Moral Hazard in Health Insurance: Are Consumer-Directed Plans the Answer?

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I. INTRODUCTION

Insurance exists to spread risks of unpredictable events over a larger group of individuals and businesses. By pooling the premiums of multiple insureds, insurance is able to reduce the financial uncertainty or risk of each individual. Individuals being naturally risk-averse, the decreased risk achieved through insurance increases social wellbeing.

In the arena of health insurance, an insurer is able to pool sufficient premium dollars of many insureds to cover the expected costs of treatment for those insureds, plus administrative costs and a given level of profit. The problem arises in the way that such reduction in risk of payment changes the behavior of individual insureds, who ultimately control which provider treats the patient and which treatments will be incurred. Because the individual knows that her treatment costs will be covered by insurance, she does not spend that money as carefully as she would if it were her own. In fact, studies have shown a positive correlation between the presence and scope of health insurance and the demand for medical services.¹

Most employees have health insurance coverage through an employer,
which is an accident of history, an unintended consequence of government regulation that has persisted. During World War II, employers were constrained by federal wage controls, while at the same time the amount of money being pumped into production for the war effort meant that employers needed a way to retain productive employees. Because employee benefits aside from wages were not controlled, many employers began offering health insurance. Tax benefits to both employer and employees made this offering stick - the employer could deduct expenses for medical insurance as a compensation expense, but the value of the coverage was not included in employees' taxable income. This tax benefit also led to medical coverage that expanded in scope from the initial hospital-only coverage offered by employers during World War II to the comprehensive coverage many enjoy today, as employers sought ways to shift compensation dollars to such insurance. This also led employers to provide plans with low deductibles to provide compensation through this tax-benefited route rather than the more heavily-taxed cash compensation. While much of the money employees receive in the form of medical insurance is money they otherwise would have received as higher wages, once that money is spent on providing medical insurance, employees tend to treat it as other peoples' money.

In recent years, high rates of increase in the cost of providing this coverage have led insurers and employers to look for ways to reduce the perceived freewheeling spending by their employees. Annual increases have been in double-digits for several years and are only now beginning to slow. It remains unclear what portion of these increases is due to moral

3. Id.
4. Id.
5. Telephone Interview with Tami Tolzman, Senior Administrator, 3M Co. Total Health Management (June 29, 2005). 3M Co. initially offered hospital-only coverage in 1942 at the then-highly-competitive rate of up to $30 per day, for which the employees paid no premium. In comparison, today 3M's base PPO medical plan has 90% coverage for most services after a $300 deductible, with a premium for individual coverage at $20 per month.
6. HENDERSON, supra note 2, at 6-7.
7. Id. at 8.
8. Id.
9. Hewitt Associates LLC, Hewitt's 2004 Future Health Care Expectations Survey Overview 6-7 (Oct. 2004) [hereinafter Health Care Expectations 2004]. Average annual percentage increases since 2000 have been as follows - 2000: 12%; 2001: 15%; 2002: 16%; 2003: 13%; 2004: 12%. A separate survey by Towers Perrin projects only an 8% increase for 2005, but this represents a per-employee average increase of $582 for PPO plans, which could have been significantly higher were it not for continuing efforts by employers to manage such increases. JOE CONWAY, TOWERS PERRIN, TOWERS PERRIN PROJECTS AN 8% INCREASE IN EMPLOYER-SPONSORED HEALTH CARE COSTS FOR 2005, 7 (Oct. 6, 2004).
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hazard and the disconnect between the true cost of medical care and the cost borne out-of-pocket by employees.10 Because employers, on average, pay 81% of the total cost of employee medical insurance, such increases cannot be continually absorbed.11 Therefore, employers have implemented increased cost-sharing in the forms of higher deductibles and coinsurance or copayments.12 In addition, an expanding number of employers are offering consumer-directed health plans as a way to increase employee sensitivity to the true costs of medical services and thereby create a sense of consumerism.13

This paper will examine this "moral hazard" problem with health insurance, beginning with Part II, which describes moral hazard and its effect on patients as consumers of medical services. Part III then explores the methods that insurers and employers have used to reduce the cost-increasing effects of moral hazard on medical insurance. Because a majority of insureds under the age of sixty-five are covered through employers, this paper will concentrate on the actions of employers in containing cost increases. Part IV discusses so-called "consumer-directed health plans," including what they are and whether such plans may be an answer to the problem of cost increases generally and to moral hazard specifically. Part V will then conclude with recommendations based on the author's personal experience with these issues as well as what has been learned in researching this article.

II. MORAL HAZARD - WHAT IT IS AND THE EFFECTS OF HEALTH INSURANCE

A. What Is Moral Hazard?

Moral hazard, simply put, is the tendency of an individual to behave differently in regards to a particular event depending on the presence of insurance.14 For instance, once an insurable event such as an auto theft is

11. CONWAY, supra note 9.
13. Id.
14. See generally Arrow, supra note 1.
insured against, the insured will tend to be more careless, such as leaving the car unlocked or parking in higher-theft areas. Similarly, it has been shown that where a house is insured against fire, the prevalence of accidental fire attributable to carelessness increases.\textsuperscript{15}

In the context of health insurance, moral hazard is manifested in the tendency of individuals to increase utilization of medical services paid for by insurance compared to those services not covered.\textsuperscript{16} As insurance coverage increases, demand for services covered by such insurance likewise increases. Specifically, moral hazard has been shown to vary with the copayment, or portion of the medical bill paid by the insured-patient.\textsuperscript{17} For example, a person who contracts the flu, but whose insurance has a deductible of $1000, is far less likely to see the doctor than a person who has 100\% coverage after a $10 copayment.

