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The Impact of Expanding Pre-Deductible Coverage in HSA-Eligible Health Plans on Premiums

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AT A GLANCE

IRS Notice 2019-45 allows health savings account (HSA)-eligible health plans the flexibility to cover 14 medications and other health services used to prevent the exacerbation of chronic conditions prior to meeting the plan deductible. There is limited evidence on the impact of expanding pre-deductible coverage on insurance premiums. In this *Issue Brief*, we use claims data to quantify the effect of expanded pre-deductible coverage of services and medications specified in IRS Notice 2019-45 on premiums.

Key Findings:

- The impact on premiums of expanding pre-deductible coverage for 14 services in HSA-eligible health plans as allowed in IRS Notice 2019-45 is small. Estimated premium increases range from virtually zero to 1.5 percent.
- There is no expected premium increase when deductibles are replaced by coinsurance, use of health care services is assumed not to increase due to lower cost sharing, and enrollees' related diagnoses are required.
- We found a 0.9 percent increase in premiums when use of health care services was assumed to increase because of the lower cost sharing and when employers did not impose any cost sharing.
- If all 14 services were excluded from pre-deductible coverage with no cost sharing, there was increased use of health care services, and the services were covered whether or not an enrollee had a related diagnosed condition, premiums would increase by 1.5 percent.

Several factors explain the relatively small increases in premiums. The percentage of enrollees with any of the diagnoses mentioned in the IRS notice is low. As a result, use of the 14 services allowed to be covered pre-deductible is also relatively low, especially among enrollees with a related diagnosis. The cost for nearly all the 14 services allowed to be covered pre-deductible is relatively low when spread across the entire population. Users of the 14 health care services are commonly high users of health care more generally because of their health conditions and often meet their deductible. As a result, even when coverage for services is provided pre-deductible, these users are likely to continue to meet their deductible. Employers could easily recoup the forgone cost sharing by imposing a pre-deductible copayment or coinsurance.

Even before there was evidence that expanding pre-deductible coverage had a negligible impact on premiums, there was an appetite among employers for adding more services if allowed by the IRS. There is also support for expanding pre-deductible coverage among policymakers, as evidenced by the Chronic Disease Management Act, which was reintroduced in the U.S. Congress as recently as May 2021. This bipartisan, bicameral legislation would provide HSA-eligible health plans additional flexibility to provide pre-deductible coverage for services that manage chronic conditions.

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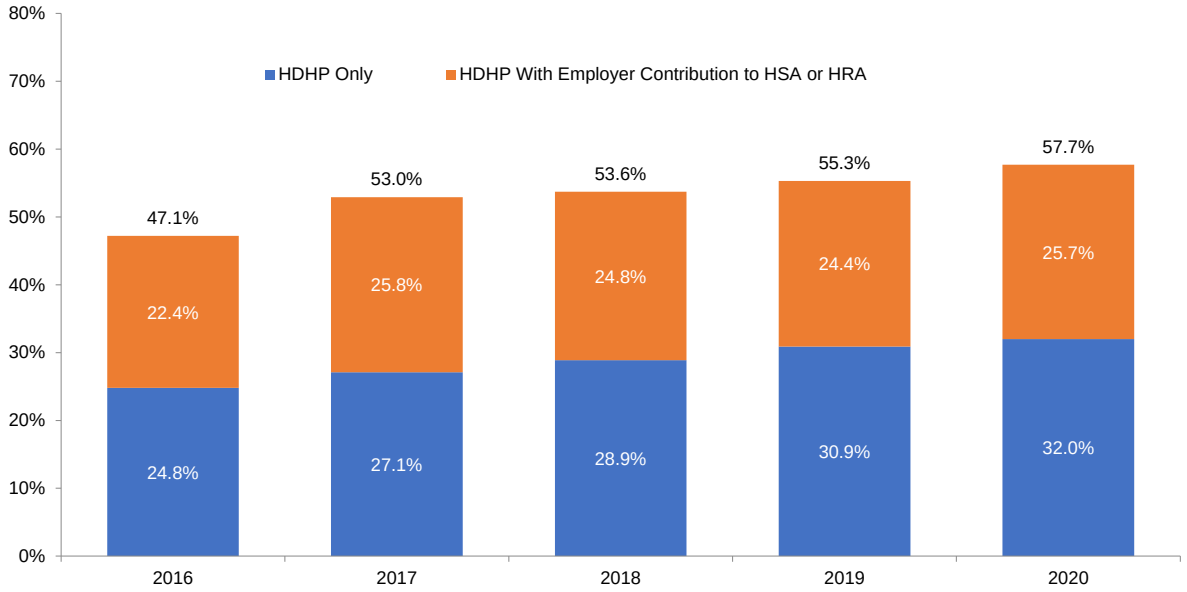
Introduction

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) included a provision that created what are commonly known as high-deductible health plans (HDHPs). At the time, these plans had to have a deductible of at least $1,000 for individual coverage and $2,000 for family coverage (see Appendix Figure 1). As will be discussed in more detail below, HDHPs may provide coverage of certain preventive services prior to the satisfaction of the health plan deductible. Enrollees in plans that meet these and other requirements are allowed to open and contribute to a health savings account (HSA) on a tax-preferred basis. Thus, these plans are also commonly known as HSA-eligible health plans. In 2022, these plans must have a deductible of at least $1,400 for individual coverage and $2,800 for family coverage. Enrollment in HSA-eligible health plans may account for over one-half of those with private health coverage (Figure 1).[1]

Figure 1
Percentage of Persons Enrolled in a High-Deductible Health Plan (HDHP), by Employer Contribution to HSA or HRA,* Among Those With Private-Sector Health Coverage and Employee-Only Coverage, 2016–2020



* HSA = health savings account, HRA = health reimbursement arrangement.
Source: Medical Expenditure Panel Survey - Insurance Component (MEPS-IC).

