Muskie School of Public Service

Reform Options for Maine's Individual Health Insurance Market

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UNIVERSITY OF SOUTHERN MAINE

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An Analysis Prepared for the Bureau of Insurance

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Executive Summary

In its May 2006 report, the Blue Ribbon Commission on Dirigo Health recommended an analysis of alternative policy initiatives to address the high insurance premium costs for individual health insurance. The Bureau of Insurance engaged Gorman Actuarial and the Muskie School of Public Service to analyze three specific policy options. The first was the merger of the individual and small group markets in which the blended claims experience of these populations would be subject to one set of regulatory requirements. The second policy option was the development of a reinsurance program applicable to all insurers in the individual or merged market in which the claims incurred by high cost persons above a predetermined level, or attachment point, would be borne by a subsidized program. In a reinsurance program, high cost claimants would continue to select and enroll in existing health insurance programs. The last policy approach was the development of a high risk pool in which individuals purchasing insurance in the individual market who are projected to incur high claim costs would be insured in a separate risk pool.

The analysis relied on enrollment, premium and claims data provided by health insurance companies in Maine as well as a body of literature that informed various assumptions on migration levels, take-up rates and premium structure. For each policy alternative, the analysis identified the impact of the alternative on current and projected premium levels for the affected populations, migration of currently insured as well as uninsured persons among the various insurance options that were created by the alternative and the magnitude of any subsidies required under each of the three alternatives. A summary of the findings include:

- A merged market provides modest premium relief to persons purchasing individual coverage but requires a modest increase in small group premium costs to subsidize this relief.

- While a reinsurance program can significantly reduce premium costs, the specific magnitude of these reductions depends on the amount of subsidy funding that is provided.

- For many persons, a high risk pool program will also favorably impact premium levels at a level reflective of subsidy funding. The approach will also create a residual pool of individuals who are grandfathered under current arrangements and who will experience increasingly higher premiums as the underwriting risk in the pool deteriorates over time.

- All alternatives except for the reinsurance options will require significant revisions in current rate setting regulations.

- Projections of the increase in the size of the insured population in Maine due to first year program impact range from 915 to 4,500 people, depending on the option.

The report does not make any specific recommendations as to a preferred policy alternative nor does it suggest sources of funds to meet the projected subsidy levels.

Introduction

Maine's Current Situation

Maine is in the process of examining how to make individual health insurance more affordable. Currently, only about 3 percent of Maine's population (41,000) is covered by individual insurance whereas over 50 percent of Mainers receive health insurance through an employer. Approximately 11 percent of Maine's under age 65 population remains uninsured. In recent years, the rising cost of health insurance premiums has made it increasingly difficult for employers to offer health insurance benefits. Individuals who do not have access to health insurance through their jobs are left with few affordable options in the private market.

In recent years, individual premiums have escalated rapidly, making coverage unaffordable for many and prompting many others to reduce their coverage by switching to less expensive catastrophic policies and/or policies with reduced benefits. As of 2006, approximately 72 percent of policies in Maine's individual market had deductibles of $5,000 or higher and the average deductible was approximately $7,000. Because the market is not attractive, few health insurers offer individual coverage in the state.

Market Regulations

Maine has a number of regulations governing how insurance companies can provide coverage to individuals and businesses. These rules include limitations on medical underwriting as well as requirements specifying which benefits must be included in insurance plans offered within the state. Since 1993, Maine has had a guarantee issuance law which requires insurance companies offering individual coverage to accept all applicants, regardless of health status and/or pre-existing medical conditions, although insurers may apply waiting periods for coverage of pre-existing conditions to the extent that these probationary periods have not been met under prior insurance coverage. Maine also requires insurance companies to use modified community rating in the individual market, which means that companies are limited in the extent to which they can vary premiums based on age, geography and type of employment. They may not differentiate premiums based on health status or sex.

Rules in the small group market are similar to those in the individual market. Coverage is offered on a guaranteed issue basis and premiums are determined by rating rules which set the degree of required rate compression based on demographic, actuarial and other characteristics of the group. Currently, insurers may not vary premiums by more than 20 percent on either side of a base premium rate, for the combined factors of age, geography or industry. There is no limitation on the adjustment factor insurers may use for differences in cost due to group size. Group size adjustments can reflect both administrative costs (lesser economies of scale for smaller groups) and risk selection.

While community rating and guaranteed issuance are policies intended to make insurance available to all individuals, including those with serious medical needs, these provisions may contribute to higher average premiums within the individual market as a result of adverse selection. On the one hand, guaranteed issuance and community rating assure that even the oldest and sickest consumers can purchase insurance at a cost that is not excessively

higher than the price that is offered to the average person. On the other hand, younger and healthier individuals are required to shoulder more costs than would be justified based on their own claims experience and therefore, have less incentive to remain in the market. To the extent that younger and healthier individuals leave the market, those individuals who remain are disproportionately less healthy and contribute to an upward spiraling of costs at a faster rate. This cycle of an accelerated rate increase followed by further deterioration of the risk pool is known as a "death spiral" and, if not addressed, will lead to the total demise of the individual insurance market.

