

Commentary—Looking at the Effects of Consumer-Centric Health Plans on Expenditures and Utilization

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Consumer-centric health plans are now emerging as one of the possible solutions to the inappropriate use of health services and the high cost of health insurance in the United States. Labeled variously as “consumer-directed health plans,” “choice plans,” or plans with reimbursement or savings accounts, these health benefit options are currently a small but rapidly growing health insurance segment. Large companies like Aetna, Humana, and the Blues have insured offerings, while start-up companies like Definity and Lumenos offer self-insured options to large employers.

DEFINING “CONSUMER-CENTRIC” HEALTH PLANS

While there may be many “flavors” of consumer health plans, one might define a “consumer-centric” health plan as having the following necessary components:

- An optional health account or savings account of some defined value (e.g., a health reimbursement account of \$1,000 per year per covered individual).
- A “gap” in coverage that is the responsibility of the insured individual, generally anywhere from \$1,500 to \$3,000 per year.
- Catastrophic coverage at a high level of insurance (employer payments of 90 percent or 100 percent) after sufficient charges are incurred to exceed the “gap.”
- Decision-support tools and related price and quality information available (generally via the Internet) to help the insured individual choose between providers, alternative therapies, or places of service.
- A high level of communication from both the employer sponsor and the health carrier to enable the insured individual to understand his or her choices.

- An employer philosophy regarding company contributions that gives employees the ability to choose between lower cost-sharing options (with higher payroll deductions) or higher cost-sharing options (with lower payroll deductions).

While this definition is somewhat more restrictive, a consumer-centric option is more likely to be effective if it has all of these characteristics. For Humana, the consumer-centric solution is comprised of a total replacement product that offers traditional plans—health maintenance organizations (HMOs) and preferred provider organizations (PPOs)—and the new options with the consumer-centric characteristics. This product offers individuals the decision-support tools needed to make informed choices when balancing payroll deductions and point-of-service cost sharing and has adjustment for the projected health-risk characteristics of individuals enrolling in the various options.

WHEN WILL ROBUST DATA BECOME AVAILABLE?

The first large employers began to offer consumer-centric plans in 2001. Each year since, the absolute number of employees covered has remained a small percentage of the total U.S. insured population under age 65 (perhaps reaching between 1 million and 1.5 million as of January 1, 2004), but the growth rate has been geometric, doubling or more each year. Consultant and industry projections indicate that this level of growth will continue into 2005.

The definition of robust actuarial data and the time period involved changes depending on the question being asked. For example, in determining employee acceptance of the new consumer-centric options, an analyst needs the experience of perhaps 50,000 to 100,000 individuals given those choices, but the information is known almost immediately upon completion of the open enrollment period. In contrast, understanding utilization at the service-specific level (e.g., hospital admission utilization), one needs at least a full 12 months of data, plus 3 months of “run-out” of claims on at least 100,000 members. These data are generally not available until 15 months (or more) after open enrollment.

In the article, “Evaluation of the Effect of a Consumer-Driven Health Plan on Medical Care Expenditures and Utilization” (Parente, Feldman, and

Christianson 2004, this issue), the authors review approximately 3,600 contracts (assumed to be about 7,200 members at the common rate of two members per contract) over a three-year period. This amount of experience is generally thought to be “actuarially credible” for overall premium trends (i.e., how much cost per contract increased one year over the prior year), but should be viewed cautiously as an indication of changes in utilization. For example, a single long hospital admission for a high-cost event, such as a 30-day admission for a serious auto accident, could distort any year-to-year comparisons for a group of this size.

Data are now emerging and being reported by insurers and start-up companies on the larger blocks of business. Reports indicate that Definity had more than 175,000 covered members during 2003 and Humana enrolled approximately 150,000 members during the same time period. However, important information on expenditure trends and the underlying utilization changes is just now emerging. Even with these blocks of data, analysts should treat the results cautiously since the “early adopters” of consumer-centric solutions may have different characteristics or approaches than the rest of the employer community.

DISCUSSION OF RESULTS OF THE STUDY

The authors of the “Evaluation” study have made an important contribution to the initial understanding of the effects of consumer-centric health plans. By evaluating a large single-employer over a three-year period, including the pre- and postimplementation phase, an analyst can find good indications of the likely effects that should be measured on larger populations.