\textbf{B. What Causes Moral Hazard?}

Moral hazard is caused by several economic principles and theories. First, economic theory is based primarily on the assumption that individuals act in their own best economic interest.\textsuperscript{18} It is therefore completely rational that for insured services, as the marginal cost of medical services is reduced the patient will tend to consume more.\textsuperscript{19} In fact, studies have continually shown that after controlling for health status, those who have health insurance consume more medical services than those without insurance.\textsuperscript{20} As the example above indicates, the person with the $1000 deductible would only decide to visit the doctor when the expected utility of that visit (or the expected avoided harm) exceeds the cost. This follows traditional economic theory that rational individuals act when the marginal utility (benefit to that individual) is greater than the marginal cost of that action.\textsuperscript{21}

A second cause of moral hazard in health insurance is the inequity of information between patients and providers. By the nature of their specialized training and experience, physicians have an enormous amount of information regarding treatment options, risks, and prognoses, none of which is completely shared with patients.\textsuperscript{22} Patients may not possess

\textsuperscript{15} Arrow, \textit{supra} note 1, at 961.
\textsuperscript{16} Id.
\textsuperscript{18} Eric French & Kirti Kamboj, \textit{Analyzing the Relationship Between Health Insurance, Health Costs, and Health Care Utilization}, 26 ECON. PERSP. 60, 60 (Sept. 22, 2002).
\textsuperscript{19} Id. at 65.
\textsuperscript{20} Id. at 65-66.
\textsuperscript{21} Id.
\textsuperscript{22} See generally Sherry A. Glied, \textit{Health Insurance and Market Failure Since Arrow}.
sufficient information to even determine whether an episode of care is appropriate or whether self-care will be adequate. This contributes to moral hazard in that patients who are understandably ignorant regarding their options must put substantial trust in the physician.\textsuperscript{23} Furthermore, it should not be overlooked that the physician cannot completely set aside his own self-interests in billing for treatment.\textsuperscript{24} This can be particularly true with so-called “dynamic moral hazard” in which a physician or facility has invested in the latest technology and therefore is motivated to recommend testing or treatment using this technology, even if lower-cost alternatives are available, knowing that the decision will not affect the patient.\textsuperscript{25} Expanding technologies have led to a wider scope of insurance coverage, which in turn has led to even greater moral hazard caused by both patient and physician.\textsuperscript{26}

The third, related cause of moral hazard in health insurance is the inequity of information between the insurer and individual insureds. The insurer cannot know going in the risks involved with insuring a given individual.\textsuperscript{27} Additionally, specific episodes of illness are not contractible and insurers are empowering insureds to spend their money without direct control over how that money is spent for most outpatient services.\textsuperscript{28} The insurer may, and generally does, have greater information relating to which providers have better medical outcomes for specific diagnoses and treatments, as well as which treatment options have proven most successful.\textsuperscript{29} Traditionally, this information has not been shared for a variety of reasons, including avoiding the perceived endorsement of better providers, as well as a lack of solid actionable data.\textsuperscript{30} Lack of solid actionable data is due to inflation, increased medical charges due to aging populations, and higher demand for services.

A fourth cause of moral hazard is the fact that today the insured patient is insulated from the costs involved with treatment decisions. This goes hand-in-hand with the inequity of information just discussed, but even if there were perfect information sharing regarding the treatment options and their

\textit{in Uncertain Times: Kenneth Arrow and the Changing Economics of Health Care} 108 (Peter J. Hammer et al., eds., 2003).

\textsuperscript{23} See id.
\textsuperscript{24} Id. at 107.
\textsuperscript{25} Id.
\textsuperscript{26} Id.
\textsuperscript{27} French & Kamboj, supra note 18, at 62.
\textsuperscript{28} Vera-Hernandez, supra note 17, at 671.
\textsuperscript{30} Id. at 57-59.
efficacy, the insured patient is not price-sensitive to these options. Essentially, once the insurance is paid for, it is equivalent to a reduction in the price of medical care. Particularly in the situation of plans with flat copayments for physician office visits, often the insured will pay the same flat amount regardless of what is done while in that office.

The biggest cause of this insulation from the costs of medical care is that patients are spending other people’s money when they consult the doctor. The actual out-of-pocket costs to the patient are minimal. One study showed that patients in hospitals pay only five cents out-of-pocket for every dollar they spend of insurance funds. To show the effect this has on the behavior of patients, various analogies to other types of purchases have been made. For example, if an individual could purchase a car and pay only a $500 deductible and 20% of the remaining sticker price for a small premium payment, that individual would be incentivized to make maximum use of this coverage. The difference in price between the individual’s portion of the cost of a $15,000 Hyundai ($3400) and a $30,000 Chevy ($6400) may not be sufficient to encourage appropriate purchasing.

