Premium Impact of Expanding Pre-Deductible Coverage to Chronic Disease Management Medications in HSA-Eligible Health Plans

Paul Fronstin, Ph.D., Employee Benefit Research Institute; M. Christopher Roebuck, Ph.D., RxEconomics LLC; and A. Mark Fendrick, M.D., University of Michigan

ATA 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 expanding pre-deductible coverage to 116 drug classes used to manage chronic conditions.

Key Findings:

- The impact on premiums of expanding pre-deductible coverage to 116 drug classes related to chronic disease management medications in HSA-eligible health plans is relatively small (range 1.3–4.7 percent).
- The premium impact was driven by: 1) the amount of increased uptake of drugs as a result of enhanced coverage, 2) elimination of all consumer cost sharing or inclusion of coinsurance in lieu of the deductible, and 3) whether or not increased drug use led to offsets in spending on non-drug medical expenditures (e.g., preventable hospitalizations).
- Premiums increased the least — 1.3 percent — when employers imposed coinsurance instead of a deductible and when increased use of prescription drugs led to reduced use of other medical services.
- The most expensive scenario, an increase of 4.7 percent, occurred when increased prescription drug utilization led to no decrease in use of other medical services and employers did not impose any coinsurance (i.e., zero cost sharing).

Overall, health spending averaged $4,947 per person in 2018. Prescription drugs accounted for $983 or 20 percent of total spending. The 116 drug classes examined in this study accounted for $798, which was 81 percent of the drug spend and 16 percent of the total spend per person. Only $108 of the $798 in drug spending on the 116 drug classes, or 2 percent of total spending, was attributable to the deductible. The remainder was covered by insurance and/or some other form of cost sharing.

In the absence of utilization increases as a result of covering these 116 drug classes in full, premiums would increase 2 percent. However, medical cost offsets as well as other forms of cost sharing will reduce the impact of expanding pre-deductible coverage on premiums. This is evidenced by the 1.3 percent increase in premiums that we found when average coinsurance is imposed instead of a deductible, and medical cost offsets apply.

Our finding that premiums increased little due to the expansion of pre-deductible coverage is also related to the relatively high percentage of users of the 116 drug classes meeting their deductible. Users of these services are generally high users of health care 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.

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.

This study was conducted through the EBRI Center for Research on Health Benefits Innovation (EBRI CRHBI), with the funding support of the following organizations: Aon, Blue Cross Blue Shield Association, ICUBA, JP Morgan Chase, National Pharmaceutical Council, Pfizer, and PhRMA.
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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).

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

Under the initial 2004 IRS guidance for HSA-eligible health plans, 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.” 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).
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 most 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 include 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. A 2021 AHIP survey of health plans also found that three-quarters of health plans expanded pre-deductible coverage as a result of the IRS notice.4

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.

There is limited empirical evidence on the impact of expanding pre-deductible coverage on insurance premiums as a result of IRS Notice 2019-45. The 2021 AHIP survey of insurers noted above reported 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.

EBRI research using claims data and assumptions about behavioral responses confirmed the findings from the AHIP survey (Fronstin, Roebuck, and Fendrick 2022). In general, the impact on premiums of expanding pre-deductible coverage as allowed in IRS Notice 2019-45 is small. Estimated premium increases range from virtually zero to 1.5 percent. There was no premium increase in the conservative scenario where deductibles were replaced by coinsurance,
use of health care services were assumed not increase due to lower cost-sharing, and enrollees’ related diagnoses were required. We found a 0.87 percent increase in premiums when use of health care services was assumed to increase because of the lower cost sharing and employers did not impose any cost sharing. If all 14 services were excluded from pre-deductible coverage with no cost sharing, use of health care services increased, and the services were covered whether or not an enrollee had a related diagnosed condition, premiums increased by 1.5 percent.

The only known work that examined how expanding pre-deductible coverage to medications to manage chronic conditions was conducted before IRS Notice 2019-45 was released and examined 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.

