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# Consumer-Directed Health Care

## Early Evidence Shows Lower Costs, Mixed Effects on Quality of Care

Consumer-directed health care (CDHC) is an increasingly popular form of health coverage. CDHC involves a high-deductible plan—defined by the U.S. Treasury as \$1,100 or greater for individuals in 2007 but scheduled to increase annually—often combined with a tax-advantaged savings account. Compared with traditional employer-based health coverage, consumer-directed plans shift more of the cost of routine medical care onto consumers, who pay for the first \$1,100 of annual care (and under some plans, more) out of pocket or from tax-advantaged savings. This plan design assumes that consumers who spend their own money for medical services will have an incentive to shop for care more prudently. The design further assumes that health care providers will respond to this consumer behavior by providing better and more efficient care, thus harnessing market forces to slow overall cost growth and improve quality of care.

Is CDHC having the desired effects? Emerging evidence from the first studies of CDHC suggests that these plans typically reduce the use of health services and cut costs, but they have mixed effects on quality of care.

### Background: The Policy Debate over CDHC

The growth of CDHC has occurred amid debate in policy and health care circles about the effect of increased consumer cost sharing. Champions

### Key findings:

- Consumers who switched from traditional health plans to consumer-directed health plans (defined as those with annual deductibles of \$1,100 or greater in 2007) generally spent less on medical care and used fewer medical services.
- Consumer-directed health plans had mixed effects on quality of care. Some evidence revealed a greater use of preventive services, but there was also evidence that enrollees might be saving money by forgoing needed care; in addition, enrollees in consumer-directed plans reported lower levels of satisfaction than those in traditional plans.
- A majority of people in consumer-directed health plans reported that they lacked adequate information to make informed choices about medical care.

of CDHC maintain that high-deductible plans will reduce costs without harming consumer health because they will discourage the use of inappropriate services. Giving individual consumers greater incentive to make cost-effective health care choices, the argument goes, will lead them to use only needed care and to seek high-quality providers, in turn creating pressures to spur quality improvement. Skeptics counter that shifting costs to consumers could cause them to

### This Highlight summarizes RAND Health research reported in the following publication:

Beeuwkes Buntin M, Damberg C, Haviland A, Kapur K, Lurie N, McDevitt R, and Marquis MS, "Consumer-Directed Health Care: Early Evidence About Effects on Cost and Quality," *Health Affairs*, Web Exclusive, Vol. 25, No. 6, November/December 2006, pp. w516–w530. As of January 29, 2007:  
<http://content.healthaffairs.org/cgi/content/full/25/6/w516>

forgo needed care. In addition, skeptics note that consumers typically lack access to adequate information for making wise choices about service prices and quality. Finally, there are concerns that high-deductible plans may attract a disproportionate share of healthier, wealthier families. If these families leave traditional plans, the cost of traditional plans for less healthy people could increase, adding to the number of uninsured.

The debate about the effect of high-deductible plans has drawn heavily on a landmark study conducted by the RAND Corporation in the 1970s and 1980s: the Health Insurance Experiment (HIE). (For more information about the HIE, see the research highlight at [http://www.rand.org/pubs/research\\_briefs/RB9174/](http://www.rand.org/pubs/research_briefs/RB9174/).) The HIE's findings offer some support to both sides in the debate. The HIE found that cost sharing reduced the use of health care services without significantly affecting the health of most participants. However, cost sharing in the HIE worked like a blunt instrument: It reduced the use of appropriate and inappropriate services in roughly equal proportions. Changes in benefit design since the HIE hold out promise that consumers can make better choices about using appropriate services. For example, many consumer-directed plans waive or reduce the deductible for preventive care and may provide incentives for consumers to enroll in disease management programs, health-risk appraisals, and wellness initiatives. The challenge for CDHC plan design, then, is to promote cost-consciousness and discourage the use of inappropriate care without deterring consumers from seeking needed care.

Evidence about the effects of CDHC plans is now emerging. A team of analysts led by RAND researcher Melinda Beeuwkes Buntin reviewed recent studies and gathered data from insurance carriers and employers. The analysts also examined enrollment trends, selection issues, the impact of CDHC on utilization and costs, and trends in consumer access to information. Finally, they interviewed experts from the insurance industry, employers, and provider groups about the issues surrounding CDHC and its impact to date.

## Effects of CDHC

**Enrollment and selection into plans.** CDHC enrollment is growing rapidly. A 2006 survey found that enrollment had more than tripled since early 2005, reaching 3.2 million. While this number is still relatively small—representing only about 3 percent of the commercial market—the trend is toward increased growth. One forecast projects that the market will expand to as many as 30 million enrollees within the next ten years. Are CDHC plans enrolling relatively healthier and wealthier people? Studies show that CDHC participants appear to be in slightly better health and have slightly higher incomes than those in other plans.

