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High Deductible Health Plans

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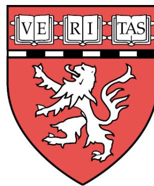


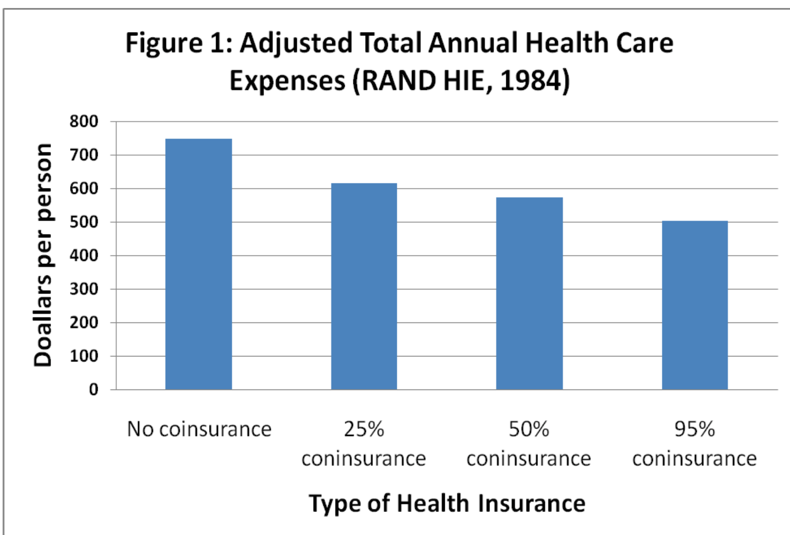
Background

A deductible is an amount of money that an individual must pay out of pocket before a health plan begins to cover expenses. High deductible health plans (HDHPs) are fee-for-service insurance plans with higher-than-normal deductibles, defined by the federal government as greater than $1,200 per year for a single person or more than $2,400 for a family (IRS 2009). In some cases, plans cover recommended services such as preventive exams and cancer screening without making them subject to the deductible. HDHPs are often coupled with health savings accounts (HSAs) or employer-sponsored health reimbursement accounts (HRAs) that allow consumers to set aside money for health care in a tax-sheltered account. This money can then be used to meet deductibles and other out-of-pocket health care expenses.

Since HDHP enrollees must initially pay most medical expenses out of pocket, they will in theory be more likely to seek out lower cost providers or defer care that they believe to be of little value. Proponents of HDHPs assert that these plans will motivate individuals to use less unnecessary care and therefore lower their overall health spending. In addition, proponents believe a more cost-conscious consumer might encourage more competition among health care providers.

Cost and Usage of Medical Services

Since HDHPs are a relatively new addition to the health insurance market, much of our understanding of their effect on cost and usage comes from previous research that analyzed health plans with high levels of cost sharing. The gold standard for such research is the RAND Health Insurance Experiment (HIE), a 15-year, multimillion dollar project that randomly assigned families to health plans with different levels of cost sharing and followed their usage of health care (Newhouse 2004). The study found a clear pattern: plans with higher cost sharing led to a reduction in medical costs, mostly explained by fewer hospitalizations. For example, health care spending among the group with the largest deductible (similar to today's HDHPs) was 66% of the spending of those with the smallest deductible (See Figure 1) (Manning and Newhouse 1987). The decreased spending was due to patients reducing their use of health care rather than seeking lower-cost care (Keeler 1992). The highest-deductible group reduced their use of all services by 30% and had a 23% lower likelihood of being hospitalized compared to those with no deductible (Newhouse 2004). Notably, however, the researchers also analyzed the types of care that were forgone. In general, enrollees were not



able to distinguish between services thought to be necessary versus unnecessary and decreased utilization of both types of services equally.

More recent research analyzing HDHPs presents a similar picture but is somewhat limited by favorable selection—the observation that younger, healthier patients, who foresee less need for health care, are more likely to join an HDHP (Bertko 2004) (Greene, Hibbard, Dixon, Tusler 2006). Because of favorable selection, it can be difficult to know if changes in behavior and health spending are truly due to enrollment in an HDHP or if they reflect the healthier status of many HDHP enrollees.

