



REINSURANCE: HOW STATES CAN MAKE HEALTH COVERAGE MORE AFFORDABLE FOR EMPLOYERS AND WORKERS

Katherine Swartz
Harvard School of Public Health

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ABSTRACT: State-government-provided reinsurance—essentially, insurance for insurance companies—can relieve health insurers of the risk of “adverse selection” (disproportionate enrollments of individuals with extraordinarily high medical costs), particularly in the small group and individual markets. With such programs in place, insurers may significantly lower premiums, thereby making health coverage affordable for more people. Two states, New York and Arizona, have run reinsurance programs for several years that are achieving significant success. As other states consider establishing their own plans, they must similarly take into account a variety of operational, cost-estimation, and financial issues. Although established primarily with the working poor in mind, reinsurance could be designed to lower health insurance costs for all.

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ABOUT THE AUTHOR

Katherine Swartz, Ph.D., is professor of health economics in the Department of Health Policy and Management, Harvard School of Public Health. She is also director of graduate studies for the Harvard Ph.D. Program in Health Policy. Her research interests relate to three issues: people who lack health insurance and how their access to health care might be financed; how insurance companies might protect themselves from the risk that their insured lives may use more dollars of medical care than expected; and how managed care organizations and other third-party payers can create financial incentives to encourage physicians to be cost conscious in making decisions about medical care. In addition, Dr. Swartz is editor of the health policy journal, *Inquiry*. She received her doctorate in economics from the University of Wisconsin, Madison.

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EXECUTIVE SUMMARY

Policymakers are increasingly drawn to the concept of government-sponsored reinsurance as a strategy for significantly reducing premiums for health insurance, particularly for small groups and individuals. This report aims to inform readers about the mechanics of reinsurance, the experience of two states that have approached reinsurance in different ways, and the issues that states should consider prior to implementing a reinsurance program for their small-group and individual markets.

Basics of Reinsurance

Reinsurance essentially is insurance for insurance companies (and, sometimes, for other organizations that face risk, such as employers that self-insure their employees' health care costs). As with so many other types of insurance policies, reinsurance is not activated until a deductible is met; and there is a "ceiling," or upper limit, on reinsurable expenses. Reinsurance policies also have coinsurance rates (amounts that the policyholder must pay for particular services) that apply to expenses between the deductible and ceiling.

Government-based reinsurance rests on the principle that insurers need relief from the risk of "adverse selection," which occurs when a disproportionate share of the people applying for insurance policies expect to have extraordinarily high medical costs in the coming year. When this happens, insurers could be forced into bankruptcy. But if the state or federal government creates a program that assumes responsibility for the bulk of these extreme expenses, insurers have less reason to fear adverse selection. With such programs in place, moreover, they can significantly lower premiums.

Insurers typically worry about two types of very large losses—aggregate losses for a group being above some overall level, and loss per insured person exceeding some threshold. Aggregate losses could exceed expectations if more group members had expenses above the average than was expected for the group. In this case, the insurer would not have set premiums high enough to cover those aggregate losses. To place a limit on their exposure to such expenses, insurers often purchase reinsurance. In such cases it is known as *aggregate stop-loss* reinsurance, since it puts a stop to overall losses above some level.

Annual losses per insured person also could become excessive—perhaps passing the threshold above which people are in the top, say, 5 or 1 percent of the country's health care expenditure distribution. Many companies with self-insured health plans, as well as insurers, purchase *excess-of-loss* reinsurance in order to avoid bearing full risk for any individual's expenses that exceed some level.

Reinsurance in Practice

While many states have begun to consider providing reinsurance, thus far only two have actually done so. “Healthy New York” (HNY) and Arizona’s “Healthcare Group” (HCG)—the former being an excess-of-loss plan and the latter an aggregate stop-loss program—provide two successful demonstrations of the strategy’s feasibility.

By providing protection to insurers for the risk of extraordinarily high costs incurred by any individual, HNY is in effect establishing a back-up reservoir of funds to help pay for catastrophic cases. In this way, insurers do not have to build such reserves into their premiums, which can thus be lower. In contrast, HCG provides protection to insurers for the risk that a large number of enrollees may have above-average but not necessarily extraordinary expenses—a situation that typically occurs when they are more likely to have chronic health problems. In this case, Arizona is lowering premiums by subsidizing the higher-than-average expenses of all the enrollees.

Another key difference between the programs is their incentive structure for insurers. The excess-of-loss reinsurance in HNY requires the insurer to retain a good deal of the risk of an enrollee’s costs exceeding a threshold (\$5,000 currently)—the insurer is responsible for 10 percent of the costs between \$5,000 and \$75,000 and all of the costs above \$75,000. So the insurers have a strong incentive to manage the care of individuals whose medical expenses begin to go above \$5,000. The aggregate-loss reinsurance structure of HCG does not contain an incentive for the insurers to manage the medical care of high-cost individuals. Instead, the plan encourages insurers to reduce total costs. The state will audit all of HCG’s expenses if it applies for subsidies—not just the expenses of the high-cost enrollees.

The premiums initially offered under HNY (in January 2001) were about half those for individuals in the regular direct-pay, individual market in New York, and were between 15 and 30 percent lower than premiums of comparable policies for small firms. HNY’s premiums declined another 6 percent in the second year of program operations; and shortly thereafter, when the threshold was lowered, premiums declined another 17 percent. In New York City in 2004, Healthy New York premiums were 40 percent lower than the average small group HMO premium and two-thirds lower than the self-pay individual market premium. The state’s efforts to publicize and market HNY were hampered early on by the 9/11 terrorist attacks on New York City and the Department of Insurance’s efforts to help the people and companies affected. But expanded marketing efforts since 2003, combined with lower premiums, have since increased the program’s enrollment—between December 2003 and December 2004, it almost doubled. As of May 2005, the program had 92,368 individuals enrolled.

Arizona's program has similarly benefited the state and its people. When HCG began providing reinsurance in fiscal year (FY) 2001, the total state subsidy was \$8 million per year. By FY2004, because expenses had been significantly reduced, this subsidy could be cut to \$4 million.

Key Issues for States

When other states consider reinsurance programs, they need to consider the lessons learned from these two initiatives as well as some of the issues—related to operations, cost estimation, and financing—presented in this paper.

Four operational issues are critical:

- Choice of type of reinsurance to provide (aggregate stop-loss or excess-of-loss) and the pros and cons of each
- The need for transparency as to why someone has high expenses
- The threshold level of expenses for activation of the reinsurance
- Setting up an auditing or verification of claims submitted for reinsurance.

