer diagnosis, effects may extend beyond long-term costs to the length and quality of lives. Little research has been done into how health outcomes vary for individuals enrolled in HDHPs versus those enrolled in other types of plans. This limits the ability to draw any conclusions as to the effects of any appropriate care reductions. Additionally, few studies we are aware of speak to the long-term impacts of cost savings for those forgoing medical treatment.[29]

Financial Burdens

Members with higher-deductible plans are obligated to pay higher shares of costs as they begin to incur claims. If a member has several office visits early in the policy period, the member will pay 100 percent of the costs of the visits up to the deductible. Many non-HDHP designs include copays for primary care and specialist care visits, limiting the member's obligation to a fixed value per visit, such as $50. The higher share of costs may be a burden to members. For example, a 2017 Federal Reserve Board report indicated that about 40 percent of adults would not be able to cover a $400 unexpected expense.[30] This may also lead to HDHP enrollees forgoing necessary care until it becomes a critical need.

A 2016 study analyzed the 2011–2013 Medical Expenditure Panel Surveys conducted by the Agency for Healthcare Research and Quality (AHRQ).[31] The study found HDHPs were most financially burdensome for low-income adults. Among adults with employer-sponsored insurance and incomes below 250 percent of the federal poverty level, about 27 percent to 30 percent of adults with an HDHP, approximately 20 percent of adults with low-deductible plans and approximately 15 percent of adults with no-deductible plans had out-of-pocket health care costs exceeding 20 percent of family income. If members are unable to pay their share of health care costs, hospitals and physicians will not receive their share of reimbursement, potentially leading to higher fees to cover the bad debt associated with nonpayment.

> Individuals do not always have all the information needed to utilize HDHPs effectively.

Other Factors That Could Make HDHPs Work Better

Although various studies have had conflicting conclusions regarding the effectiveness of HDHPs, there are some additional factors that could make them more effective.

1. **Cost transparency.** Costs in the health care system are not always transparent, and it is difficult for members to price shop in the current market. Providers may charge patients different rates for the same services depending on insurance coverage, and coverage specifics may even be impacted by billing procedures. As a result, many patients cannot know their share of the costs until they receive invoices from providers. Additionally, providers may not know the full cost until the medical services have been performed, particularly when service cost is dependent on factors that are not known before a procedure.

   Because of the lack of cost transparency, patients may find it difficult to make health care decisions based on cost. While HDHPs should encourage individuals to choose efficient and cost-effective providers, individuals do not always have all the information needed to make that decision. With greater cost transparency from both providers and insurance companies, individuals may be better informed.

2. **Discussions between providers and patients.** Providers and patients should have discussions about the costs of potential treatments or prescription drugs. Providers are in a good position to determine the effectiveness of various treatments based on their experience and can help patients assess treatment options, including considerations for costs. These discussions may be particularly important in value-based care arrangements in which providers are compensated based on the quality and effectiveness of care. These discussions are also important in "reference-based" plans, which target a threshold dollar amount for services, beyond which the enrollee would pay 100 percent of the excess.

3. **Pre-funding of HSAs.** Both employers and employees are eligible to contribute to HSAs. In most cases, HSA contributions are made evenly throughout the year. If medical services are incurred early in the year, individuals may not have enough HSA funds available to cover the costs. Allowing employers and employees to contribute funds in lump sums may ease this concern.

4. **Allowing more first dollar coverage.** The high deductible on all services is a blunt instrument that might cause people to forgo necessary services. Suggestions include paying for most primary care services (not just preventive care services) and paying for certain chronic condition supplies and testing, such as those related to diabetes.

5. **Lengthened consumerism.** HDHPs could be redesigned to increase an individual's "skin in the game." One way would be through different plan designs, such as allowing higher out-of-pocket maximums but lower deductibles so the "consumerism" effects are felt longer by way of coinsurance.