Despite these limitations, there is a fairly consistent pattern showing that HDHP enrollment is associated with a decrease in use of services and slower rate of growth in spending. One study compared emergency department visits among enrollees in a traditional health plan and individuals who had recently been switched by their employer from the same traditional health plan to an HDHP. They observed a 10% reduction in total visits to the ED among HDHP enrollees that was mostly due to a decrease in repeat ED visits for low-severity conditions (Wharam et al. 2007). In 2001, Humana, a large health insurer, introduced several HDHPs along with more traditional health plans. HDHP enrollee spending was 25%–35% lower than prior estimates would have predicted, although favorable selection likely accounted for some of this decrease in spending (Bertko 2004). However, another study that examined 30,000 HDHP enrollees with six different employer programs found a much smaller level of cost savings associated with HDHP enrollment. When researchers factored in members' risk profiles, they determined that the HDHP accounted for a cost savings of 1.5% compared to other plans (Burke and Pipich 2008).

Not all studies have demonstrated a decrease in overall spending with HDHP enrollment, however. One study found that while HDHP users initially had lower prescription drug costs, they eventually incurred significantly increased costs related to hospital care compared to enrollees of more traditional plans (Feldman, Parente, and Christianson 2007). These results suggest that high-deductible plans may at first motivate patients to lower health spending by avoiding essential care but that eventually health costs will be higher as patients face the repercussions of putting off necessary care.

Effect on Quality of Care and Patient Health

Higher cost sharing is intended to make consumers more cost conscious so that they will use available cost and quality information to make better health care decisions. In practice, however, studies demonstrate that higher cost sharing reduces both necessary and unnecessary care. Health outcomes for the general population have not been shown to be affected by increased cost sharing, but poorer health outcomes have been observed for lower-income patients and sicker patients under such health plans. Low-income individuals may be more affected by higher cost sharing as it presents a relatively higher financial burden.

The RAND HIE demonstrated that the 40% of participants with the lowest income and the 40% of participants in the poorest health were most negatively affected by increased cost sharing. Under high-cost-sharing plans, these patients were 21% more likely to have chest pain, shortness of breath with light exercise, and unexplained weight loss of greater than 10 pounds. High cost sharing also inhibits low-income individuals and families from accessing

needed care. Lower-income adults (the lowest third in income) were 39% less likely to access "highly effective care for acute conditions" for themselves and 44% less likely to access such care for their children when they were subject to cost sharing (Rasell 1995).

In 2008, The EBRI/Commonwealth Fund's Consumerism in Health Care Survey reported that 31% of HDHP enrollees reported delaying or avoiding health care due to cost, compared to only 16% in more traditional health plans. Adults making less than $50,000 per year were also more likely to avoid medical care independent of their category of health insurance (Frostin and Collins 2008). In addition, a study analyzing emergency room visits suggests that lower-income patients may be more likely to forgo essential medical treatment even for high-severity incidents when they are enrolled in an HDHP (Wharam et al 2007).

Multiple studies demonstrate that increased cost sharing has adverse effects on drug adherence (Greene, Hibbard, Murray, Teutsch, and Berger 2008). A survey of over 1,300 individuals showed that patients enrolled in an HDHP were more likely than enrollees in other plans not to fill a prescription for each type of medication surveyed (See Table 1) (Lee and Zapert 2005). For some chronic conditions including lipid disorder, congestive heart failure, diabetes, and schizophrenia, higher cost sharing is associated not just with reduced adherence but also with higher costs resulting from additional use of medical services. (Goldman, Joyce, and Zheng 2007).

