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# TESTIMONY

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## Consumer-Directed Health Plans

### Research on Implications for Health Care Quality and Cost

CHERYL DAMBERG

CT-249

September 2005

Testimony presented before the California Department of Insurance on  
September 20, 2005

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**Statement of Cheryl L. Damberg, Ph.D.<sup>1</sup>  
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**Before the Department of Insurance  
State of California**

**September 20, 2005**

Commissioner Garamendi, staff and other invited guests, thank you for inviting me to discuss the work that my RAND colleagues and I are doing to examine the newly emerging consumer-directed health plans (CDHPs) and whether and how these plan designs impact health care quality and costs. My comments today derive from a research project that RAND is conducting under a planning grant from the California HealthCare Foundation. The views expressed in my testimony are my own and should not be attributed to the sponsor of this research.

In my remarks, I will summarize the findings from a recently released RAND—California HealthCare Foundation report,<sup>2</sup> which provides an overview of the current state of knowledge on the effectiveness of Consumer-Directed Health Plan approaches—specifically high deductible plans (with and without personal health savings accounts) and tiered benefit products. My presentation will describe recent trends in the adoption of these tools and any recent evidence of the effectiveness of these approaches in reducing health care use and spending, while preserving and promoting access to appropriate care. Additionally, I will note several recommendations that we make in our study regarding important research questions that should be addressed to understand the impact of these newly emerging plan designs.

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<sup>1</sup> The opinions and conclusions expressed in this testimony are the author's alone and should not be interpreted as representing those of RAND or any of the sponsors of its research. This product is part of the RAND Corporation testimony series. RAND testimonies record testimony presented by RAND associates to federal, state, or local legislative committees; government-appointed commissions and panels; and private review and oversight bodies. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

<sup>2</sup> Buntin, M.B., C. Damberg, A. Haviland, N. Lurie, K. Kapur, and M.S. Marquis, *Consumer-Driven Health Plans: Implications for Health Care Quality and Cost*, California HealthCare Foundation, June 2005.

Before getting into the specific findings of our recently released study, I want to underscore that employee health benefit designs are evolving rapidly, that Consumer-Directed Health Plan products have to date had relatively low penetration in the market (albeit are increasing in their penetration), and have not been in place in most instances long enough or with enough enrollees to be able to fully gauge their impacts. At this point in time, there is more that is NOT known than is known about the effects of these newly emerging plan designs. To help fill this knowledge void, RAND is gearing up to conduct a 3-year national study that will provide a rigorous assessment of the impact of these products on health care costs, quality and access.

### **WHAT DO WE MEAN BY “CONSUMER-DIRECTED HEALTH PLANS”?**

Consumer-Directed Health Plan’s involve increased incentives to make consumers financially responsible when they choose costly health care options. The design of these plan models is predicated on the assumption that consumers will seek and use information on the efficacy of treatment and provider performance if they have a sizeable financial stake in care decisions. Employers hope that by providing consumers with informational tools and financial incentives, this approach will work to contain the growth in health care costs by inducing consumers to eliminate unnecessary care and to seek lower-cost, higher quality providers.

Consumer-Directed Health Plan models refer to two basic models: 1) high deductible plans that are often paired with a personal health care spending account—either a Health Reimbursement Account (HRA) or a Health Savings Account (HSA) to pay for unreimbursed medical expenditures; and 2) tiered benefit designs—either “tiered premium” plans that require high patient cost sharing if a consumer selects a less-restrictive network of providers (either hospitals, physicians, or both) or “tiered-provider” plans, where a consumer pays lower costs when selecting a provider in a preferred tier.

#### **What are high-deductible plans?**

In 2004, the average individual deductible for covered workers was \$221; in contrast, a high-deductible plan, qualified to be paired with an HSA, must have a minimum deductible of \$1000 for an individual and \$2000 for a family. Often these plans are accompanied by a personal spending account of \$600 to \$1000 for an individual worker

that can be used to satisfy the deductible: this leaves an effective deductible of about \$400 to \$1000. Employers generally offer high deductible plans as an alternative or an option to more traditional PPO or HMO plan offerings.