Five issues connected to estimating the costs of a reinsurance program are also important:

- Obtaining and adjusting expenditure data
- Estimating the number of uninsured people who would purchase health insurance if reinsurance were in place
- Estimating total expenses of people with costs above different thresholds
- Estimating program costs with different ceilings on reinsurable expenses and different cost-sharing splits between insurers and the reinsurance program
- Estimating the net costs of the program by factoring in state expenditures for the currently uninsured.

Finally, this paper offers some discussion of how a reinsurance program might be funded. If a state finances a reinsurance program with state revenues—as opposed to raising revenues from the insurers themselves—the program is more likely to have the desired effect of encouraging insurers to reduce their premiums and enroll more people.

REINSURANCE: HOW STATES CAN MAKE HEALTH COVERAGE MORE AFFORDABLE FOR EMPLOYERS AND WORKERS

INTRODUCTION

Interest in the concept of government-provided reinsurance has grown in recent years as a strategy for significantly reducing premiums in the small-group and individual insurance markets.¹ When reinsurance programs are in place, insurers are willing to significantly lower premiums because the state (or federal) government takes responsibility if policyholders' expenses exceed some threshold amount, for example, \$50,000. Although less than 1 percent of the U.S. population has annual medical expenses above \$50,000, people in that category account for about 28 percent of the country's medical spending. Thus, reinsurance can have significant impact.

The strategy of government-provided reinsurance rests on the principle that insurers need relief from the risk of "adverse selection," which occurs when a disproportionate share of the people applying for insurance policies expect to have extraordinarily high medical costs in the coming year. When this happens, insurers could be forced into bankruptcy. But if the state or federal government creates a program that assumes responsibility for the bulk of these extreme expenses, insurers have less reason to fear adverse selection. Moreover, they can reduce premiums and be willing to accept more applicants.

The expectation is that lower premiums in the small-group and individual markets will also induce more low-risk people to buy policies, thereby lowering averaging risk in the pool—and that a steady state will develop whereby the vast majority of people with small-group and individual coverage will be low-cost. With the premiums thus remaining low, these markets can be a viable source of health insurance for workers who do not have access to large employer-based coverage.

This paper has two overall objectives: to explain what reinsurance is and how it operates, and to discuss the major issues that states should address when they consider implementing a reinsurance program.

REINSURANCE BASICS

Reinsurance Defined

Reinsurance is insurance for insurance companies (and, sometimes, for other organizations that face risk, such as employers that self-insure their employees' health care costs). The elements of reinsurance are in many ways familiar to most of us. As in most auto, liability,

and health insurance policies, reinsurance is not activated until a deductible is met, and there is a “ceiling,” or upper limit, on insurable expenses. Reinsurance policies also have coinsurance rates (amounts that the insured party must pay for particular services) that apply to expenses between the deductible and upper limit.

Types of Losses and Reasons for Insurers to Purchase Reinsurance

Insurers typically worry about two types of very large losses—aggregate losses for a group being above some overall level, and loss per insured person exceeding some threshold. Aggregate losses could exceed expectations if more group members had expenses above the average than was expected for the group. In this case, the insurer would not have set premiums high enough to cover those aggregate losses. To place a limit on their exposure to such expenses, insurers often purchase reinsurance. In such cases it is known as *aggregate stop-loss* reinsurance, since it puts a stop to losses above some level.²

Annual losses per insured person also could exceed some level—perhaps passing the threshold above which people are in the top, say, 5 percent or 1 percent of the country’s health care expenditure distribution. Many companies with self-insured health plans, as well as many insurers, purchase *excess-of-loss* reinsurance in order to avoid bearing full risk for any individual’s expenses that exceed some level. With both types of reinsurance, the purchaser (the originating insurer) retains responsibility for a fraction of the costs if they go above the threshold that activates the reinsurance. This is the equivalent of a coinsurance rate on health insurance that individuals purchase.

In addition to wanting reinsurance to protect them from either of these types of risks (aggregate or excess-of-loss), insurers also like to buy reinsurance so that they can expand their businesses. Most states have requirements for the minimum financial reserves that insurers must have on hand (so that they are financially prepared for the small probability of large losses), but this ties up enough of their capital to prevent them from investing in their own or other enterprises. If insurers purchase reinsurance, however, some of their capital can be freed up, as the premiums involved are lower than the financial reserves that the insurers would otherwise have to maintain.

The bulk of the insurers’ risk of very large losses, in other words, has been shifted to the reinsurers. Under these circumstances, insurers can sell more policies because the capital reserves now enhanced by the purchase of reinsurance can be used to cover more individuals.

Specifications of Reinsurance Policies

Four parameters, or specifications, determine the price at which reinsurance is sold. The first is the number of people in a policy for which the purchaser wants reinsurance. The other three are: the range of expenses to be covered (what is known as a “layer” of reinsurance); where the layer falls in the distribution of expenditures that might be covered by a policy; and the fraction of the expenses in that layer for which the purchaser will retain responsibility. This discussion focuses on these latter three parameters, as they are less well known or understood.

Range of expenses (or layer) of reinsurance. The range of expenses to be covered by a reinsurance policy is determined by its equivalents of deductible and ceiling. Most of us are familiar with these terms—homeowner insurance, for example, usually comes with a deductible (perhaps \$1,000) and an upper limit on full replacement costs (as when a fire destroys the house). In the case of reinsurance, however, “deductible” and “ceiling” are replaced by “attachment point” (the level of expenses at which the reinsurance is activated) and “upper limit,” respectively.

