RAND HEALTH

Skin in the Game: How Consumer-Directed Plans Affect the Cost and Use of Health Care

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Key findings:

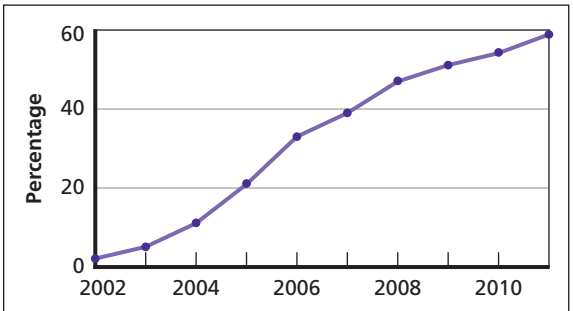
- **Families that switched from a traditional health plan to a consumer-directed health plan spent an average of 21 percent less on health care in the first year after switching than similar families remaining in traditional plans.**
- **Two-thirds of the savings came from initiating fewer episodes of care; one-third came from spending less per episode.**
- **Enrollees cut back on the use of some beneficial services, including preventive care, such as cancer screenings, even though such care was fully covered under consumer-directed plans.**
- **If the proportion of Americans with employer-sponsored insurance who enrolled in consumer-directed plans increased to 50 percent, annual health care costs would fall by an estimated $57 billion.**

As health care costs continue to climb, the search for solutions intensifies. One approach is the use of consumer-directed health plans, which combine a high deductible with a tax-advantaged personal health account whose funds roll over from year to year.[1] In exchange for the high deductible, monthly premiums are reduced. These plans are intended to give consumers more "skin in the game"—that is, to make them responsible for a greater share of spending. Proponents of this approach contend that consumers in such plans will have more incentive to make prudent, cost-conscious decisions about using health care, which, in turn, should drive down overall health care costs. Critics, however, have voiced concerns that consumers lack information needed to reduce spending without reducing quality of care.

These plans are increasingly common. In 2011, about 17 percent of Americans with employer-sponsored health coverage were enrolled in a consumer-directed plan. A 2012 survey found that 59 percent of large employers offered at least one such plan (Figure 1). With continued cost pressures compounded by the recession, enrollment is expected to continue to grow. Yet despite this growing enrollment, little is known about how these plans affect enrollee spending or use of services.

To address this knowledge gap, a team of researchers from RAND, Towers Watson, and the University of Southern California conducted a series of studies to examine the effects of high-deductible plans—particularly consumer-directed plans—on the costs and use of care. The team collected claims and enrollment data from 2003 through 2007 for more than 800,000 households

Figure 1
Over Half of Large Employers Now Offer a Consumer-Directed Health Plan



SOURCE: Data from Towers Watson and the National Business Group on Health, *Performance in an Era of Uncertainty: 17th Annual Employer Survey on Purchasing Value in Health Care*, 2012.

[1] Plans with high deductibles are defined here as those that meet the minimum deductible to qualify for a health savings account, or approximately $1,000 per person.

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insured through 59 large employers across the United States, which allowed them to do the most comprehensive study to date on this topic. This research highlight summarizes the study's key findings, which were originally published in four journal articles.

Families Who Switched to a High-Deductible Plan Spent Less on Health Care

The first phase of the analysis used data from the early study years (2004–2005) to analyze how families' spending and use of health care changed in the first year after switching from a traditional plan to some form of higher-deductible plan (including consumer-directed plans and other types of plans with deductibles greater than $500 per person) compared with similar families who stayed in traditional plans. Results showed the following:

- Families enrolling in a higher-deductible plan for the first time spent an average of 14 percent less in the first year than similar families in traditional (lower-deductible) health plans. The analysis examined plans with a range of deductibles. However, cost savings were significant only for enrollees in plans with a deductible of at least $1,000 per person.
- Families in a high-deductible plan reduced spending significantly compared with similar families in traditional plans even when employers made moderate account contributions to help offset additional costs associated with a $1,000-deductible plan.

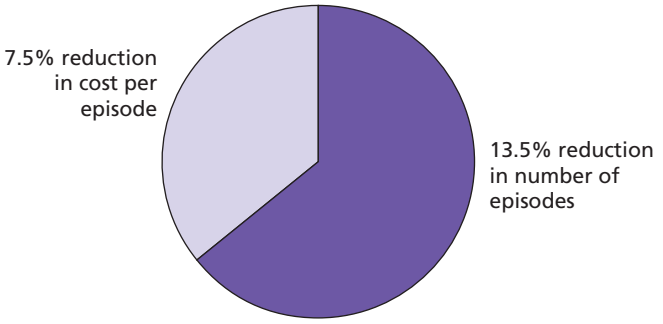
How Consumer-Directed Plans Achieve Savings

The subsequent phases of the research focused on how consumer-directed plans influenced enrollees' use of health care and whether these plans promoted cost-conscious behavior. The RAND Health Insurance Experiment (HIE), the classic 1970s study of the effects of cost-sharing on health care use, found that enrollees in plans with higher levels of cost-sharing spent less on health care because they initiated fewer episodes of care.[2] Once enrollees were in the health care system, they spent the same amount per episode as those with lower levels of cost-sharing.[3] Would this pattern still hold in the current generation of high-deductible plans?

