Value-driven healthcare: Change along a continuum

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It's no secret that over the past decade, American employers, payers, and consumers in the healthcare arena have been united in at least one desire—to control medical costs. As costs have continued to outstrip the U.S. consumer price index with an inflation rate of 6% to 7%, consumers and employers alike continue to look for a way out. The industry is currently pursuing several tiers of development in order to tame costs and smooth the sense of chaos in healthcare. Current innovations include consumer-driven healthcare (CDHC), cost and quality transparency, pay for performance (P4P), and medical record and technology interoperability. In 2006, these four tiers were described by the Department of Health and Human Services (HHS) as general "cornerstones" for healthcare reform, as part of the federal administration's order for value-driven healthcare (VDHC) in the United States.

GLOSSARY

Consumer-driven health care (CDHC—also known as consumer-driven health plans or CDHPs) **is a healthcare management concept that combines a health savings account (HSA) and a high-deductible health plan (HDHP). This combination gives health consumers an incentive to take better responsibility for their own health and to be more judicious in their healthcare expenditures.**

Value-driven health care (VDHC) **in a sense encompasses CDHC/CDHPs (and, at a minimum, is complementary to CDHC). VDHC encourages employers and health plans to provide better information to health consumers and to encourage more affordable and effective healthcare decision making. VDHC encourages consumers to make healthcare decisions based on quality and cost—in short, to make healthcare decisions based on value.**

But how will these developments ultimately affect health system functionality, pricing, and quality? Initial data is limited, but a growing body of evidence is providing an ever-clearer picture of these new trends. There is certainly room for debate over how these notions can help control healthcare costs, though initial results are promising.

The HHS directives helped the industry create focus and direction toward the goal of tightening operations and cutting costs; HHS drew in more than 1,000 healthcare-related organizations that agreed to take steps toward complying with guidelines for reform.

A CONTINUUM OF CHANGE

One way to conceptualize the evolution of healthcare is to see it as a continuum in time. Sixty years ago, we saw an era secure in lower-priced benefits that reflected a different world. At only 3.9%, healthcare spending was a much lower percentage of the total gross national product in the late 1940s. Today, healthcare spending is at about 16% percent of gross domestic product, an all-time high.[1] Will expenses climb higher? Perhaps, though an optimistic view puts us at a point on the continuum where reform forces are gaining momentum.

The public and industry remain cautious—perhaps wary of not only change itself, but also the implication that more responsibility will rest with them. The public will be expected to take more control of its health decisions and the cost implications therein, and the industry will be expected to provide better decision-making tools so that healthcare users can make better decisions.

CDHC: CONNECTING THE CONSUMER

The Milliman Consumer-driven Impact Study

In April of 2008, Milliman published a study of CDHC plan results, an independent, risk-adjusted analysis of CDHPs.[2] The Milliman Consumer-driven Impact (CDI) Study's mission was to go beyond the level of analysis seen in anecdotal reports about CDHC and VDHC, and instead adjust for demographic, risk and other factors, providing a more level and fair assessment of CDHPs in comparison with the traditional, more benefit-rich plans commonly used today. We performed a detailed analysis of several large corporate employers that were early adopters of consumer-driven healthcare plans.

1 The U.S. Department of Health and Human Services' National Health Expenditure Accounts, published since 1964, present healthcare expenditures as a proportion of gross domestic product. Available historical data for the 1940s, by contrast, tracked spending as a proportion of gross national product.
2 Jack P. Burke and Robert J. Pipich, Consumer-driven Impact Study, April 2008.

TABLE 1[3]

YEAR	OUT-OF-POCKET AS A % OF TOTAL NATIONAL HEALTHCARE EXPENDITURES	NATIONAL HEALTHCARE EXPENDITURES AS A % OF DISPOSABLE PERSONAL INCOME	OUT-OF-POCKET PAYMENTS AS A % OF DPI (PRODUCT)
1950	56.3%	6.0%	3.4%
1960	46.9%	7.5%	3.5%
1970	33.2%	10.2%	3.4%
1980	22.9%	12.6%	2.9%
1990	19.1%	16.7%	3.2%
2000	14.3%	18.8%	2.7%
2006	12.2%	21.9%	2.7%

As the first column in Table 1 shows, during the last six decades, patients' cost sharing as a percent of the total health bill decreased significantly. At the same time, utilization and healthcare spending as a portion of disposable personal income (DPI) rose dramatically. The third column of the table calculates the product of the first two columns. As you can see, out-of-pocket spending as a percent of DPI remained remarkably consistent and low.