Under the initial IRS guidance, until the deductible is met, coverage does not include "any service or benefit intended to treat an existing illness, injury, or condition, including drugs or medications."[2] This narrow definition of the "safe harbor" has likely caused some plan members to go without needed care, as it is well established that increases in cost sharing for health care have been associated with deleterious consequences. Thus, the U.S. Department of Treasury issued guidance 15 years later in 2019 via IRS Notice 2019-45 to further increase the flexibility of HSA-eligible health

plans to cover specific low-cost preventive services to prevent the exacerbation of chronic conditions on a pre-deductible basis (Figure 2).[3]

Figure 2
Chronic Disease Management Services in the Expanded Safe Harbor

Preventive Care Service	For Individuals Diagnosed With
Angiotensin-converting enzyme (ACE) inhibitors	Congestive heart failure, diabetes, and/or coronary artery disease
Antiresorptive therapy	Osteoporosis and/or osteopenia
Beta blockers	Congestive heart failure and/or coronary artery disease
Blood pressure monitor	Hypertension
Inhaled corticosteroids	Asthma
Insulin and other glucose-lowering agents	Diabetes
Retinopathy screening	Diabetes
Peak flow meter	Asthma
Glucometer	Diabetes
Hemoglobin A1c testing	Diabetes
International normalized ratio (INR) testing	Liver disease and/or bleeding disorders
Low-density lipoprotein (LDL) testing	Heart disease
Selective serotonin reuptake inhibitors (SSRIs)	Depression
Statins	Heart disease and/or diabetes

Source: https://vbidcenter.org/initiatives/hsa-high-deductible-health-plans-2/

A 2021 EBRI survey found that 76 percent of employers with 200 or more employees increased the number of drugs and services covered pre-deductible in HSA-eligible health plans as a result of IRS Notice 2019-45 (Fronstin and Fendrick 2021). Pre-deductible coverage was often added for health care services related to heart disease and diabetes care. Two-thirds added pre-deductible coverage for blood pressure monitors and insulin/glucose-lowering agents, 61 percent added coverage for glucometers, and 54 percent added coverage for beta blockers. Health care services least likely to have pre-deductible coverage were peak flow meters and INR testing (25 percent each). Most employers did not eliminate cost sharing for the pre-deductible services that were added. The percentage eliminating cost sharing ranged from 25 percent to 40 percent, depending on the service. The 2021 EBRI survey also found that most employers would add pre-deductible coverage for additional health care services if allowed by law.

There are several ways in which expanding pre-deductible coverage may impact premiums. Expanding the generosity of coverage shifts spending from enrollees to the plan. Enrollees may increase services utilization when their cost-share declines, leading to higher health care costs and — as a result — higher premiums. However, there might be cost offsets from increased use of other services. Despite these theories, there is limited empirical evidence on the impact of expanding pre-deductible coverage on insurance premiums. A recent AHIP survey[4] of insurers found that most respondents reported either no premium increase or premium increases of less than 1 percent. Although estimates are reported, a great deal of uncertainty regarding the effect of Notice 2019-45 on premiums remains. In the AHIP survey, 15 percent of fully insured plans and 29 percent of self-insured plans noted that it is too early to know what impact the Notice had on premiums. Another 7 percent of fully insured plans and 17 percent of self-insured plans reported "other" when asked about the impact of the Notice. No context was given for the "other" responses, but we can conclude that 22 percent of fully insured plans and 46 percent of self-insured plans still do not know what impact the Notice had on premiums.

In this *Issue Brief*, we use claims data to estimate the effect of expanded pre-deductible coverage of services and medications specified in IRS Notice 2019-45 on premiums. Our work greatly improves on past research, which found there was still a great deal of uncertainty regarding the effect of Notice 2019-45 on premiums. Data from the 2018 IBM MarketScan Commercial Claims and Encounters databases are used. This research is important because the EBRI

survey not only found a strong response to IRS Notice 2019-45, but also found that most (81 percent) employers would add pre-deductible coverage for additional health care services if allowed by law. Information on the impact on premiums would also help inform policymakers who are deliberating policies to extend pre-deductible coverage to a broader list of clinical services.

Background

Until IRS Notice 2019-45 was released on July 17, 2019, when it came to providing pre-deductible coverage of health care services in HSA-eligible health plans, employers were guided by the Internal Revenue Service (IRS) safe harbor section 223(c)(2)(C) of the Internal Revenue Code (IRC). Employers could only provide coverage of the following services prior to the satisfaction of the plan deductible:

- Preventive services recommended by the U.S. Preventive Services Task Force (USPSTF), the Advisory Committee on Immunization Practices (ACIP), the Health Resources and Services Administration's (HRSA's) Bright Future Project, and HRSA and the Institute of Medicine (IOM) committee on women's clinical preventive services (required by Section 2713 of the Patient Protection and Affordable Care Act of 2010 (ACA) and IRS Notice 2013-57).[5]
- Periodic health evaluations such as annual physicals and select preventive screenings not listed above (optional, per IRS Notice 2004-23).[6]
- Obesity weight-loss programs and tobacco cessation programs (optional, per IRS Notice 2004-23).[7]
- Drugs taken by asymptomatic individuals to prevent the manifestation of disease (optional, per IRS Notice 2004-50).[8]

Increases in consumer out-of-pocket costs for health care have been associated with deleterious consequences. These include financial stress, worse disease control, increases in hospitalizations, and exacerbation of health disparities, particularly those with chronic medical conditions and lower household incomes.[9] In fact, there is a body of peer-reviewed literature demonstrating that selectively lowering cost sharing for high-value chronic disease management medications can meaningfully improve adherence; reduce the risk of adverse health outcomes; and, in some cases, reduce expenditures.[10]

With IRS Notice 2019-45 in place, HSA-eligible health plans are now able to adopt a more flexible benefit design, offering more protection for certain medical services through a value-based insurance design (V-BID) plan structure. As the market for HSA-eligible health plans grows, it is important that these plans use this flexibility to allow for effective health management for all beneficiaries. A targeted strategy exploring coverage for certain high-value, clinically indicated health services prior to meeting the deductible will produce more effective clinically nuanced designs, without fundamentally altering the original intent and spirit of these plans. Adoption of voluntary, clinically nuanced, expanded HSA-eligible health plan benefit designs has the potential to mitigate cost-related non-adherence, enhance patient-centered outcomes, allow for lower premiums than most PPOs and HMOs, and substantially reduce aggregate health care expenditures.