**C. The Optimal Insurance: A World Without Moral Hazard**

One approach to reduce moral hazard involves removing the event being insured against from the control over the insured individual. With health insurance, cost of treatment is partially determined by unpredictable episodes of illness, although the cost is also affected by the individual’s choice of doctor and facility, as well as by the individual’s willingness to use medical services. Again, it has been shown that the presence of insurance affects these decisions, with demand for healthcare and therefore cost of treatment increasing with the presence of insurance.

The ideal insurance would provide protection against unpredictable costs of necessary medical care. Kenneth Arrow proposed that in an optimal system, a physician would be paid according to the degree of benefit to the

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33. See, e.g., Henderson, supra note 2, at 2. Henderson uses a theoretical “food card” to make the same point: if a food card were provided by an individual’s employer and after a deductible of $250 the individual only paid 20% of her food expenses, the incentive to purchase sensibly as a good consumer would be minimal.
34. Arrow, supra note 1, at 961.
35. Id.
36. Id.
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patient. Presumably this scheme would make payment contingent on the medical outcomes for the particular patient. But as Arrow properly noted, this would shift the risk from the patient to the physician; because physicians have been shown to be extremely risk averse, it is probably more appropriate for insurance to pool this risk. In any case, the insurance plan should be designed so that medical care is always undertaken when the expected utility, taking into consideration the probabilities of positive outcomes, exceeds the expected cost.

D. Moral Hazard: The Real-World Data

In the years leading up to the late-1970s, it was considered an intuitive but unproven assumption that cost-sharing affected the quantity of medical services sought. The Nixon administration funded a $180 million, multi-year study by the RAND Corporation to conduct a controlled experiment to determine the effect of cost-sharing on demand for medical services, which ended in 1982. This experiment allowed RAND to become the sole insurer for 5809 people, each randomly assigned to different insurance plans with co-insurance ranging from zero to 95%. The health of the participants was tested at the beginning and end of the experiment with self-reporting questionnaires and physical exams.

The data derived from the RAND study confirmed the previous assumption: higher cost-sharing does reduce spending on outpatient medical services as measured by total cost of treatment. With health differences and other variables controlled for, the plan with 95% cost sharing (amounting to a $1000 family deductible due to the out-of-pocket maximum) showed spending that was just 66% of the amount used by those with no coinsurance. These numbers were similar regardless of income level, indicating that more affluent people are as influenced by cost-sharing as those with lower incomes. Further, the study found these differentials between free care and cost-sharing continued after five years, which

37. Id. at 964.
38. Id. at 964-65.
39. Id. at 965.
41. Id. at 317-318.
42. Id.
43. Id. at 318.
44. Id.
45. Id.
46. Keeler, supra note 40, at 318.
indicates that cost-sharing is not less effective over time due to unmet need.47

The study also concluded that cost-sharing had no significant impact on the health of those involved; in fact, the physicians involved were disappointed to find the low level of improvement resulting from increased visits.48 With few exceptions, those receiving free care had substantially the same health levels as those having to pay a portion of the costs.49 Notably, one exception was where the plan completely paid for vision care (often not covered by medical plans), which resulted in participants enjoying better-corrected vision.50 Likewise, the data appeared to indicate that the increased number of visits induced by free care led to better case-finding and management of hypertension, although at a cost of $300 per year in 1982 dollars.51 However, later analysis showed that more than half the benefit of free care for high blood pressure was conferred by a one-time screening examination at a fraction of the cost.52

Additional analyses of the RAND data built upon the initial study’s conclusions. An analysis by six RAND economists in 1987 showed that not only does increased cost-sharing reduce expenditures on medical services, but also that such cost-sharing does not lead to patients foregoing treatment.53 This directly contradicted the hypothesis that less favorable coverage would actually increase total costs by deterring necessary preventive care and increasing later hospitalizations.54 In fact, the economists determined “we can rule out clinically significant benefits from the additional services in the free fee-for-service plan.”55 It appeared that the introduction of cost-sharing reduced the number of visits and therefore the total costs of treatment, but did not prevent patients receiving the appropriate treatment when needed.56

The greatest reduction in treatment costs occurred between the zero coinsurance rate and the 25% level, with reduced gains (reductions) at each subsequent level of coinsurance.57 Interestingly, however, cost-sharing has little, if any, effect on utilization of inpatient medical services. The RAND

47. Id.
48. Id. at 319.
49. Id.
50. Id.
51. Id.
52. Willard G. Manning et. al., Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment, 77 AM. ECON. REV. 251, 265 (1987).
53. Id. at 258.
54. Id at 263-65.
55. Id. at 265.
56. Id at 259.
57. Id.
study showed that although cost-sharing had substantial effects on the use of outpatient services, the result was the opposite for inpatient services. Additionally, the data showed that the level of inappropriate use of inpatient medical services (23%) was the same across all of the coinsurance levels. It would seem, therefore, that inpatient services are more appropriately seen as complementary to outpatient services than as a substitute.

Similar results were achieved when RAND analyzed the effect of cost-sharing on utilization of prescription drugs using a four-site study with a variety of cost-sharing plans randomly assigned to participants. The study found an increase of 60% in dollar-value of utilization of prescription drugs between the lowest coinsurance plan and the plan with a 95% coinsurance. Further, the average number of prescriptions purchased per person per year increased for enrollees in the free plan, with the 95% plan participants spending only slightly over half as much on prescription drugs. Importantly, the study noted that higher spending was caused by this increased quantity as opposed to a difference in price per prescription.