### **What are the Trends in Offerings of High-Deductible Plans?**

In 2004, only 10% of all businesses offered at least one plan with a \$1000 deductible (20% of businesses with 5,000 or more employees). While few employers have introduced these plans, the number of employers offering them doubled between 2003 and 2004. In California, 18% of employers offered a high-deductible health plan in 2004, and this figure could increase to more than one-third of employers in 2 years if employers carry out their reported intentions to add a high-deductible plan.

### **What do we know about the effects of high deductible plans on spending?**

Skeptics of these plans say they will do little to control health care costs, given that 74% of health care spending in 2002 (for privately insured people under the age of 65) was for those with expenditures exceeding \$3000. However, employers and the trade press report savings from high deductible plans of 10% relative to expected premium trends. It is not clear from these reports what share of the savings accrue from real reductions in spending vs. a shift in costs from the employer to employee. *It should be emphasized that these plans are new and have not been subject to rigorous evaluation.*

The results of the RAND Health Insurance Experiment, a randomized controlled trial of the effects of cost sharing on health care use conducted between 1974 and 1982, have been used to simulate the effect of moving employees from a typical health plan to one with a high deductible. These studies suggest that moving everyone from a plan with today's typical cost-sharing features to a high-deductible plan would result in a one-time reduction in spending of about 4-15%. These estimates are based on a shift to high-deductible only plans without personal savings accounts; personal savings accounts may mitigate to some degree the impact of the financial incentive to the consumer and thus offset some of these savings. Moreover, it is not known whether high deductibles will constrain the rate of growth in spending over time or just lead to a one-time reduction in spending. There is evidence that most of the growth in spending can be attributed to technological innovation, and there is little evidence that greater cost sharing will slow the adoption of new technology.

In the RAND HIE, the effect of cost sharing was on the patient decision to initiate care; the amount of spending per episode of care did not vary substantially with cost sharing. However, a change in coverage for the entire population might affect practice norms among physicians (i.e., change physician behavior), leading to even greater reductions in health care use. On the other hand, some economists believe that reductions in demand for visits by patients will lead to physician-induced demand for care in an effort to offset income losses, which could somewhat offset the effects on use and spending estimated from the HIE. Thus, it remains uncertain whether large-scale changes in benefit design would lead to larger or smaller effects in total health care use and spending than found in the HIE. And, while the HIE found no difference between the poor and non-poor in the effect of increased cost sharing on health care use, today's plan designs may impose a greater burden on low-income families than was the case with the HIE, and thus may augment disparities in access to care between low- and high-income families. *Additional research is required to understand the effect of cost sharing on use of care and spending given the new design features of high deductible plans, and how these effects may differ by population subgroups.*

#### **What do we know about the effects of high deductible plans on quality and health?**

While the RAND HIE found that greater patient cost sharing reduced use, it also concluded that the reduction generally was at the expense of care that is considered efficacious as well as less effective services, with a few exceptions. Cost sharing reduced the use of the emergency rooms for less urgent problems to a greater extent than for urgent problems, and it did not reduce use of care regarded as highly effective for non-poor children.

Lower use of services among persons with greater cost sharing in the HIE did not generally translate into adverse health effects, suggesting that the new high deductible plans would not lead to poorer health outcomes. However, negative consequences did occur for some low-income people in poor health. If new health plan designs place greater cost burdens on the low-income population than did the HIE plans, they may have broader health consequences than observed in the HIE. In a study by Goldman et al. on the effects of cost sharing on the use of prescription drugs, drug use decreased but not indiscriminately; people with chronic conditions were less likely to reduce their disease-specific drug use than other drugs (although the extent of this varied by condition).