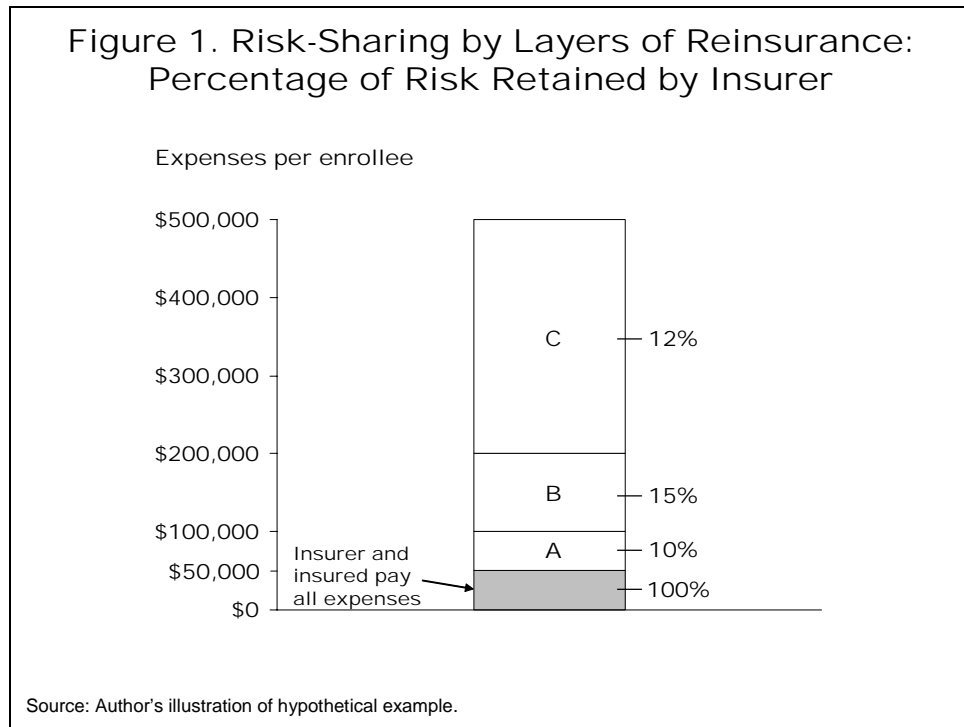
Reinsurance is typically sold in several layers of coverage, with each layer referring to a specified range of expenses.³ For example, an insurer might accept full risk for per-person annual expenses below \$50,000 but seek excess-of-loss reinsurance for expenditures that exceed \$50,000. In this case, it could purchase reinsurance that covers expenses between \$50,000 and \$100,000, and then another layer of reinsurance for expenses between \$100,000 and \$200,000, and so forth. As in other areas of business, a functioning marketplace is at work here. An originating insurer might purchase reinsurance for one or two layers from one reinsurance company and then obtain reinsurance for another layer from a different company. For their part, reinsurers might be willing to sell reinsurance for all of the policies that an insurer has—or the reinsurer could choose to sell reinsurance only for particular types of policies based on purchasers’ characteristics or the benefits packages. A reinsurer might set such restrictions, for example, if it believes that certain of the originating insurer’s policies have highly correlated risk—so that if one person has major expenses, many others will too.

Where the layer lies in the distribution of expenses. The implications of purchasing a layer of reinsurance equal to \$50,000 or \$100,000 depend very much on where that layer is located in the full distribution of expenses being insured. For example, medical expenses are highly skewed—as noted earlier, less than 1 percent of the population has expenses above \$50,000. Given this skew, a layer of excess-of-loss reinsurance covering expenses from \$50,000 to \$100,000 will include more people than will a layer for \$200,000 to

\$250,000. So even though both layers have the same differential of \$50,000, the first one “captures” more people and will therefore be more expensive.

Fraction of expenses within the layer that the purchaser must pay. Reinsurers almost always require that the purchaser of reinsurance retain some of the risk for rising expenses. This gives the purchaser an incentive to manage those expenses⁴ and to avoid benefits package designs that encourage enrollees to use health care services inefficiently.⁵

A purchaser of reinsurance might buy several layers of coverage, each with different fractions of risk that it must bear. Thus, for example, a reinsurance purchaser could be responsible for 10 percent of the costs in the first layer that it purchased, 15 percent in the next layer, and then maybe 12 percent in the third layer (Figure 1).



In summary, the premium for a layer of reinsurance depends on the range of expenses covered, where that layer lies in the distribution of expenses that are possible, and the fraction of expenses for which the originating insurer retains responsibility. For example, an excess-of-loss reinsurance layer of \$50,000 between \$50,000 and \$100,000 that requires the purchaser to be responsible for 15 percent of the costs will cost less than the same layer that requires the purchaser to pay only 8 percent of the costs. Or an excess-of-loss reinsurance policy with a layer of \$100,000 between \$250,000 and \$350,000 will cost less than an equivalent policy covering expenses between \$50,000 and \$150,000.

Sellers and purchasers of reinsurance can vary these three specifications—especially the fraction of costs for which the purchaser is responsible—to arrive at a mutually agreeable price for the policy.

Why Private Reinsurance for Extending Insurance to the Uninsured Is Scarce

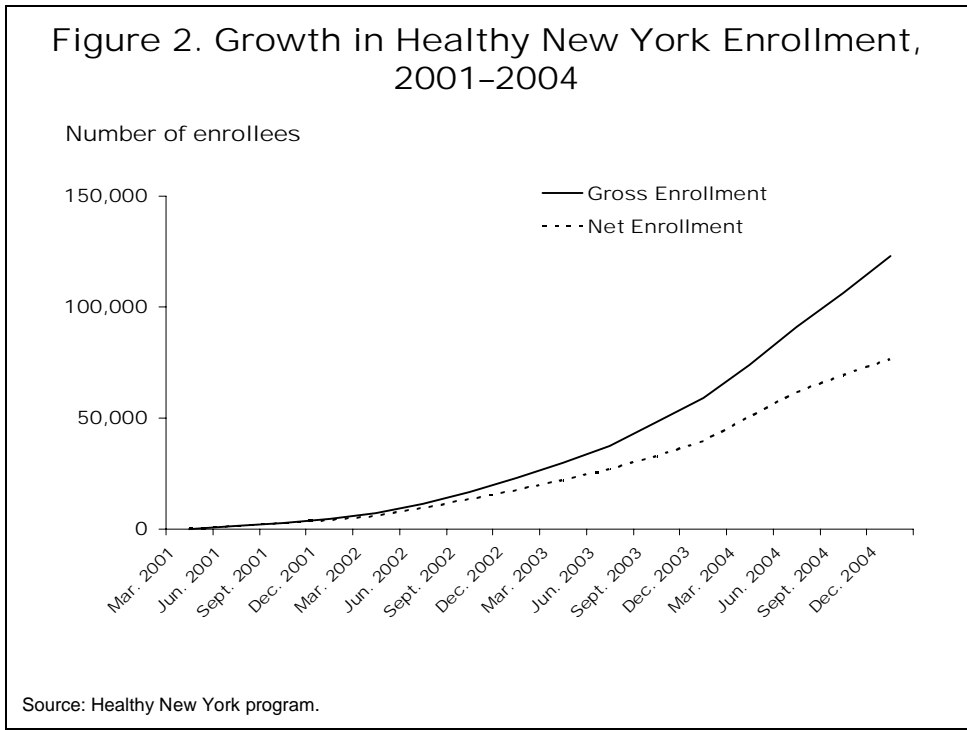
Although private reinsurance companies exist, there is basically no private reinsurance market for policies that would cover presently uninsured working people and their families—that is, people who might purchase coverage through the small group and individual insurance markets. Just as health insurers are concerned about the potential for adverse selection, so are reinsurers. And they feel that they lack sufficient data for pricing reinsurance policies used in conjunction with health coverage targeted at those who are currently uninsured.