Five results of this study can be compared with Humana’s early experience with consumer-centric products. In general, these results are consistent with the outcomes observed for the Humana employees’ pilot and with the block of 150,000 insured Humana customers.

First, Humana’s SmartSuite product (a total replacement package that includes both a consumer-centric CoverageFirst option and four other traditional HMO and PPO options) lowered cost trends from the mid-teens for traditional products (HMOs or PPOs offered in the same markets) to the 5 percent range in each of the first two years. Interestingly, this is a counterintuitive result, since most “choice” offerings (multiple products offered as a part of a flexible benefit employee option at time of enrollment) generally result in slightly (3 percent to 5 percent) higher overall costs.

Second, this study looks only at employee cost sharing for deductibles, coinsurance, and other copayments at the time of service. Equally important to employee choice and family financial status is the payroll deduction cost of an option. In Humana's pilots, employees appear to have made intelligent choices, with healthier employees choosing higher cost-sharing options in exchange for much lower payroll deductions. It also appears that lower-paid employees chose to minimize their household financial risk by "pre-paying" through higher payroll deductions to obtain low cost-sharing plans (e.g., PPOs with low deductibles and copayments). Overall, in Humana's pilots, the combined effect of changes in cost sharing and reduced payroll deduction was a *net* reduction in employee cost in the first year. To see the total effect of consumer-centric solutions, analysis should include both cost sharing for services and payroll deductions.

Third, this study shows a variety of changes in utilization over the three-year period. The first observation is that utilization on a population this size (3,600 contracts) for relatively low-frequency services such as hospital admissions is highly variable from year-to-year. Hence, the uptick in utilization in year three of the study might be an actual increase in utilization from pent-up demand, a change due to lack of familiarity with a new health plan, or simply the chance that only one or two catastrophic injuries created an unusual amount of usage. This is especially true when looking solely at the CDHP sample ($N = 531$ contracts).

In general, the Humana pilot experience with about 5,000 contracts (just less than 10,000 covered beneficiaries) showed a decrease in hospital admissions, no increase in hospital outpatient services, and an increase in physician office visits. In contrast to the measurement of only the CDHP option in the study, these results include utilization in all options (600 beneficiaries in the CoverageFirst product, about 4,000 in the HMO, and the remaining 5,400 in one of several PPO options) (see Table 1). For Humana, a second year is not directly comparable since the pilot option was significantly changed to an advanced product design. Still, results of this group showed an equally low mid-single digits trend in the second year after implementation. When measuring only the CoverageFirst option, findings indicated a significant year-one decline in various utilization categories, but the low number of members ($N = 600$) was too small to be credible.

Fourth, the study found favorable selection in year one in the CDHP option, as measured using the Johns Hopkins ACG software, which uses ambulatory diagnostic groups along with gender and age variables. Since this was measured at the employee contract level, changes in family status (i.e.,

Table 1: SmartSuite—Evidence of Behavioral Change

<i>Type of Service</i>	<i>Utilization/1,000 Change</i>
Inpatient	– 14%
Outpatient	0%
Office Visits—Total	13%
Rx	5%

adding or deleting dependents) can have an impact on health-risk measures. This measure found higher risk levels in the HMO and PPO options, but only about 6 percent to 10 percent higher. Since ACGs are more focused on ambulatory encounters and diagnoses than some other measures, these risk measurements could potentially understate the actual risk differences in the population.

In Humana’s pilot, favorable risk selection in the CoverageFirst enrollees was also found, but on a much greater level. Using the simplest measure, prior use, analysis revealed that CoverageFirst enrollees in the year preceding implementation had average per member per month (PMPM) claims that were approximately 50 percent of the average PMPM cost for the whole 10,000-member group. Hence, favorable selection is a very significant factor. On the other hand, PPO members had higher than average claims in the prior period.

Age appears to be an insufficient predictor of health status difference. Similar to this study, Humana found that there was little difference (less than one year) in the average age of members enrolled in the CoverageFirst option versus traditional PPO and HMO options.

Income appears to be an important factor. The average salary of Humana members enrolled in the CoverageFirst option was significantly higher than the average salary of the overall workforce. This result mirrors that of the study, which showed a higher concentration of CDHP members in the 75th or higher percentile. It is believed that Humana’s workforce made “good choices” where lower-income employees minimized the insurance risk of high deductibles in exchange for paying higher payroll deductions. A future analysis of this study’s employer might want to include this component.

