REPORT 2 OF THE COUNCIL ON MEDICAL SERVICE (I-07)
Health Insurance Coverage of High-Risk Patients
(Reference Committee K)

EXECUTIVE SUMMARY

At the 2006 Interim Meeting, the House of Delegates adopted Recommendation 2 of Council on Medical Service Report 5 "Expanding Health Insurance Coverage to the Uninsured: 2007 and Beyond," which calls for the American Medical Association (AMA) to "review the financing of health care for and/or insurance coverage for those with chronic illness or who are experiencing catastrophic health expenses." The Board of Trustees referred the recommendation to the Council for study and report back to the House at the 2007 Interim Meeting.

Achieving health care coverage for individuals with chronic or expensive medical conditions poses one of the greatest challenges for health system reform. The AMA reform proposal, which relies on subsidizing the purchase of private insurance, giving individuals greater choice of health plan, and improving health insurance markets, has raised concerns that people with predictably high medical costs will not be able to afford adequate coverage. Thus, safeguards to ensure coverage of high-risk patients are critical to the acceptance and success of the AMA reform proposal.

Prevailing methods to protect high-risk patients rely heavily on health insurance market regulations, such as strict community rating of premiums, guaranteed issue, and benefit mandates. Market regulations are designed to indirectly extract cross-subsidies from low-risk individuals to high-risk individuals. They often backfire by making premiums inordinately expensive for people in good health or with low incomes, and creating incentives for insurers to risk-select – "cherry pick" low-risk individuals and avoid high-risk individuals.

In contrast to market regulations, risk-based subsidies directly target high-risk individuals. Defined as subsidies for health care coverage that are targeted on the basis of individual risk, as distinct from income or other factors, risk-based subsidies include high-risk pools, risk adjustment, and reinsurance. Risk-based subsidies provide appropriate incentives to insurers to cover high-risk individuals without requiring high-risk enrollees to pay prohibitively high premiums. Risk-based subsidies can be financed with general tax revenues, rather than premium revenues, thereby avoiding unintended consequences of market regulations such as driving up premiums, inviting free-riders, and limiting choice of health plan benefit design.

Different forms of risk-based subsidies employ different mechanisms. High-risk pools remove high-risk individuals from the "regular" health insurance market, making premiums more affordable for the general population but limiting choice of coverage for high-risk individuals. Risk adjustment is a method of adjusting payments to health plans based on the risk of their enrollees, for example, on the basis of health status, previous health claims, age, and gender. Reinsurance is insurance for insurers, whereby the reinsurer pays some share of an individual or group's medical expenses beyond a pre-specified limit.

This report concludes with several recommendations, including support for the principle that health insurance coverage of high-risk patients be subsidized through direct risk-based subsidies such as high-risk pools, risk adjustment, and reinsurance, rather than through indirect methods that rely heavily on market regulation.

REPORT OF THE COUNCIL ON MEDICAL SERVICE

CMS Report 2 - I-07

Subject: Health Insurance Coverage of High-Risk Patients

Presented by: Georgia A. Tuttle, MD, Chair

Referred to: Reference Committee K
(M. Leroy Sprang, MD, Chair)

At the 2006 Interim Meeting, the House of Delegates adopted Recommendation 2 of Council on Medical Service Report 5 "Expanding Health Insurance Coverage to the Uninsured: 2007 and Beyond," which calls for the American Medical Association (AMA) to "review the financing of health care for and/or insurance coverage for those with chronic illness or who are experiencing catastrophic health expenses." The Board of Trustees referred the recommendation to the Council for study and report back to the House at the 2007 Interim Meeting.

Achieving health care coverage for individuals with chronic or expensive medical conditions poses one of the greatest challenges for health system reform. The AMA proposal to cover the uninsured, which relies on subsidizing the purchase of private insurance, giving individuals greater choice of health plan, and improving health insurance markets, has raised concerns that people with predictably high medical costs will not be able to afford adequate coverage. These concerns are compounded by apprehensions about the individual health insurance market, and about the proposed removal of the existing tax bias favoring employment-based coverage over individually purchased insurance. Thus, safeguards to ensure coverage of high-risk patients are critical to the acceptance and success of the AMA reform proposal.