According to Notice 2019-45, the list of preventive services that can be covered pre-deductible will be reviewed on a periodic basis. In fact, the guidance specifically states that the periodic review is expected to occur approximately every five to 10 years. For patients and employers alike, 10 years may be a long time to wait for such coverage decisions to be made given the pace of research on plan design and medical innovation. There are already examples of services that may meet the criteria for pre-deductible coverage that were omitted from Notice 2019-45. For example, the Notice identifies angiotensin-converting enzyme (ACE) inhibitors to prevent exacerbations for individuals diagnosed with congestive heart failure (CHF), diabetes, and/or coronary artery disease. Patients who either do not respond to or who have an adverse reaction to ACE inhibitors are usually switched to angiotensin receptor blockers (ARBs) to prevent the same exacerbations. However, ARBs are not included in the list of 14 services in Notice 2019-45, and thus they cannot

be covered pre-deductible in HSA-eligible health plans. Similarly, serotonin-norepinephrine reuptake inhibitors (SNRIs) may be an effective treatment for patients with depression who do not respond to SSRIs.

Financial Impact of Expanded Drug Coverage

Implementation of pre-deductible drug coverage can change plan-paid expenditures in three respects:

(a) Shift: Independent of volume effects, lower consumer cost sharing shifts the cost burden from the patient to the plan.

(b) Volume: Lower patient out-of-pocket costs tend to increase utilization.

(c) Offsets: In some clinical scenarios, greater utilization of high-value therapies can decrease spending on other services (e.g., hospitalizations).

There is already an appetite for adding more services, as evidenced by The Chronic Disease Management Act, which was reintroduced in the U.S. Congress as recently as May 2021. This bipartisan, bicameral legislation would provide HSA-eligible health plans additional flexibility to provide pre-deductible coverage for services that prevent the exacerbation of chronic conditions.

This work greatly improves upon prior related research. AHIP conducted a study of health plans in 2021 to assess the impact of expanded pre-deductible coverage in HSA-eligible health plans on premiums. It found that about one-half of health plans experienced a premium increase of less than 1 percent, and 8–19 percent experienced no premium change. Yet, this survey also found that there is great deal of remaining uncertainty regarding the effect of Notice 2019-45 on premiums. In the AHIP survey, 15 percent of fully insured plans and 29 percent of self-insured plans noted that it is too early to know what impact the Notice had on premiums. Another 7 percent of fully insured plans and 17 percent of self-insured plans reported "other" when asked about the impact of the Notice. No context was given for the "other" responses, but we can conclude that 22 percent of fully insured plans and 46 percent of self-insured plans still do not know what impact the Notice had on premiums.

VBID Health has quantified the potential financial impact on enrollee out-of-pocket spending and employer spending of expanding pre-deductible coverage to 57 drug classes used to treat 11 chronic conditions (VBID Health n.d.). It found that covering all these drug classes pre-deductible with a combination of copayments and coinsurance would increase premiums by 1.7 percent.

Data and Study Sample

For the present study, we utilized the IBM® Marketscan® Commercial Claims and Encounters (CCAE) Database and IBM® Marketscan® Benefit Plan Design (BPD) Database. Data from 2018 were used — the last full year preceding IRS Notice 2019-45. Member health insurance eligibility information, as well as medical (inpatient and outpatient) and pharmacy claims, comprised the CCAE files. The BPD database provided carrier-specific individual and family deductible levels. Although the 2018 CCAE contains over 27 million covered lives, we restricted our analysis to those continuously enrolled (i.e., 365 days) in an employment-based, HSA-eligible health plan. We also required that the policyholders were full-time employees, and we included their spouses and dependents. These exclusions resulted in an initial sample of 2.1 million members. Next, we merged individual and family deductible levels from the BPD database. This information was generated by Marketscan® developers via a plan-specific statistical analysis of claims data and not gleaned from plan documents. As a result, deductible levels were not available for all members in the initial sample. After requiring individual/family deductibles of at least $1,350/$2,700 — the 2018 federal minimums for HSA eligibility — the final analytical sample included 1.6 million members.

We also captured age, gender, geographic region (Northeast, Midwest, South, West), relationship to policyholder (self, spouse, dependent), and household size (number of enrollees on the policy) for descriptive analysis.

Methods

Measurement of 14 Health Services

IRS Notice 2019-45 lists 14 health services that may be afforded pre-deductible coverage in an HSA-eligible health plan, each with a required medical diagnosis. Seven are prescription drug therapeutic classes, with those being 1) antiresorptive therapy for osteoporosis and/or osteopenia; 2) angiotensin-converting enzyme (ACE) inhibitors for congestive heart failure, diabetes, and/or coronary artery disease; 3) beta blockers for congestive heart failure and/or coronary artery disease; 4) inhaled corticosteroids for asthma; 5) insulin and other glucose-lowering agents for diabetes; 6) selective serotonin reuptake inhibitors (SSRIs) for depression; and 7) statins for heart disease and/or diabetes. The remaining 7 health services consist of medical devices and diagnostic tests: 1) blood pressure monitor for hypertension; 2) peak flow meter for asthma; 3) glucometer for diabetes; 4) retinopathy screening for diabetes; 5) hemoglobin A1c testing for diabetes; 6) international normalized ratio (INR) testing for liver disease and/or bleeding disorders; and 7) low-density lipoprotein (LDL) testing for heart disease.