Fifth, it appears that the study restricted the members of the employer group analyzed to only those in the group for all three years by removing any new entrants or terminations. While this clearly provides the best

measurement of a stable cohort of individuals, it misses the “real world” effect on dynamic employee populations. Most employers have turnover in the 5 percent to 10 percent range annually, with certain employers having 30 percent to 50 percent turnover. In managing health care benefit costs, it is the systemwide payroll and benefit funding cost that counts, not just the cost of the stable cohort of longer term employees.

For example, in measuring the Humana pilot, analysis found that new hires were much more likely to enroll in the new CoverageFirst option than were longer-term employees at open enrollment. One might hypothesize that newly hired enrollees were more likely to scrutinize the new benefits offerings and make an informed decision while longer-term employees were more likely to be satisfied with the status quo and thus, default into the same plan as the prior year. This aspect of employee decision making warrants more study.

LIMITATIONS OF THE STUDY

The study’s authors appropriately describe the limitations of their work. Several additional comments may be relevant. The authors note that a study of a single employer should be viewed cautiously. In addition to earlier comments about the need for more members to attain actuarially credible results, there may be other significant factors related to geography (where the employees are located), original plan design, employees’ preferences (e.g., the greater preference of California residents to enroll in HMOs), and industry (e.g., whether manufacturing employees have different preferences than service workers).

“Regression to the mean” in calculation of differences in expenditures is another important issue. Individuals with either very high costs or very low costs will frequently have costs closer to the average (“regression to the mean”) in the years following the high- or low-cost year. However, Humana’s analysis has seen some evidence of much lower regression to the mean in the healthiest quintile of members. Other quintiles generally exhibit both directions of “regression to the mean” but the healthiest quintile may remain in “healthy” status for a longer period.

The authors remark that an issue is whether data are consistent across different insurers for this employer. While this issue deserves some consideration, the relatively small sample size, particularly of the CDHP enrollment, probably is a much more important factor.

Table 2: SmartSuite—Allowed Charges before (2000) and after (2001) SmartSuite for Humana Louisville Associates

<i>Eligible Charge Range</i>	<i>Average Out-of-Pocket</i>		<i>Out-of-Pocket Change</i>
	<i>2000</i>	<i>2001</i>	
\$1–\$999	\$60	\$75	\$15
\$1,000–\$1,999	\$215	\$263	\$48
\$2,000–\$4,999	\$397	\$532	\$135
\$5,000–\$9,999	\$707	\$1,036	\$329
\$10,000+	\$2,313	\$2,210	\$(103)
Total	\$322	\$411	\$89

DISTRIBUTIONAL EFFECTS

One key component was apparently not included in this study: the distributional effect of the new consumer-centric plans on individuals in different illness/spending categories. An important question is how low-, middle-, and high-expenditure individuals are affected. In Humana’s pilot, analysis was completed on the cost-sharing changes (i.e., from deductibles, and so forth) from the pre-implementation period to the postimplementation year. As somewhat expected, analysis found that cost sharing increased modestly for low- and middle-expenditure categories, with the highest increase being approximately \$300 per year in greater cost sharing. However, a surprising result was that high expenditure individuals apparently made excellent choices by opting for lower cost-sharing products, with a resulting *decrease* in their cost sharing from year-to-year (see Table 2).

CONCLUSIONS

Based on both the similarities and differences in various outcome measures and the small sample size of observed populations, one should conclude that the “jury is still out” on the ultimate effects of consumer-centric plans. Early results, however, give indications that real, systemwide cost savings are possible with relatively little adverse effect on the average beneficiary. Encouragement should be given to the academic and policy community to continue to study these early consumer-centric models directly (using “raw data”) as well as to draw inferences from the “gray literature” available from

various sources, such as employer disclosures, insurer studies, and data accumulated by employee benefits consultants.

REFERENCE

- Parente, S. T., R. Feldman, and J. B. Christianson. 2004. "Evaluation of the Effect of a Consumer-Driven Health Plan on Medical Care Expenditures and Utilization." *Health Services Research* 39 (4, part 2): 1189–1210.