III. METHODS OF CONTROLLING MORAL HAZARD IN HEALTH INSURANCE

A. Historical Methods

Historically, to minimize moral hazard, insurers have experimented with encouraging optimal utilization of medical services by applying both carrot and stick to both provider and patient. As discussed in Part II above, health insurance, without more, generally lacks incentives for either patients or providers to seek or provide cost-efficient medical care.

Insurers first attempted to control moral hazard through supply-side methods, including utilization review and management (UM/UR). UM/UR charges the insurer (or claims administrator for self-insured plans) with reviewing specific treatment plans recommended by physicians prospectively, concurrently, or subsequently. This review is typically done on inpatient admissions or surgical procedures to ensure the necessity and appropriateness of recommended procedure(s), facility, and length of

58. Manning et al., supra note 52, at 259.
59. Keeler, supra note 40, at 318.
61. Id. at 13.
62. Id.
63. Handel, supra note 29, at 51.
To the extent the procedures are not approved, they will not be reimbursed by the insurance plan, thereby creating a great incentive for providers to make sure that approval is received. A related method is to audit provider charges once billed in order to ensure that only necessary treatments are reimbursed. This type of review program reduces moral hazard by inserting an additional party, interested in the costs, into the decision-making process, as well as by developing a greater dataset to be used in future plan design.

A second method of controlling moral hazard on the supply side is the imposition of fee schedules and negotiated discounted payment rates to physicians. From an economic perspective, at a lower given price, producers will supply a lower quantity of the service. This means, for example, that if a physician office visit previously charged at $100 is now discounted to $75, the physician will be less willing to provide the same number of visits, thereby limiting the opportunity of patients to over-utilize such visits. In reality this theory has not always been borne out in the medical arena, as practices have been able to increase productivity and reduce internal costs such that a higher number of visits can be provided at the reduced rate, thereby achieving previous total billing amounts. However, this method has been successful in leading medical practices to use lower-cost providers to more efficiently provide the same services once only performed by physicians. This reduces moral hazard by removing some of the self-interest of providers to recommend services that may not be absolutely necessary but traditionally would have been thrown-in when fully covered by insurance and performed by physicians.

A third but related method of controlling moral hazard from the supply-side is the notion of prepaid medical care. This type of system can take the form of capitation payments to primary care providers ("PCPs"), in which the PCP is paid a given per-enrollee per-month rate and is expected to provide whatever care is necessary to the assigned enrollees for that limited pot of money. This motivates the PCP to provide care efficiently in order to receive the maximum amount of funding available to them.

64. *Id.*
65. *Id.* at 52.
66. *Id.*
67. *Id.*
68. See generally Warren Greenberg, *Demand, Supply, and Information in Health Care and Other Industries, in Incentives vs. Controls in Health Policy: Broadening the Debate, supra* note 10, 96-97. The supply of physicians' services has increased since the 1960s, making it easier for the payer to negotiate with physicians' groups and hospitals to have greater bargaining power.
69. *Id.* at 97.
70. *Id.* at 97-98.
71. Elizabeth Docteur & Howard Oxley, Org. for Econ. Co-operation & Dev., *Health-
to maximize profit and will minimize unnecessary care because it will cut into the PCP’s revenue. This function is often linked to a requirement that the PCP perform a “gatekeeper” function in providing referrals to specialists, as a pool of money is held back until year-end, at which point the PCP is paid out of the reserve to the extent that specialist referrals are minimized. Although they have largely proven successful in containing moral hazard, these capitation systems have encountered numerous problems, not the least of which is resistance from providers who are notoriously risk-averse and see capitation as a major shift of risk from the insurer to providers.

Turning to consumers, in the early 1970s there was a fear that imposing cost-sharing and other incentives to patients as consumers was “penny-wise and pound-foolish.” This fear resulted from the theory that controlling predictable utilization would lead to higher long-term costs through increased hospitalizations. But as indicated above, the RAND study and subsequent analyses clearly showed that while cost-sharing could reduce moral hazard and the costs of treatment, it did not indicate any significant effect on the health of the participants.

Almost immediately after the RAND survey results were compiled and disseminated, insurers and employers began to increase cost-sharing attributes of their plan offerings. For example, in 1983, the year after the study was completed, Xerox Corporation raised its coinsurance from 0% to 20% and increased its annual deductible from a flat $100 to 1% of salary. Its employee communications that year cited the RAND study as the primary reason for the changes, noting the potential for savings on medical services without risking adverse effects on health.

HMOs, originally conceived of as a type of closed-panel prepaid medical plan, likewise began adding or increasing copayment requirements for physician visits and hospital stays. While few HMOs in 1982 required any copayment, and those that did were generally $5 or less, 83% of HMO members paid physician visit copayments of between $5 and $10 by 1990.
Perhaps the best data regarding the effectiveness of cost-sharing on reducing moral hazard effects on utilization without producing adverse health effects come from the state Medicaid programs. Many of these programs initially provided coverage for outpatient services, including physician visits, with no copayment required.\textsuperscript{81} In 1972, California was one of the first states to experiment with the use of copayments for physician visits as a way to control high utilization.\textsuperscript{82} The study indicated that increasing the copayment from $0 to $1 per visit yielded a volume reduction in number of visits by 8\%.\textsuperscript{83} Although federal law requires that any copayments in Medicaid be "nominal," many states followed this example and implemented copayment requirements in the 1990s.\textsuperscript{84} In 2001, Utah was experiencing high utilization that was ever-increasing, but after implementing $2 copayments for physician visits in November of that year, utilization of such visits plummeted 70\% by February 2003.\textsuperscript{85}