Thus, if states want to implement a reinsurance program designed to encourage private insurers to enroll uninsured workers—specifically, those in small firms, the self-employed, and nonpermanent employees—they will probably have to provide the reinsurance themselves, at least for the immediate future. It is expected, however, that data on expenditure patterns generated through state programs will eventually be used by private reinsurers to set premiums for reinsuring this group.

States with Different Reinsurance Structures: New York and Arizona

Healthy New York. In January 2001, New York State implemented Healthy New York (HNY), the first state-provided excess-of-loss reinsurance program. Funded from the state's Tobacco Settlement Fund—so that no new taxes have been needed to finance the program—HNY is directed at low-income, small employers, sole proprietors, and individual workers.⁶ To further its objective of making the coverage available to lower-income workers, the program has eligibility restrictions for small employers. A firm cannot have more than 50 employees; 30 percent of its employees must earn less than \$32,000 annually; the firm must not have provided a comprehensive group plan to its employees within the previous year; and at least 50 percent of its workers must participate, including at least one of the workers earning less than \$32,000. Similarly, sole proprietors and individual workers cannot have annual incomes greater than 250 percent of the poverty level, and individual workers cannot have access to employer-based coverage or have had such access within the previous year. Nor can they be eligible for Medicare.

On May 1, 2005, there were 92,368 enrollees in HNY; and since January 2001 a total of nearly 153,000 have been enrolled (Figure 2). Because all health maintenance organizations (HMOs) in the state must participate in HNY, everyone covered by the program is enrolled in an HMO.



Initially, HNY paid 90 percent of claims between \$30,000 and \$100,000, and the HMO was responsible for the other 10 percent; if expenses went above \$100,000, the HMO was fully responsible for them. In other words, the state provided a layer of reinsurance for expenses between \$30,000 and \$100,000. The reasoning was that the private reinsurance market, such as it is, would be more likely to sell reinsurance for layers of expenses above \$100,000 if the state were taking responsibility for 90 percent of the costs in the lower layer.

To the surprise of many observers, very few people enrolled in HNY had claims greater than \$30,000 in the first two years of the program's operation. This was due in part to the imposition of waiting periods before coverage could begin for medical care related to preexisting conditions. But the primary reason why so few enrollees had high claims was that most of them were relatively healthy. Most enrollees had total annual claims of less than \$5,000. So in June 2003, the claims layer for which HNY would provide reinsurance was lowered (retroactively to January 1, 2003) to expenses between \$5,000 and \$75,000.

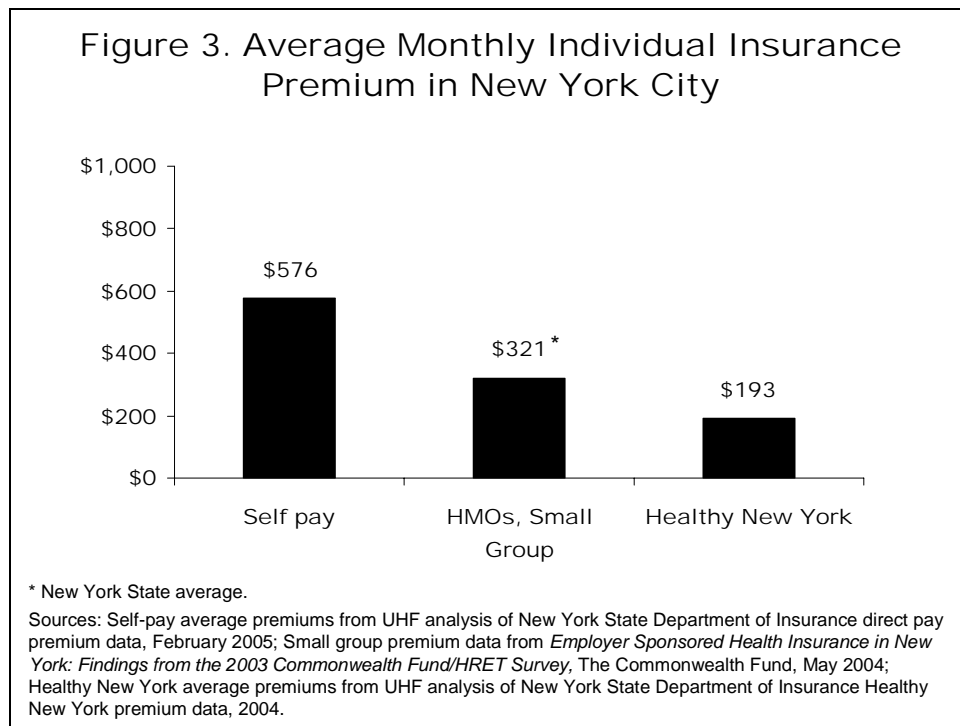
The premiums initially offered under HNY were about half the premiums for individuals in the regular direct-pay, individual market in New York, and were between 15 and 30 percent lower than premiums of comparable policies for small firms (Swartz, 2001). HNY's premiums declined another 6 percent in the second year of program

operations (Lewin Group, 2003). Then, when the reinsurance layer was lowered, premiums declined another 17 percent on average. In New York City in 2004, Healthy New York premiums were 40 percent lower than the average small group HMO premium and two-thirds lower than the self-pay individual market premium (EP&P Consulting, 2004) (Table 1 and Figure 3).

Table 1. Monthly Premiums for Single Coverage in Healthy New York: Six Counties (in dollars)

		2001	2002	2003	2004
Albany	Highest	198	198	247	175
	Lowest	151	151	151	126
Monroe	Highest	162	162	173	143
	Lowest	157	150	150	124
New York	Highest	250	250	279	208
	Lowest	193	203	193	161
Niagara	Highest	142	142	163	135
	Lowest	126	129	129	107
Queens	Highest	250	250	279	208
	Lowest	164	164	164	161
Suffolk	Highest	246	246	279	205
	Lowest	164	164	164	164

Source: Healthy New York Web site, <http://www.ins.state.ny.us/website2/hny/english/hny.htm>; last accessed January 2005.



Claims paid by HNY for calendar year 2003 under the new layer were estimated to total about \$13 million (EP&P Consulting, 2004).