Proponents of a market-based approach to health system reform contend that health insurance and health care markets suffer from ill-conceived tax and regulatory policies that can be remedied, rather than inherent incompatibility between health care and private markets. Concerns about coverage of high-risk individuals are often addressed by advocating better funding for high-risk pools, the belief being that high-risk pools would both protect high-risk individuals and allow "regular" markets to function. However, there has been insufficient analysis of the funding levels and other conditions required for high-risk pools to succeed, as well as insufficient attention paid to the relative merits of alternative forms of risk-based subsidies, including high-risk pools, risk adjustment, and reinsurance.

The purpose of this report is to educate the medical profession, policy makers, and the general public about public policy options for collectively financing the medical expenses of high-risk patients. This report provides an overview of the AMA reform proposal and previous Council on Medical Service reports and AMA policy related to coverage of high-risk patients; defines relevant terms and concepts, laying the foundation for ongoing empirical analysis; and presents several policy recommendations.

AMA POLICY AND PREVIOUS COUNCIL REPORTS

The AMA proposal to expand health insurance coverage and choice has three main pillars: (1) income-related, refundable, advanceable tax credits or vouchers for the purchase of health insurance; (2) individual rather than employer choice and ownership of health plan; and (3) fair "rules of the game" that include protections for high-risk patients and greater individual responsibility. The proposal was first established in Council on Medical Service (CMS) Report 9 (A-98), "Empowering Our Patients: Individually Selected, Purchased and Owned Health Expense Coverage." The Council has since refined the AMA proposal through numerous reports. Core elements of the AMA reform proposal are contained in AMA Policies: H-165.920, "Individual Health Insurance," H-165.865, "Principles for Structuring a Health Insurance Tax Credit," H-165.856, "Health Insurance Market Regulation," and H-165.848, "Individual Responsibility to Obtain Health Insurance" (AMA Policy Database).

As described in CMS Report 6 (A-05), "Update on the Individual Health Insurance Market," the combined elements of the proposal are expected to transform health insurance markets, resulting in a wide range of affordable coverage options and alternative means of pooling risk. CMS Report 3 (A-01) "The Effects of Individually Owned Health Insurance on Risk Pooling and Cross-Subsidization" drew a conceptual distinction between the "pure" insurance function of insurance (i.e., protection against low-probability, high-cost events) and cross-subsidization of health care from low-risk to high-risk individuals.

CMS Report 7 (A-03) established nine "Principles for Health Insurance Market Regulation" (H-165.856) in order to collectively finance the medical expenses of people with predictably high costs, without unduly driving up premiums for the rest of the population, or hindering market experimentation to find attractive combinations of plan benefits, patient cost-sharing, and premiums. These principles include streamlined, more uniform market regulations that provide incentives, not penalties, to insurers for taking all types of patients. Individuals should have a guarantee that they will not lose coverage or be singled out for premium hikes due to changes in health status (i.e., guaranteed renewability). At the same time, individuals need to be encouraged to "play fair" by taking greater responsibility for obtaining health insurance without waiting until illness strikes or they need medical attention. As discussed in CMS Report 3 (A-06), "Individual Responsibility to Obtain Health Insurance," people who choose to be uninsured despite being able to afford coverage should face adverse tax implications (H-165.848). Risk-based subsidies can take the form of high-risk pools, risk adjustment or reinsurance, which is described in CMS Report 4 (I-05), "Reinsurance and the Health Insurance Market."