Other than cost-sharing, the 1980s saw other attempts to rein in the effects of moral hazard and cost increases in general. One such method was the introduction of health promotion and employee assistance programs ("EAPs"). Such programs are intended both to educate employees on healthy lifestyle choices and to intervene earlier in the process, before actual medical care is needed.\textsuperscript{86} For example, EAPs can provide education about the dangers of alcoholism, provide counseling, and present alternatives to more-expensive medical services, which leads to reduced absenteeism and lower health care claims costs.\textsuperscript{87} Employers can provide onsite fitness facilities, arrange for low-cost health club memberships, or organize employee communication programs to encourage greater physical fitness and help keep employees out of the medical system.\textsuperscript{88}

The one 1960s-style insurance contract that remains today is the Medicare indemnity policy, which lacks much of the utilization management and other cost-containing measures found in private

\textsuperscript{81} See, e.g., LEIGHTON KU ET AL., THE EFFECTS OF COPAYMENTS ON THE USE OF MEDICAL SERVICES AND PRESCRIPTION DRUGS IN UTAH'S MEDICAID PROGRAM, CTR. ON BUDGET AND POLICY PRIORITIES 3 (Nov. 22, 2004).


\textsuperscript{83} Id. at 16.

\textsuperscript{84} KU, supra note 81, at 9.

\textsuperscript{85} Id. at 5-6.

\textsuperscript{86} HANDEL, supra note 29, at 53.

\textsuperscript{87} Id.

\textsuperscript{88} Id. at 54, 233-34.
insurance. Traditionally, this policy has addressed moral hazard by leaving beneficiaries vulnerable to virtually unlimited cost-sharing, particularly for long-term illnesses. Until recent changes, Medicare did not provide coverage for outpatient prescription drugs, an excellent example of predictable costs whose coverage is contrary to pure insurance theory. But now with the addition of a prescription drug benefit through Medicare Part D, this last bastion of old-style insurance contract has bowed to modern economic and political realities.

B. Modern Trends in Controlling Moral Hazard

Beginning with the greater increases experienced near the end of the 1990s, insurers and employers again began to search in earnest for ways to control medical care costs, including those caused by moral hazard. On the provider side, the near-universality of managed care ensured that a majority of surgeries and hospitalizations were subject to UM/UR restrictions. Cost reductions can be achieved on the supply-side through restraints by properly coaxing providers away from excessive utilization of high-technology resources to less costly and more effective alternatives, but insurers have had difficulty finding this state. Risk-sharing with providers has been tried, with or without capitation, as has imposition of additional controls and limitations on provider autonomy through standards of care requirements. However, such restrictions can lead to enormous administrative costs and dissatisfaction by both providers and patients.

Employers have been able to achieve a certain level of savings through more advanced purchasing methods, many of which have been brought over from other areas of their businesses. For example, Hewitt Associates, working with 350 large employers, established several initiatives to improve purchasing efficiency, sufficient to reduce annual cost increases by 1-2%. Total savings experienced over a two-year period have been 10-

89. Glied, supra note 22, at 106
90. Id.
91. Id.
93. Glied, supra note 22, at 108.
95. Id. at 17.
96. Id. at 18-19.
97. Hewitt Associates, How to Impact Health Care Cost and Behavior,
30% by using data-driven procurement to better align health care purchasing for a given employee population with more efficient insurance providers and administrators in various regions. 98

In recent years, it has become clear to insurers and employers that to cap the seemingly ever-increasing costs of medical insurance, the insured/employee must be engaged as a consumer rather than merely a patient receiving care. This trend began with the introduction of health promotion programs, but has increased as employers have sought to partner with employees to control costs. 99 Because employees at least partially "feel the pain" of medical insurance cost increases through rising premiums, increased cost-sharing, and even lower salary increases, it is also in their best economic interest to become involved in controlling these costs. 100

First, in order to engage employees in their medical care decisions, employers have continued to increase the portion of costs that employees pay. Employers have learned that cost awareness can cause employees to take greater accountability for their health care choices and this awareness comes from cost-sharing. Additionally, behavioral research has shown that employee behavior is best impacted by making financial incentives and penalties visible to employees. 101

In recent years, a majority of employers have increased cost-sharing with employees by raising employee contributions, deductibles, and copayments/coinsurance. 102 In fact, data from Hewitt Associates indicates that over the most recent five years, employee contributions have increased 126% and employees are now paying approximately 19% of the overall cost of health care, compared to approximately 13% in 1995. 103 Average annual


98 Id.


103. Hewitt Teleconference, Health Care Expectations: Future Strategy and Direction
individual deductibles are now $300 for PPO plans, compared to $100 in such plans in 1990.104

Similar cost-sharing increases have been implemented in employer-sponsored retiree health plans. A study by Brandeis University in 2001-02 found that spending on prescription drugs had been increasing at a rate of 15 - 20% every year since 1990, but that this trend could be dampened with increased cost-sharing.105 For example, by doubling copayments from $5 to $10 for single-tier (all drugs require the same copay amount) prescription drug plans, overall drug spending is reduced by 22%, attributable partially to shifting costs to retirees, but largely due to decreases in utilization.106