It is not surprising that total healthcare costs have increased as the out-of-pocket sharing has decreased. The lack of true, choice-making healthcare consumers has seemingly contributed to rising health costs.

The essence of CDHC, with its emphasis on customer-initiated, value-driven choices, is to reconnect the consumer with his own health and healthcare decisions. An effective CDHC plan should eliminate some of the bureaucracy and red tape that have caused healthcare to become costly, impersonal, and often ineffective.

Put another way, the current lack of healthcare consumerism has two components:

1. **Lack of information:** Even the large employers that are first to implement CDHC plans agree that consumer information/education tools are still not available or adequate. But in the end, the increased use of transparency and excellent educative materials will influence consumers' ability to make efficient, cost-conscious healthcare decisions to create overall savings.

2. **Lack of incentive:** As costs have shifted over the course of decades from the consumer to another payer, the consumer has actually become insulated from the true cost of care. Carriers have long been aware of this trend, and they have priced their insurance plans accordingly. Many experts believe that this "cost insensitivity" on the consumer's end has driven up utilization and service costs, especially when it comes to routine care and the treatment of chronic conditions.

The responsibility factor

One way to connect consumers more closely with their own healthcare decisions is to ramp up the personal responsibility factor. Stories about such consumer responsibility are common in the media today. A major network's Web site recently reported that some employers are cutting costs by charging obese employees an extra fee on medical insurance. The Internet sound-offs in response to this topic revealed a range of consumer responses, from dismay at such fees to alarm at the way the increase in sicker individuals is raising healthcare costs for the aggregate. It's clear, though, that "carrots" have been much more palatable than "sticks"; numerous recent national news items have reported on insurance carriers that now offer small cash rewards and other bonuses for members who document healthy lifestyle measurements.

These incentives may work because they correspond with a dawning understanding on the part of many Americans: Lifestyle choices are linked to health and/or disease. As described by a recent international health agency's press release, Americans' chronic diseases (preventable diabetes and heart disease) add up to $150 billion a year in combined medical spending, and our 33% incidence of obesity contrasts with Europe's 17% rate. At the same time, per capita healthcare spending in the United States is double that of countries like the Netherlands or France.

What can we do about this? Data from the Milliman report show that plans emphasizing CDHC spend fewer healthcare dollars and moderately control costs across a variety of plan designs and carriers. However, as shown in the study, high-deductible plans (along with their side accounts) are not by themselves the panacea for creating healthcare savings that some had hoped.

3 Out-of-pocket expense and national health expenditures are published by CMS. They are available at http://www.cms.hhs.gov/NationalHealthExpendData/02NationalHealthAccountsHistorical.asp, Table 3 - National Health Expenditures. Personal disposable income data is published by the Bureau of Economic Analysis and is available at www.bea.gov/bea/dn/nipaweb/SelectTable.asp, Table 2.1 - Personal Income and Its Disposition. The oldest data for both was obtained from US Bureau of the Census, Historical Statistics of the United States, Colonial Times to 1970, Bicentennial Edition, Part 1, pg 74. The last column is calculated by multiplying the first two.

An essential component: Consumer education

The CDI study shows that, after adjusting for most risks, CDHPs result in a significant 4.8% savings. An adjustment for induced utilization drops the savings to 1.5%—but because most HDHPs factor induced utilization into their larger strategy, the more significant savings deserve some real consideration.

Still, there remains untapped savings potential that will likely only be realized if consumers are able to make healthcare decisions based on better cost and quality information.

We have seen some progress in terms of providing better information. The presence of consumer health Web sites, such as WebMD.com and Intelihealth.com, help counsel the public in a general way about illnesses, letting patients know when medical help is categorically necessary or optional, and the like. There is also potential for educational instruments to include a cost perspective, and as time goes on, we may see payers and others in the industry develop tools such as online flow charts that frame treatment options. Medical providers, who have a business incentive to steer toward the more complex treatment route, might not discuss the full range of choice with a patient. Education about healthcare costs and quality can help identify more affordable treatment for sports injuries or back pain (for example, the difference between physical therapy and surgery.) This all hearkens back to the "get a second opinion" approach; now that people have better access to information, they can do their own research on how best to deal with a given condition.

Another strategy that registers as a sophisticated version of the "second opinion" is the use of healthcare management firms. A recent article in the *Wall Street Journal* gave examples of employers who seek to fine-tune healthcare-product efficiency levels in order to cut costs via such firms. Companies like Best Doctors Inc. conduct audits of healthcare choice patterns for an employer and might check in on employees' treatment courses by offering an analysis, free of charge for the employee, to help ensure that the most efficient healthcare choices are being made.

