



Consumer-directed health plans: Do they deliver?

By Sarah Goodell, M.A.¹ and M. Kate Bundorf, M.B.A., M.P.H., Ph.D.,² based on a research synthesis by Bundorf.

¹ The Synthesis Project
² Stanford University School of Medicine

SUMMARY OF KEY FINDINGS

- > **CDHPs have, on average, reduced health care spending.** Estimates of the savings range from 5 percent to 14 percent and are driven primarily by reductions in spending on pharmaceuticals and outpatient care. The reduction in health spending is concentrated among healthier enrollees.
- > **The overall effect of CDHPs on quality of care is not clear.** While some studies find consumers reduce health care use indiscriminately when enrolled in a CDHP, a study of emergency department use, for example, found consumers reduced visits primarily for low severity conditions. The effects on health outcomes are unknown.
- > **CDHPs tend to attract higher-income, more educated and healthier enrollees.** The majority of evidence is from large, self-insured employers offering multiple plans, for whom favorable risk selection into a single plan is not necessarily problematic, however.

Why are policy-makers interested?

- The managed care backlash of the 1990s combined with rising health expenditures led to the creation of Consumer-Directed Health Plans (CDHPs), which place greater responsibility for health care decision-making in the hand of consumers.
- CDHPs are intended to reduce health care spending by exposing consumers to the financial implications of their treatment decisions.
- CDHPs have grown in popularity since their inception, but it is unclear what effect they have on utilization or costs and whether consumers in CDHPs consider both cost and quality when making health care decisions.

The definition of CDHPs is rather fluid, but they are often associated with three features: a relatively high annual deductible, a personal spending account, and the availability of decision support tools for enrollees. In practice, however, not all CDHPs have all three features.

For purposes of this policy brief, a CDHP is defined as a high-deductible plan which is accompanied either by a Health Reimbursement Arrangement (HRA) or is eligible for a Health Savings Account (HSA). The majority of the research evidence on which this brief is based is from employment-based settings in which high-deductible health plans are offered with an HRA (see below).

Who enrolls in CDHPs?

In 2011, 17 percent of people with employer-sponsored health insurance were enrolled in a CDHP, up from 4 percent in 2006 (Figure 1). Among firms offering health insurance, large firms are more likely to offer a CDHP than small firms, but a larger proportion of covered workers is enrolled in CDHPs in small firms (23%) than in large firms (15%) (Reference 1). Enrollment in CDHPs in the individual market has grown, but not as fast as in the employer-based market (Reference 2).

CDHP enrollees tend to have higher levels of income or education than enrollees in other types of plans (Reference 3). In addition, CDHP enrollees have better self-reported health status, lower rates of smoking, higher rates of exercise, and may be more knowledgeable and skillful in managing their health than enrollees in other plans (Reference 4).

CDHPs reduce spending primarily among healthy enrollees.

TAX TREATMENT OF CDHPs

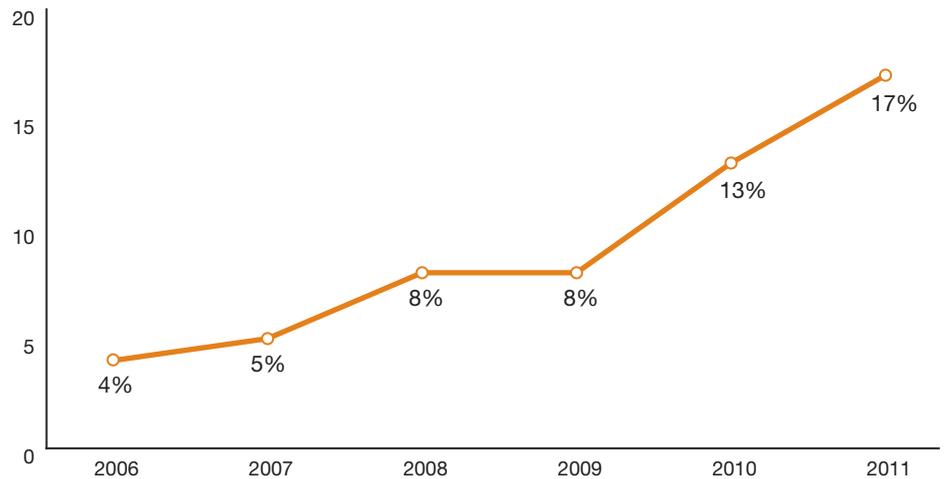
The development of CDHPs was strongly influenced by federal regulations adopted in early 2000 which established favorable tax treatment for personal spending accounts. HRAs and HSAs serve similar functions, but have different rules and implications for consumers.