Overall, retiree plans with more aggressive cost-sharing (i.e., at least 20% higher copay requirements for retail vs. mail-order and brand vs. generics) experience, on average, a 13.3% reduction in spending per prescription and approximately 18.7% reduction in total annual costs per member to the plan sponsor.107 A substantial portion of this savings (55%) is attributable to the cost shifted to the retiree, but approximately 45% is attributable to reduced utilization of higher-cost alternatives when more cost-effective drugs are available.108

Another form of cost-sharing that puts the decision about what insurance coverage is appropriate into the individual's hands is called "fixed-dollar premium contribution." This form is a type of defined-contribution strategy whereby the employer sets the level of its contribution, then allows its employees to determine how this contribution will be spent.109 While this type of contribution strategy has not yet been widely adopted, the experience of one large employer, the University of California ("UC"), indicates it has been successful in increasing employee awareness of the true cost of coverage and garnering large savings.110 In 1994, UC

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2005, 6 (Nov. 17, 2004).
104. Id.
106. Id. at W409.
107. See id. at W414. Exhibit 4 compares the average annual spending per prescription for less aggressive cost sharing at $45 versus $39 for more aggressive cost sharing, which is a 13.3% reduction. Exhibit 4 also shows the average annual overall cost per member to plan sponsor to be $1421 for less aggressive cost sharing compared to $1155 for more aggressive cost sharing, which is a 18.7% difference.
108. See id. (stating that total savings per member is $266, $145 of which is attributable to members paying more out of pocket; therefore, 55% is attributable to increased cost sharing, and the remaining 45% to more efficient purchasing by members or reduced use of higher-cost alternatives).
110. Id.
announced that it would limit its premium contribution to the cost of the least-expensive of its four plan offerings, while employees who chose the more expensive plans would pay the difference. 111

In the first year, 45% of the employees switched to the lowest-cost plan to pay zero premiums. 112 Over the next 4 years, each of the four plans actually reduced the premiums they charged in an effort to gain enrollment, with total real prices after inflation dropping by 20-25% in that period. 113 Because the shifting occurred to more restrictive HMO plans, utilization was reduced and total health spending for UC's employees dropped 9.3% in each of the first two years. 114 In the end, however, plans began to experience adverse selection issues (a concept discussed more fully below in Part IV) and at least one plan was raising premiums, 115 indicating that additional work in design and implementation of this type of plan will be necessary for success in the long-term.

A related concept introduced by a few large employers such as Dell Inc. and FedEx Corp. go by various names: "cafeteria," "menu" or "a la carte" plan selection. This method essentially offers one base plan, usually a PPO, with optional riders that allow employees to "buy-up" to additional options, meaning one base plan can have as many as 100 different variations. 116 Rather than the employer choosing a one-size-fits-all plan, the employee is able to customize the plan to best suit her needs.

An example of a base plan and options, provided by Hewitt Associates, follows with these basic characteristics: 117

- $1000 annual deductible (optional $750, $500, $250)
- 80%/60% in-network/out-of-network coinsurance (optional select network with 100%/80%/60%; $25 or $15 copays for office visits)
- $10/$20/$40 prescription drug copays (optional $10/20/30; $5/15/30)

Because of the communication challenges and potential confusion to employees presented by this increased flexibility, these plans are generally offered using online modeling tools that show estimated costs under various plan options and health conditions. 118 The upside of these plans is that

111. Id. at 229.
112. Id. at 230 (In 1994, "Health Net gained more than 9,000 new UC enrollees").
113. Id.
114. Id. at 231.
115. Buchmueller, supra note 109, at 233-34.
118. Rubenstein, supra note 116.
employers can offer higher levels of coverage but, similar to fixed-premium plans, the employees will pay the full additional costs for their choices. Approximately 13% of large employers have adopted such plans through 2004, either as an additional option or full-replacement for existing options, although it does not appear these plans will see much additional adoption at this point due to their perceived complexity.

Aside from cost-sharing, the provision of greater information to employees is perhaps the largest trend among employers for reducing moral hazard. Employers are providing “decision-support tools,” including web-based tools, to provide greater information to employees at all stages of the health care purchase process, from plan selection to treatment. For example, as better data becomes available, many employers are rolling out access to cost and quality data for providers and facilities. As of 2004, only about 12% of large employers had begun providing this information to employees, but an additional 65% indicated intent to adopt in the future. To reinforce this approach, some employers have or are considering either using a select network of providers and hospitals with the best cost and quality data, or tiering copayments based on whether one of these preferred providers is used.

Perhaps the most far-reaching change to implement consumerism in employer-sponsored health benefit plans is the consumer-directed plan, discussed in the following section.