Some have expressed concern that consumers in high deductible plans may skimp on preventive care, although to prevent this problem from occurring, many plans waive the deductible for preventive services (i.e., the legislation authorizing HSAs permits the deductible to be waived for preventive care and periodic evaluations). However, the effects on preventive care are likely more complicated as some preventive services are provided or ordered during a non-preventive care visit; a high deductible may thus indirectly lead to a reduction in such services. And it might vary by the cost of the preventive care service—flu shots vs. colonoscopy.

*There is need for further study of the effect of new plan designs on preventive care use, on use of efficacious and ineffective services, and on health consequences.*

**Personal Health Accounts**—are a key component of the new generation of high deductible health plans and they place decisions about health expenditures in the hands of consumers. There are different types of accounts, but they share certain broad features. Employers and/or enrollees make deposits into a specially designated account that is then used to purchase health services. If enrollees spend all the funds in a given year, they must then pay for additional health services out of pocket until their deductible is met. Above the deductible most costs are covered. There are two main types of personal health accounts that are paired with high deductible plans:

**Health Reimbursement Accounts (HRAs)**—these are employer-funded and owned. Unused funds carry over year-to-year, but when an employee leaves the firm, the funds revert to the employer. Account funds can be used only for medical care. HRAs can be used with any type of insurance plan.

**Health Savings Accounts (HSAs)**—were established in 2003 as part of the Medicare Prescription Drug, Improvement and Modernization Act. HSAs must be combined with an insurance plan with a deductible of at least \$1000 for an individual and \$2000 for a family. The maximum account contribution is the lesser of 100% of the deductible or \$2600 for an individual/ \$5150 for a family. Contributions to the accounts can be made by the employee, employer, or both; however, the employee owns the account and it is fully portable across jobs. Accounts can earn investment income that is not taxed and funds can be withdrawn (with tax penalty) to pay for non-medical expenses. The



portability and investment provisions of HSAs encourage consumers to conserve the funds and treat them as retirement accounts.

### **What are the Trends in the Use of Personal Health Accounts Paired with High Deductible Plans?**

Insurer interest in HSAs and HRAs is widespread and growing. Today, at least 75 insurers offer account-compatible plans nationwide. With the introduction of HSAs, employer interest is shifting away from HRAs to HSAs; however, because unused account balances revert to employers when an employee leaves, employer-funded HRAs are less costly to employers than equally funded HSAs—so employers are unlikely to completely shift to HSAs. A recent survey by Watson Wyatt and the National Business Group on Health found that 8% of large employers currently offer some form of HSA and that the number is expected to increase to 26% next year. There is emerging evidence that the newest HSA products may initially be more popular among small business and individuals than larger groups; some smaller businesses that might not otherwise offer health insurance see them as a way to provide low cost coverage. A survey of America's Health Insurance Plans (AHIP) members found that 16% of small group HSA policies were sold to businesses that previously did not offer insurance.

The adoption of CDHPs by major employers is happening in a gradual fashion; few large employers have chosen the “full replacement” route of abandoning traditional plans entirely in favor of CDHPs. Employee take up is low when CDHPs are offered alongside traditional plans, as generally is the case now.

### **What Do We Know About Selection Effects into CDHPs?**

There is concern that enrollees in CDHP plans will differ from those opting for the traditional plans, namely that only high-income, healthy people will choose the CDHP option, leaving sicker people in the traditional plans. This might increase the cost of traditional plans as there will be fewer people across whom to spread the high cost of caring for sick people. While high deductible plans coupled with accounts should attract enrollees who expect to have low medical expenses, enrollees with large expected expenses can reduce their effective out-of-pocket maximum with an account because the payments are made in dollars that one does not pay taxes on. Neither the contributions to nor the distributions from HSAs are taxed—and thus are likely to appeal to high-income employees who will view them as investment tools.