Table 1: Proportion of Members of HDHPs and Other Privately Insured Patients Who Did Not Fill a Prescription Because of Cost
(Lee and Zapert, 2005)

Condition for Which Medication Was Prescribed	Patients Enrolled in Non–High-Deductible Plan	Patients Enrolled in High-Deductible Plan
	percent	
All	13	28
Diabetes	15	24
Depression	9	30
Arthritis	9	16
Chronic pain	9	23
Heart disease or hypertension	8	18
Allergies	7	23
Asthma	9	23
High cholesterol	2	16
Other chronic condition	17	25

In general, increased cost sharing leads to lower rates of preventative care. For example, women's usage of Pap smears and mammography declines when the procedures are not covered by insurance (Trivedi, Rokowski, and Ayanian 2008) (Rosenthal, Hsuan, and Milstein 2005). Some studies suggest that lower-income patients are disproportionately affected (Trivedi, Rokowski, and Ayanian 2008). However, these negative effects on preventative care can be avoided if HDHPs are designed to cover high-value care before the deductible is met. Illustrating this point, one study compared the rate of cancer screening for patients before and after switching to an HDHP. If the screening process was covered by insurance (breast, cervical, colon cancer) the rates of screening were unchanged under an HDHP. However, other screening that was no longer covered dropped more than 25% (Wharam et al 2009).

Financial Risk to the Enrollee
HDHPs generally offer lower premiums than other plans and as such can lower overall health care costs for patients with few medical needs. The American Academy of Actuaries estimated that those with few health care needs would save $360 per year when switching to an HDHP from a more traditional plan (Actuaries 2008).

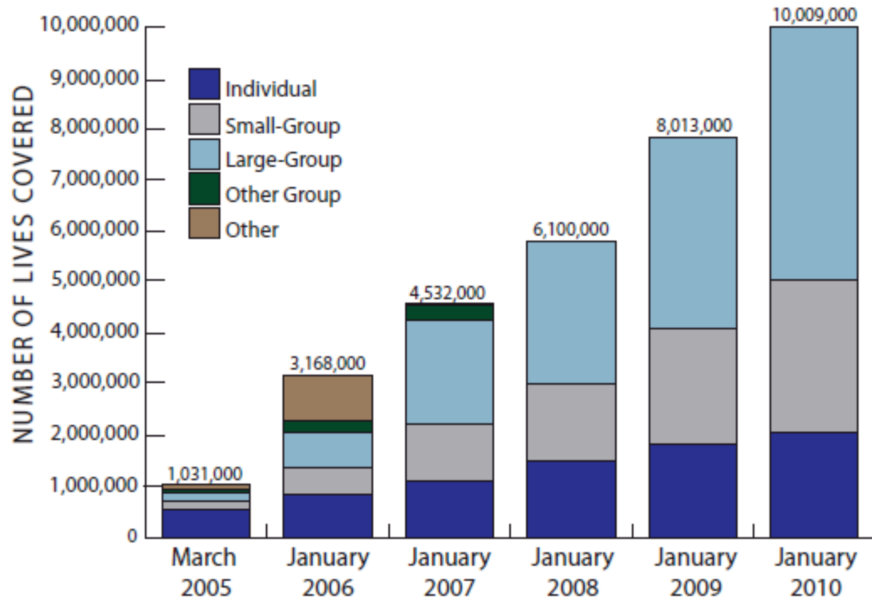
However, HDHP enrollees may carry a higher risk of financial burden because of the high initial out-of-pocket costs. Research suggests that low-income and less-healthy individuals with chronic disease or moderate health care needs will be most at risk. Some consider HDHPs a "tax" on the sick, because they have to spend the full amount of the deductible before services are covered. The Commonwealth Fund's Biennial Health Insurance Survey found that 54% of people with deductibles greater than $1,000 reported difficulty paying health care bills, compared with 39% of people with deductibles less than $500 and 24% of people with no deductible. The survey also found that low-income individuals enrolled in an HDHP were more likely to have medical debt or struggle to pay medical bills than individuals with similar incomes enrolled in plans with lower deductibles. (Davis, Doty, and Ho 2005)

Patient Satisfaction
HDHP enrollees are less satisfied with their health insurance than those enrolled in more traditional health plans. The Employee Benefits Research Institute (EBRI)/Commonwealth Fund's Consumerism in Health Care Survey found that only 35% of HDHP enrollees were extremely or very satisfied with their health plan compared to 64% in more traditional plans. Only 27% of individuals covered by an HDHP would recommend the plan to a friend (Fronstin and Collins 2008).