The Impact of Drug Coupons

Recently, much attention has been paid to various drug reimbursement strategies by manufacturers and pharmacy benefit managers. Of particular importance in the context of HSAs and HDHPs is the concept of drug coupons. In contrast to a rebate, a drug coupon is provided directly to the enrollee and pays for a portion of that person's drug costs. These coupons are often tied to brand-name drugs and can significantly reduce the medication's price for the enrollee while increasing plan costs for employers by incenting the higher-cost prescription. Coupons present a lifeline to those seeking an otherwise unaffordable medication. However, coupons remove incentives that underlie HDHPs and create possible tax issues with the IRS. For these reasons, many insurers and self-insured plan sponsors prohibit coupons or do not allow them to be credited toward the deductible and out-of-pocket maximum.

THE FUTURE OF HSAs

Although health care policy has been a sensitive topic since the passage of the ACA in 2010, improvements to HDHPs and HSAs became a focus when Republicans took control of both houses of Congress in 2014. Although most of these changes have not been passed, numerous bills and regulatory guidance have been proposed that can generally be grouped into the following categories:

- Changes that expand which plans can be paired with HSAs.
- Changes that expand the ability of individuals to contribute to HSAs.
- Changes that allow HSAs to be used for a broader variety of expenses.
- Changes that expand the scope of HSAs beyond major medical health care.

Expansion of Plans That can be Paired With HSAs

One of the core limitations of the HSA is the pairing with qualifying HDHPs. Various proposals have considered expanding the range of possible pairings.

HSAs Could be Paired With all ACA Bronze and/or Catastrophic Plans

Bronze and catastrophic plans have very high deductibles—ones that meet the minimum requirements but can even exceed the maximum allowed cost-sharing amounts for an HDHP. Catastrophic plans fail to meet the IRS's HDHP requirement that nonpreventive costs cannot be covered until the deductible has been met, because these plans must cover the first three primary care clinic visits at no or low cost sharing. Given the high levels of cost sharing inherent in these plans, it seems reasonable that the same HDHP/HSA pairing logic and the benefits of consumerism could apply to these plans as well.

Line up ACA and HDHP Maximum Out-of-pocket Limits

If HDHP limits are increased to align with the ACA's higher maximum limits on annual cost sharing, issuers offering ACA-compliant coverage would be able to craft a wider range of plan designs that comply with HDHP requirements and ensure that HSAs are available in the bronze tier. This proposal is somewhat more limited than allowing HSAs to be paired with all bronze and catastrophic plans, but it retains more of the clear consumer empowerment components of current HDHPs.

Allow Medicare-eligible Individuals to use HSAs

Medicare-eligible individuals are, in aggregate, some of the highest users of services, and Medicare-related topics often drive health policy. As a result, any tool engaging consumerism in this population could reap outsized benefits in terms of overall utilization. The Medicare MSA presents an account-based option within the Medicare framework;[32] however, enrollees selecting an MSA may not deposit their own funds into the account. Additionally, federally mandated reimbursement levels and limits on non-MSA benefit designs could limit consumer incentive to shop around beyond that already present in the Medicare Advantage market. Although continued access to and ability to fund an HSA would provide a tax-advantaged environment, it may be less likely to result in the desired consumer empowerment that underlies the HDHP/HSA pairing because of the overall higher level of utilization in this population.

Allow Anyone to use an HSA

The idea of universal availability of the HSA has also been proposed, which would make HSAs more similar to typical investment accounts. HSAs would have the distinct advantage of allowing individuals to select a health plan that is consistent with their willingness to bear risk for higher health expenses. However, it would also likely reduce the ability for HSAs to meaningfully reduce costs, as the focus of these accounts could shift from their role in assisting with health care costs to their role as an investment vehicle.

TIMELINE OF THE HIGH DEDUCTIBLE HEALTH PLAN (HDHP) AND THE HEALTH SAVINGS ACCOUNT (HSA)

Mid-1980s	The kernel of the idea promoted by John Goodman
1996	HDHP initially defined by Health Insurance Portability and Accountability Act alongside the Archer Medical Savings Account
2003	The current HDHP and HSA formalized in the Medicare Modernization Act
2006	HDHP limits modified by the Health Opportunity Patient Empowerment Act
2010	HSAs modified in small ways by the Affordable Care Act

Expansion of Contributions

Although contributions are not as often a feature of discussion in the HDHP/HSA policy debate, two contribution-related proposals have been a consistent feature of proposed HSA legislation.