Additional AMA policy on health insurance market regulation supports protections for high-risk patients, including restrictions on the use of genetic information (H-185.972 and H-165.856[4]), and rights of applicants regarding insurer decisions on premium rating and rejection (H-180.981). AMA policy supports high-risk pools, and advocates that they: not impose preexisting condition limitations; charge premiums slightly higher than standard group rates; restrict enrollment to the medically uninsurable and those lacking access to group coverage; and require participation by all insurers and self-insured ERISA plans (H-165.995 and H-285.915). Policies H-165.920[10] and H-330.933 support the use of risk adjustment and the further study of reinsurance.

Other AMA policy supports subsidies and/or specialized insurance benefits for specific high-risk populations. Policy H-90.976 states that all people with developmental disabilities should have access to care throughout their lives, and Policy H-90.986 advocates outreach to disabled children

who may qualify for Supplemental Security Income benefits. Although AMA policy generally advocates that health insurance benefit mandates be minimized (H-165.856[9b], H-180.978, and H-185.964), several policies support development of specialized insurance benefits for children with chronic and expensive illness (H-185.968), adults with congenital and/or childhood diseases (H-185.963), and children with congenital or developmental deformities (H-185.967). Finally, Policy H-20.907 calls for expanded private and public coverage of financially needy persons with HIV and AIDS.

Policy H-165.888[2] states that unfair concentration of market power of payers is detrimental to patients and physicians, if patient freedom of choice or physician ability to select mode of practice is limited or denied.

DEFINITION OF RISK-BASED SUBSIDIES

Individuals or groups of individuals are said to be "high-risk" when they have predictably high medical costs, or above-average risk of having high medical costs. Risk levels can be determined by estimating an individual's future health care costs, using information on demographic characteristics, health status, and past medical costs. It should be noted that not every high-risk person will require expensive medical treatment in a given year, and, conversely, some low-risk people will end up incurring high costs, for example, because of traffic collisions or other random events. Figure 1 of the Appendix of this report illustrates the distribution of predicted annual medical costs in the general under-65 population, using 1996-2002 data on those covered, or potentially covered, by private health insurance (Pauly and Herring, *Health Affairs*, May/June 2007). The skewed distribution reflects that fact that a small proportion of the population accounts for a large portion of total costs in a given year. A narrow definition of "high-risk" might include only the very small portion of the population at the far right of the distribution that is truly "uninsurable," whereas a broader definition might include even "average" people in older age groups. The lines distinguishing the levels of risk (low, average, or high) are unavoidably arbitrary, but do not fundamentally change the basic challenge of covering high-risk patients.

Risk-based subsidies are defined as subsidies for health care coverage that are targeted on the basis of individual risk, as distinct from income or other factors. Risk-based subsidies also are distinct from less targeted policies to subsidize coverage of high-risk individuals, such as strict community rating of premiums or guaranteed issue regulations. In the context of private insurance markets, the three forms of risk-based subsidy proposed most often are high-risk pools, risk adjustment, and reinsurance. Though beyond the scope of this report, public programs that directly provide coverage or care to high-risk individuals represent an additional type of risk-based subsidy, for example, Medicare and Medicaid coverage of the elderly and disabled.

It is important to clarify that risk-based subsidies are mechanisms to finance costs, rather than control costs. Policy discussions sometimes create misunderstanding on this point, for example pointing out that federally provided reinsurance could reduce premium levels without drawing sufficient attention to the corresponding increase in tax revenues needed to pay for reinsurance. For instance, if an enrollee had medical expenses of $200,000 in a given year, in the absence of reinsurance, the full amount would be paid for with premium revenues collected by the insurer. Alternatively, federal reinsurance could pay for $75,000 of the patient's expenses (i.e., 75% of expenses over $100,000) using general tax revenues. In either case, the patient's medical expenses remain $200,000, but the source of funding for the $75,000 differs. Other mechanisms are needed

to rein in costs and achieve greater value from health care spending, as discussed more fully in Council on Medical Service Report 8 (A-07), "Strategies to Address Rising Health Care Costs."

