REPORT 11 OF THE COUNCIL ON MEDICAL SERVICE (A-98)
Adverse Selection Against Generous Health Insurance Under Defined Contribution Systems
(Informational Report)

EXECUTIVE SUMMARY

Resolution 109 (I-97) calls on the AMA to study the mechanisms of health insurance plan selection resulting in the adverse selection against generous health insurance occurring under defined employer contribution systems. Current AMA policy (Policies H-40.969, H-165.881, H-165.890, and H-330.933, AMA Policy Compendium) advocates defined contribution health coverage in the public and private sectors as a means of fostering beneficiary choice and cost-consciousness. To the extent that adverse selection eliminates generous insurance as employers switch to defined contribution systems, it may pose a problem for high-risk individuals as healthier persons gravitate disproportionately to less expensive, less generous plans. By reducing pooling – and cross-subsidies – across risk groups, defined contribution systems present a tradeoff between expanding consumer choice and preserving the cross-subsidies which support generous insurance.

Council on Medical Service Report 11 finds that there is a low prevalence of defined contribution health benefits systems and no general trend toward defined contribution systems. Although limited empirical evidence suggests that defined contribution systems can accelerate adverse selection, defined contribution systems are neither a necessary nor sufficient condition for market exit of generous insurance plans. Other forces also threaten the viability of indemnity plans, and plan failure can be forestalled by policy interventions. Finally, plan failure can be regarded either as an efficient outcome of market forces or as requiring policy intervention.

REPORT OF THE COUNCIL ON MEDICAL SERVICE

CMS Report 11 - A-98

Subject: Adverse Selection Against Generous Health Insurance Under Defined Contribution Systems

Presented by: Arthur R. Traugott, MD, Chair

INTRODUCTION

At the 1997 Interim Meeting, the House of Delegates adopted Resolution 109 calling on the AMA to study adverse selection against generous health insurance occurring under defined employer contribution systems. In this informational report, the Council on Medical Service responds to that request.

AMA policy (Policies H-40.969, H-165.881, H-165.890, and H-330.933, AMA Policy Compendium) advocates defined contribution health coverage in the commercial, Medicare, and military sectors as a means of fostering beneficiary choice and cost-consciousness. To the extent that adverse selection eliminates generous insurance as employers switch to defined contribution systems, it poses a problem for high-risk individuals as healthier persons gravitate disproportionately to less expensive, less generous plans. By reducing pooling – and cross-subsidies – across risk groups, defined contribution systems present a tradeoff between expanding consumer choice and preserving the cross-subsidies which support generous insurance.

Previous reports of the Council on Medical Service (10, I-93; 1, I-94; and 3, A-97) have examined mechanisms of health insurance plan selection under managed care, community rating, and Medicare+Choice, and have identified policies to limit risk selection, including risk-adjustment and reinsurance. In the extreme, adverse selection could cause an insurance plan to exit the market, a phenomenon sometimes referred to as a "death spiral." Resolution 109 (I-97) expresses the concern that defined contribution systems precipitate the demise of generous insurance, particularly indemnity plans. "Generous" implies insurance with relatively few restrictions on access to benefits or providers and correspondingly high premiums. It is important to note that generous is a relative term and that any type of plan, including an HMO, could be the most generous plan in a given market. This report addresses two questions. First, to what extent does adverse selection against generous insurance occur under defined contribution systems? Second, does adverse selection require a policy response, or should it be regarded as a normal consequence of well-functioning markets?

VARIABLE CONTRIBUTION VS. DEFINED CONTRIBUTION SYSTEMS

Most employers who offer a choice of health insurance subsidize expensive plans more heavily than inexpensive plans. In this case, the employer's contribution toward health benefits depends on the plan chosen, and the health benefit system can be called a "variable contribution" system. Examples of variable contribution systems include those in which the employer pays the full premium of any plan chosen, the full premium minus a fixed employee contribution or a fixed-

percentage contribution. Compared to "defined contribution" systems, variable contribution systems channel more beneficiaries into expensive plans.

Under a "defined contribution" system, the employer contributes a fixed-dollar amount towards the employee's health insurance, and the employee is responsible for paying any difference between the employer contribution and the premium of the chosen plan. The defined contribution could be equal to the premium of the lowest-cost option or capped at a higher amount, in which case, the employee typically does not pocket the savings from choosing an option costing less than the cap. Defined contributions are variously called "capped benefits," "uniform contributions," "standard contributions," "fixed-dollar contributions" or "equal-dollar contributions." Defined contributions are a central component of "managed competition" systems, which include additional measures such as standard benefit packages. For purposes of this report, the term "defined contribution" allows for the possibility that the employer's contribution is higher for employees with dependent coverage than for those with individual coverage, and the formula used to determine the contribution might change from year-to-year. The salient point of a defined contribution system is that at any point in time, each employee faces incentives to choose insurance according to the costs and benefits of available plans.