Using prescription drug and medical claims data on all individuals in the final analytical sample, we flagged each of the 14 services using the codes listed in Appendix Figure 2. Patients were classified with a disease if they had at least one inpatient or two outpatient (on different dates) claims during the year (using ICD10 codes). The prescription drug therapeutic classes were identified using the AHFS.[11] The medical devices and diagnostic tests were categorized using HCPCS[12] and CPT[13] codes. It is worth noting that IRS Notice 2019-45 is not particularly precise in its specification of the 14 services. Thus, we adopted a relatively broad interpretation of the list. For example, we included associated parts and supplies for the medical supplies (e.g., test strips for glucometers).

Impact Analysis of Pre-Deductible Coverage

To estimate the impact of pre-deductible coverage for the 14 services, we first summed the following fields from all flagged claims: deductible, coinsurance, copayment, plan paid amount, and total allowed amount. These aggregate figures were divided by the total sample size to derive mean values. The average annual deductible amount (per covered life) for the 14 services represents the expected cost that will be shifted from the member to the plan sponsor because of the forgone member cost share in the form of deductible contributions. In this case, we assume that the employer provides first-dollar coverage for the 14 services throughout the year. We make this assumption because it is unlikely that an employer will provide pre-deductible coverage with no cost sharing and then impose cost sharing once an enrollee meets his or her deductible. In prior work, we found that the majority of employers imposed some form of cost sharing in lieu of a deductible, ranging from 60 percent to 75 percent, depending on the service (Fronstin and Fendrick 2021).

When enrollees face reductions in cost sharing for health care, they are likely to increase utilization. Nonusers may decide to initiate use of health care (i.e., the extensive margin) and existing users may increase their level of utilization (i.e., the intensive margin). To model this scenario, we repeated the analysis described above but included a utilization-increase assumption. Using the often cited -0.2 elasticity of demand estimate for outpatient medical care from the RAND Health Insurance Experiment (Newhouse 1993), we assumed a 20 percent increase in utilization for the 14 services in this scenario.

Next, we assumed that employers imposed some form of cost sharing on the 14 services. This cost sharing is imposed regardless of whether an enrollee meets his or her deductible. In prior work, we found that between 48 percent and 63 percent of employers require a copayment from employees, depending on the health care service (Fronstin and Fendrick 2021). The percentage of employers requiring coinsurance for the 14 health care services ranged from 4 percent to 19 percent.

Finally, we considered the same four scenarios under which plan sponsors do not require the associated diagnoses for the 14 services listed in the IRS Notice. Given that pharmacy claims data do not contain diagnosis information, and specific medical services do not always list relevant diagnosis codes, plan sponsors may want to avoid the

administrative burden that would be necessary to confirm the presence of the chronic conditions. Thus, we repeated all previously described scenarios with the diagnosis requirements relaxed.

In all the scenarios, we assumed that the forgone deductible payments will be recoverable when other health services become subject to the deductible. For this scenario, we summed the deductible fields from all claims for individuals and families (i.e., household size>1). If either the total individual or total family deductible paid was equal to or greater than that dictated by the benefit design, then we flagged the member as having met the deductible. Next, we captured the amount of (non-14 services) spend (i.e., total allowed amount) in excess of the deductible level among users of the 14 services. We assumed the maximum potential deductible recoupment would equal the mean of this overspending measure — not to exceed the mean lost deductible amount. The actual average recoupment amount would be lower than this assumption if the other services now subject to the deductible would have otherwise had copayments or coinsurance.

Results

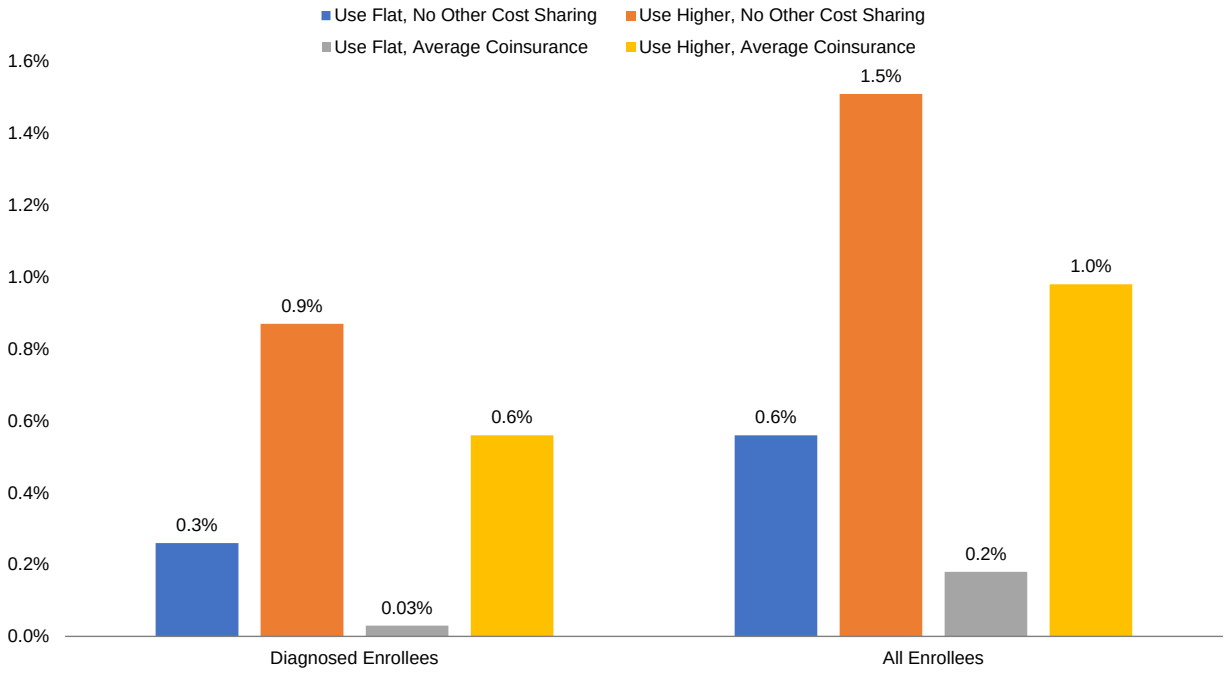
The impact on premiums of expanding pre-deductible coverage for 14 services in HSA-eligible health plans as allowed in IRS Notice 2019-45 is summarized in Figure 3. In general, the effects vary in several ways but are relatively small, regardless. The estimated premium increases range from virtually nothing to 1.5 percent.