Health Reimbursement

Arrangements: HRAs are owned by the employer and only the employer is allowed to make contributions to the account. There is no limit to employer contributions; contributions are excluded from an employee's gross income and not subject to taxes. Although unused funds may accumulate from one year to the next, should an employee terminate employment or switch health plans, the funds may revert to the employer.

Health Savings Accounts: HSAs address one of the key limits of HRAs—a lack of portability. HSAs are owned by the individual, not the employer, making them portable across employment situations and health plans. Both employer and employee contributions to HSAs are excluded from the employee's taxable income. Individuals and employers are allowed to establish or contribute to an HSA only when the individual is enrolled in a qualified high-deductible health plan. In 2012, the minimum qualifying deductible was \$1,200 for individual and \$2,400 for family coverage. The Patient Protection and Affordable Care Act (ACA) requires the health plans to cover certain preventive services without a deductible, although some CDHPs did this prior to the ACA.

Figure 1: CDHP enrollment in employer-sponsored plans, 2011



Source: KFF/HRET Annual Employer Survey, 2011 (Reference 1)

Do CDHPs reduce utilization?

Multi-firm studies find CDHPs reduce utilization 5 percent to 14 percent relative to alternative types of plans (Reference 5). Single-firm studies, in contrast, have generated less consistent evidence on cost savings (Reference 6).

CDHPs have larger effects on total spending for low- than for high-risk enrollees (Reference 7). Out-of-pocket spending for high-risk enrollees actually could be less under a CDHP than a traditional plan depending on how cost-sharing is structured once the deductible is met and how much the employer contributes to the spending account (Reference 8).

Plans with higher deductibles and less generous spending accounts are associated with larger reductions in spending (Reference 9).

This finding is based primarily on the experience of employers offering HRAs. Less evidence exists on the effects of HSAs. Because funds in HSAs may be invested and accumulate over time and because they are owned by individuals rather than employers, account owners may spend these funds more sparingly.

It is unclear if utilization reductions are clinically appropriate.

What types of utilization reductions occur?

Much of the savings associated with CDHPs is driven by reductions in spending on pharmaceuticals and outpatient care (Reference 10).

Studies of the effects of CDHPs on inpatient spending produce inconsistent results (Reference 11).

CDHPs do not reduce the use of preventive services significantly when they are excluded from the deductible (Reference 12).

When preventive services were not excluded from the deductible, however, there was a more substantive reduction in cervical and breast cancer screening (Reference 13). The ACA requires many preventive services to be offered without cost-sharing.

There is mixed evidence on the extent to which enrollees reduce utilization of clinically appropriate services.

Studies of emergency department use found consumers responded to the introduction of a deductible by cutting back on visits for low, rather than high severity, conditions that could potentially be managed in a lower-cost setting (Reference 14). Similarly, a study of maternity services found quality indicators were not affected by CDHP enrollment (Reference 15). But CDHPs also are associated with modest reductions in medication adherence in patients with chronic conditions. The negative effects on utilization tend to be concentrated on drugs for asymptomatic conditions such as hypertension and high cholesterol (Reference 16), which could have negative long-term effects on patient health.

What decision support tools are available to CDHP enrollees?

Decision support tools are improving in quality and increasing in availability, but significant weaknesses remain (Reference 17).

In particular, cost data often are based on provider averages rather than being provider-specific, cost estimates are often procedure-based rather than episode-based, and quality information is often limited to a small set of measures, which sometimes conflict across tools.

The types of tools offered by CDHPs are often available to enrollees in other types of plans as well.

In both cases, little evidence is available on the effects of information tools on either plan enrollment or utilization of care when enrolled.

RISK SELECTION AND INSURANCE COVERAGE

Much of the evidence on CDHPs is based on the experience of large, self-insured employers who usually offer CDHPs alongside other plans. Since employers are prohibited from varying employee contributions based on individual health status, CDHPs, which typically require higher cost-sharing, are likely to be more attractive to healthier employees, who expect lower out-of-pocket spending. In fact, studies consistently find that CDHPs do enroll younger, healthier individuals compared with other types of plans (Reference 18). Risk segmentation, however, is not necessarily problematic when the employer is self-insured and at risk for the spending of the entire group.

In contrast, small firms usually offer only one plan and purchase fully insured products. In the individual and small group markets, CDHPs may serve as a mechanism for insurers to segment risks, which would lower premiums for low risks and raise them for high risks. However, whether CDHPs experience favorable risk selection in the individual or small group market is unknown.

The effect of CDHPs on rates of insurance coverage is unknown. A potential benefit of high-deductible plans is that they might increase rates of insurance coverage by providing access to a lower premium product. On the other hand, CDHPs may not increase rates of coverage because neither the relatively high cost-sharing nor the tax-favored savings vehicle is likely to make insurance coverage more attractive to the currently uninsured who are disproportionately low income and less wealthy (Reference 19).