Allow Contributions to Match the Out-of-pocket Maximum

The maximum contribution amount for an HSA is about half of the maximum out-of-pocket limitation for HDHPs. This means an individual enrolled in a lean HDHP may be paying for a significant portion of costs with dollars that are not tax-advantaged. By allowing HSAs to cover all enrollees' health care expenses under any HDHP design, these plans would see an additional tax benefit. Further, employers may be more willing to consider leaner HDHPs and bring the corresponding potential for increased consumer influence on prices. However, these higher deductibles may also result in more avoided care and higher costs down the road if not paired with a sufficiently high HSA amount.

Allow Spousal Catch-up Contributions in Family HSAs

Currently, only one spouse can make contributions to an HSA starting at age 55 when both spouses are enrolled in the same plan. Allowing both spouses to make catch-up contributions would remove this "marriage penalty" and allow for greater savings.

Expansion of Major Medical use of HSA Funds

While HSAs can be used for a variety of major medical expenses, there are limits. Proposals to remove the limitations are described next.

Allow use of HSAs for Health Care Premiums

Currently, HSAs cannot fund premium payments. This may not be as much of a concern with employer-sponsored coverage, where premiums are typically paid via payroll deduction. However, the ability to use HSA funds to pay for other coverage could result in increased uptake of insurance in the individual market. Because HSA funds are tax-advantaged, this would remove one of the key differences between individual versus employer-sponsored coverage. Current limitations on HSA contributions, however, imply that most or all of the HSA would be spent on premiums instead of medical costs, limiting their value in deferring or defraying costs through consumerism.

Allow use of HSAs for Over-the-counter Health Supplies

One of the changes in the ACA was to remove the ability for HSAs, HRAs and FSAs to be used to purchase over-the-counter (OTC) medical supplies, including medications that are not typically covered by health insurance. These supplies can be an important part of everyday medical care, and allowing HSAs to be used in this capacity could encourage individuals to self-treat for minor injuries for which they might otherwise seek medical attention. However, this too would reduce the amount of funds available to pay for current HSA-eligible medical expenses.

Allow use of HSAs for Direct Primary Care Arrangements

Under a basic direct primary care arrangement, an individual pays a set monthly retainer to a physician up front and can see that physician as needed.[33] The IRS has ruled that this, in essence, constitutes a health insurance plan, and correspondingly, HSA funds cannot cover its cost. Direct primary care arrangements have increased in popularity as individuals and primary care doctors seek more personal care. Like HSAs, this arrangement aligns with consumer empowerment and could create cost reductions. However, as with OTC supplies, HSA dollars spent on direct primary care would redirect funds away from HSA-eligible medical expenses.

Expansion of Nonmajor Medical use of HSA Funds

The last category of proposals relates to nonmajor medical use of HSAs and tends to be both less explored and more controversial.

Allow use of HSAs for Fitness Equipment

One topic of debate is the role of wellness in reducing overall expenses. Proposals have been made to expand the use of HSAs to cover nonmedical wellness items, in particular fitness equipment such as treadmills. In theory, allowing individuals to use HSA funds to encourage wellness would be offset by significantly reduced health expenses associated with healthier living. Critics argue that this allowance would create a new tax avoidance for a purchase and activity that an individual would normally do.

Allow use of HSAs to Pre-fund Long-term Care Needs

Funding for long-term care (LTC) is a major crisis in our health care system. The amount and duration of LTC expenses represents a financial risk that has led to rising rates for LTC insurance and significant instability in the market segment. This also represents a major financial crisis for state Medicaid budgets. If HSAs can be expanded to accommodate LTC costs, they may be able to be part of the solution to a pressing need.