Premiums increase the least (0.03 percent) in the following circumstance:

- Employers impose coinsurance.
- Enrollees are diagnosed with the requisite conditions.
- Use of health care services does not increase because of lower cost sharing.

If employers choose to not impose any cost sharing, premiums increase 0.3 percent.

Figure 3
Impact of Expanding Pre-Deductible Coverage in HSA-Eligible Health Plans on Premiums

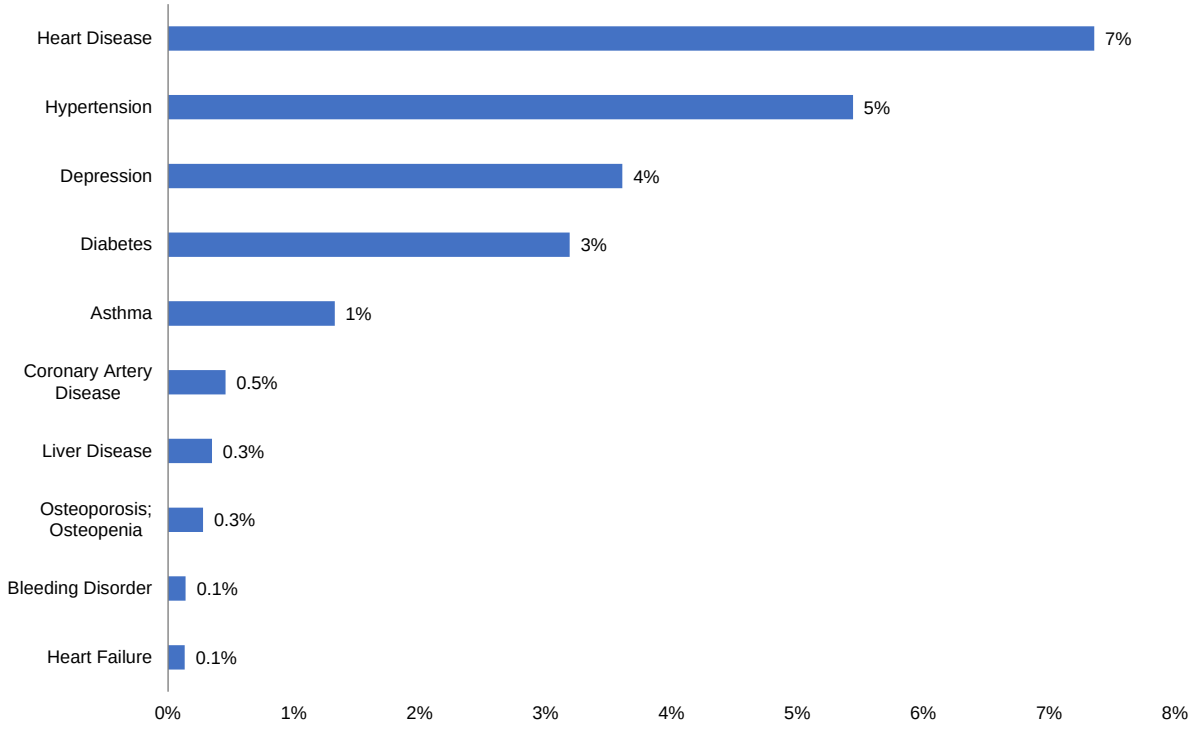


Source: Employee Benefit Research Institute estimates based on administrative enrollment and claims data.

Eliminating deductibles can induce enrollees to use more health care. This may occur in two ways. Enrollees who were not receiving any of the 14 health care services specified in IRS 2019-45 may start to use those services (this is known as the extensive margin). And among those using health care services, they may increase the amount they are using (this is known as the intensive margin). As an example, enrollees with diabetes may have filled some prescriptions for insulin but not enough to be adherent to their medication regimen when insulin was subject to a deductible. When insulin was covered pre-deductible, enrollees may have become adherent to the recommended medication regimen. When we assume a 20 percent increase in utilization, premiums increase 0.6 percent when coinsurance is imposed instead of a deductible. Premiums increase 0.9 percent when the 20 percent increase in use is not subject to any cost sharing.

The IRS notice specifies that pre-deductible coverage is only allowed for enrollees who have been diagnosed with the associated chronic condition specified in the notice, as shown in Figure 4. All the premium effect estimates presented so far assume that the diagnosis associated with the chronic condition exists in the patient medical claims. It is reasonable to assume that enrollees with claims for insulin have been diagnosed with diabetes. However, a claim for LDL testing cannot be assumed to be limited to people with heart disease, and diagnosis codes do not appear on every claim. Therefore, employers and health plans may err on the side of covering all LDL testing as it may be more costly to try to determine which claims for LDL testing are related to enrollees with heart disease. If we relax the diagnosis requirements, premiums increase between 0.2 percent and 1.5 percent.

Figure 4
Prevalence of Diagnoses Pertaining to IRS Notice 2019-45



Source: Employee Benefit Research Institute estimates based on administrative enrollment and claims data.

Discussion

Our findings are consistent with related research in this area. AHIP conducted a study of health plans in 2021 to assess the impact of expanded pre-deductible coverage in HSA-eligible health plans on premiums. Thirty-six health plans responded to the survey. The survey found that about one-half of health plans (56 percent among fully insured

products and 46 percent among self-insured products) experienced a premium increase of less than 1 percent, and 8 percent of self-insured products and 19 percent of fully insured products experienced no premium change.

There are several factors that can explain the small increase in premiums.