Simulation analyses and experience to date show mixed results about the importance of selection. In a simulation by Keeler et al, CDHPs with modest deductibles would not attract those who were much healthier than average, though selection becomes a greater concern with very high deductible plans. Actual experience among those purchasing HSA products through eHealthInsurance show that they are older (so potentially in poorer health) than those buying non-HSA products, and that about 40% of those purchasing HSA products had incomes below \$50,000 and one-third were previously uninsured. Also, in the AHIP survey described above, half of HSA individual policy purchasers were over age 40 and almost 30% were previously uninsured. In contrast, in two separate studies—one by Hibbard et al. and another by Parente—Hibbard found that those enrolled in the CDHP were better educated and in better health than those selecting the traditional PPO, while Parente found CDHP purchasers were in better health and were higher paid than other workers. Clearly the plans are drawing new customers into the health insurance market.

**What are the Effects on Spending Associated with CDHPs?** The tax advantaged nature of personal accounts makes current consumption of health care less expensive than consumption of other goods and services and may offset the decreased spending expected from a high deductible plan. Simulation analyses suggest that personal accounts may offset the savings from high deductibles by as much as 50%. Rather than the 4-15% reduction in use mentioned earlier in my remarks, when combined with personal accounts, reductions in use may fall in the 2-7% range.

Reductions in system-wide spending from HSA plans will depend on the extent of take-up and patient selection when more than one plan is offered. Keeler et al. concluded that switching all people to high-deductible plans with personal accounts would be associated with moderate savings, but taking into account voluntary self-selection into such plans, national spending would change by only 2% or less. Selection could mean that accounts are funded for individuals who would not have incurred any expenses, thus leading to higher outlays for employers.

Is there evidence that personal account-based plans reduce spending? Emerging reports suggest a cautious “yes.” One health plan reported a reduction in facility-based services and increased reliance on generic drugs, and lower cost increases for the CDHP enrollees

as compared to PPO enrollees. Parente et al. found that CDHP enrollees at one large employer had lower total expenditures than PPO enrollees and lower pharmaceutical costs, however expenditures were higher than for HMO enrollees and increased more rapidly than other groups. One employer reported a reduction of 18.7% in total medical cost after completely replacing its traditional plan with a high deductible—HRA plan.

*All of the findings I've noted above should be treated with caution. More work needs to be done to examine the effects before researchers and policy makers can speak confidently about the savings associated with the various CDHP products.*

*Furthermore, how the effects of the new designs vary over time is needed to understand the implications for cost containment over time. Are these one-time reductions in use or also reductions in cost growth? At this stage it's too early to tell and we lack information to answer this question. We also lack sufficient experience with these plans to assess the impact of these plans on quality and health—and it may take longer for measurable changes in health outcomes to occur.*

**Tiered benefit designs**—as noted earlier, tiered products can refer to either “tiered premium” plans or “tiered-provider” plans. Tiers are based on cost, quality, and/or satisfaction.

### **What are the Trends in Tiered Plans?**

A number of the largest insurers now offer tiered products. A survey by Millman of HMOs and PPOs that serve the large group commercial market found that 17% of plans offered a tiered product in 2004 and 42% expected to offer a tiered network plan in 2005. Hospital tiering tends to be more common than medical group tiering, based on findings from the 2003 Community Tracking Study survey.

However, employer interest in tiered products is still limited. Only 2% of all employers in a national survey said they were very likely to offer a tiered physician or tiered hospital network in 2005, while 19% said they were somewhat likely to offer one. Employers remain skeptical about the effectiveness of tiered provider networks to control costs, and don't see much difference between the new tiered models and PPO and POS offerings. Most employers have indicated a preference for increased cost sharing rather than for incorporating a new product design. Introduction of tiered products has also been

problematic in markets where there is a concentration of market power among the providers, who refuse to accept placement in the non-preferred tier.

Initially sorting providers into different tiers was based on cost factors (prices, payment levels or efficiency), but increasingly there are adjustments made for service mix and severity of patients and inclusion of quality metrics. However, there is much greater disparity in costs than in quality measures in most markets; therefore, quality differences often do not affect tier placement.

### **What are the Effects of Tiered Products on Spending?**

The degree of cost sharing required to elicit price-sensitive behavior from consumers is unclear. Some studies have shown little effect of cost sharing on patient choice of provider. The success of tiering will partly depend on how high-cost patients respond to the incentives, since the majority of costs stem from a small minority of the insured population who may be least able to make choices based on cost. Some believe these plan models will increase costs if consumers equate high cost with high quality. But others report that providers adopt cost-saving and quality-improving measures in order to be placed in preferred tiers.