The state's efforts to publicize and market HNY were hampered early on by the terrorist attacks of September 11, 2001, and by the Department of Insurance's efforts to help people and companies affected by those attacks. But expanded marketing efforts since 2003, combined with lower premiums, have increased the program's rate of enrollment in the past 18 months. The number of current enrollees almost doubled between December 2003 and December 2004, and increased another 60 percent in 2005 to date, reflecting both a significant number of new enrollees and a decline in the number of disenrollees (EP&P Consulting, 2004).⁷

Arizona's Healthcare Group. Arizona's Healthcare Group (HCG) program takes a different reinsurance approach—it uses state funds to subsidize aggregate losses incurred by participating insurance plans. As noted earlier, this approach is called aggregate stop-loss reinsurance. A division of the Arizona Health Care Cost Containment System (known for administering the state's Medicaid program), HCG was created in 1985 to provide health care coverage to small businesses with 50 or fewer employees. At its inception, HCG did not have a reinsurance component, but the need eventually became apparent. Between 1997 and 2000, the program's annual health care costs rose 17 percent and premiums rose 9 percent. As the premiums increased, enrollment declined—it peaked at about 20,000 in 1997—and the enrollees who remained were sicker and had higher medical expenses. As of January 2005, about 12,600 people were enrolled in HCG (Healthcare Group of Arizona, 2004).

In fiscal year (FY) 2000, the state began to subsidize the program. The first year's subsidy was \$8 million, but by FY2004 it was cut to \$4 million as a result of "aggressive medical management" (Healthcare Group of Arizona, 2004). For future years, the HCG has set a target expectation that 86 percent of premium revenues will be spent on medical care (i.e., the medical loss, or expense ratio, will be 86 percent)—and any medical expenses that would drive a plan's ratio above 86 percent presumably will be subsidized by the state. Thus, the program provides reinsurance when a plan has high medical expenditures in total from all its enrollees—not just when a few enrollees have extraordinarily high expenditures.

The New York and Arizona plans represent two types of reinsurance programs that address different risks faced by insurers. HNY provides protection to insurers for the risk of extraordinarily high costs incurred by any individual. In effect, New York is

providing a backup reservoir of funds to pay for catastrophic cases so that the insurers do not have to build such reserves into their premiums. This allows premiums to be set at lower levels. In contrast, HCG provides protection to insurers for the risk that a large number of enrollees may have above-average, but not extraordinary, expenses—a situation that typically occurs when the enrollees are more likely to have chronic health problems. In this case, Arizona is lowering premiums by subsidizing the higher-than-average expenses of all the enrollees.

Another key difference between the programs is their incentive structure for insurers. The excess-of-loss reinsurance in HNY requires the insurer to retain a good deal of the risk of an enrollee's costs exceeding a threshold (\$5,000 currently). The insurer is responsible for 10 percent of the costs between \$5,000 and \$75,000, and all of the costs above \$75,000. The insurers have a strong incentive, therefore, to manage the care of individuals whose medical expenses begin to go above \$5,000. The aggregate-loss reinsurance structure of HCG does not contain an incentive for the insurers to manage the medical care of high-cost individuals. Instead, it encourages them to reduce total costs. The state will audit all of the plan's expenses if it applies for subsidies, not just the expenses of the high-cost enrollees.

ISSUES THAT STATES NEED TO CONSIDER BEFORE IMPLEMENTING REINSURANCE PROGRAMS

Before creating a reinsurance program, state decision-makers need to gather some basic information, review the available alternatives, and analyze the potential effects of different choices. In that way, they can reduce confusion and minimize the chance of unexpected outcomes. The relevant issues can be sorted into three categories: operations, estimating costs, and financing.

Operations

Implementing a reinsurance program, as with any new program, requires attention not only to the overall objective but also to the operational details along the way. While some details are particular to individual states and their insurers, other operational issues—including the four discussed below—are more universal. They should be considered by any state in designing its reinsurance program:

Choice of type of reinsurance to be provided. Aggregate stop-loss reinsurance protects insurers from the risk of enrolling a group of people who *collectively* have disproportionately high medical expenses. Excess-of-loss reinsurance protects insurers from the risk of enrolling a disproportionate number of people who *individually* have extremely

high expenses. The issue confronting the designers is which one of these types has better incentives for (a) reducing insurers' use of mechanisms to avoid adverse selection or the enrollment of uninsured people, and (b) managing the costs of medical care of the enrollees. Both of these goals must be kept in mind.

Insurers can predict fairly well who is likely to have higher-than-average costs if they know who has chronic conditions, or the risk factors for chronic conditions. But because insurers cannot predict who among a group of people is likely to have extremely high medical costs, sometimes they use blanket-screening mechanisms—they try to avoid enrolling all people predicted to have above-average costs. The excess-of-loss reinsurance design addresses this problem by relieving the insurer of the risk of enrolling a person with extremely high medical costs; and it also protects the insurer should it end up with a disproportionate share of very-high-cost people. The insurer is reimbursed for the excess costs of each person in this category.

Excess-of-loss reinsurance also has strong incentives for insurers to manage their enrollees' health care. Because insurers bear all of the risk of costs below the threshold for excess-of-loss activation, they are motivated to manage the costs of *all* enrollees. Given that aggregate stop-loss reinsurance does not contain such strong incentives, the rest of this paper will assume that excess-of-loss is the design choice.

Need for transparency regarding why someone has high expenses. A reinsurance pool can produce its intended incentives—of encouraging insurers to reduce their use of selection mechanisms and to manage the health care of enrollees—only if it is clear that the people whose expenses activate the reinsurance are indeed extraordinarily sick. To achieve such transparency, the insurance policies need to be standardized in terms of the benefits that are covered and the cost-sharing that is required of enrollees. By thus making the policies comparable, a major problem is avoided: having to determine if certain enrollees had high expenses simply because their insurance policy provides generous, comprehensive coverage of services, without any cost-sharing. Such a policy increases the likelihood that someone could have expenses in excess of the threshold for the reinsurance. Standardizing benefits packages—that is, making the policies actuarially equivalent—also reduces the ability of insurers to use particular benefits to attract mostly low-risk people.

Without standardization of benefits, the reinsurance program is vulnerable to gaming by insurers and charges of improper reimbursements. For example, suppose the program covered expenses only between \$30,000 and \$100,000 and one insurer permitted radiological scans without preauthorization. Because radiological scans are expensive, a

cancer patient whose bills were above \$30,000 would then have most of the cost of the scans reimbursed by the reinsurance program. Eventually, other insurers might catch on to the fact that the program was allowing the first insurer to look generous, but until then it was simply better at gaming the system.

Transparency regarding why someone has very high medical expenses also may be easier to maintain if everyone is required to be in a managed care plan. It is widely believed that managed care plans are better at managing the care and costs of high-cost people than indemnity insurers or plans that pay medical providers on a fee-for-service basis. But this requirement presumes that a state has numerous managed care plans and that they are present in most parts of the state. Many states do not meet this presumption. Fortunately, most indemnity insurers now have in place significant management programs for managing the care of people who appear to be likely to have high health care needs and costs.