The percentage of enrollees with any of the seven diagnoses mentioned in the IRS is notice is low. As a result, use of the 14 services allowed to be covered pre-deductible is also relatively low in most cases. The percentage of the population filling a prescription in the seven drug classes ranges from 1.7 percent to 8.7 percent, and the percentage using any of the seven medical services ranges from 0.02 percent to 28.3 percent (Figure 5). Among those using services, the average quantity of services used is relatively low as well. It is important to note that these estimates are for the entire population, regardless of whether a diagnosis was present. Use is slightly lower when restricting claims to only those enrollees with a diagnosis, because most enrollees will not use the services listed in the IRS notice if they are not diagnosed with a related condition. However, notable exceptions are HbA1C (hemoglobin A1c) and LDL testing, as those are used more in the general population.

Figure 5
Use of Health Care Services Pertaining to IRS Notice 2019-45

Health Service	Percentage of Enrolled Population Using Health Care Service	Average Use Among Enrolled Population	Percentage of Enrolled Population Using Health Care Service When Diagnosis Is Indicated	Average Use Among Enrolled Population When Diagnosis Is Indicated
Medications				
Antiresorptive therapy	1.7%	7.1	0.1%	7.7
Angiotensin-converting enzyme (ACE) inhibitors	5.2%	9.4	1.3%	9.7
Beta blockers	4.1%	8.7	0.4%	9.8
Inhaled corticosteroids	8.7%	2.7	0.8%	4.9
Insulin and other glucose-lowering agents	3.8%	14.3	2.7%	16.7
Selective serotonin reuptake inhibitors (SSRIs)	7.4%	8.1	1.8%	8.0
Statins	7.5%	9.3	3.7%	9.5
Medical Services				
Blood pressure monitor	0.02%	1.2	0.01%	1.1
Peak flow meter	0.12%	1.5	0.04%	1.7
Glucometer	0.1%	3.2	0.1%	3.7
Retinopathy screening	2.2%	1.8	0.5%	2.5
Hemoglobin A1c (HbA1C) testing	13.3%	1.4	2.9%	2.3
International normalized ratio (INR) testing	2.2%	2.4	0.2%	4.6
Low-density lipoprotein (LDL) testing	28.3%	1.3	5.3%	1.6

Source: Employee Benefit Research Institute estimates based on administrative enrollment and claims data.

While the IRS notice specifies that pre-deductible coverage is only allowed for enrollees who have been diagnosed with the associated chronic condition specified in the notice, it may be impractical for health plans to follow this rule. One of the issues is that diagnoses do not always appear on medical claims, and prescription drug claims do not have diagnosis fields at all. Claims may be denied only to be appealed later, with the appeal resulting in a reversal of the denial when the enrollee provides documentation of the diagnosis. Employers and health plans might try to avoid such an administrative cost burden as it appears that only 2 of the 14 services (HbA1C and LDL testing) are provided to the population more generally. Alternatively, health plans may choose to cover the 14 services where it is safe to assume that an enrollee receiving the service has a related diagnosis (i.e., insulin for diabetes).

The cost for nearly all the 14 services allowed to be covered pre-deductible is relatively low when spread across the entire population. The cost is less than $1 per enrollee for antiresorptive therapy, ACE inhibitors, beta blockers, blood pressure monitors, peak flow meters, glucometers, and INR testing (Figure 6). SSRIs, retinopathy screening, HbA1c testing, and LDL testing are between $1 and $2 per enrollee per year. Even on an annual basis, a number of these medications and services are low cost among enrollees diagnosed with related chronic conditions. For example, on an annual basis, LDL testing is $34, ACE inhibitors cost $37, peak flow meters cost $38, and HbA1c testing costs $38. The cost of insulin and other glucose-lowering agents accounts for the greatest percentage of total spending — 2 percent, and over $3,600 on an annual basis among enrollees diagnosed with diabetes.

Figure 6
Average Spending on Health Care Services Pertaining to IRS Notice 2019-45

Health Service	Spending per Enrollee	Proportion of Total Spending	Spending per Enrollee With Diagnosis
Medications			
Antiresorptive therapy	$0.68	0.01%	$634
Angiotensin-converting enzyme (ACE) inhibitors	$0.50	0.01%	$37
Beta blockers	$0.49	0.01%	$126
Inhaled corticosteroids	$7.25	0.1%	$960
Insulin and other glucose-lowering agents	$98.33	2%	$3,627
Selective serotonin reuptake inhibitors (SSRIs)	$1.85	0.04%	$104
Statins	$4.65	0.1%	$126
Medical Services			
Blood pressure monitor	$0.004	0.0001%	$71
Peak flow meter	$0.01	0.0003%	$38
Glucometer	$0.40	0.01%	$310
Retinopathy screening	$1.23	0.02%	$262
Hemoglobin A1c (HbA1C) testing	$1.12	0.02%	$38
International normalized ratio (INR) testing	$0.16	0.003%	$82
Low-density lipoprotein (LDL) testing	$1.78	0.04%	$34
Total	**$4,947.28**		

Source: Employee Benefit Research Institute estimates based on administrative enrollment and claims data.

Overall, 8 percent of enrollees with individual coverage met their deductible, and 7 percent with family coverage did so. The percentage of users of the 14 health care services listed in the IRS notice meeting their deductible was much higher. Depending on the health care service, the percentage of users meeting their deductible ranged from 17 percent for LDL testing users to 41 percent for those receiving a blood pressure monitor (Figure 7). Among those users with a related diagnosis, the percentage reaching their deductible was even higher — ranging from 25 percent to 46 percent. Our finding that premiums increased very little due to the expansion of pre-deductible coverage is related to the relatively high percentage of users of the 14 services meeting their deductible. Users of these 14 health care services are generally high users of health more generally because of their health conditions. As a result, even when coverage for services is provided pre-deductible, these users are likely to continue to meet their deductible. Services that would otherwise be subject to copayments or coinsurance once deductibles are met will be subject to the deductible when other services are no longer subject to the deductible.

Diagnosed users of the 14 health care services listed in the IRS notice are likely to continue to meet their deductible. The relatively high use of health care services in this population amounts to an average of $16,900 in spending per year. To understand how cost sharing might change for these users and their employers, consider the examples in Figure 8. For all the examples, we assume that there is a $3,000 deductible and 10 percent coinsurance above the

deductible until the out-of-pocket maximum is reached. We also assume that the enrollee has employee-only coverage to simplify the example.