*There is limited information about the effect of tiered health plans on controlling costs, primarily because these plans are relatively new and have not yet been widely implemented.* While studies of tiering of prescription drug benefits have found slower growth in utilization and expenditures, the results of these studies should be applied with caution to tiered hospitals and medical groups. This is because drugs are more homogeneous and information about drug equivalence is far more easily available and interpretable.

### **What are the Effects of Tiered Products on Quality?**

There is some concern that tiered networks may affect quality, since more tiered networks are based primarily on costs, high quality providers with higher costs may be placed in non-preferred tiers, making them unaffordable to the poor. While some plans incorporate quality measures into their tiering criteria, reliable and consistent quality data are difficult to find. It remains to be seen whether tiering may become an important mechanism to transmit both quality and price information to help consumers make informed choices among providers and to encourage providers to offer efficient high-

quality care. *Similar to the impact on costs, there is limited information about the effect of tiered health plans on quality, primarily because these plans are relatively new and have not yet been widely implemented.*

## **CONSUMER INFORMATION AND DECISION SUPPORT**

CDHPs increase the need for information and decision support as consumers are asked to weigh trade-offs in selecting providers or treatment options—decisions that have both financial and health implications. Various tools and information are being made available in varying degrees by health plans to support more activated consumers, such as health promotion/education, risk reduction programs, consumer decision support (e.g., comparative provider performance information, self-care and shared decision making information), disease management, directories of providers and pharmacies, information on insurance benefits and claims history, and online personal health information. The limited evidence to date shows that plans vary significantly in the extent to which they provide decision support. At this stage, the provision of consumer decision support remains quite limited in scope and there is variability in the usability of the information provided.

Consumers, while still largely reliant on friends, family, or a referring physician to help guide them in making choices, are increasingly reporting they have seen or used information on health care quality to make decisions. A Kaiser Family Foundation—AHRQ—Harvard sponsored national survey of consumers conducted in 2004 showed that 35% of consumers have seen information comparing the quality of plans and providers, and about half of those who had seen it reported they had used this information to make a decision about their care. Yet empirical studies conducted in the past 5-7 years find that most consumers are not using these tools to make decisions, and that frequently consumers could not easily or correctly evaluate the content of the material. Studies also find a strong correlation between education and use of the Internet for health information; thus, the utility of decision tools may vary substantially among different subpopulations.

Various problems exist today in the provision of consumer information. First there is limited information collected and publicly available. Second, there is a lack of standardization in measurement and reporting to enable consumers to compare performance across providers and treatments. Third, the information currently provided

to consumers typically is not easily evaluable and consequently may be confusing or create the potential for the consumer to make the wrong choice. Presentation format and design is critical in influencing how people weight their decision choices and in whether they attend to and comprehend the information. The evaluability of the information becomes critically important because there is more at stake, the choices are more complex, and the volume of information is likely to be greater—all of which may overwhelm the consumer.

A 2003 report issued by the American Association of Retired Persons (AARP) outlined the difficult decisions consumers will face in these new consumer plan models, including: 1) understanding information about options; 2) identifying information relevant to one's personal situation; 3) knowing the factors to consider in a choice; 4) integrating that information into decision making, including differentially weighting factors and making trade-offs, and 5) understanding and weighting the implications for personal financial and health risks.

***Currently, we know little about the structure or the content of the information given to consumers in CDHPs, and whether and how they are using that information in their decision-making. Future research should explore the extent to which information tools are made available, whether existing tools provided in CDHPs have the characteristics noted above, whether the information is evaluable, and how this information is actually used by consumers in CDHP models. There also continues to be limited collection and transparency of performance information at all levels of the health system, and in particular for those areas, providers, and treatments that are most critical to facilitating informed consumer decision-making.***