Setting the threshold for activation of reinsurance. The next section discusses how a state can determine the threshold level at which the reinsurance is activated. But once that threshold is determined, there is an operational issue: whether the threshold should be set in dollars (which would require that it be updated each year to account for changes in health care costs and practices), or whether it should automatically be set each year to equal the threshold for the top 1 percent (or some other percentage) of the expenditure distribution.

Setting the threshold in dollars is simple and straightforward, though there needs to be a process for updating this level. The consumer price index (CPI), the most general measure of price inflation, is not an appropriate adjuster. Since medical care prices generally lead CPI, the index only slowly accounts for changes in how medical care is provided. The medical care price component of CPI would be a better price index to use to adjust for inflation, but it is also slow to reflect innovations in the treatment of diseases or conditions.

Because such changes are particularly likely to affect the expenses that would qualify as very high cost, benchmarking the threshold to the expenditure distribution each year—setting it equal to, say, the top 1 or 2 percent of the expenditure distribution—appears more attractive. Setting the threshold this way will involve a one- to two-year lag in the updating of the expenditure distribution, but the benefit is that it will incorporate changes both in how medicine is being practiced and in the accompanying prices.

Setting up a system for the auditing/verification of claims submitted for reinsurance. Early in the process of implementing the reinsurance program, the state should announce its procedures for governing how very-high-cost claims will be submitted and how they will be verified (preferably, by an independent auditor). This will give insurers the time to set up their own computer programs to track health care expenditures—the earlier they know the format for submitting high-cost claims, the more they will cooperate—and it will avoid potential conflicts of interest.

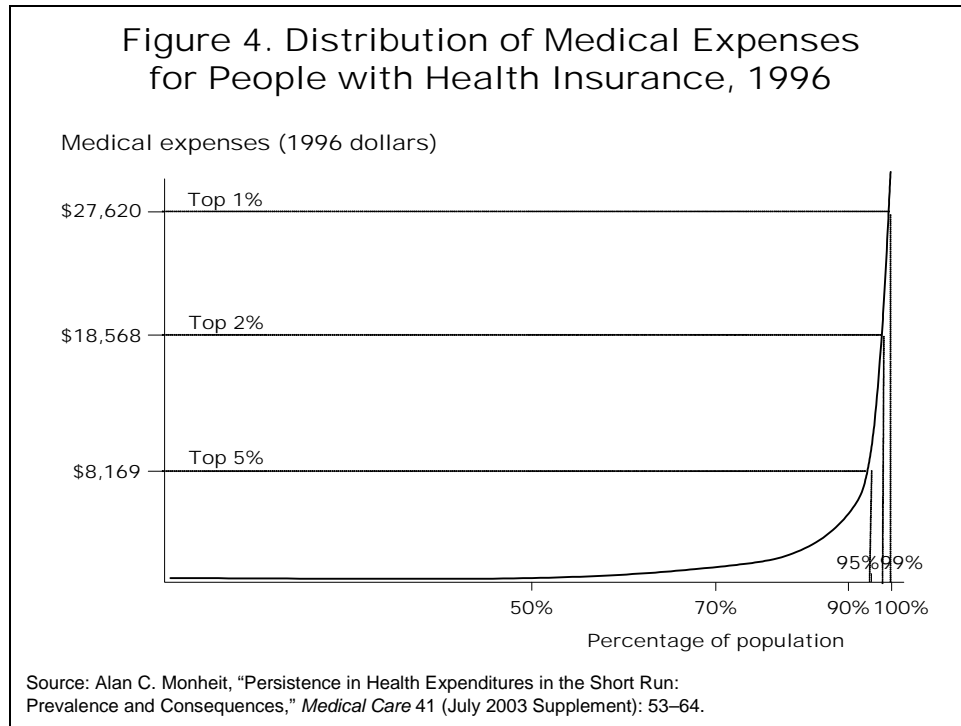
Estimating Costs

The state's estimated costs for a reinsurance program can be derived from the expected distribution of insured people's expenses, the threshold level chosen (above which the reinsurance is activated), and the fraction chosen (which determines how the reinsured expenses will be split between the state's reinsurance program and the insurers).

Determining each of these three factors is a separate task, but states should not lose sight of the fact that the process of estimating the costs will involve going back and forth between the steps in an iterative fashion. For example, the number of people who might purchase coverage will depend on the premiums, which will depend in turn on the fraction of expenses that will be eligible for reinsurance. Conversely, the fraction of expenses eligible for reinsurance will depend in part on how many people might buy insurance. Performing these iterations under different (but reasonable) sets of assumptions will provide policymakers with upper and lower bounds on the cost estimates.

As part of estimating the costs, at least five issues need to be considered:

Gathering and adjusting expenditure data. To determine the underlying distribution of expenses that will ultimately be significant in estimating the program's costs, a state will need to obtain annual expenditure data, by individuals, from the local insurers (Figure 4). These data should include all of the insurers' enrollees—not just those who have used medical care—and should be adjusted by the state to account for differences in the benefits packages and cost-sharing requirements across insurer policies. In addition, the data may have to be adjusted to account for any significant differences in the age and sex distributions of two distinct populations: people with insurance coverage, and uninsured workers and their dependents. If the uninsured, for example, are more likely to be younger than the insured, then the state could expect to have more enrollees with low expenses. Adjusting the expenditure distribution to account for any such differences would improve the accuracy of the estimates.