CONCLUSION

From their genesis in the latter half of the last century to their current place as a conservative cure-all for our health care system, HDHPs and the related funding mechanisms continue to be significant topics in the health policy debate. Because of their relatively recent rise to prominence, the jury is still out on just how effective HDHPs and HSAs are in the quest to reduce health care expenditures and improve quality and patient outcomes. Although there are signs these plans reduce costs, there are also signs that the reduction is at least partly due to the avoidance of beneficial services and that reductions do not compound year over year. More research is needed to assess the value these plans can offer, and thus determine what changes may allow HSAs to maximize their benefit to our health care system. ■

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ENDNOTES

1 Several charts are available from Health System Tracker. *Peterson-Kaiser*, n.d., *https://www.healthsystemtracker.org/chart-collection/u-s-spending-healthcare-changed-time/#item-per-capita-basis-health-spending-grown-substantially_2017 document the long-term phenomena* (accessed December 19, 2018).

2 Cafeteria plans were formally enshrined in Section 125 of the Internal Revenue Code in November 1978 and are often also referred to as Section 125 plans.

3 Recent proposed changes by the Trump administration significantly alter the HRA landscape but are beyond the scope of this article.

4 In many ways, higher deductibles are more consistent with the typical notion of insurance as protection against catastrophic events, as the enrollee pays for small routine expenses out of pocket but still has protection against large, unpredictable expenses, as with other elements of our financial safety system.

5 An additional and important academic work by Goodman and economist Mark Pauley outlining the combination of tax incentives, medical savings accounts and catastrophic insurance was published in *Health Affairs* in 1995. See Pauly, M. V., J. C. Goodman, J. Feder, L. Levitt, S. M. Butler, D. M. Cutler, and G. R. Wilensky. 1995. Incremental steps toward health system reform. *Health Affairs (Millwood) Spring:125–139*, *https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.14.1.125*.

6 The Archer MSA was named after Representative Daniel Archer, who proposed the amendment containing MSAs.

7 Access to MSAs was limited to small employers and self-employed individuals, and tax-free contributions could be made only by either the employee or the employer, but not both, during any taxable year.

8 Medicare MSAs were also introduced in this bill.

9 America's Health Insurance Plans. Health savings accounts and high deductible health plans grow as valuable financial planning tools. *America's Health Insurance Plans*, April 2018, *https://www.ahip.org/wp-content/uploads/2018/04/HSA_Report_4.12.18.pdf* (accessed November 7, 2018). AHIP notes in this report that HDHPs have increased fairly steadily in enrollment from about 1 million lives in 2005 to almost 22 million lives in 2017.

10 IRS Revenue Procedure 2018-30. 26 CFR 601.602. *https://www.irs.gov/pub/irs-drop/rp-18-30.pdf* (accessed November 7, 2018).

11 The initial ACA out-of-pocket limit for 2014 was set equal to the HDHP out-of-pocket limit. However, the ACA limit is indexed by premium growth, while the HDHP limit is indexed by the consumer price index. Because health care premiums have grown faster than consumer prices, the ACA limit has increased so that it is now significantly higher than the HDHP limit.

12 There are different deductible and out-of-pocket maximums for Archer MSA plans, which are not covered in this section as they have largely been replaced by HSAs.

13 For preventive services allowed to be covered on a first dollar basis, see Publication 969 (2017), Health savings accounts and other tax-favored health plans. *IRS.gov*, March 8, 2018, *https://www.irs.gov/publications/p969#en_US_2017_publink1000204037* (accessed December 19, 2018). Additionally, the ACA requires non-grandfathered health coverage to provide several preventive services with no cost to the enrollee. See Preventive health services, *Healthcare.gov*, n.d., *https://www.healthcare.gov/coverage/preventive-care-benefits/* (accessed December 19, 2018).

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15 Supra note 9.

16 An example of a worst-case scenario analysis would be evaluating the sum of premium costs and the plan's out-of-pocket cost limit.

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33 For more information on direct primary care, see FAQ on direct primary care, *American Academy of Family Physicians*, n.d., *https://www.aafp.org/practice-management/payment/dpc/faq.html* (accessed December 19, 2018).