In this Issue Brief, we use claims data to estimate the effect of expanding pre-deductible coverage beyond IRS Notice 2019-45 to 116 classes of medications. Our work improves on past research in a number of ways. First, we incorporate medical cost offsets, which occur when increased utilization of prescription drugs results in decreased use of medical services. Second, we use actual information on deductibles, copayments, and coinsurance instead of using the same baseline HSA-eligible health plan design for all enrollees. Third, by using more recent data, our estimates reflect more recent use and cost of brand and generic drugs in each of the drug classes. 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 (option, 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 for those with chronic medical conditions and lower household income.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; 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 selective serotonin reuptake inhibitors (SSRIs).

There is already an appetite for adding more services, as evidenced by The Chronic Disease Management Act, which was reintroduced in the United States 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.

### Financial Impact of Expanded Drug Coverage

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

(a) Volume: Lower patient out-of-pocket costs tends to increase utilization.

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

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

### 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 plan-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 116 Drug Therapeutic Classes
We classified all prescription drug claims into therapeutic classes using the AHFS® Pharmacologic-Therapeutic Classification (AHFS).11 Of the 572 unique therapeutic classes in the AHFS, we selected the most common and most costly 116, which together captured 94 percent of all prescription drug claims and 81 percent of all pharmacy spending for our sample in 2018.12 These 116 therapeutic classes likely included some medications not used in the prevention and/or management of chronic disease (e.g., antibacterials, antibiotics). We did not attempt to further prune the list of classes since it is unclear how the IRS would enforce this clinical nuance were Notice 2019-45 expanded in some way. We did, however, overlay the Red Book’s® maintenance indicator field onto the data for the 116 classes and determined that 87 percent of pharmacy spending and 72 percent of prescription drug claims were for drugs that were labeled as being for “chronic” or “both chronic and acute” conditions (i.e., just 14 percent of spending and 28 percent of claims were either labeled as “acute only” or “unknown”).

Impact Analysis of Pre-Deductible Coverage
To estimate the impact of pre-deductible coverage for the 116 drug classes, we first summed the following fields from all relevant claims: deductible, coinsurance, copayment, plan paid amount, and total allowed amount. These aggregate figures were divided by the total sample size to derive average values. The average annual deductible amount (per covered life) for the 116 drug classes 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 allows first-dollar coverage for the 116 drug classes 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.

Volume Effects
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 12 percent utilization-increase assumption, based on estimates of the elasticity of demand for prescription drugs (Roebuck 2012) (Gatwood et al. 2014).

Shift Effects
We also assumed that employers imposed some form of cost sharing on the 116 drug classes. This cost sharing is imposed regardless of whether an enrollee meets his or her deductible. We added this assumption because in prior related 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). For this assumption, we calculated the average cost share by summing the copay and coinsurance fields from the 116 drug classes’ claims that were adjudicated after the deductible was satisfied and then divided by the sum of the allowed amounts from those claims.

Offset Effects
Finally, we also considered potential medical cost offsets from increased use of prescription drugs. The Congressional Budget Office (CBO) acknowledged that there was a link between prescription drug utilization and its impact on use of other medical services as far back as 2012 (Congressional Budget Office 2012). More specifically, when it came to scoring the financial impact of proposed policies that may affect use of medications among Medicare beneficiaries, the CBO started assuming that a 1 percent increase in the number of prescription drug fills was associated with a 0.20 percent decrease in spending on other medical services. A similar effect has been found in the Medicaid population (Roebuck et al. 2015). We think it is reasonable to assume the same effect will apply to the population with employment-based health benefits — in particular, those enrolled in HSA-eligible health plans.
In all the scenarios, we assumed that the forgone deductible payments would be recoverable when other health services became 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-116 drug classes) spend (i.e., total allowed amount) in excess of the deductible level among users of the 116 drug classes. 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 to 116 drug classes related to chronic disease management medications in HSA-eligible health plans is summarized in Figure 3. In general, the effects vary in several ways but are relatively small, regardless. The estimated premium increases range from 1.3 percent to 4.7 percent.