Analyzing data related to first-year effects from all five study years (2003–2007), the study team found that enrollees who switched to consumer-directed plans spent 21 percent less on health care in their first year; furthermore, in contrast with the HIE's results, approximately one-third of the savings resulted from lower spending per episode of care (Figure 2).

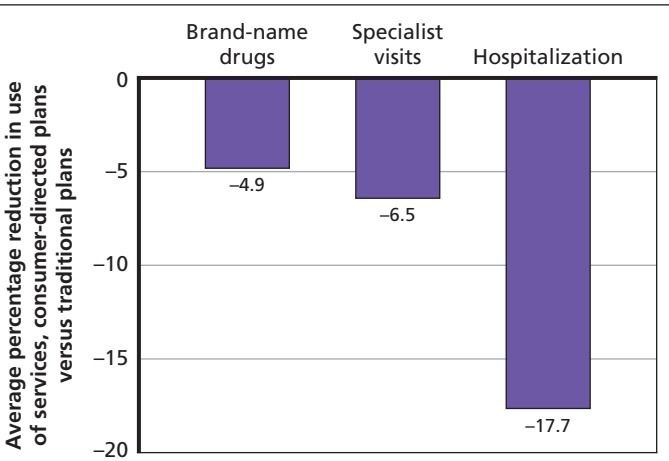
Costs per episode of care fell because enrollees used fewer or less expensive services in a given episode of care. For example, enrollees used 4.9 percent fewer name-brand drugs, made 6.5 percent fewer visits to specialists, and had 17.7 percent fewer hospital stays in the first year after switching to a consumer-directed plan (Figure 3).

Figure 2
Enrollees in Consumer-Directed Plans Initiated Fewer Episodes of Care and Spent Less Per Episode



SOURCE: Data from Haviland et al., 2011b.

Figure 3
Enrollees in Consumer-Directed Plans Used Fewer or Less Expensive Services in a Given Episode of Care



SOURCE: Data from Haviland et al., 2011b.

[2] An episode of care begins with the first physician visit or hospitalization for a given disease, which is determined by the diagnosis for the visit, and ends when the treatment is complete; for a chronic condition, all services for a given year are grouped together as a single episode of care.

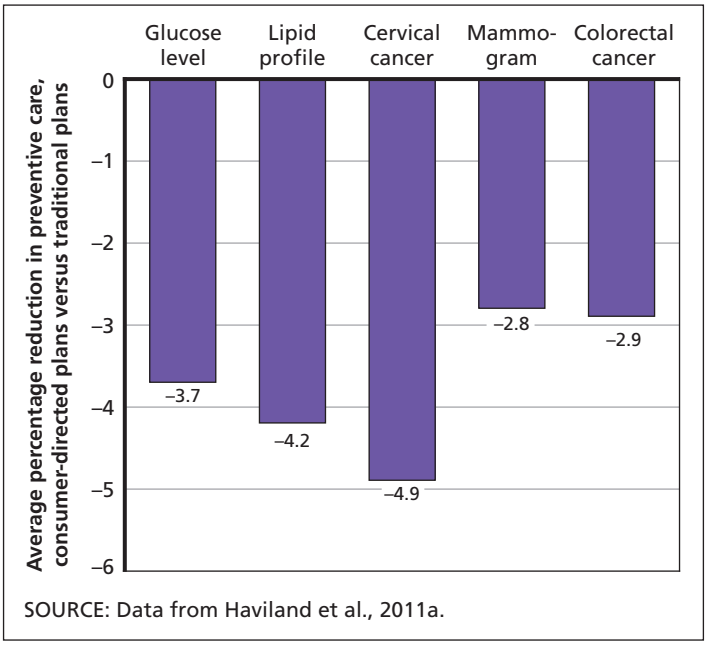
[3] Brook RH, Keeler EB, Lohr KN, Newhouse JP, Ware JE, Rogers WH, Davies AR, Sherbourne CD, Goldberg GA, Camp P, Kamberg C, Leibowitz A, Keesey J, and Reboussin D, "The Health Insurance Experiment: A Classic RAND Study Speaks to the Current Health Care Reform Debate," Santa Monica, Calif.: RAND Corporation, RB-9174-HHS, 2006 (http://www.rand.org/pubs/research_briefs/RB9174.html).

Enrollees in Consumer-Directed Plans Cut Back on High-Value Preventive Care

As enrollees reduced medical spending, they cut back on the use of some beneficial services. Some preventive care, such as childhood vaccinations, dropped, while rates actually increased among enrollees in traditional health plans. Rates of mammography, cervical cancer screening, and colorectal cancer screening decreased among those with consumer-directed plans compared with those in traditional plans (Figure 4). The use of other high-value services, such as blood tests for glucose and cholesterol for diabetics, also fell. Surprisingly, the drop in preventive care occurred even though most preventive testing is fully covered under consumer-directed plans. It is worth noting that under the Affordable Care Act, preventive care must be fully covered in all plans; however, almost all consumer-directed plans already offer such coverage.