In principle, under a defined contribution system, employees' insurance options could be unrestricted or restricted to those arranged by the employer. In practice, defined contributions must usually be applied toward a plan arranged by the employer. When employers offer only one plan (or none), the distinction between variable contribution and defined contribution systems becomes moot. Given the AMA's interest in expanding consumer choice and encouraging cost-effective choices, "defined contribution" implies here that more than one plan is offered.

PREVALENCE OF DEFINED CONTRIBUTION SYSTEMS

Despite periodic discussion by some employers about switching to a defined contribution system, there is not yet a general trend in that direction. Available data show that among employers offering a choice of plans, a minority do so through a defined contribution system. The prevalence of defined contribution systems depends on whether it is examined at the worker or employer level, and varies by firm size, region, and sector of the economy.

A 1997 survey of public and private sector employers with 200 or more workers conducted by KPMG Peat Marwick found that in firms offering a choice of plan, 18% of workers were offered health benefits through a defined contribution system. KPMG data from 1995 using broader categorizations of benefit systems showed that no more than 24% of workers in firms offering a choice of plan, and 20% of workers in all firms surveyed, were offered health benefits through a defined contribution system. (Although the 1995 and 1997 data are not directly comparable, they do not suggest a significant trend towards defined contribution systems for health benefits.)

The 1995 KPMG data was presented at the employer level as well as the worker level. They showed that a maximum of 12% of surveyed firms offering a choice of plan, and 7% of all surveyed firms, offered health benefits through a defined contribution system. Defined contribution systems were most prevalent among large employers and in the government and finance sectors. The KPMG data exclude firms with fewer than 200 workers, most of which offer zero or one health plan. Hence, they overstate the prevalence of defined contribution systems by employers.

Two other surveys report similarly low prevalence of defined contribution systems for the provision of health benefits. A 1992 survey of public and private firms by the Foster-Higgins consulting firm found that only 14% of employers used a defined contribution. The Lewin Group surveyed 44 state governments and found only five offering a defined contribution equal to the lowest-cost option.

EFFECTS OF DEFINED CONTRIBUTION SYSTEMS ON ADVERSE SELECTION

There is a general consensus among analysts that switching from a variable contribution to a defined contribution system increases adverse selection against more generous/expensive plans. However, it would not be correct to attribute adverse selection against indemnity plans solely to defined contribution systems. General factors which threaten the viability of indemnity plans include the introduction of managed care options, increased acceptance of managed care by beneficiaries, aging out of beneficiaries most attached to indemnity insurance, rising health care costs, and miscalculation in setting premiums.

Unpublished KPMG data show that, regardless of the type of benefit system, firms offering indemnity plans that then add HMOs to their plan choices experience an increase in indemnity premiums. Similarly, HMO premiums are higher for firms that offer only HMOs compared to firms that offer both indemnity and HMO options. Both of these findings suggest that increased managed care penetration affects risk selection. Although switching to a defined contribution system might accelerate managed care penetration and thereby affect the viability of indemnity insurance, it is not the sole factor in play.

To the extent that defined contribution systems act upon premiums and plan viability, they do so through several channels. First, defined contribution systems force plans to compete on the basis of price, pushing premiums closer to true costs. Second, by removing preferential subsidies of more expensive plans, defined contributions affect beneficiary choice of plan. Even if beneficiaries were of uniform risk, a switch to a defined contribution system should shift beneficiaries into lower-cost plans, thereby changing the size of the risk pools, costs, and premiums for plans. Dwindling enrollment could threaten viability of more generous plans even in the absence of adverse selection. If, however, there is variation in beneficiary risk, and if healthier beneficiaries are more price-sensitive than those who are less healthy, low risks will migrate disproportionately to lower-cost plans. Conversely, individuals who have lived in an area for a long time or who are chronically ill tend to refrain from switching plans (regardless of type of plan or plan generosity) in order to maintain access to their current health care providers. Price competition, the number of enrollees, and the risk mix of enrollees all affect premiums, which in turn affect beneficiary choice. Finally, factors independent of the type of benefit system – e.g., broad changes in markets, consumer preferences, and technology – also affect premiums.