Premiums increase the least (1.3 percent) in the following circumstance:

- Utilization of health care services increased 12 percent.
- Employers impose average coinsurance instead of a deductible.
- Increased use of prescription drugs reduce use of other medical services.

Premiums increase the most (4.7 percent) in the following circumstance:

- Utilization of health care services increased 12 percent.
- Employers did not impose coinsurance.
- Increased use of prescription drugs did not reduce use of other medical services.

**Figure 3**

*Impact on Premiums of Expanding Pre-Deductible Coverage to Chronic Disease Management Medications in HSA*-Eligible Health Plans

* HSA = health savings account.
Source: Employee Benefit Research Institute estimates based on administrative enrollment and claims data.
### Figure 4
**Multivariate Sensitivity Analysis of Impact on Premiums of Expanding Pre-Deductible Coverage to Chronic Disease Management Medications in HSA-Eligible Health Plans**

#### 7% Coinsurance Increase

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#### 14 Percent Coinsurance

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<tr>
<th>Utilization Shift</th>
<th>Medical Cost Offset</th>
<th>0%</th>
<th>5%</th>
<th>10%</th>
<th>15%</th>
<th>20%</th>
<th>25%</th>
<th>30%</th>
<th>35%</th>
<th>40%</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.8%</td>
<td>0.8%</td>
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<td>0.8%</td>
<td>0.8%</td>
<td>0.8%</td>
<td>0.8%</td>
<td>0.8%</td>
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</tr>
<tr>
<td>4%</td>
<td>1.5%</td>
<td>1.3%</td>
<td>1.2%</td>
<td>1.0%</td>
<td>0.9%</td>
<td>0.8%</td>
<td>0.6%</td>
<td>0.5%</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>8%</td>
<td>2.2%</td>
<td>1.9%</td>
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<td>1.3%</td>
<td>1.0%</td>
<td>0.7%</td>
<td>0.4%</td>
<td>0.1%</td>
<td>-0.2%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>12%</td>
<td>2.8%</td>
<td>2.4%</td>
<td>1.9%</td>
<td>1.5%</td>
<td>1.1%</td>
<td>0.6%</td>
<td>0.2%</td>
<td>-0.3%</td>
<td>-0.7%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>16%</td>
<td>3.5%</td>
<td>2.9%</td>
<td>2.3%</td>
<td>1.7%</td>
<td>1.1%</td>
<td>0.5%</td>
<td>-0.1%</td>
<td>-0.7%</td>
<td>-1.2%</td>
<td>-1.2%</td>
</tr>
<tr>
<td>20%</td>
<td>4.2%</td>
<td>3.4%</td>
<td>2.7%</td>
<td>1.9%</td>
<td>1.2%</td>
<td>0.5%</td>
<td>-0.3%</td>
<td>-1.0%</td>
<td>-1.8%</td>
<td>-1.8%</td>
</tr>
<tr>
<td>24%</td>
<td>4.8%</td>
<td>3.9%</td>
<td>3.1%</td>
<td>2.2%</td>
<td>1.3%</td>
<td>0.4%</td>
<td>-0.5%</td>
<td>-1.4%</td>
<td>-2.3%</td>
<td>-2.3%</td>
</tr>
</tbody>
</table>

- 4% of More Premium Increase
- 3-4% Premium Increase
- 2-3% Premium Increase
- 1-2% Premium Increase
- 0-1% Premium Increase

**Premium Decrease**

Source: Employee Benefit Research Institute estimates based on administrative enrollment and claims data.
If employers choose to not impose any cost sharing, premiums increase 2.9 percent. Were we to remove the assumption that prescription drug utilization affects use of other medical services, our premium estimates would increase. They would increase to 3.1 percent if employers imposed coinsurance instead of a deductible.