It also should be noted that the purpose of risk-based subsidies is to subsidize the medical care of high-risk patients, not the insurance industry, and that ongoing AMA advocacy efforts aggressively challenge the insurance industry on issues such as unfair concentration of market power, excessive profits, managed care abuses, unfair antitrust advantage in negotiations with physicians, and unfair payment practices. Risk-based subsidies relate to expenses that are both predictable and large, which neither eliminates uncertainty about individuals' health needs nor absolves insurers from bearing financial risk for enrollees' medical expenses. In the interests of protecting high-risk patients, risk-based subsidies change the financial incentives faced by insurers, increasing compensation for enrolling high-risk individuals and reducing compensation for enrolling low-risk individuals. Compensating plans according to the risk of their enrollees has two effects. First, it reduces insurers' incentives to risk-select – "dump" and "stint" to avoid high-risk people, and "cherry pick" or "cream skim" to attract low-risk people. Even without active risk selection by insurers, however, individuals of different risk may systematically self-select into different health plans. Second, compensating plans according to enrollee risk enables insurers to charge lower premiums for low-risk individuals, attracting healthy, low-income individuals, which is a group that makes up a large share of the uninsured.

COMPARING RISK-BASED SUBSIDIES AND MARKET REGULATIONS

Many states attempt to protect high-risk people by regulating health insurance sold to individuals or small employment groups. Most market regulations fall into three categories, involving premiums, acceptance or rejection of health insurance applicants, or covered benefits. Market regulations often backfire by increasing the cost of health insurance for younger, healthier people, and by creating incentives for insurers to risk-select. A good example of this is the combination of strict community rating, guaranteed issue, and extensive benefit mandates. Under strict community rating, everyone enrolled in a health plan pays the same premium based on the average cost of all enrollees, so that the cost of covering predictably expensive enrollees is spread across the community of all people buying insurance. Guaranteed issue laws require insurers to accept all applicants, and benefit mandates require health plans to cover specified health services.

These regulations can make premiums inordinately expensive for people in good health or with low incomes. The community rated premium for the population shown in Figure 1 would be $1,817, which would be higher than predicted costs for 70% of the population. If individuals are not required to obtain health insurance, many low-risk people will forgo coverage rather than pay premiums double or more their likely medical costs. The fewer low-risk enrollees in the plan, the higher the average cost per enrollee and, thus, the higher the community-rated premium. Strict community rating is sometimes called a hidden sales tax on the healthy. Compliance with an individual requirement to obtain coverage for those who can afford it, as advocated by the AMA, would increase coverage across risk groups and, coupled with strict community rating, increase cross-subsidization from low- to high-risk individuals. However, community rating would still effectively finance subsidies with taxes levied on the basis of health, generally considered less fair than using taxes based on income (i.e., general tax revenues).

Furthermore, strict community rating affects insurer incentives and behavior. Under strict community rating, a health plan collects the same premium whenever someone enrolls, regardless of how expensive or inexpensive the person's care is likely to be. Rather than providing

motivation to enroll high-risk individuals, strict community rating does the opposite, creating financial incentives to "cherry pick" healthy people and avoid high-risk individuals. So long as the amount collected is the same for everyone, regardless of what the amount is, the incentive to risk-select exists. In Figure 1, a community-rated premium based on an average cost of $1,817 would cover less than one fifth of the predicted costs of the tenth of the population with the highest risk, $10,000-plus per person. Because high-risk individuals pay premiums that fall short of their likely expenses, health plans must enroll enough low-risk individuals in order to stay in business.

Like strict community rating, guaranteed issue contributes to individuals' decisions to forgo coverage, because anyone forgoing coverage can always buy insurance later should he or she fall ill – a situation compared to being allowed to buy fire insurance after one's house has caught fire. Guaranteed issue exacerbates the "free rider" problem, whereby the insured implicitly subsidize coverage of the uninsured. Finally, while any one benefit mandate might have little impact, cumulatively, they can add significantly to the cost of health insurance. Because they require some people to buy more generous coverage than they would otherwise choose, or forgo coverage, benefit mandates have been likened to offering a choice between buying a luxury sedan or walking.