To measure the effects of defined contribution systems in a definitive fashion, it would be necessary to have detailed data on the following for all employers offering multiple health plans: plan features, risk selection across plans, patterns of migration, and changes in plan offerings. Such data would enable a comparison between the degree of adverse selection under variable contribution systems and defined contribution systems. Since no such data set exists, the Council examines well-documented case studies of defined contribution systems.

FEHBP The Federal Employees Health Benefits Program (FEHBP) is the best-known example of a defined contribution health benefits system. More than 400 health plans currently participate in

the FEHBP, some with high-and low-options, and all beneficiaries have a choice of at least seven plans. In its first decade, the program experienced relative stability in premiums, enrollment patterns, and plan offerings. More recently, risk selection has grown across high-and low-option plans, and across indemnity and managed care plans, resulting in the exit of one of two nationwide indemnity carriers.

Although the Government's defined contribution was initially fixed from year-to-year, it is now tied to premiums of the most popular plans. The Government's contribution equals 60% (71% starting in 1999) of the weighted average of the six highest-enrollment plans' premiums – *or* 75% of a plan's premium, whichever is lower. Strictly speaking, the "75% rule" has turned FEHBP into a hybrid defined-variable contribution system since it gives lower subsidies to low-cost plans than to high-cost plans.

Between 1960 and 1985, Blue Cross/Blue Shield and Aetna each offered high-and low-option indemnity plans nationwide through the FEHBP. Until 1970, nearly 80% of beneficiaries were enrolled by one of these two carriers, and most chose the high-option plan. There was net migration into high-option plans despite a widening gap in premiums, caused primarily by the expansion of benefits in high option plans. As health care inflation accelerated, plan choice proliferated, and open seasons were held more often, risk selection increased. According to General Accounting Office estimates, most of the difference between high-and low-option premiums in the early 1980s was due to risk selection rather than the direct effect of greater generosity in the high option plans. Adverse selection against indemnity plans as a group also grew. Dwindling enrollment and adverse selection nearly caused Blue Cross/Blue Shield to withdraw from FEHBP in 1983. Aetna, which was experiencing similar pressures, did leave the program in 1986 (at which time, most of its subscribers moved over to Blue Cross/Blue Shield).

FEHBP administrators took active measures to counter risk selection, such as allowing particularly generous plans to drop certain benefits. The "75% rule," though introduced on the principle that employees should contribute toward their health benefits, is credited with mitigating risk selection by reducing the subsidy towards premiums of low-cost plans. By enhancing benefits in its low-option plan, Blue Cross/Blue Shield successfully encouraged migration from the high option to low option while increasing its share of FEHBP beneficiaries.

The FEHBP case demonstrates the phenomenon of adverse selection and market exit of generous insurance, as well as the potential for policy interventions to reduce adverse selection and avert "death spirals." Several complexities of the case should be noted, however. First, adverse selection might have driven Aetna out of the market even if the FEHBP had been a strict variable contribution program. Second, interventions on the part of the FEHBP administrators and Blue Cross/Blue Shield limited adverse selection. Third, part of Blue Cross/Blue Shield's success in averting a "death spiral" can be attributed to market dynamics, namely the exit of Aetna. Finally, the FEHBP has been very successful in holding down costs, due in part to its bargaining power and in part to competition among plans for price-sensitive enrollees.

Harvard University and the Mass GIC (Cutler and Zeckhauser 1997 and Cutler and Reber 1996) In the early 1990s, Harvard University's 10,000 employees chose among a generous Blue Cross/ Blue Shield preferred provider organization (PPO) plan and several HMOs through a variable contribution system. In 1995 and 1996, Harvard phased in a defined contribution system, following which the PPO experienced dwindling enrollment and adverse selection, and was eventually discontinued. Comparing Harvard's experience with that of the Group Insurance

Commission (GIC) of Massachusetts, a variable contribution system covering about 245,000 state and local employees and their dependents, suggests that pressures facing generous insurance plans exist outside of defined contribution systems and that policy interventions can successfully reduce adverse selection and avert plan failure.

Prior to Harvard's switch to a defined contribution, enrollment in the PPO was stable at about 20% of employees, and premiums of the PPO and HMOs were all very similar. Following the switch to a defined contribution system, younger and healthier people migrated out of the PPO, and PPO premiums rose dramatically. In 1997, the PPO plan was disbanded. Another notable effect of Harvard's switch to a defined contribution system is that it reduced total premium costs, in part because of switching to lower-priced plans, and in part because of price competition.