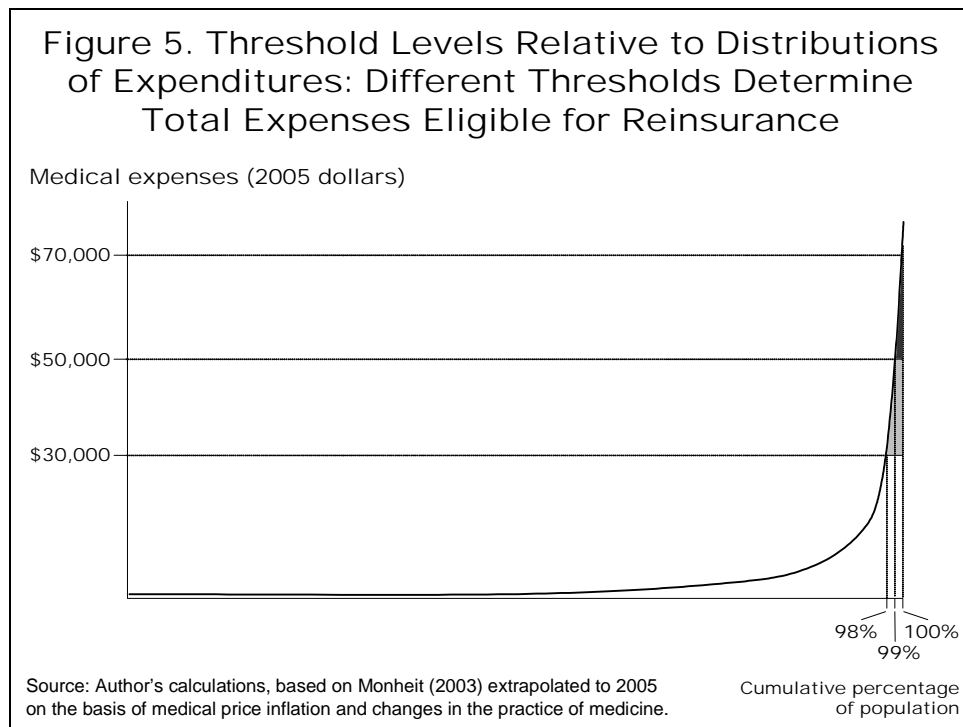


Gathering the raw expenditure data on individuals may be difficult, however, as many insurers do not have software programs for tracking at that level of detail. In such cases, the state may need to provide incentives to the insurers—perhaps offering to subsidize the cost of purchasing the needed software. It might be easier, however, to obtain data just from the few insurers who already have the capability to track annual expenditures at the individual level, or to request that data be manually compiled for small subsets of insurers’ policyholders. Not only might this sampling prove sufficient, it could also avoid placing undue burdens on insurers that would reduce their cooperation.

If it ultimately proves too difficult to obtain the needed expenditure data from insurers, the state could turn to the Medical Expenditure Panel Survey (MEPS), a federal survey designed to be nationally representative of the U.S. noninstitutionalized population. The survey’s data derives from about 10,000 households each year—the number fluctuates between 8,000 and 12,000—which comes to about 22,000 people (Cohen, 1997). Using MEPS data in lieu of insurers’ data has two disadvantages, however: 1) MEPS has only 192 people in the top 1 percent of the expenditure distribution (a very small number of people with extremely high costs); and 2) because MEPS data is national data, important state-specific differences in health care use and expenditure patterns may be overlooked. For example, some states have much higher fractions of the nonelderly population that lack health insurance than the 17 percent national average.

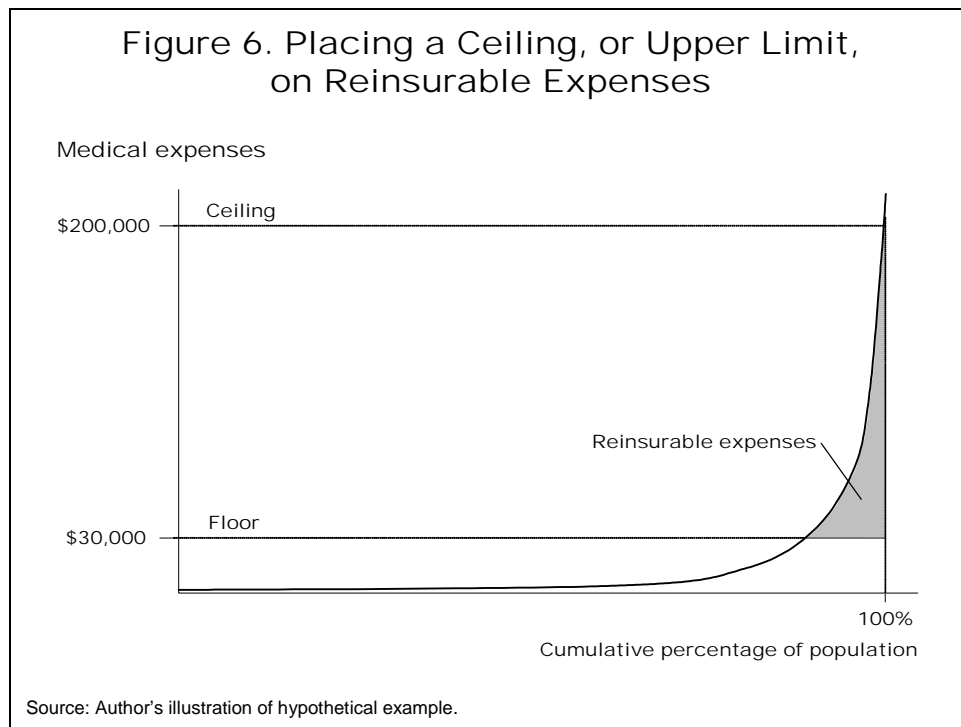
Estimating the number of uninsured people who would purchase coverage. The distribution of expenditures profiles a population in terms of percentages of people with different levels of expenses. But the total costs of a group with that expenditure distribution depend on the number of people in the group. Thus, a state needs to have an estimate of how many people might purchase small-group or individual coverage if the reinsurance program were in place and it lowered insurance premiums by a significant amount. Of course, the enrollment rate will depend greatly on the expected drop in premiums—which the state will not be able to estimate until it resolves several of the issues discussed below. The process of estimating the final expected costs of the program will therefore require several iterative steps.

Estimating different threshold levels and the total expenses of people with costs above each threshold. Once the expenditure distribution has been adjusted, it is relatively straightforward to estimate several possible threshold levels that capture the top percentiles of the expenditure distribution (Figure 5). Reinsurance is most often talked about in terms of reimbursing costs of people in the top 1 percent of the expenditure distribution, so that is one obvious threshold. Others might be the top 0.5 percent or the top 5 percent of enrollees. And some states might prefer to start with particular dollar thresholds (\$30,000 or \$50,000, for example) and then estimate what proportion of the population has expenses above those levels.



After alternative thresholds have been determined, estimates of the total amount of medical expenses qualifying for reinsurance under each scenario immediately follow.

Estimating program costs with different ceilings on reinsurable expenses and different cost-sharing splits between the insurers and the program. As with HNY, and as with reinsurance in general, states could create one layer of expenses per person for which the reinsurance would apply. Creating a single layer essentially sets a ceiling on eligible expenses—the upper limit of expenses that can be reimbursed (Figure 6). And it is easy to see how different ceilings—and, indeed, different layers with alternative thresholds and ceilings—might affect the program’s costs. Using the distribution of expenditures, one simply adds up the total expenses that would come from the people whose annual expenses are within any specified layer.