**Health care costs and use.** One way to measure the impact of CDHC on total health care costs is to estimate what would happen if all nonretired insured Americans switched from traditional plans to CDHC plans. Using available evidence, the analysts estimated that such a change would produce a one-time savings of 4–15 percent. However, consumer-directed plans are often coupled with tax-favored personal spending accounts, such as health savings accounts and health reimbursement arrangements, which in effect decrease the cost of medical care below the deductible amount. These accounts could offset, by as much as half, the reduction in use and spending from high-deductible plans. Recent studies have supported the view that high-deductible plans generally help lower health care spending at the individual level, including out-of-pocket costs, although there were cases in which spending increased for enrollees in CDHC.

Studies that used health maintenance organizations (HMOs), preferred provider organizations (PPOs), and other plans for comparison also showed that CDHC plans typically reduce health care spending and utilization. As shown in the figures, consumers in high-deductible plans generally experienced

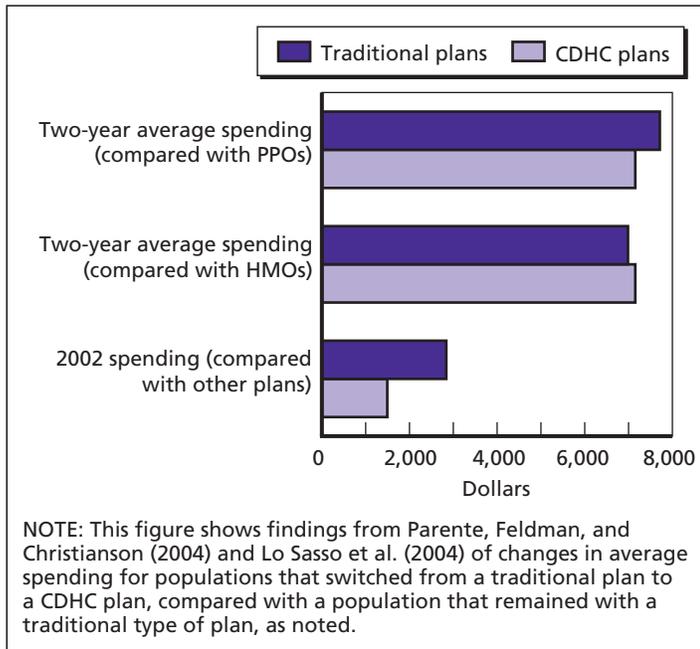
- lower overall average spending on medical services (Figure 1)
- smaller premium increases (Figure 2)
- mixed results for individual health care spending, with CDHC plans resulting in increases for some and decreases for others (Figure 3)
- lower service use across a range of categories, including primary care visits, emergency room visits, hospital days, and office visits (Figure 4).

**Quality of care.** Early evidence about CDHC's effects on quality showed mixed results. Several studies reported an increased use of preventive care in consumer-directed plans and increased adherence with prescribed treatment. However, other studies found that enrollees in CDHC plans are more likely to behave in ways that save money, such as failing to get follow-up lab tests, that might have adverse long-term consequences for their health. In addition, patient satisfaction—an important indicator of quality of care—suggests that CDHC plan participants are less satisfied with their health coverage than are those in other kinds of plans and less satisfied with their current CDHC plan than they were with the plan they switched from.

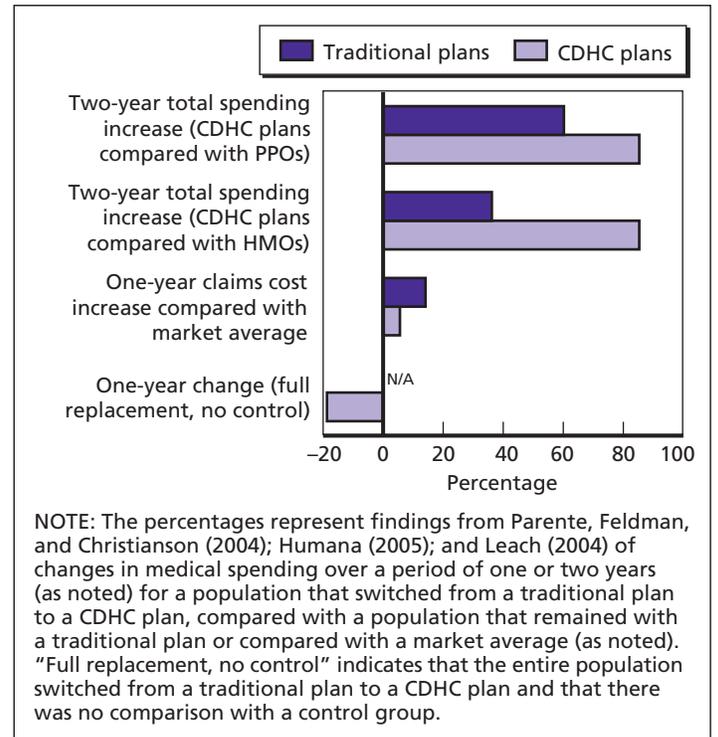
## Consumer Information and Technology Issues

CDHC assumes that giving consumers greater financial responsibility for health care choices will lead them to demand accurate information about service costs and quality. Indications are that new information sources and tools are emerging. Some insurance plans have launched programs