To gain insight into whether these effects were worse for vulnerable populations, the team also analyzed whether reductions in high-value care were greater for lower-income or chronically ill patients. They found no reductions that were greater for these groups than for non-vulnerable enrollees in consumer-directed plans.

Figure 4
Enrollees Received Less High-Value Care



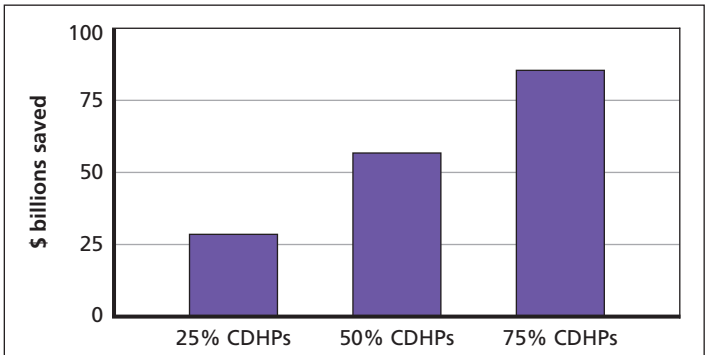
SOURCE: Data from Haviland et al., 2011a.

Growth in Consumer-Directed Plans Could Cut Costs Sharply

With or without the Affordable Care Act, the number of Americans in consumer-directed plans is expected to grow significantly. As noted, about 17 percent of families receiving health coverage through an employer currently have this type of coverage. That number could grow substantially in the coming years. How will this change affect overall health care costs in the United States? To answer this question, a final phase of the analysis estimated what would happen if enrollment grew to 50 percent of the employer-sponsored insurance market.

The resulting projection showed that an increase in consumer-directed plan enrollment to 50 percent would result in annual savings of $57 billion in health care costs (Figure 5). That decrease would be the equivalent of a 4 percent decline in total health care spending for the nonelderly. These savings could be larger or smaller, depending on the extent of enrollment in high-deductible plans. At the 25-percent level, the savings for the nonelderly population would be more than $28 billion (in the range of 1 to 2 percent). At the 75-percent level, the savings would be more than $85 billion (in the range of 5 to 9 percent).

Figure 5
Fifty-Percent Enrollment in Consumer-Directed Plans Could Reduce Annual Health Spending by $57 Billion



SOURCE: Data from Haviland et al., 2012.
NOTE: CDHP = consumer-directed health plan.

Conclusions and Avenues for Further Research

These studies present strong evidence that consumer-directed health plans reduce health care spending and could lead to significant cost savings at the system level. The studies showed that enrollees in consumer-directed plans tend to visit doctors less often and are also reducing spending after they are under a doctor's care compared with similar families staying in traditional plans. It must be emphasized, however, that these studies examined only effects in the *first year* after families switched to a high-deductible plan. The cost effects in later years of enrollment remain uncertain and will require further study. If high-deductible plans stimulate more prudent purchasing over time, they could be an important part of the answer to rising health care costs. If, however, patients skimp on highly valuable services that can prevent more costly problems later, the savings may be short-lived. Further research is required to assess the longer-term effects of these plans. ■

This research highlight summarizes RAND Health research reported in the following publications:

Buntin MB, Haviland AM, McDevitt R, and Sood N, "Healthcare Spending and Preventive Care in High-Deductible and Consumer-Directed Health Plans," *American Journal of Managed Care*, Vol. 17, No. 3, March 2011, pp. 222–230 (EP-201100-48, http://www.rand.org/pubs/external_publications/EP20110048.html).

Haviland AM, Marquis MS, McDevitt RD, and Sood N, "Growth of Consumer-Directed Health Plans to One-Half of all Employer-Sponsored Insurance Could Save $57 Billion Annually," *Health Affairs*, Vol. 31, No. 5, May 2012, pp. 1009–1015 (EP-201200-104, http://www.rand.org/pubs/external_publications/EP201200104.html).

Haviland AM, Sood N, McDevitt R, and Marquis MS, "How Do Consumer Health Plans Affect Vulnerable Populations?" *Forum for Health Economics and Policy*, Vol. 14, No. 2, Article 3, September 2011a, pp. 1–12 (EP-201100-86, http://www.rand.org/pubs/external_publications/EP20110086.html).

Haviland AM, Sood N, McDevitt RD, and Marquis MS, "The Effects of Consumer-Directed Health Plans on Episodes of Health Care," *Forum for Health Economics and Policy*, Vol. 14, No. 2, Article 9, September 2011b, pp. 1–27 (EP-201100-208, http://www.rand.org/pubs/external_publications/EP201100208.html).

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Abstracts of all RAND Health publications and full text of many research documents can be found on the RAND Health website at www.rand.org/health. This research highlight was written by David M. Adamson. The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND**® is a registered trademark.

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