Although health insurance market regulations often yield disappointing results, simply removing them will not protect high-risk individuals. For example, in the absence of premium rating regulations, insurers could charge risk-rated premiums, also called "actuarially fair" premiums. In this case, each person faces a premium equal to his or her predicted medical expenses shown in Figure 1. More low-risk patients would be willing and able to buy insurance, and insurers would be indifferent between enrolling high-risk and low-risk individuals. However, high-risk individuals would have to pay extremely high premiums or forgo coverage, defeating the societal goal of collectively financing coverage for high-risk individuals.

Risk-based subsidies take an entirely different approach to protecting high-risk individuals, differing from market regulations in several important respects:

- Market regulations are designed to indirectly extract cross-subsidies from low-risk individuals to high-risk individuals, whereas risk-based subsidies directly target high-risk individuals.

- Under market regulations, the amount a health plan receives for enrolling someone is simply the premium paid by the individual or employer, so that either high-risk individuals face prohibitively high premiums or insurers face losses for enrolling high-risk individuals. Risk-based subsidies delink the two amounts, enabling health plans to receive higher payments for covering high-risks, without requiring those individuals to pay actuarially fair premiums.

- Risk-based subsidies can be financed with general tax revenues rather than premium revenues, thereby avoiding the unintended consequences of driving up premiums, inviting free-riders, and limiting choice of health plan benefit design.

FORMS OF RISK-BASED SUBSIDIES

Risk-based subsidies include high-risk pools, risk adjustment, and reinsurance, defined as follows:

High-risk pools: A high-risk pool is a separate insurance pool or health plan for high-risk individuals, which allows insurers to keep premiums down in the "regular" market. While high-risk pool enrollees' premiums are typically 150% of standard premiums, high-risk pools still require subsidies. Providing high-risk pool coverage to the tenth of the population with the highest predicted costs in Figure 1 would lower the average cost in the remaining population from $1,817 to about $1,300. It would also leave a less skewed cost distribution in the standard market, which would lessen the effects of premium rating regulations and risk-selection. Setting high-risk pool premiums at 150% of $1,300, or about $2,000, would leave an average shortfall per high-risk pool enrollee of thousands of dollars, to be paid by tax revenues.

Approximately thirty-two states operate high-risk pools. In 2006, California, New York, North Carolina, Tennessee, and Vermont each received federal seed grant monies authorized by the Deficit Reduction Act of 2005 for the creation and operation of high-risk pools; and 25 states already operating high risk pools received bonus grants to expand enrollment and/or enrollee benefits.

Risk adjustment: Risk adjustment is a method of adjusting payments to health plans based on the risks of their enrollees, for example, on the basis of key health status indicators, previous health claims, age, and gender. In addition to premiums paid by enrollees, health plans receive payment from a risk adjustment fund for enrolling high-risk individuals, and make payments into (or fail to receive payments from) the fund for enrolling low-risk individuals. Compensating plans according to the risks of their enrollees makes high-risk individuals relatively more attractive and low-risk individuals relatively less attractive to insurers, reducing incentives to risk-select. In theory, net payments collected by plans would perfectly correspond to individuals' predicted costs as shown in Figure 1.

To date, the most extensive experience with risk adjustment comes from Medicare's risk adjustment of capitated payments made to private managed care plans. Risk adjustment has also been applied to the health insurance market in South Africa, where it is called "risk equalization." Risk adjustment is also sometimes applied to payment for medical services, for example, to reflect differences in patient case-mix across physicians.