About 80% of individuals with an HDHP reported frustration at the lack of information available about the cost and quality of health care services **(**Davis 2004). Because the prices of visits, laboratory tests, and procedures are rarely openly disclosed, HDHP enrollees are largely unable to search out lower-cost care. One survey found that only 7% of employers rated the information that they provided for their employees about cost of health providers as excellent or good (McDevitt, Lore, Buntin, Damberg, and Park 2007). While more insurers and employers are posting information on health costs and tools to aid consumers in making health decisions, few HDHP enrollees feel confident that they have enough tools to make an informed decision (Buntin, Damberg, and Haviland 2006).

HDHPs in the Future
As cost containment grows in importance, HDHPs will likely assume a much larger piece of the health insurance market. Already the number of people enrolled in an HDHP is growing rapidly, increasing from 1 million in 2005, to 4.5 million in 2007, to more than 10 million in 2010 (Center for Policy Research 2010) (See Figure 2).

Figure 2: Number of Individuals Covered By HDHPs
(AHIP HAS/HDHP Census, 2010)



A recent survey of almost 500 employers by Fidelity Investments suggests that HDHPs are seen by many as the plan of the future in the employer-based market. Some 55% of respondents indicated that HDHPs were the health plans that were most attractive to their company in the years ahead (Fidelity 2010). The Patient Protection and Affordable Care Act mandates that tens of millions of people enroll in health insurance plans over the next few years. Because of their low premiums, HDHPs may provide coverage for many of the newly insured. Four years after the passage of state health reform in Massachusetts, many of the plans offered through the state's Health Connector are HDHPs; these "bronze" plans have the most affordable premiums.

Due to the expected growth in the HDHP market, it will be important to continue to develop better information related to the cost and quality of health providers and to monitor the health outcomes and financial risks associated with these plans, especially for low-income patients.

Part I

Michael Harrington is a 51-year-old single man from Roxbury who lost his job at a car dealership about nine months ago. He recently was hired at a local bank for a position that provides regular hours and a steady income. Unfortunately, however, Michael was forced to take a significant pay cut, and his new job does not provide health insurance. Before starting at his new position, Michael visits the Massachusetts Health Connector website to search for a health plan. Michael's salary of $45,000 is just above the amount at which Massachusetts begins subsidizing premiums for its residents. Because he is worried about living on a much smaller salary, Michael decides to enroll in the least expensive plan that is available to him, the Neighborhood Health Plan (see table). The plan seems skimpy to Michael, but it has positive reviews from other enrollees. It has a meager prescription drug plan, a $2,000 deductible (with 20% coinsurance after the deductible is met), and a $5,000 cap on out-of-pocket expenses. Michael concludes that since he has no major health problems and is taking only one medication—Lipitor®, for high cholesterol—he probably doesn't need top-of-the-line coverage and that this cheaper plan will be helpful as he adapts to living on a lower salary.

Insurance Carrier	Neighborhood Health Plan
Insurance Type	HDHP
Premium	$334.86/month
Annual Deductible	$2,000
Annual Out-of-Pocket Maximum	$5,000
Visits to PCP Annual Physical	$25 copay. Not subject to annual deductible
Inpatient Hospital Care Outpatient Surgery Laboratory and Imaging	Subject to annual deductible and then 20% coinsurance *(all information from https://www.mahealthconnector.org)*

Several months after starting his new job, Michael visits his primary care physician, Dr. Beldon, for an annual physical. They talk about his new job, which he enjoys, but Michael reports that this last year has been challenging; with his pay cut, he is struggling to get by financially. After the physical exam, Dr. Beldon explains that he would like to draw blood in order to run a few basic lab tests, including a prostate-specific antigen (PSA) test, a lipid panel to make sure that Michael's cholesterol is under control, and liver function tests to look for side effects from the statin. Michael worries that his cholesterol might be higher than in previous years. He shares with Dr. Beldon that he has not been taking his Lipitor® as regularly because it is much more expensive under his new insurance. Dr. Beldon decides to switch Michael to a generic statin which costs much less and reminds Michael of the importance of taking his medication regularly.