Of course, the reinsurer does not assume responsibility for 100 percent of the risk—the original insurer still retains some fraction. Thus, the next step in estimating the program’s costs is to take the expense estimates of different layers and determine the effects of several possible cost-sharing splits. This exercise can become quite sophisticated if there is more than one layer and each is marked by a different level of cost-sharing. For example, an initial layer of reinsurance might run from \$50,000 to \$100,000 per person, with a second layer running from \$100,000 to \$200,000, and a third layer running from

\$200,000 to \$500,000—and the fraction of expenses that the reinsurance program pays might be set at 75 percent, 85 percent, and 95 percent, respectively.

These variables can be iteratively adjusted until the total cost estimate reflects the level of reinsurance responsibility that the state wants to accept.

Estimating the net costs of the program—factoring in already-existing state expenditures for the uninsured. The state currently pays in a variety of ways for the health care costs of uninsured people. Some of these costs would presumably be lower if the uninsured were able to afford private health insurance as a result of the reinsurance program making insurance both more available and lower-cost. Thus, a portion of the state’s present costs in this domain should be netted out of the estimate of its reinsurance-program costs.

Financing the Reinsurance Program

Along with estimating the possible costs of a reinsurance program, a state needs to determine how the program might be funded. Of course, the magnitude of the cost estimates may affect which financing alternatives seem most likely and therefore receive the most attention in the planning phase. Conversely, any limits on funding of the program may help determine how much of the very high medical expenses are going to be subject to reinsurance.

New York State was fortunate in terms of not having had to raise taxes to finance HNY. By virtue of timing and political savvy in the creation of HNY, the state was able to fund the program from its then-new Tobacco Settlement Fund. States that have already earmarked their Tobacco Settlement Funds for other purposes do not have this option.

In the current period of strained state budgets, finding new sources of financing for the reinsurance program will not be easy. But at the same time, with rising numbers of uninsured Americans—especially middle-class Americans (see Conclusion below)—it should be possible to engage public support by pointing out that modest taxes on everyone will enable large numbers of people to obtain affordable coverage. Each state will likely have different preferences, however, for how revenues might be raised to fund a reinsurance program.

The current political stricture against new taxes makes it tempting to look to insurers to pay for a reinsurance program for the small-group and individual markets. There are several significant drawbacks, however, to going this route. One is that it would work against a prime purpose of the reinsurance, which is to reduce insurers’ concerns

about adverse selection in these markets. If the insurers have to pay for the reinsurance, they no longer have an incentive to reduce their use of selection mechanisms to avoid people who might have high expenses. A second concern is that insurers would not reduce their premiums as much if they have to pay an assessment to fund the reinsurance. This would hurt another of the prime objectives of the reinsurance program: to make small-group and individual coverage significantly less expensive so more workers will buy it.

A third drawback to assessing insurers to pay for a reinsurance program is that doing so reduces the size of the funding base for the program. Because the Employee Retirement Income Security Act (ERISA) exempts self-funded health plans from state taxes on insurance policies, all the people in self-funded employer plans would not be contributing to the reinsurance program. This makes the funding base for the program much smaller than the general population and corporate bases that are tapped for general state revenues.

CONCLUSION

The need for affordable health insurance in the small group and individual markets has never been greater than it is today. As a result of the well-known shift in employment during the 1980s and early 1990s from manufacturing to service industries, many people who had or would have had manufacturing jobs—with health insurance—in earlier generations have instead found employment in the service sector. But there is a catch: the typical service firm is small.⁸ Given that two of five small firms do not sponsor employer-based plans, this major employment shift has increased the number of people who lack such coverage. Many of them would of course like to obtain small-group coverage in lieu of employer-based coverage.

A second shift in employment is now boosting demand as well for small group and individual coverage. The rapidly rising costs of health insurance, combined with competitive pressures in industry, have provided an incentive for employers to shift their hiring to nonpermanent employees. When these companies offer health coverage then, they do not have to offer it to temporary workers or to people hired as contract workers. This shift in employment practices has developed over the past eight years—at an even faster pace since an economic recession began in 2000—and it is increasingly affecting people who are middle class.⁹

These individuals often are highly skilled; most have college degrees; and they tend to have careers that in prior decades would have been based at large firms that offered

good salaries and fringe benefits, including health insurance. Premiums for individual coverage, however, are much higher than what they were previously paying out-of-pocket for employer-based coverage. Without some government programs to counter insurers' efforts to avoid adverse selection, more and more workers will find it impossible to obtain insurance through the small group and individual markets—either because it is unaffordable or is denied to them altogether.

States that wish to comply by creating a reinsurance program, however, are entering rather new territory. Only New York and Arizona have done so thus far. As planners in those two states will attest, a number of issues—and their implications—need to be considered when planning a reinsurance program. This paper has outlined some of the more important universal issues that states should consider. But ultimate choices will depend on states' own population, history of insurance and regulatory relations, and potential sources of financing for the program.

NOTES

¹ This increased interest is due partly to the relative success of Healthy New York—a four-year-old state program that provides reinsurance to participating firms—and partly to the inclusion of a reinsurance component in Senator John Kerry’s health care proposal during the 2004 presidential campaign. Several articles by this author and others have also contributed to interest in how government reinsurance could lead to lower premiums and create an incentive for insurers to accept more applicants for small group and individual coverage, thereby reducing the number of uninsured (Swartz 2002; Blumberg and Holahan 2004; Chollet 2004).

² The concept is similar to stop-loss limits on a consumer’s annual out-of-pocket expenditures connected to an insurance policy.

³ Layers make it feasible to determine the actuarial risk of an insured event within a range of expenses and then price the policy accordingly.

⁴ Requiring the originating insurer or purchaser to retain some risk also gives that party an incentive to be selective about who it insures and to avoid adverse selection. This point may be more obvious in the case of homeowner insurance, where due diligence involves checking for fire hazards, for example.

⁵ Economists refer to such designs as containing a “moral hazard” because they encourage overuse of medical care.

⁶ Workers who enroll in HNY as individuals can be self-employed, or they can work for employers that do not offer health insurance. Self-employed people can be either sole proprietors or individual workers, depending on whether they have incorporated their businesses.

⁷ The rate of disenrollment from the program dropped from 4.4 percent in 2003 to 3.8 percent in 2004 (EP&P Consulting 2004).

⁸ The effect of the shift from manufacturing to services on the distribution of employment by firm size can be seen in the following statistics: In 1979, 37 percent of all private-sector workers were employed at establishments with fewer than 50 people; by 2002, this fraction was 43 percent.

⁹ This is discussed further in a forthcoming book by the author (Swartz 2005).

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