An alternative to risk-adjusting payments to health plans is to risk-adjust tax credits or vouchers given to individuals and families for the purchase of health insurance. Although risk-adjusted tax credits and risk-adjusted plan payments are conceptually equivalent, the former would entail greater administrative challenge and cost, for example, possibly involving use of individual medical data by the Internal Revenue Service to determine the size of tax credits. A crude but administratively feasible way to risk-adjust tax credits would be to make credits equal to a percentage of premium (with higher percentages at lower incomes). Percent-of-premium tax credits would automatically adjust to variations in premiums due to individual risk factors and geographic cost levels, and could be capped at some upper limit. However, relating tax credits to health insurance expenditures encourages overinsurance, whereas fixed-dollar amounts provide incentives for individuals and families to be cost-conscious when choosing coverage.

Reinsurance: Reinsurance is insurance for insurers, whereby medical expenses beyond a pre-specified limit are paid by the reinsurer. The limit may be based on individual or group expenses, and the reinsurer may cover some or all expenses beyond the limit. Reinsurance may be voluntary or mandated, and private companies or government may serve as reinsurers. Unlike high-risk pools or risk adjustment, which provide subsidies based on individuals' predicted medical costs, reinsurance subsidies are based on actual costs that have already been incurred. Figure 2 in the Appendix shows distributions of both predicted and actual costs across individuals, illustrating the fact that actual costs are more highly skewed than predicted costs. It should be noted that the set of individuals who actually have the highest costs (around $22,349 for the top tenth of the population) is not the same set of individuals predicted to have the highest costs (around $10,351). For purposes of illustration, if reinsurance were to cover 75% of individual medical expenses above $20,000, then roughly ten percent of the most costly individuals would each trigger reinsurance payments of about $1,762 to their insurers (75% of $2,349).

A TYPOLOGY OF RISK-BASED SUBSIDIES

Table 1 in the Appendix proposes a simple typology of risk-based subsidies that highlights the major differences between high-risk pools, risk adjustment, and reinsurance. High-risk pools are distinguished by the fact that they remove high-risk individuals from the "regular" health insurance market. Haislmaier calls this "exclusionary" coverage, noting that it restricts the individual's choice of health plan, in contrast to "inclusionary" coverage of risk adjustment or reinsurance, which allows greater choice.

Another important dimension is whether the subsidy is determined prospectively or retrospectively. With high-risk pools and risk adjustment, an individual whose coverage is subsidized is identified prospectively, before the coverage period (e.g., year) begins, on the basis of his or her risk factors and projected medical expenses. The amount of subsidy is a fixed payment to the insurer, determined in advance and independent of the actual expenses incurred. Determining subsidies prospectively gives insurers incentives to contain costs, but also creates incentives to limit care.

In contrast, reinsurance subsidizes the medical expenses of those whose actual expenses exceed a pre-determined threshold retrospectively. In this regard, reinsurance resembles cost-based-reimbursement, which can reduce insurers' selection incentives but also create perverse cost-containment incentives. Because of tradeoffs between prospective and retrospective determination of subsidies, risk adjustment may, in practice, include or "blend" both prospective and retrospective adjustments. This report clarifies the distinction between risk adjustment and reinsurance on the basis of whether subsidies are determined primarily in advance or after-the-fact, classifying what has previously been called "retrospective risk adjustment" as reinsurance.

The typology also draws attention to several other considerations in designing risk-based subsidies. As noted earlier, risk adjustment payments are normally made to insurers but could also or alternatively be made to individuals, for example, in combination with individual, income-based tax credits or vouchers toward the purchase of health insurance. The typology also highlights the fact that any type of risk-based subsidy can be financed through general tax revenues, premium surcharges or some combination thereof. Similarly, for any type of risk-based subsidy, insurer participation can be voluntary or mandatory. Finally, it should be noted that more than one type of risk-based subsidy could be used simultaneously, and that risk-based subsidies can be used in conjunction with less targeted market regulations designed to protect high-risk patients or strike a balance between meeting the needs of high-risk individuals and the general population.