Still, the information gap extends beyond questions of consumer education. As seen with other new healthcare management concepts, the early results are not conclusive and the industry is still grappling with how to measure value. In time, concepts such as wellness, which is difficult to measure in its own right, and disease management, which has finally come around to providing better metrics, may have a more profound effect on the cost of healthcare in this country. Or some combination of all these factors may help decrease the overall trend. With healthcare spending occupying an increasing portion of gross domestic product, all of these concepts deserve further scrutiny as we search for a solution to the healthcare funding crisis.

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TRANSPARENCY: SEE-ALL

Transparent cost and quality data may also speed progress along the healthcare continuum. Transparency adds accountability and infuses the system with better information, which can lead to better choices.

Two carriers in the Midwest (Humana and Aetna) that recently experimented with information transparency reported seeing dramatic changes. The results showed that their insured members moved away from high-cost items when they had access to specific price information about inpatient and outpatient treatment costs to all members (those on both CDHC and non-CDHC plans). Providers began to adjust rates down, not wanting to be seen as the most expensive. These are early, anecdotal reports, but they are encouraging.

That said, achieving transparency is not easy. Carriers often have contracts with providers that prohibit them from releasing pricing information. While there have been some early adopters, many organizations are more cautious and may wait for their cue from others. One such example is occurring at the Centers for Medicare and Medicaid Services (CMS), which is creating value exchanges that can help make data public in a useful way. Regional data pooling initiatives in Massachusetts, Minnesota, Wisconsin, and Washington state (to name a few locations) are also encouraging cooperation, data sharing, and transparency as an end in and of itself. These efforts provide a more accurate picture of healthcare delivery and outcomes in particular regions. Armed with this information, providers, payers, and consumers can all make wiser healthcare decisions.

P4P: ANOTHER SUPPORTIVE STRATEGY

Pay-for-performance (P4P) can also abet the VDHC movement. Pay for performance—bonus dollars for physicians and healthcare entities that rate high on quality indicators—has received mixed reviews in recent years. But proponents are eager to expand the usage of P4P schemes in the clinical arena. Today's pay-for-performance programs use and build upon the strategies designed 20 years ago; looking beyond present-moment efficiency, they tend to focus on clinical performance and patient satisfaction in settings like HMOs, public and private hospitals, and clinics. There are P4P success stories to point to. CMS's Hospital Quality Incentive Demonstration project, for example, awarded more than

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$117 million to top-performing hospitals during its first two years of operation. During that time, the average composite quality at the facilities increased 11.8%, resulting in improved care and outcomes for more than 800,000 patients.

Such efforts are on the rise. A recent survey shows that the number of P4P programs in the United States has increased from 39 in 2003 to approximately 148 in March 2007. The Medicare and Medicaid programs have begun to use P4P to rate quality, as well.

With newer P4P techniques, a healthcare entity might measure its levels of quality via known tools already in place, such as with standardized Health Plan Employer Data and Information Set (HEDIS) measures. Doctors' scorecard ratings may go up if the entity provides practices like community education and outreach activities. Entities might receive a standard payment for average performance and a higher per member per month (PMPM) payment for above-average performance. For clinics, incentive bonus dollars might be predicated on improvements tracked from one year to the next. Those working in P4P see it as improved quality in the present, with a stability-creating function, checks-and-balances style, in the long term.

INFORMATION AND TECHNOLOGY SYSTEMS INTEROPERABILITY

Integrated, exchangeable medical records may also help stem costs, for obvious reasons. The traditional paper-based system is more prone to errors, duplication, lack of coordination, and other problems that drive up costs. Hospitals and healthcare facilities that keep non-transparent, non-interoperable electronic records are, as one analyst termed it, "proprietary silos" that ultimately control patient information.

The exchange of patient electronic health records (EHRs) to the various providers for any given patient will present an informational breakthrough because clinicians will for the first time have a full, longitudinal medical record about each patient. Consumers can move more easily among their medical providers without fear that their information will be lost. Payers can benefit from the economic efficiencies, fewer errors, and reduced duplication that develop from interoperability. Healthcare information exchange and interoperability (HIEI) will lead to better-quality care and will affect the spectrum of healthcare, including vendors, payers, providers, hospitals, private physician practices, employers, and consumers.