Conclusions and Policy Implications

CDHPs have neither transformed health care markets as dramatically as their proponents had hoped nor been as detrimental as their detractors had feared. CDHPs have reduced health care expenditures, primarily for outpatient services and pharmaceuticals. The evidence on their effect on quality of care is mixed. While some studies indicate that consumers reduce utilization indiscriminately in response to higher deductibles, others suggest that consumers differentiate between more and less clinically appropriate care.

In their current form, however, CDHPs are likely to represent only part of a solution to address high and rising health care costs. The evidence indicates that CDHPs generate savings primarily among low- and medium-risk enrollees. In other words, they have little effect on spending for the small proportion of the population which generates the bulk of health care spending. Thus, a comprehensive approach to addressing high health care spending would require additional solutions targeted toward high-risk populations.

There is no evidence CDHPs have generated risk segmentation that has eroded coverage. The bulk of the evidence on CDHPs is from large, self-insured employers for whom risk segmentation is not necessarily problematic. However, there is also no evidence that CDHPs have expanded insurance coverage in the United States, and little evidence on the financial implications of greater cost-sharing for low-income and/or less healthy enrollees.

REFERENCES

Reference 1: Claxton G, Rae M, et al. *Employer Health Benefits 2011 Annual Survey*. Menlo Park, CA: Henry J. Kaiser Family Foundation, and Chicago: Health Research & Educational Trust, 2011.

Reference 2: America's Health Insurance Plans (AHIP). *January 2012 Census Shows 13.5 Million People Covered by Health Savings Account/High-Deductible Health Plans (HSA/HDHPs)*. Report prepared by AHIP Center for Policy and Research, May 2012.

Reference 3: Buntin MB, Damberg C, et al. "Consumer-Directed Health Care: Early Evidence About Effects on Cost and Quality." *Health Affairs*, vol. 25, no. 6, 2006; Barry CL, Cullen MR, et al. "Who Chooses a Consumer-Directed Health Plan?" *Health Affairs*, vol. 27, no. 6, 2008; Parente ST, Feldman R, et al. *The Impact of Health Status and Price on Plan Selection in a Multiple-Choice Health Benefit Program including HRA and HSA Options*. Unpublished manuscript. University of Minnesota, 2008; Fronstin P. "Findings from the 2009 EBRI/MGA Consumer Engagement in Health Care Survey." *Employee Benefit Research Institute (EBRI) Issue Brief*, no. 337, December 2009; Lave JR, Men A, et al. "Employee Choice of a High-Deductible Health Plan Across Multiple Employers." *Health Services Research*, vol. 46, no. 1, 2011.

Reference 4: Fronstin P. "Findings from the 2011 EBRI/MGA Consumer Engagement in Health Care Survey." *Employee Benefits Research Institute (EBRI) Issue Brief*, no. 365, December 2011; Hibbard JH, Greene J, et al. "Plan Design and Active Involvement of Consumers in Their Own Health and Healthcare." *American Journal of Managed Care*, vol. 14, no. 11, 2008.

Reference 5: Buntin MB, Haviland AM, et al. "Healthcare Spending and Preventive Care in High-Deductible and Consumer-Directed Health Plans." *American Journal of Managed Care*, vol. 17, no. 3, 2011; Lo Sasso AT, Shah M, et al. "Health Savings Accounts and Health Care Spending." *Health Services Research*, vol. 45, no. 4, 2010.

THE SYNTHESIS PROJECT (Synthesis) is an initiative of the Robert Wood Johnson Foundation to produce relevant, concise, and thought-provoking briefs and reports on today's important health policy issues.

PROJECT CONTACTS

David C. Colby, Ph.D., the Robert Wood Johnson Foundation
Katherine Hempstead, Ph.D., the Robert Wood Johnson Foundation
Sarah Goodell, M.A., Synthesis Project

SYNTHESIS ADVISORY GROUP

Linda T. Bilheimer, Ph.D., Congressional Budget Office
Jon B. Christianson, Ph.D., University of Minnesota
Paul B. Ginsburg, Ph.D., Center for Studying Health System Change
Jack Hoadley, Ph.D., Georgetown University Health Policy Institute
Haiden A. Huskamp, Ph.D., Harvard Medical School
Julia A. James, Independent Consultant
Judith D. Moore, Independent Consultant
William J. Scanlon, Ph.D., National Health Policy Forum
Michael S. Sparer, Ph.D., Columbia University

Reference 6: Charlton ME, Levy BT, et al. "Effects of Health Savings Account-Eligible Plans on Utilization and Expenditures." *American Journal of Managed Care*, vol. 17, no. 1, 2011; Borah, 2011; Parente ST, Feldman R, et al. "Employee Choice of Consumer-Driven Health Insurance in a Multiplan, Multiproduct Setting." *Health Services Research*, vol. 39, no. 4, 2004.

