High-Deductible Health Plans

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High-deductible health plans (HDHPs) provide insurance coverage at a low monthly premium, but expose consumers to higher cost-sharing for most health services than traditional plans. High-deductible plans are increasingly prevalent in both the employer-sponsored and individual health insurance markets. Consequently, it is critical to understand the effects of HDHPs on the affordability of health care for consumers, health care costs and utilization, and health outcomes. The evidence is somewhat limited by inadequate study designs, short follow-up times, variations in HDHP features, and a dearth of studies examining health outcomes.

However, the evidence we have suggests HDHPs:

1. are less affordable than traditional plans because of cost-sharing requirements that exceed the financial resources of many consumers;
2. lead to fewer office and emergency department visits and about the same use of preventive services as traditional plans, at least in the short run (1-2 years), though findings across studies are inconsistent; and
3. may result in poorer health outcomes for consumers of low socioeconomic status.

Theory Supporting HDHPs

High-deductible plans aim to reduce health care costs by subjecting consumers to the financial consequences of their health care choices. Proponents theorized that consumers will alter their behavior to minimize their cost-sharing by reducing unnecessary health care utilization, selecting more affordable providers, and adopting healthier behaviors.1,2

Proliferation of HDHPs

High-deductible health plans are spreading rapidly in the employer-sponsored health insurance market, as shown in Figure 1. Said another way, in 2010, just over a quarter of employees with health insurance coverage had a deductible of greater than $1,000 for single coverage. By 2015, nearly half of employees did.3,4

Findings

HDHPs MAY RESULT IN POORER HEALTH OUTCOMES FOR CONSUMERS OF LOW SOCIOECONOMIC STATUS.
High deductible plans have also become the dominant type of insurance on the health insurance exchanges created by the Patient Protection and Affordable Care Act. For example, Washington State’s Office of the Insurance Commissioner reported that health plans offered in 2016 had significantly higher deductibles than 2015 plans. In 2015, 49 plans had deductibles lower than $1,300 and 8 plans had deductibles greater than $6,000. In 2016, only 25 plans offered deductibles lower than $1,300, while the number of plans with deductibles greater than $6,000 grew to 28.

Evidence – Affordability
Studies on the effects of HDHPs on the affordability of health care have used two approaches: (1) surveys of consumers to ask about health care-related financial burden, or (2) comparisons of out-of-pocket (OOP) costs in HDHPs to self-reported income and assets. Surveys inquiring about financial burden (e.g., problems paying medical bills, delaying or foregoing needed care) have all concluded that people with HDHPs are significantly more likely to report experiencing health care-related financial burden than people in traditional insurance plans.

Comparisons of OOP costs to income have found that, among low- and middle-income consumers, those with HDHPs are significantly more likely than those in traditional plans to exceed “affordability” (costs to income ratios) thresholds (studies have used 3%, 10% and 20%). Furthermore, a significant percentage of the non-elderly and non-poor population do not have sufficient household liquid assets to cover the deductible for a HDHP, and a majority do not have sufficient liquid assets to cover the OOP limit for a HDHP.

Evidence – Costs and Utilization
Most prior research on the effects of HDHPs have focused on health care costs and utilization. Studies examining total costs have demonstrated inconsistent results, with several showing lower costs for HDHP consumers compared to consumers in traditional plans and several showing comparable costs.

Research on the effects of HDHPs on utilization has produced varying results as well, depending on the area of utilization under examination. All but one study that examined outpatient visits has found that consumers with HDHPs have fewer outpatient office visits compared to consumers with traditional plans, an effect that was sustained throughout the follow-up period in all studies.
Pharmaceuticals. About half of the studies on the use of pharmaceuticals have demonstrated reductions in prescription fills, lower adherence rates, and a greater likelihood consumers will discontinue some classes of drugs if they have high-deductible coverage compared to consumers with traditional insurance. Other studies, however, found no difference in these measures between the two groups. Only one study showed increased prescription drug use for HDHP enrollees relative to consumers in a traditional plan.

Emergencies. A majority of studies examining emergency department (ED) use demonstrated fewer visits for consumers with high-deductible insurance relative to consumers in traditional plans during follow-up periods of either one or two years. Only a couple of studies with similar follow-up periods showed no differences in ED use. However, the study with the longest follow-up period of four years showed a significant increase in ED use among HDHP consumers relative to controls in the third and fourth year of follow-up.

Hospital admissions. Findings from studies focusing on inpatient hospital admissions have been very inconsistent. One study showed a decline in hospital admissions for consumers with an HDHP compared to consumers with a traditional plan. Two studies showed a relative decline in admission rates in year one of follow-up, but comparable rates in year two. Two studies showed comparable rates of admissions throughout the follow-up period. Finally, two studies showed significantly higher rates of admissions throughout a three year follow-up period.

Prevention. Most studies have found no differences in receipt of preventive services (cancer screenings, disease monitoring tests, and well-child visits) between HDHP enrollees and those with a traditional health plan, when these services were exempt from the deductible. One study, however, found reduced immunization rates among children in families covered by an HDHP compared to children in families with traditional insurance. Another study found reduced cancer screening rates in the first year of follow-up that did not persist during the remaining three years of follow-up. The only study that examined the receipt of preventive services that were subject to the deductible found a significantly reduced likelihood of mammograms, a reduced likelihood of Papanicolaou tests, and no difference in prostate cancer screening tests among consumers with a high-deductible plan.

Evidence – Outcomes

Only a couple of studies have examined the effect of HDHPs on health outcomes other than ED visits and hospitalizations, but the limited evidence suggests HDHPs may result in poorer health outcomes for low-income consumers. Results from the RAND Corporation’s health insurance experiment showed a significant reduction in blood pressure for low-income individuals with high blood pressure who were on the free insurance plan compared to individuals on the cost-sharing plans. Low-income individuals on the free plan who had vision problems at the beginning of the study also showed improved vision by the end of the study. A more recent study found that low-income HDHP consumers with diabetes experienced significantly increased visits to the ED for preventable acute diabetes complications relative to consumers in a traditional plan.
Limitations of the Evidence

The research on the effects of HDHPs has several limitations. The designs of many of the studies made it difficult to establish a causal relationship between HDHP coverage and study findings. Yet, studies with a design that supported causal inference often examined only a single health plan and were limited in their generalizability. Additionally, the majority of studies had follow-up periods of only one or two years; the longest follow-up period was four years. Consequently, the long-term effects of HDHPs on affordability, utilization and costs, and outcomes remains unknown. Finally, differences in the features of the HDHPs makes comparisons between studies difficult.

References