DISCUSSION

Ensuring affordable coverage for high-risk patients is critical to the viability of health system reform proposals that rely on the private health insurance market, posing a key challenge for the success and acceptance of the AMA health system reform proposal. The Council on Medical Service reaffirms the AMA position that communal support for those with predictably high medical costs is a worthy goal. Conflating this social equity goal with the "pure" insurance function of health insurance (i.e., protection against low-probability, high-cost events) does a disservice to both goals. Making the social equity goal more explicit would encourage systematic thinking about the cross-subsidies implicit in different public policy approaches, and assist policy makers in implementing measures to protect high-risk patients more directly, transparently, and effectively.

The Council believes that direct risk-based subsidies such as high-risk pools, risk adjustment, and reinsurance have important advantages over prevailing approaches, which rely heavily on indirect subsidization through health insurance market regulation. Risk-based subsidies can be financed with general tax revenues rather than premium revenues, averting the unintended consequences of driving up premiums, inviting free-riders, and limiting choice of health plan. Risk-based subsidies also provide appropriate incentives to insurers for covering high-risk individuals, without requiring high-risk enrollees to pay actuarially fair premiums. In keeping with the strategy of incrementalism underlying the AMA reform proposal, the Council recommends that measures to provide risk-based subsidies be pursued both within the context of the broader AMA reform proposal, and independently. The Council also believes that protection of high-risk patients should continue to be given strong emphasis in the advocacy of the AMA reform proposal.

RECOMMENDATIONS

The Council on Medical Service recommends that the following be adopted and the remainder of this report be filed:

1. That our American Medical Association (AMA) reaffirm Policy H-165.856 [3], which supports the principle that risk-related subsidies such as subsidies for high-risk pools, reinsurance, and risk adjustment should be financed through general tax revenues rather than through strict community rating or premium surcharges. (Reaffirm HOD Policy)

2. That our AMA supports the principle that health insurance coverage of high-risk patients be subsidized through direct risk-based subsidies such as high-risk pools, risk adjustment, and reinsurance, rather than through indirect methods that rely heavily on market regulation. (New HOD Policy)

3. That our AMA support state-based demonstration projects to subsidize coverage of high-risk patients through mechanisms such as high-risk pools, risk adjustment, reinsurance, and other risk-based subsidies. (New HOD Policy)

References for this report are available from the AMA Division of Socioeconomic Policy Development.

Fiscal Note: Staff cost estimated to be less than $500 to implement.