Several weeks after his appointment with Dr. Beldon, Michael is surprised to receive a bill in the mail from his physician's office. He remembered paying the $25 copay after his appointment. He is shocked to see that he has been billed $465 for the laboratory tests that Dr. Beldon ordered. He had assumed that since his insurance covered an annual physical that it would pay for the tests ordered during that appointment. His old insurance had always covered basic lab tests. When he called the insurance company, they explained that all laboratory tests were subject to the deductible and offered to send him a catalogue that detailed which visits and procedures were covered by insurance. When he hung up the phone Michael stared at the bill, wondering how he would pay off the $465 that he owed.

Discussion Questions

- What do you think of Michael's decision to enroll in an HDHP?
- A survey of families with HDHPs found that many were confused about specific processes due to the complexity of their plans and reluctant to discuss costs with doctors (Lieu et al. 2009). Dr. Beldon was aware that Michael had switched insurance coverage. What role does a doctor have in alerting patients to the cost of recommended treatment?
- How might Michael's attitude toward tests and procedures change during future appointments with Dr. Beldon?

Part II

Several months after his visit to Dr. Beldon, Michael is still struggling to pay off his medical bill from his physical. He has noticed that his financial struggles have taken a toll; he has been on edge at work and much more stressed at home. Also, for the past week or so, he has been coughing a lot. Although the cough is bothering him, he decides not to make an appointment with Dr. Beldon. He looked through the information that the insurance company sent him, but it was difficult to predict how much the visit might cost, and he knows that he cannot afford another large medical bill.

With each day, the cough progresses, and one week later he notices that he is hot to the touch and is having a great deal of difficulty breathing. He calls Dr. Beldon, who is highly concerned about Michael's health and refers him to the ED. When he is finally worked up by the ER doctors, they tell him that he has pneumonia, and, given his state, they would like to admit him to the hospital for a day or two until his condition stabilizes. As he struggles to catch his breath, Michael agrees to the plan, but wonders how he will be able to pay for his care.

Discussion Questions

- What steps can be taken to teach patients the difference between necessary and unnecessary care?
- What steps could be taken to improve drug adherence and to avoid unnecessary hospitalizations among enrollees of HDHPs?
- Michael's HDHP has 20% coinsurance after the deductible is met, but many HDHPs have much lower cost sharing once the deductible is reached. How might incentives change for patients with very high medical bills?

Part III

The governor of Indiana recently appointed a commission to begin plans for a health insurance exchange as mandated by the passage of national health reform (Patient Protection and Affordable Care Act). According to the law, states must develop an insurance exchange which provides subsidized insurance for individuals with incomes from 133% to 400% of the federal poverty level (FPL). The exchange should also provide a network for individuals making more than 400% of FPL to purchase health insurance (which is not subsidized) (Kaiser 2010). Today, the commission is planning on discussing what role HDHPs should play in Indiana's exchange program.

Since Massachusetts was the first state to set up a health insurance exchange as part of its statewide health care reform in 2006, its exchange, the Health Connector, serves as an important model for other states. The Health Connector encompasses two programs that are very similar to those outlined in the health reform bill. The first program provides subsidized healthcare to those making less than 300% of the FPL. The committee has noted that no HDHPs are offered to these individuals. All others individuals are eligible for the second program that allows them to compare and purchase unsubsidized insurance on an exchange, which includes all types of insurance plans, including HDHPs.

As the discussion begins, several committee members voice their concerns over research that shows that low-income individuals are more likely to avoid or delay necessary care when they are enrolled in an HDHP. One man cites a study that shows low-income HDHP enrollees are less likely to fill prescriptions and that the short-term cost savings of this may likely be overshadowed by much higher health spending in years to come. These arguments are countered by a woman who reminds the group that, for healthy individuals with relatively few health care needs, HDHPs could save enrollees a significant amount of money each year.

All members of the committee agree that any HDHP that is offered on their exchange would need to provide clear policy information and tools to help enrollees search for high-quality, low-cost health care. The committee is left divided, however, on which individuals should be allowed to choose an HDHP. One committee member says, "HDHPs offer the possibility of saving money, but they do so with an increased financial risk for people. I'm not sure if that's a chance I'm willing to take for our low- and moderate-income families."

Discussion Questions

- Which groups of people should be offered an HDHP as a choice for their health insurance plan?
- Should the committee limit HDHP enrollment to people who are more likely to have a cash reserve in case of emergency?

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