The technology for interoperability was unavailable 20 years ago and is still relatively new. America's Health Insurance Plans (AHIP) has designed a model electronic medical record, and medical information systems companies offer such health information exchange systems for hospitals and other providers. These systems can also include services that integrate the transmission and acceptance of claims or bills, decrease processing costs, improve accuracy, and lower administration costs.

RESULTS FROM EMPLOYERS UTILIZING CDHC

The sum of CDHC's most compelling parts, detailed above, will lead to an extraordinary change in the way we get our medical care. However, because we are in an evolving transition on the healthcare continuum, miscalculations are inevitable. Some of the questions and criticisms directed at VDHC, and CDHC in particular, have a valid basis. There is a concern, for example, that CDHC would lead consumers to forego necessary medical care, resulting in deteriorating health for some.

Because healthier, younger consumers are the ones attracted to CDHC, there is also the concern that evaluations of CDHC will create a misleading impression to the public and the industry, as the CDHC population generally uses fewer medical services and so is less likely to face the out-of-pocket charges associated with such plans.

Finally, will CDHC really translate into true savings? If so, where would those savings actually come from? Milliman's Consumer-driven Impact Study offers answers here, too. Comparing six corporate employers' actual experience and the "risk scores" of populations that chose CDHC versus non-CDHC plans, the study addressed the question: Do CDHC plans really save money?

Using actuarial methodology, the study adjusted the two groups–CDHC and non-CDHC plans–for factors like benefit design, age, gender, risk score, and geography/area of the country. Some interesting results emerged, including the fact that five out of the six employers showed savings as a result of CDHC plans. Table 2 on the following page details the findings.

While some of the savings reported to date by CDHPs may be somewhat illusory because they are not risk-adjusted, the 4.4% savings (before induced utilization) is significant and offers promise of increased savings as CDHPs take hold.

TABLE 2

RATIO OF ADJUSTED CDHP TO NON-CDHP ALLOWED CLAIMS, BY EMPLOYER AND IN TOTAL

COMPANY	UNADJUSTED ALLOWED CLAIMS	COMBINED ADJUSTMENTS	ADJUSTED ALLOWED CLAIMS	"SAVINGS"
A	67%	77%	86.9%	13.1%
B	56%	58%	97.4%	2.6%
C	54%	64%	84.5%	15.5%
D	73%	70%	104.7%	-4.7%
E	54%	57%	96.1%	3.9%
F	52%	56%	93.9%	6.1%
TOTAL	59%	62%	95.2%	4.8%

The study also showed the following:

- The actual paid claims PMPM, that is the plan share of cost, for the CDHP population were very low. They were 50% of the PMPM for the non-CDHP products. These were, however, high-deductible plans, which are expected to pay out less in claims. Despite this, these results are encouraging.
- The actual allowed claims PMPM for the CDHP population are also low. The allowed claims for plans designated as consumer-driven were about 41% lower than the allowed claims for the non-CDHP-designated plans.
- The employee programs promoting healthy lifestyles were directed to all employees, so any resulting savings would probably touch all participants equally, not just those in the high-deductible health plan.
- The employers surveyed said they were not yet giving employees access to information on provider quality, a key "consumer" tool.
- Only one of the employers said it was giving its employees access to information about provider costs.

These survey results, discussions with the employers, and research into other plans made something apparent: Until strong, effective tools that allow consumers to truly shop for providers based on quality and cost are produced and available, CDHP savings will be based only on the incentives to save costs that high-deductible plans have historically provided. See the CDI report for the complete context of these numbers; go to milliman.com and search on "consumer-driven impact."

THE FUTURE ON THE CONTINUUM

The truth is, we may not see large numbers of early adopters of value-driven healthcare; there is a natural disinclination to be the first one into the water. But as you can see from the companies analyzed in the Milliman study, various styles and incarnations of responsibility-driven healthcare, and specific CDHC plans, are currently being tried, tested, and implemented by a number of corporate employers, with some modest and encouraging success.

Nevertheless, questions remain. What is the real impact on claim costs of a high-deductible program? What impact will such benefit plans and data transparency have on future cost trends? Over what period will any impact be seen—short or long term? How do carriers make rate adjustments for employer groups who have purchased a consumer-driven plan that requires transparent data as part of the package? How do providers and carriers price the impact of releasing information? How do they balance the need for transparency against the need to price products as aggressively as possible? How should this new data be used to create incentives for higher quality at a hopefully lower cost?

It's easy for us to say that we are somewhere along an evolving healthcare continuum. Pinpointing our exact location is more difficult, but in the coming years we should find answers to all of the above questions and see more evidence that value-driven healthcare can contain or reduce costs. Preliminary signs point to continued progress.

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