APPENDIX

Figure 1. Distribution of Predicted Annual Medical Costs

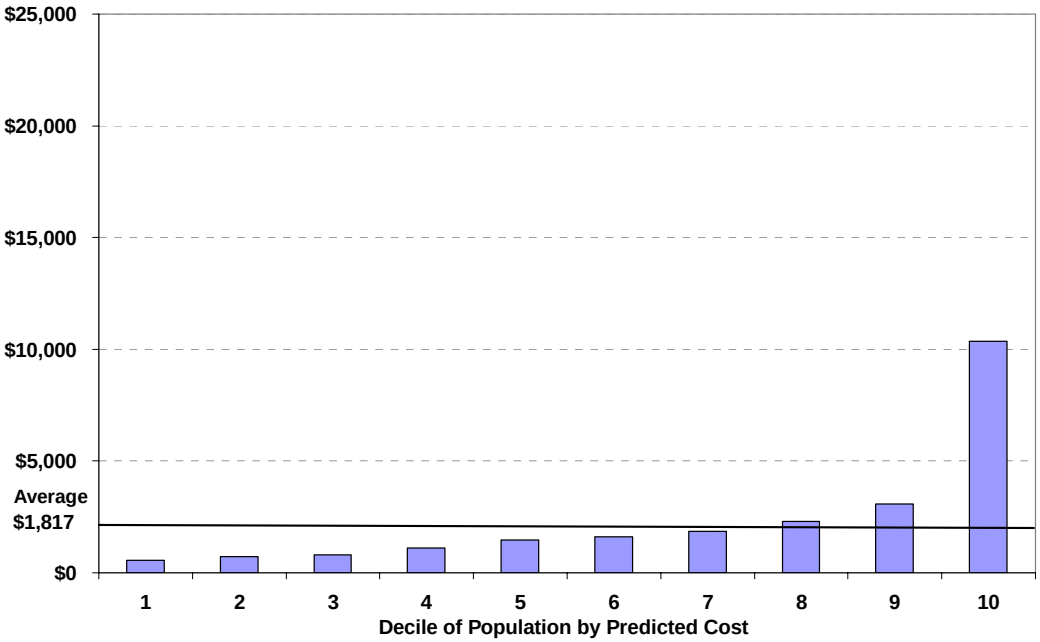
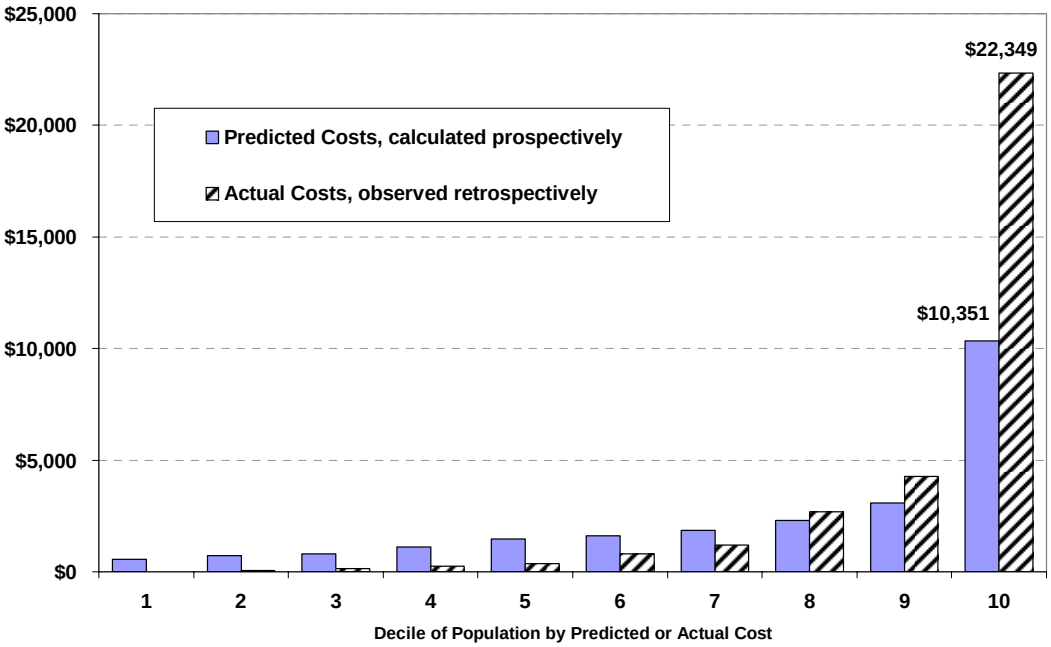


Figure 2. Distribution of Predicted and Actual Annual Medical Costs



Source for both figures: Adapted from data contained in Exhibit 1 of Pauly and Herring, *Health Affairs*, May/June, 2007. Data is from the 1996-2002 private insurance market and is expressed in 2002 dollars.

Table 1. Typology of Risk-Based Subsidies

	HIGH-RISK POOLS	RISK ADJUSTMENT	REINSURANCE
Is coverage integrated into the "regular" market or segregated ("inclusionary" or "exclusionary")?	**Segregated**	**Integrated**	**Integrated**
Is the subsidy provided prospectively (i.e., on the basis of predicted or *ex ante* costs) or retrospectively (i.e., on the basis of actual or *ex post* costs)?	**Prospectively**	**Prospectively** (or "Blended")	**Retrospectively**
Is the subsidy provided to the insurer or individual?	**Insurer**	**Either**	**Insurer**
What is the source of financing for the subsidy (general tax revenues, premium surcharges or a combination)?	**Any**	**Any**	**Any**
Is participation voluntary or mandatory?	**Any**	**Any**	**Any**