Figure 7
Percentage of Users of Health Care Services Meeting Deductible

Health Service	Percentage of Users of Health Care Services Meeting Deductible	Percentage of Users of Health Care Services With Related Diagnosis Meeting Deductible
Medications		
Antiresorptive therapy	28%	30%
Angiotensin-converting enzyme (ACE) inhibitors	19%	25%
Beta blockers	25%	37%
Inhaled corticosteroids	21%	29%
Insulin and other glucose-lowering agents	24%	26%
Selective serotonin reuptake inhibitors (SSRIs)	23%	30%
Statins	20%	26%
Medical Services		
Blood pressure monitor	41%	46%
Peak flow meter	21%	27%
Glucometer	34%	33%
Retinopathy screening	22%	28%
Hemoglobin A1c (HbA1C) testing	20%	25%
International normalized ratio (INR) testing	39%	42%
Low-density lipoprotein (LDL) testing	17%	25%

Source: Employee Benefit Research Institute estimates based on administrative enrollment and claims data.

Figure 8
Impact of Adding Pre-Deductible Coverage on Cost Sharing for Employee-Only Coverage

	No Services Covered Pre-Deductible	Insulin and Other Glucose-Lowering Agents Covered Pre-Deductible for Diabetics	Inhaled Cortisteroid Covered Pre-Deductible for Asthmatics	Selective Serotonin Reuptake Inhibitors (SSRIs) for Depression
Plan Design				
Deductible	$3,000	$3,000	$3,000	$3,000
Coinsurance	10%	10%	10%	10%
Total Spending	$16,900	$16,900	$16,900	$16,900
Pre-deductible coverage	$0	$3,600	$1,000	$100
Deductible	$3,000	$3,000	$3,000	$3,000
Coinsurance	$1,390	$1,030	$1,290	$1,380
Total Out-of-Pocket (OOP)	$4,390	$4,030	$4,290	$4,380
Change in OOP		**-$360**	**-$100**	**-$10**
% of Sample With Condition		**3%**	**1%**	**4%**
Cost Share Shift as a Percentage of Total Spend		**0.2%**	**0.02%**	**0.01%**

Source: Employee Benefit Research Institute estimates based on administrative enrollment and claims data.

When there is no pre-deductible coverage, an enrollee using $16,900 in health care services reaches his or her $3,000 deductible and incurs 10 percent coinsurance on the $13,900 in health care services used above the deductible, or $1,390. As a result, total out-of-pocket spending is $4,390.

Now let's assume that only insulin was covered on a pre-deductible basis. The average allowed amount for insulin is about $3,600. Assuming that insulin is not subject to any copayments or coinsurance, the enrollee would be covered for $3,600 in insulin. They would then meet their $3,000 deductible. After the deductible is met, $10,300 in health care spending is subject to coinsurance, resulting in $1,030 paid toward coinsurance and $4,030 paid out-of-pocket in total. Cost sharing falls by $360 or 0.2 percent. In other words, employer costs increase by 0.2 percent.

Employers could easily recoup the cost sharing by imposing a pre-deductible copayment or coinsurance on insulin. To recoup $360, employers could require a $20/fill copayment, assuming insulin is refilled once per month. The $20 copayment would be less than the $35/month cap on out-of-pocket spending that was recently included in the Affordable Insulin Now Act passed by the U.S. House of Representatives.

Insulin and other glucose-lowering agents are the costliest of the 14 services that can be covered pre-deductible in the IRS notice. Hence, if other services were covered on a pre-deductible basis with no cost sharing, the change in cost sharing and subsequent impact on employer costs would be minimal. For example, enrollee cost sharing would fall by $100/year for inhaled corticosteroids and $10 for SSRIs. These represent 0.02 percent and 0.01 percent of employer health spending, respectively.

Congressional Efforts to Further Expand Pre-Deductible Coverage

Building on the momentum of Executive Order 13877 and IRS Notice 2019-45, Senators John Thune (R-SD) and Tom Carper (D-DE) introduced the Chronic Disease Management Act of 2019 in the Senate (S. 1948), followed by the introduction of the companion bill in the House of Representatives (H.R. 3709) by Representatives Earl Blumenauer (D-OR) and Tom Reed (R-NY). This bipartisan, bicameral legislation would provide HSA-eligible health plans additional flexibility to provide coverage for services that manage chronic conditions prior to meeting the plan deductible. The bill was reintroduced in the Senate in January 2020 (S. 3200) and April 2021 (S. 1424) and in the House of Representatives in May 2021 (HR. 3563), building on the IRS guidance and previous versions to further increase pre-deductible coverage for chronic disease management.

Conclusion

In response to IRS Notice 2019-45, three-quarters of large employers offering HSA-eligible health plans expanded pre-deductible coverage for medications and services that prevent the exacerbation of chronic conditions. The impact on premiums of expanding pre-deductible coverage for 14 services in HSA-eligible health plans as allowed in IRS Notice 2019-45 is small. Premium increases range from virtually nothing to 1.5 percent. Employers can minimize the minor costs associated with expanding pre-deductible coverage by imposing common copayment levels or coinsurance to pre-deductible services.

Even in the absence of evidence that expanding pre-deductible coverage will increase premiums by only a small amount, employers were already reporting that they would add additional services on a pre-deductible basis if allowed by the IRS. There is bipartisan, bicameral legislation that has been introduced in the U.S. Congress which would provide additional flexibility to extend pre-deductible coverage to services that manage chronic conditions. Employers and policymakers have an appetite for more flexible plan designs or "smarter" deductibles because rising health care spending has created serious fiscal challenges.