IV. CONSUMER-DIRECTED HEALTH PLANS: A POSSIBLE ANSWER TO MORAL HAZARD?

A. What are Consumer-Directed Health Plans?

One theory to combat the problem of moral hazard involves enabling employees to purchase medical care as if they were doing so with their own money. Employers have been wary of going as far as true defined contribution plans, in which the employee has in essence a “voucher” for a certain amount and then is able to spend that money on his own selected
However, a major step down that path is the consumer-directed plan, which provides the individual with a high-deductible health plan, as well as a medical spending account. This account, funded by the employer plan-sponsor and typically in the range of half the value of the deductible, is then used by that individual to pay for medical care. A typical design of such plans according to Hewitt is:

A PPO plan, with 90% in-network/70% out-of-network coinsurance
- $2000 annual deductible
- $1000 health reimbursement account funded by the employer, with roll-over
- Leaving a $1000 gap between the $1000 HRA and the $2000 deductible level

If the individual uses the full amount of the account, he is then liable for the remaining amount of the deductible (the so-called “gap” in coverage) before the PPO plan will begin paying anything. On the other hand, if the individual has medical costs that are less than the amount of the account funded by the employer, this money will roll-over to subsequent years. The rolled-over money can be used toward those subsequent years’ deductibles, and eventually, for individuals with low health care expenditures, will exceed the deductible and can be carried over indefinitely into retirement.

In either case, the theory behind these consumer-directed health plans is that the individual will spend the funded account as if it were his own money, both to avoid getting to the “gap” in coverage and to carry over the funds. This is the sought-after “consumerism” behavior that employers are striving for, trying to get employees to act as consumers of healthcare rather than beneficiaries. Employer plan sponsors who have used consumer-driven health plans (“CDHPs”) as replacements for existing plans have so far experienced savings under these plans, partially due to the change in individuals’ behavior. However, if the employer only offers

125. See generally id.
126. Id.
130. Mauro, supra note 126, at 3
132. Id. at 5.
133. Mauro, supra note 126, at 3, 4.
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the CDHP as an additional option alongside existing plans, the problem of adverse selection can occur.

B. Adverse Selection - What It Is and How It Affects Health Plans

Adverse selection, like moral hazard, is a concern that must be addressed by those designing health plans. However, unlike moral hazard, which concerns the behavior of individuals once enrolled in a plan, adverse selection affects enrollment patterns among health plan offerings.\textsuperscript{134} Adverse selection is problematic on grounds of both efficiency and equity among employees.\textsuperscript{135} Unless an employer plan sponsor intends to completely replace all existing plans and offer only a CDHP, adverse selection must be addressed.

As noted above in the University of California example, adverse selection becomes an issue whenever there is competition between health plans and employees must choose one.\textsuperscript{136} Individuals, acting rationally in their own best interests, will always choose the health plan that best suits their own expected needs for health care coverage,\textsuperscript{137} meaning that plan options must be priced appropriately to minimize the effects of adverse selection.\textsuperscript{138} This is particularly true for plans such as CDHPs, which by their very nature attract young, healthy individuals and are more likely to be shunned by those who know they will need to consume considerable health care.\textsuperscript{139}

Economist Mark Pauly described the economic theory of adverse selection and the stages that it typically follows.\textsuperscript{140} In the first stage, if given a selection of health plan options, a lower-cost plan such as a CDHP will disproportionately attract the employees who have had low utilization under more traditional plans because low-risk consumers value generous coverage less than high-risk consumers.\textsuperscript{141} This very trend occurred when HMOs were first offered as an option alongside traditional indemnity plans in the 1980s, with HMOs “picking off” low-risk (and thereby low-utilizing) individuals with lower premiums to compensate for more restrictive coverage.\textsuperscript{142}

\textsuperscript{134} Mark Pauly & Sean Nicholson, \textit{Adverse Consequences of Adverse Selection}, 24 J. \textbf{HEALTH POL.} 921, 922 (Oct. 1999).
\textsuperscript{135} See id. (describing the stages of adverse selection).
\textsuperscript{136} Buchmueller, \textit{supra} note 109, at 233.
\textsuperscript{137} Pauly & Nicholson, \textit{supra} note 134, at 922.
\textsuperscript{138} \textit{Id.} at 929.
\textsuperscript{139} Gabel et al., \textit{supra} note 127, at W4-214.
\textsuperscript{140} See Pauly & Nicholson, \textit{supra} note 134, at 922.
\textsuperscript{141} \textit{Id.} at 922, 923.
\textsuperscript{142} \textit{Id.} at 923, 925.
As the higher-risk individuals remain with the more-generous, higher-cost plan, the claims experience of that plan is skewed toward these higher-utilizing individuals, thereby increasing costs.\textsuperscript{143} This forces the generous plan to raise premiums, eventually to the point that even higher-utilizing individuals will choose the lower-cost alternative and at some point the more generous plan is no longer economical to offer.\textsuperscript{144} Pauly argues that this cyclical pattern will continue, with low-risk individuals continually seeking lower-cost plans and more generous plans becoming too expensive to continue.\textsuperscript{145}

For CDHPs, there is not yet sufficient data to show conclusively that these plans attract primarily low-risk individuals, but there is intuitiveness to this hypothesis that requires the adverse selection issue to be addressed. This has caused employers to look to CDHPs initially not so much as a cost-reducing proposition, but as one step down the path of increasing a sense of consumerism among employees.\textsuperscript{146}

\textbf{C. Other Challenges to Consumer-Directed Health Care}

The desire of employers to impose a sense of consumerism among employees and to implement CDHPs as a method of increasing that phenomenon faces several other challenges. One obstacle is the outright resistance of some employees to any efforts perceived as cost-shifting measures by employers.\textsuperscript{147} While employers try to enlist employees as allies in controlling health care costs, surveys indicate that many employees view such costs as the problem of employers and not something for which they should be responsible.\textsuperscript{148}