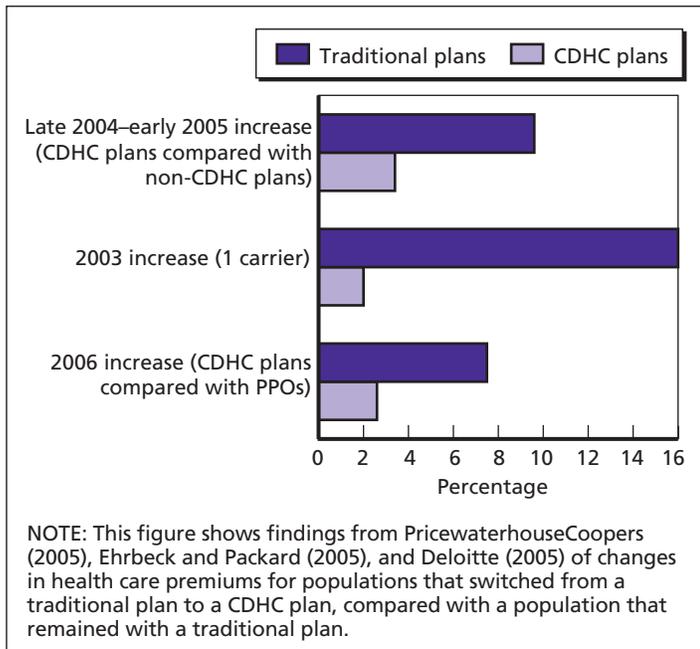
**Figure 1**  
Effects on Cross-Sectional (Average) Spending



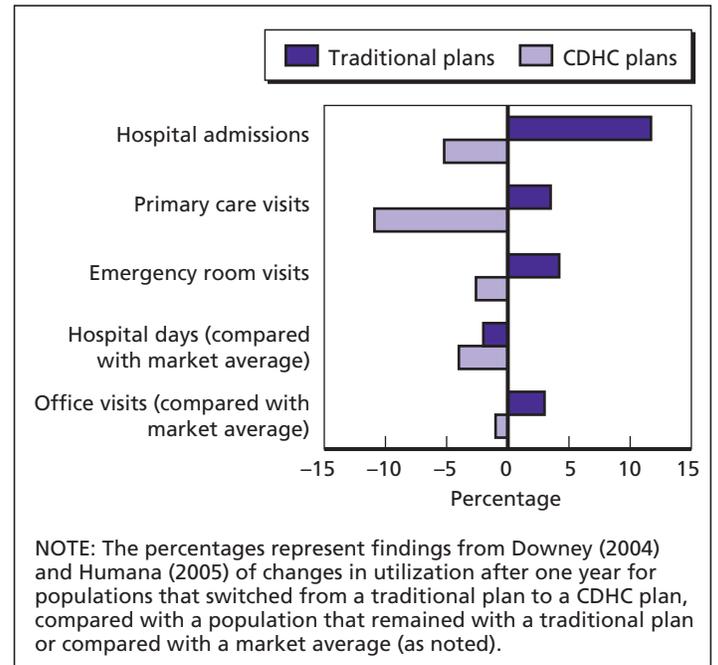
**Figure 3**  
Effects on Individual Medical Spending



**Figure 2**  
Effects on Health Insurance Premiums



**Figure 4**  
Effects on Medical Service Utilization



to provide information on fees that they have negotiated for specific medical procedures and on prices for prescription drugs. Participants in CDHC plans appear to make greater use of this information. They are more likely to ask providers about costs and to pay attention to preventive services. Nevertheless, participants in consumer-directed plans generally reported that they lack sufficient information to support their decisions about costs or provider performance. Less than a sixth of enrollees felt that adequate information was available to support their decisions. Furthermore, information systems to support consumers or to help physicians inform consumers are sparse, and those that exist are handicapped by a lack of standardization in measurement and reporting across providers and treatments. These issues point to the substantial but unrealized potential for information technology in health care, especially if the projected growth of CDHC is accurate.

### Implications

This study represents the first stage of ongoing research that will gather and analyze empirical data on the effects of CDHC. The evidence to date is not sufficient to support firm conclusions about the effects of CDHC. Further research is needed to test a broader range of benefit designs, measure changes in patterns of use, and apply rigorous analytic techniques that produce reliable and generalizable conclusions. However, among experts interviewed for the study (including representatives from the insurance industry, employers, and provider groups), there was surprising consensus on a number of points concerning needed changes. Many urged improvements in health information technology, especially in creating better data-sharing systems and standardized measures to compare quality across providers. Many also recommended changes in regulations to allow greater flexibility in plan design to provide incentives for appropriate service use and changes to protect vulnerable populations. Some also noted that the public sector could further quality improvements by supporting development of standardized metrics for assessing quality of care. Finally, many urged a role for the public sector in raising the general population's overall level of health literacy. About half of Americans find it difficult to understand health information, which likely hinders their ability to obtain high-quality care. ■

### Figure Citations

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