Appendix

Appendix Figure 1

Statutory HSA Limits, 2004–2022

	Minimum Deductible		Maximum Contribution		Maximum Out-of-Pocket Limit		Per-Person Catch-up Contribution Limit
	Individual	Family	Individual	Family	Individual	Family	
2004	$1,000	$2,000	$2,600	$5,150	$5,000	$10,000	$500
2005	1,000	2,000	2,600	5,150	5,000	10,000	600
2006	1,050	2,100	2,700	5,450	5,250	10,500	700
2007	1,100	2,200	2,850	5,650	5,500	11,000	800
2008	1,100	2,200	2,900	5,800	5,600	11,200	900
2009	1,150	2,300	3,000	5,950	5,800	11,600	1,000
2010	1,200	2,400	3,050	6,150	5,950	11,900	1,000
2011	1,200	2,400	3,050	6,150	5,950	11,900	1,000
2012	1,200	2,400	3,100	6,250	6,050	12,100	1,000
2013	1,250	2,500	3,250	6,450	6,250	12,500	1,000
2014	1,250	2,500	3,300	6,550	6,350	12,700	1,000
2015	1,300	2,600	3,350	6,650	6,450	12,900	1,000
2016	1,300	2,600	3,350	6,750	6,550	13,100	1,000
2017	1,300	2,600	3,400	6,750	6,550	13,100	1,000
2018	1,350	2,700	3,450	6,900	6,650	13,300	1,000
2019	1,350	2,700	3,500	7,000	6,750	13,500	1,000
2020	1,400	2,800	3,550	7,100	6,900	13,800	1,000
2021	1,400	2,800	3,600	7,200	7,000	14,000	1,000
2022	1,400	2,800	3,650	7,300	7,050	14,100	1,000

Appendix Figure 2
Coding of 14 Pharmacy and Medical Services

Chronic Conditions	**ICD10 Codes**
Heart failure	I09.81; I11.0; I13.0; I13.2; I50.xx
Depression	F31.3x-F31.6x; F31.75-F31.81; F32.xx-F32.7x; F32.9; F33.xx; F34.1; F43.21; F43.23
Asthma	J45.xx
Diabetes	E08.xx-E11.xx; E13.xx; O24.xx
Coronary artery disease	I25.1x; I25.7x; I25.81-I25.84
Hypertension	H35.03x; I10.xx-I15.xx; I67.4; N26.2
Osteoporosis; osteopenia	M80.xx; M81.xx; M85.8x; M85.9x
Liver disease	K70.xx-K77.xx
Bleeding disorders	D65.xx-D68.xx
Heart disease	I00.xx-I99.xx
Prescription Drugs	**AHFS Therapeutic Classes**
Antiresorptive therapy	92:24:00
Angiotensin-converting enzyme (ACE) inhibitors	24:08.44.04; 24:32.04
Beta blockers	24:24; 24:08.08
Inhaled corticosteroids	52:08.08; 48:10.08
Insulin and other glucose-lowering agents	68:20:00
Selective serotonin reuptake inhibitors (SSRIs)	28:16.04.20
Statins	24:06.1
Devices	**HCPCS Codes**
Blood pressure monitor	A4660; A4663; A4670
Peak flow meter	A4614; A4627; S8096; S8097; S8100; S8101; S8110
Glucometer	A4233; A4234; A4235; A4236; A4245; A4253; A4256; A4257; A4258; A4259; E0607; E0620; E2100; E2101
Procedures	**CPT & HCPCS Codes**
Retinopathy screening	67028; 67030; 67031; 67036; 67039; 67040; 92134; 92227; 92228; 92229; 92230; 92235; 92240; 92250; 92260; 2022F; 2024F; 2026F; 2023F; 2025F; 2033F; S0620; S0621; S3000
Hemoglobin A1c (HbA1C) testing	83036; 83037
International normalized ratio (INR) testing	85610; 85611; 93792; 93793; 99363; 99364; G0248; G0249; G0250
Low-density lipoprotein (LDL) testing	80061; 82465; 83700; 83701; 83704; 83718; 83719; 83721; 83722

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Endnotes

[1] In 2020, 57.7 percent of individuals with health coverage through a private-sector establishment were in a plan with a deductible that met the deductible requirements to be HSA eligible. However, we do not know how many of these enrollees were in an HSA-eligible health plan. Some were enrolled in a health plan with a health reimbursement arrangement (HRA). Others were in health plans that met the deductible requirement but may have not met other requirements, such as the restriction on preventive services.

[2] See Internal Revenue Service (2004).

[3] See https://www.irs.gov/pub/irs-drop/n-19-45.pdf.

[4] See https://ahiporg-production.s3.amazonaws.com/documents/202109-AHIP_HDHP-Survey.pdf.

[5] See Kaiser Family Foundation (2015) and Internal Revenue Service (2013).

[6] See Internal Revenue Service (2004).

[7] See Internal Revenue Service (2004).

[8] See Internal Revenue Service (2004).

[9] See the literature reviews in Bundorf (2012) and Agrawal, Mazurenko, & Menachemi (2017), as well as research in Brot-Goldberg, Chandra, Handel, & Kolstad (2017); Chandra, Gruber, & McKnight (2010); Chernew, et al. (2008); Collins, Rasmussen, Beutel, & Doty (2015); Fronstin & Roebuck (2019); Fronstin & Roebuck (2013); Fronstin & Roebuck (2020); Fronstin & Roebuck (2014); Fronstin & Roebuck (2016); Fronstin, Sepúlveda, & Roebuck (2013); Fronstin, Sepúlveda, & Roebuck (2013); Fronstin, Roebuck, Buxbaum, & Fendrick (2020); Goldman, Joyce, & Zheng (2007); Trivedi, Moloo, & Mor (2010); Wharam, et al. (2017); and Wharam, et al. (2018).

[10] See Lee, Maciejewski, Raju, Shrank, & Choudhry (2013).

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[12] The Healthcare Common Procedure Coding System (HCPCS) is a collection of standardized codes that represent medical procedures, supplies, products, and services.

[13] Current Procedural Terminology (CPT) refers to a medical code set, created, and maintained by the American Medical Association. It is used by providers of health care services to track the services and procedures they perform for purposes of billing and claims processing.

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