During the same period, the Mass GIC offered a traditional, relatively expensive indemnity plan and a variety of HMOs. Indemnity plan enrollees had higher average age, utilization, and costs than HMO enrollees, and indemnity plan premiums crept up while HMO premiums declined. Despite adverse selection, the indemnity plan maintained fairly stable enrollment. This stability was achieved largely through the GIC's active interventions to manage costs in the indemnity plan, e.g., "carving out" pharmacy and mental health benefits and subjecting outpatient care to utilization review. The GIC is currently considering risk adjustment in order to further inhibit risk selection and moderate its effects.

Two identifiable factors account for the fact that Harvard's PPO plan exited the market whereas the GIC's indemnity plan did not. First, Harvard's switch to a defined contribution drove a wider wedge between the beneficiary cost of more versus less generous insurance. Second, the GIC actively intervened to avert a "death spiral" of its indemnity plan. By imposing managed care features on the indemnity plan, the GIC reduced that plan's generosity and cost relative to competing plans.

University of California (Buchmueller and Feldstein 1996 and Buchmueller 1997) In 1993 and 1994, a total of 13 different health plans were offered to more than 100,000 University of California (UC) employees. At any given location, there was a choice of two to five HMOs with a standard benefit package and standard cost-sharing features, and most locations also offered a generous indemnity plan and a PPO with point-of-service (POS). Following a switch from variable contributions to defined contributions in 1994, UC's two indemnity plans experienced dwindling enrollment and adverse selection.

Prior to 1994, UC paid the full premium for HMO and PPO options and most of the premium for indemnity plans. Following the switch to a defined contribution system, employee contributions for indemnity plans roughly doubled, some HMOs became "pay" plans, whereas other HMOs and the PPO remained free to employees. Disenrollment rates corresponded to increases in employee contributions. In the first year of the new system, half to three-quarters of enrollees dropped out of the indemnity plans, most switching into the free PPO. With one exception, described below, HMOs that required employee contributions lost about a fifth of their enrollees, mostly to free HMOs. In subsequent years, the main indemnity plan continued to experience a steady loss in membership – particularly by younger and healthier beneficiaries – and corresponding premium hikes. In the meantime, HMO premiums declined, in part due to fierce price competition in California's managed care market during the mid-1990s. The monthly charge to employees toward the family indemnity premium is currently nearly $1,800 compared to $0 to $50 for other options.

The one case of massive migration across HMOs occurred in Santa Cruz HMOs in response to both price and non-price competition. In 1994, one HMO required a beneficiary contribution whereas the second remained free. The second HMO also signed with the largest medical group in the county, making the provider panels of the two HMOs nearly identical. About two-thirds of the enrollees from the first HMO switched into the second. Although this case has been cited as evidence of extreme price-response to a defined contribution system, it actually illustrates the importance of non-price factors, such as restrictions on providers, in beneficiary choice.

The case of UC demonstrates that beneficiaries are particularly sensitive to price when plans are held to a standard benefit package and when a close substitute for their original plan is available. In the three years following the switch to defined contributions, premium expenditures fell by nearly 25%, in part due to declining premiums and in part to shifting to lower-cost plans.

State of Minnesota (Feldman and Dowd 1993) The State of Minnesota Group Insurance Program covers 144,000 state employees, dependents, and retirees. Minnesota has always provided employee health benefits through a defined contribution system, but in the mid-1980s, the formula determining the state's contribution changed to shift costs to beneficiaries. Prior to 1986, the state's contribution was set equal to the premium for the Blue Cross/Blue Shield indemnity plan, the oldest plan in the program and the only one available statewide. During most of the 1980s, the indemnity plan had at least half of total enrollment. It competed with up to ten HMOs at times (although none of the HMOs was available statewide), and HMO premiums shadowed the indemnity rate.

In 1986, the state's contribution changed to the premium of the lowest-cost plan in each county. By 1989, seven different HMOs were the lowest-cost plan in at least some part of the state. Although the data do not include information about risk selection across plans, a 63% increase in the indemnity premium between 1988 and 1989 suggests that the indemnity plan experienced adverse selection following the change in defined contribution. In 1990, the state converted the indemnity plan to a PPO plan with POS and began managing the plan aggressively, thereby holding annual premium increases to about 5%. The defined contribution system is estimated to have reduced premium expenditures on the order of 6% because of shifting into lower-cost plans and price competition.