Our main findings are based on two assumptions: a 12 percent utilization increase assumption and a 20 percent medical offset assumption. Figure 4 shows the sensitivity of our findings when those assumptions are varied. In general, we find that as utilization increases, premiums increase as well. We also find that as medical cost offsets increase, premiums decrease. However, at some point, utilization increases combined with medical cost offsets of at least 30 percent start to reduce premiums. As expected, lower coinsurance results in higher premium increases at all combinations of utilization increases and medical cost offsets. Similarly, higher coinsurance results in lower premium increases at all combinations of utilization increases and medical cost offsets.

Our estimates assume that eliminating deductibles (whether or not coinsurance is imposed) for medications for chronic disease management will induce enrollees to increase their use of prescription drugs. This increase in use may incur in two ways. Enrollees who were not using medications for chronic disease management may start to use those services (this is known as the extensive margin). And among those using medications for chronic disease management, 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. Were we to assume that there was no increase in use of services as a result of expanding pre-deductible coverage, premiums would increase 0.9 percent if coinsurance was substituted for the deductible and 2.2 percent if no cost sharing was imposed (results not shown in figure).

Discussion

Our findings that coverage of chronic disease medications on a pre-deductible basis leads to modest (1.3–4.7 percent) premium increases are consistent with related research in this area. AHIP conducted a survey of health plans in 2021 to assess the impact of expanded pre-deductible coverage in HSA-eligible health plans on premiums related to IRS Notice 2019-45. 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.

More recently, Fronstin, Roebuck, and Fendrick (2022) used claims data to estimate the effect of expanded pre-deductible coverage of services and medications specified in IRS Notice 2019-45 on premiums. They found that premium increases ranged from virtually zero to 1.5 percent.

VBID Health appears to be the only study to have examined the impact of expanding pre-deductible coverage to services in addition to those specified in IRS Notice 2019-45 on premiums (VBID Health n.d.). It 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. It found that covering all these drug classes pre-deductible with a combination of copayments and coinsurance would increase premiums by 1.7 percent. There are several factors that can explain the small increase in premiums.

Overall, health spending averaged $4,947 per person in 2018 (Figure 5). Prescription drugs accounted for $983 or 20 percent of total spending. And the 116 drug classes examined in this study accounted for $798 or 16 percent per person. Only $108 of the $798 in drug spending on the 116 drug classes, or 2 percent of total spending, was attributable to the deductible. The remainder was covered by insurance and/or some other form of cost sharing. In the absence of utilization increases as a result of covering these 116 drug classes in full, premiums would increase 2 percent. However, medical cost offsets as well as other forms of cost sharing will reduce the impact of expanding pre-deductible coverage on premiums. This is evidenced by the 1.3 percent increase in premiums that we found when average coinsurance is imposed instead of a deductible, and medical cost offsets apply.
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 116 drug classes meeting their deductible is much higher — 17 percent. Our finding that premiums increased little due to the expansion of pre-deductible coverage is related to the relatively high percentage of users of the 116 drug classes meeting their deductible. Users of these services are generally high users of health care 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.
Impact of Adding Pre-Deductible Coverage on Cost Sharing for Patients Using Disease-Modifying Anti-Rheumatic Drugs

Disease-modifying antirheumatic drugs that are used to treat rheumatoid arthritis and other conditions is a case in point. This one drug class accounts for 19 percent of total pharmacy spending among the 116 drug classes examined. On average, this one drug class is about $34,000 per year. Additional pharmacy spending averages about $5,000 per year, and total spending on medical and pharmacy averages about $52,000 per year. To understand how cost sharing might change for the users of this drug class and their employers, consider the three examples in Figure 6. 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.

When there is no pre-deductible coverage, an enrollee using $52,000 in health care services reaches his or her $3,000 deductible and incurs 10 percent coinsurance on the $49,000 in health care services used above the deductible. However, because the statutory maximum out-of-pocket limit was $6,650 in 2018, coinsurance does not apply to the entire $49,000. The enrollee reaches his or her maximum out-of-pocket limit.