Another challenge facing employers trying to introduce consumer-driven plans is not only communicating the need for cost-containment, but also thoroughly communicating how CDHPs work, why they are being introduced, and why employees should consider such plans. Tami Tolzman at 3M indicated that at locations where health benefits employees are able to personally discuss these issues directly with employees, they have seen a willingness of employees to consider the plan, as well as increased

\begin{footnotes}
\textsuperscript{143} Id. at 922.
\textsuperscript{144} Id.
\textsuperscript{145} Id.
\textsuperscript{146} Tolzman interview, \textit{supra} note 5.
\textsuperscript{148} Id.
\end{footnotes}
Surveys indicate that effective communication not only helps drive enrollment into such plans, but also increases reported satisfaction of those already enrolled. One method that appears to be a key to successful communications is to combine personal on-site meetings, written communications, and a self-service web site that allows employees to access the information in the way that best suits their needs.

A further challenge for CDHPs is the perception that once individuals view the medical reimbursement account as their own money, they will forego necessary treatment. Critics argue that this will lead to higher medical costs in the long-run as employees shun lower costing preventative care, but ultimately incur higher-costing hospitalizations. However, employers can at least avoid the problem of foregone preventive care services by excluding such services from the deductible and not applying these costs to the account. 3M did just this with its custom-designed CDHP and initial claims data has shown that for the enrolled population, the average usage of preventive services is the same in this plan as under its other plan offerings.

D. Trends in Adopting Consumer-Directed Health Plans

Companies have been slow to adopt CDHPs, preferring to wait and see what other companies that have adopted such plans experience. By 2002, an estimated 1.5 million persons were enrolled in CDHPs offered by employers or other private insurers, with expert projections of future enrollment ranging from such plans comprising a "niche" to "50 percent of the health care market." One encouraging trend has been that for companies who adopted such plans, none reported a decline in enrollment in CDHPs from the previous year. In fact, companies have generally had success in expanding enrollment in subsequent years, with companies such as Intel reporting a threefold increase in their CDHP enrollment in the second year.

In 2004, the number of large employers offering consumer-driven

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149. Tolzman interview, supra note 5.
151. Tolzman interview, supra note 5.
152. Stoll & Denker, supra note 129, at 5.
153. Tolzman interview, supra note 5.
154. Id.
156. Mauro, supra note 126, at 4.
157. Id.
models of some variation doubled from 6% to 12%, with an additional 54% of large employers seriously considering adopting such plans in the near future.\textsuperscript{158} Whether additional employers continue to adopt CDHPs will likely be dependent on the experience of those who already have.

3M Company, headquartered in St. Paul, Minnesota, first offered its own custom-designed CDHP to its employees during the 2003 enrollment season for the year 2004.\textsuperscript{159} This plan is self-insured by 3M (as are almost all of 3M’s health plan offerings), with Blue Cross and Blue Shield of Minnesota acting as claims administrator and providing the PPO network.\textsuperscript{160} The plan is offered as an additional option alongside traditional PPO plans and the design of the plan is a PPO plan with 80\% coverage after:\textsuperscript{161}

- Individual: $750 medical savings account, $750 “gap” (total $1500 deductible)
- Family: $1500 medical savings account, $1500 “gap” ($3000 deductible)

In the first year of enrollment, 3M’s CDHP plan saw enrollment of approximately 500 employees, out of approximately 39,000 employees nationwide.\textsuperscript{162} In the 2004 enrollment for the 2005 plan year, 3M did not actively encourage employees to enroll in the plan and did not offer incentives to drive enrollment there.\textsuperscript{163} As a result, enrollment grew by only 10\% to approximately 550 employees, perhaps predictably so, but below the company’s expectations.\textsuperscript{164} Also predictably, the employees enrolled are more heavily weighted toward single employees, with approximately 62\% of those enrolled doing so as “employee-only,” rather than employees plus dependents.\textsuperscript{165}

V. CONCLUSION

Moral hazard is a very real concern for employers and insurers attempting to control rising health care costs. This is particularly true in employer-sponsored health care plans, for which employees have traditionally been charged only a very small fraction of premiums and have been responsible for only a small fraction of actual billed charges for the treatments they seek. With very little “skin in the game,” employees’ real

\textsuperscript{158} Health Care Expectations 2004, supra note 9, at 23.
\textsuperscript{159} Tolzman interview, supra note 5.
\textsuperscript{160} Id.
\textsuperscript{161} Id.
\textsuperscript{162} Id.
\textsuperscript{163} Id.
\textsuperscript{164} Id.
\textsuperscript{165} Tolzman interview, supra note 5.
cost of medical services is effectively reduced to whatever the minimal copayment may be, such that following standard supply-and-demand theory, the quantity of treatment sought is greater than it would be otherwise.

One answer to controlling the problem of moral hazard is to increase a sense of consumerism among enrollees. If employees begin to spend money on medical services as if it were their own rather than the free-wheeling spending that can arise from a sense of spending other peoples’ money, moral hazard can be reduced. It is not yet clear whether consumer-directed health plans will have this affect on overall populations of employees, but initial data seems to indicate that for those currently enrolled in such plans, their behavior (as measured by utilization of medical services) is altered. Additional experience will be required to make a final assessment on CDHPs, but employers cannot sustain the status quo of ever-increasing medical costs - clearly something must be done.