Stanford University (Royalty and Solomon forthcoming) Before Stanford University phased in "managed competition" in the early 1990s, the University provided health insurance to more than 7,000 employees through a variable contribution system. Under the new system, non-unionized employees are given a defined contribution toward one of four options. Prior to the switch to defined contribution, the indemnity plan was dropped, making a POS plan the least restricted though not most expensive plan. In addition to the POS plan, three HMOs are offered. In keeping with the managed competition approach, all four plans offer highly standardized benefits and share common cost-sharing features. The major differences among plans are the provider panels and the ability to go out of network.

1994-95 data show that employees are price-sensitive, as demonstrated by switching into lower-cost options. Further, younger and healthier people were found to be more price-sensitive than older people and people with chronic conditions. Nonetheless, Stanford has not experienced pronounced risk selection, and premium differences among plans are fairly compressed. In 1994, the monthly employee contribution toward family premiums were $113 for one HMO, $147 for the

POS plan, and $150 to $152 for the other two HMOs. In 1995, premiums in all four plans went down due to competition within the Stanford system and in California more generally.

The relative lack of risk selection under Stanford's defined contribution system seems to be due largely to the standardization of benefits across plans. In addition to limiting risk selection, the standard benefits package has helped Stanford to contain costs. However, imposing a standard benefits package has also effectively limited choice by prohibiting variations in benefits according to consumer needs and preferences.

POLICY IMPLICATIONS

There are two distinct points of view on adverse selection and "death spirals" under defined contribution systems. The two views represent different starting points for policy analysis rather than diametrically opposing perspectives. The market-oriented view maintains that the main purpose of insurance is to protect against unforeseeable risk, not to serve as a mechanism of cross-subsidization from low-risk individuals to high-risk individuals. Thus, in life and auto insurance markets, premiums are set to reflect individual's prior records and demographic characteristics. Similarly, increased risk selection across plans allows premiums to more accurately conform to actuarial risks compared to a system in which risks are distributed across plans randomly or there is only one group-rated plan.

Another reason for allowing market forces to operate freely in health insurance markets is that when individuals have a choice of insurance and face relative prices that reflect relative costs of plans, plans face competitive pressures to operate efficiently and hold down prices, and consumers make cost-effective choices. Plans that cannot survive in the face of consumer choice and in the absence of subsidies are too costly relative to benefits and should not remain in the market. Further, when generous plans are discontinued, employees continue to have access to insurance coverage, often at lower average rates.

The second view – that employers and policy makers should intervene to limit risk selection and prevent "death spirals" of generous insurance – is based on two arguments. The first argument is that adverse selection distorts prices, thereby reducing access to health care for anyone willing to bear the higher cost they themselves would generate by choosing generous insurance. Such individuals would prefer a more-generous plan to a less-generous plan so long as they are pooled with others of similar risk. If adverse selection drives a wide enough wedge between (employee portions of) premiums in more- and less-generous plans, those individuals will choose the less-generous plan despite their preference for more generous insurance.

The second argument in favor of combating adverse selection and averting "death spirals" is that insurance should both protect against unforeseeable risk and serve as a vehicle to subsidize health care costs for people of known high risk. Whereas the market-oriented view opposes requiring low-risk people to subsidized the costs of high-risk people, the interventionist view opposes requiring high-risk people to pay on an actuarially determined basis.

DISCUSSION

With the advent and expansion of managed care, indemnity plans have faced mounting pressures from dwindling enrollment and adverse selection. In the absence of policy measures to limit risk selection, some indemnity plans have exited the market or been forced to convert to PPOs. This

phenomenon has been observed under both variable contribution and defined contribution systems. Limited empirical evidence suggests, however, that defined contribution systems can accelerate adverse selection. The evidence also suggests that plan failure can be forestalled by policy interventions that compress variation in benefits across plans and limit beneficiary ability to switch plans. The Council believes, therefore, that defined contribution systems are neither a necessary nor sufficient condition for "death spirals" of generous insurance plans.

Finally, adverse selection and "death spirals" can be regarded either as efficient outcomes of market forces or as requiring policy intervention. AMA policy is grounded in a principal of neutrality which maintains that subsidies should not favor particular insurance choices, and markets should be the primary mechanism for determining those choices (Policies H-165.879, H-165.889, H-165.915, H-165.918, H-165.960, H-165.985, and H-180.978). AMA policy also promotes access to health care for all individuals, particularly those with greatest health needs (Policies H-165.877, H-165.882, H-165.918, H-165.950, H-165.960, H-165.918, and H-165.985).