Now let’s assume that disease-modifying antirheumatic drugs was covered on a pre-deductible basis. The average allowed amount for this drug class is about $34,000. Assuming that this drug class is not subject to any copayments or coinsurance, the enrollee would be covered for $34,000 in insulin. They would still meet their $3,000 deductible. After the deductible is met, $15,000 in health care spending is subject to coinsurance, resulting in $1,500 paid towards coinsurance, and $4,500 paid out-of-pocket in total. Cost sharing falls by $2,150 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. To recoup the entire $2,150, employers could require 10 percent coinsurance. Just like the case where the drug class is subject to the deductible, imposing 10 percent coinsurance results in the enrollee reaching his or her maximum out-of-pocket cost sharing limit of $6,650.
Table: Impact of Adding Pre-Deductible Coverage on Cost Sharing for Patients Using Disease-Modifying Anti-Rheumatic Drugs, Employee-Only Coverage

<table>
<thead>
<tr>
<th>Plan Design</th>
<th>No Services Covered Pre-Deductible</th>
<th>Disease-Modifying Anti-Rheumatic Drugs Covered in Full</th>
<th>Disease-Modifying Anti-Rheumatic Drugs Covered With Coinsurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deductible</td>
<td>$3,000</td>
<td>$3,000</td>
<td>$3,000</td>
</tr>
<tr>
<td>Coinsurance</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
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<tr>
<td>Total Spending</td>
<td>$52,000</td>
<td>$52,000</td>
<td>$52,000</td>
</tr>
<tr>
<td>Pre-deductible coverage</td>
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<td>$34,000</td>
</tr>
<tr>
<td>Deductible</td>
<td>$3,000</td>
<td>$3,000</td>
<td>$3,000</td>
</tr>
<tr>
<td>Coinsurance</td>
<td>$3,650</td>
<td>$1,500</td>
<td>$3,650</td>
</tr>
<tr>
<td>Total out-of-pocket (OOP)</td>
<td>$6,650</td>
<td>$4,500</td>
<td>$6,650</td>
</tr>
<tr>
<td>Change in OOP</td>
<td>-$2,150</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>% of Sample With Condition</td>
<td>0.43%</td>
<td>0.43%</td>
<td></td>
</tr>
<tr>
<td>Cost Share Shift as a Percentage of Total Spend</td>
<td>0.2%</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

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

**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 and health plans 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 (Fronstin, Roebuck and Fendrick 2022). Further expanding pre-deductible coverage to 116 drug classes that are used mostly for chronic disease medication management also has a small impact on premiums. Employers can recoup the costs associated with expanding pre-deductible coverage by imposing copayments or coinsurance.

Even in the absence of evidence that expanding pre-deductible coverage will increase premiums, employers were already reporting that they would add additional services on a pre-deductible basis if allowed by the IRS. Legislative proposals that provide additional flexibility to extend pre-deductible coverage to services that manage chronic conditions may benefit employers and policymakers who are continually challenged by health care spending’s serious fiscal challenges.
References


Appendix

Appendix Figure 1
Statutory HSA Limits, 2004–2022

<table>
<thead>
<tr>
<th>Year</th>
<th>Minimum Deductible</th>
<th>Maximum Contribution</th>
<th>Maximum Out-of-Pocket Limit</th>
<th>Per-Person Catch-up Contribution Limit</th>
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<tbody>
<tr>
<td></td>
<td>Individual</td>
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<td>Individual</td>
<td>Family</td>
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<td>2018</td>
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<td>2022</td>
<td>1,400</td>
<td>2,800</td>
<td>3,650</td>
<td>7,300</td>
</tr>
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</table>

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 an 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.


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


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, Sepulveda, & 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 Medications adjudicated via the medical insurance benefit are outside the scope of this analysis.