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Consumer Directed Health Plans: Evolution and Early Outcomes

Stephen T. Parente, Ph.D.

The first Consumer Directed Health Plans (CDHP) were introduced by health e-commerce ventures in the late 1990s. These products were designed to engage consumers more directly in their health care purchases. The conceptual model made cost and quality information evident to the consumer, usually through the Internet, thus creating a more efficient health care market.

CDHPs have evolved since their inception, and the focus has shifted to designing a health benefit that couples a high deductible health plan (HDHP) with an account to pay for first dollar medical care expenses. Typically, there is a gap between the account contribution and deductible threshold, with unused portions of the account accruing without penalty into the subsequent benefit year. The most common models of these plans today are Health Reimbursement Accounts (HRAs) and Health Savings Accounts (HSAs).

The HSA benefit design has become part of the political agenda since its inclusion in the Bush Administration's health reform package in 2004. The enduring policy dimension of CDHPs is evidenced by explicit mention of the HSA benefit design in the 2006 State of the Union address. Through a combination of tax breaks for premiums and the health savings account and tax subsidies for lower income individuals, HSAs are proposed as a solution to the high rate of health care inflation as well as potentially reducing the number of the nation's uninsured.

CDHP Impact Study

Since 2002, I have been investigating the impact of CDHPs with University of Minnesota researchers Roger Feldman and Jon Christianson. To complete this research, we have elicited the participation of four large employers with a total population of several hundred thousand covered lives. These partnerships have provided early evidence of the impact of CDHPs in large private and public employers. Specifically, we have found that: 1) income is the primary driver of CDHP selection, not age or health status, 2) CDHP plan designs without coinsurance are not showing cost-savings and 3) favoring co-insurance as an expenditure control over deductibles decreases demand for the CDHP product. Though the results described below are the product of research focused on HRAs, some may be generalizable to the entire CDHP market.¹

¹ We will be able to test this assertion soon with data from two employers offering HSAs as well as PPOs and HRAs.

What Characteristics Influence Selection?

Earlier predictions suggested that consumer directed health plans would enroll proportionately more low-risk, low-cost consumers and experience favorable risk selection relative to traditional health plans such as HMOs or PPOs. Our findings suggest much less favorable risk selection into CDHPs than originally thought. Using data from four employers, we found that the most important characteristic influencing CDHP enrollment is wage income. There were small and occasionally significant differences in chronic illness attributes and age, but these were not the rule and are unlikely to lead to a major adverse selection problem in the traditional health plans.

Do HRA-Style CDHPs Reduce Per Employee Expenditure?

Economic theory predicts that CDHPs can save money if the benefit design includes a large deductible and significant cost sharing after the deductible has been met. However, with the exception of pharmaceutical expenditures,² we have not seen savings in the employers we studied. Preliminary analysis completed by one participating employer suggests smaller increases in total health care expenditures because of a significant copayment in the benefit design. We are in the process of verifying this result using the same methods as our published research. Newer CDHP benefit designs are closest to this firm's design, and we expect to see similar results compared with our earlier published analyses of designs with no coinsurance after the deductible is met.

The Coinsurance vs. Deductible Trade-off

Using data from several employers, we found that consumers are more price-sensitive to coinsurance than deductibles when they choose health plans. Specifically, the coinsurance rate is associated with twice the price sensitivity as deductibles. At first, this finding seemed counterintuitive. However, the rationale for this behavior could indicate that deductible expenses are much more predictable than coinsurance expenses. Some consumers may feel that a 10% or 20% coinsurance rate up to \$9,000 maximum out-of-pocket expenses is too uncertain compared with 0% coinsurance and a \$6,000 deductible for a family policy. The message to benefit managers who are considering, or currently using CDHPs may be to design HRA and HSA products with 0% coinsurance and a higher deductible that is actuarially equivalent to existing non-zero co-insurance designs. ~~CDHP~~ Employee acceptance of CDHPs may improve if these changes are made.

What Opportunities Does Collaborative Research with Employers Provide?

² Parente S.T., Feldman, R., and Christianson J.B. "Evaluation of the Effect of a Consumer-Driven Health Plan on Medical Care Expenditures and Utilization," Health Services Research Vol. 39, No. 4, Part II (August 2004), pp. 1189-1209.

Through our cooperative venture with employers, we are using both HR data and claims data to identify who is choosing these plans and what the cost and utilization impacts are. Much of the research on CDHPs today is survey-based. By using claims data, our results are based on actual expenditures. While claims data are limited in their usefulness for gauging health care quality, they are the most appropriate data to answer this question.

Currently, many plans do not release their claims data results for public scrutiny. The large insurers in this market are doing everything “in-house” without external peer review or oversight. Our work has proceeded with substantial transparency and peer review to meet the standard set 25 years ago with the first empirical results from the RAND health insurance experiment.

Next Questions to Address

Do Employees Who Choose an HSA Act Differently about 401K Retirement Investment?

HSAs are now sold by financial services companies as part of a health/wealth package. We are currently preparing to work with the employers offering an HSA to test the “ownership society” hypothesis that there is a relationship between health savings and retirement choices. There are two critical questions to examine in this line of research: 1) is HSA choice related to retirement investment decisions, and 2) if HSA choice is related to retirement investment decisions, do consumers make rational retirement portfolio changes? Specifically, we posit that HSA election, HSA contribution size, and retirement portfolio decisions will be conditional on prior personal states including income, previous contribution, previous health history and demographics such as age and number of dependents. Addressing these questions will help to understand the viability of ownership society policy and the health-wealth presentation of benefits to employees that is common among many large firms.

Will the Limited IT Infrastructure to Support HSAs Limit Their Acceptance and Use?

An emerging irony in the CDHP market is that a product originally designed to activate the consumer by providing price transparency is not consistently doing so. The easiest illustration of the problem is the failure of current HSA designs to link the health savings account electronically with the claims data system of the high deductible health plan. For example, the consumer might hold the HSA in a money market account that is drawn down only when the consumer submits a debit request. The consumer is responsible for alerting the CDHP about expenses related to an approved medical service. This drastically increases the paperwork burden on the consumer and makes it more difficult for the consumers to manage their medical expenses over time. We are working with employers to examine the consumer feedback and the evolution of the IT infrastructure.

Summary

CDHPs offer a significant opportunity to change the consumer's conception of health care spending. However, their success is contingent on demonstrating a more cost-effective health insurance product than the status quo of PPOs and HMOs. Only serious and transparent accounting of the cost differences among the plan designs will address these questions.

About the Author

Stephen T. Parente, Ph.D. is the Deputy Director of the Medical Industry Leadership Institute (www.csom.umn.edu/mili) and an Assistant Professor in the Finance Department at the Carlson School of Management at University of Minnesota. Since 2002, he has been the principal investigator of five empirical analyses of Consumer Driven Health Plans funded by the Health Care Financing Organization initiative of the Robert Wood Johnson Foundation and the US Department of Health and Human Services. Progress on CDHP research efforts of Dr. Parente and colleagues can be tracked at: www.ehealthplan.org