Reference 7: Feldman RD, Parente ST. "Enrollee Incentives in Consumer Directed Health Plans: Spend Now or Save for Later?" *Forum for Health Economics and Policy*, vol. 13, no. 2, 2010; Lo Sasso AT, Shah M, et al. 2010; Lo Sasso AT, Helmchen LA, et al. "The Effects of Consumer-Directed Health Plans on Health Care Spending." *Journal of Risk and Insurance*, vol. 77, no. 1, 2010; Haviland AM, Sood N, et al. "How Do Consumer-Directed Health Plans Affect Vulnerable Populations?" *Forum for Health Economics and Policy*, vol. 14, no. 2, 2011.

Reference 8: Remler, DK, Glied SA. "How Much More Cost Sharing Will Health Savings Accounts Bring?" *Health Affairs*, vol. 25, no. 4, 2006.

Reference 9: Buntin MB, Haviland AM, et al., 2010; Borah BJ, Burns ME, et al. "Assessing the Impact of High Deductible Health Plans on Health-Care Utilization and Cost: A Changes-in-Changes Approach." *Health Economics*, vol. 20, no. 9, 2011; Charlton ME, Levy BT, et al., 2011.

Reference 10: Buntin MB, Damberg C, et al., 2006; Parente ST, Feldman R, et al. "Effects of a Consumer-Driven Health Plan on Pharmaceutical Spending and Utilization." *Health Services Research*, vol. 43, no. 5, 2008; Lo Sasso AT, Helmchen LA, et al. 2010; Lo Sasso AT, Shah M, et al. 2010; Buntin, 2011; Charlton ME, Levy BT, et al., 2011. Parente ST, Feldman R, et al., 2008.

Reference 11: Buntin, 2011; Charlton, 2011; Parente, 2004; Borah, 2011.

Reference 12: Buntin MB, Haviland AM, et al., 2010; Wharam JF, Galbraith AA, et al. "Cancer Screening Before and After Switching to a High-Deductible Health Plan." *Annals of Internal Medicine*,

vol. 148, no. 1, 2011; Rowe JW, Brown-Stevenson T, et al. "The Effect of Consumer-Directed Health Plans on the Use of Preventive and Chronic Illness Services." *Health Affairs*, vol. 27, no. 1, 2008.

Reference 13: Charlton ME, Levy BT, et al., 2011.

Reference 14: Wharam JF, Landon BE, et al. "Emergency Department Use and Subsequent Hospitalizations Among Members of a High-Deductible Health Plan." *Journal of the American Medical Association*, vol. 297, no. 10, 2007; Wharam JF, Landon BE, et al. "High-Deductible Insurance: Two-Year Emergency Department and Hospital Use." *American Journal of Managed Care*, vol. 17, no. 10, 2011.

Reference 15: Kozhimannil KB, Huskamp HA, et al. "High-Deductible Health Plans and Costs and Utilization of Maternity Care." *American Journal of Managed Care*, vol. 17, no. 1, 2011.

Reference 16: Greene J, Hibbard J, et al. "The Impact of Consumer-Directed Health Plans on Prescription Drug Use." *Health Affairs*, vol. 27, no. 4, 2008; Chen S, Levin RA, et al. "Medication Adherence and Enrollment in a Consumer-Driven Health Plan." *American Journal of Managed Care*, vol. 16, no. 2, 2010.

Reference 17: Christianson JB, Ginsburg PB, et al. "The Transition From Managed Care to Consumerism: A Community-Level Status Report." *Health Affairs*, vol. 27, no. 5, 2008.

Reference 18: Barry CL, Cullen MR, et al., 2008; Borah BJ, Burns ME, et al., 2011; Lo Sasso AT, Shah M, et al., 2010.

Reference 19: Glied SA, Remler DK. *The Effect of Health Savings Accounts on Health Insurance Coverage*. Task force on the Future of Health Insurance Issue Brief. The Commonwealth Fund, April 2005.



Robert Wood Johnson Foundation

THE SYNTHESIS PROJECT

NEW INSIGHTS FROM RESEARCH RESULTS

POLICY BRIEF NO. 24
OCTOBER 2012

The Synthesis Project
The Robert Wood Johnson Foundation
Route 1 & College Road East
P.O. Box 2316
Princeton, NJ 08543-2316
E-Mail: synthesisproject@rwjf.org
Phone: 888-719-1909

www.policysynthesis.org