Report of the Blue Ribbon Commission

In May of 2006, the Governor of Maine issued an Executive Order creating a Blue Ribbon Commission on Dirigo Health. One of the charges of this Commission was to recommend methods for reducing and controlling health care costs in Maine. The Final Report of the Blue Ribbon Commission was issued in January 2007. In this report, the Commission called for a study of three market reforms, all intended to make health insurance more affordable, particularly for those in the individual market. These options include:

- Merger of the individual and small group markets
- Reinsurance options applied to the individual and/or merged small group and individual market
- High risk pools

The Commission recommended a study of the impact of these strategies alone and in various combinations and requested a report to guide policy makers in the development of solutions to reform the individual health insurance market. Each of these possible market reforms is defined below. More in-depth information on these reforms, as well as modeling and cost estimates, can be found in the Findings Section.

- **Merger of the individual and small group markets**. Merging the individual and small group markets would require each insurer operating in the individual and small group markets to pool risk across these markets: that is, to develop premium prices according to one set of regulatory requirements based on the blended claims experience of both small businesses and individual contract holders. Carriers currently doing business in one market would be required to operate in both.

  The merging of markets provides for the distribution of risk across a larger population and contributes to greater underwriting stability for all participants. To the extent that one group currently enjoys a lower average premium cost than the other, there would be a cross subsidization of premium costs. Typically, the small group market will experience a premium increase and individuals will experience a reduction. The extent of this cross subsidy depends on the relative size of the individual group market vis a vis the small group market and the current magnitude of risk differences between the two groups. Massachusetts is one of the first states to merge its individual and small group markets. This merger will be effective July 2007.

- **Reinsurance.** Reinsurance programs transfer to a different entity the liability for large claims that fall above a specific dollar amount (e.g. greater than $15,000) or within a defined corridor (e.g. between $10,000 and $75,000). The primary goal of reinsurance is to protect insurers from large financial losses. When insurers are

protected against incurring large claims, they are better able to predict expenses and can pass savings from reduced claims liability on to consumers in the individual market. Unlike high risk pools, this approach does not preclude the continuation of guaranteed issue and is transparent to the consumer. Consumers continue to access the general insurance market and carriers are provided "back end" protection against the cost of the very sick and expensive individual. Several states, including New York and Arizona, have implemented reinsurance mechanisms within the individual or small group markets.[1]

- **High risk pools**. In regulatory environments where insurers in the individual market are allowed to medically underwrite, or deny coverage based on health status, high risk pools provide an insurance option to those who are deemed medically uninsurable. These are people who have been denied health insurance or who have been quoted excessively high premiums based on their medical histories. Consequently, guaranteed issuance provisions would not be applicable. A high risk pool isolates individuals with serious medical conditions and offers them insurance within a separate, segregated insurance program. High risk pools are usually administered, under contract, by a commercial insurer or administrative services organization and offer one or more benefit plans as determined by the governing body. Individuals enrolled in the high risk pool pay a monthly premium and are responsible for benefit cost-sharing and deductibles. High risk pools work prospectively, allowing insurers to screen health status and medically underwrite new applicants for coverage (or current subscribers who apply for a different insurance product). Insurers cannot remove current subscribers to the high risk pool.

  States with a history of guaranteed issuance regulations face a somewhat different situation than states where insurers have always applied medical underwriting criteria. In states without guaranteed issue, most potential candidates for the high risk pool are assumed to be outside the market and insurers are assumed to have a normal risk distribution among their subscribers. In guaranteed issue states, on the other hand, insurers may have a deteriorated risk pool in their individual insurance products. Therefore, these states have allowed insurers to maintain their existing subscribers in a closed pool while they open new individual products where medical underwriting is allowed (and where prices reflect the expected improved experience) to new subscribers. Enrollees in the closed pool may apply for coverage in the new plans but will be subjected to the same medical screening and underwriting as is applied to all other applicants. To keep insurance affordable, premiums are typically capped at 125 to 200 percent of the standard market rates for comparable individual insurance.

  Thirty-three states currently operate a high risk pool.[2] Idaho operates a hybrid high risk pool/reinsurance program. All carriers in Idaho offering individual insurance are required to offer a guaranteed issue product to high risk applicants. These "high-risk" plans are then integrated into a state reinsurance pool.

[1] States with reinsurance programs include: AZ, CT, ID, NM and NY. See Appendix D. NH is set to begin its reinsurance program this year. RI passed legislation for a reinsurance fund in 2006.

[2] States with high risk pools include: AL, AK, AR, CA, CO, CT, FL, ID, IL, IN, IA, KS, KY, LA, MD, MN, MS, MO, MT, NE, NH, NM, ND, OK, OR, SC, SD, TX, UT, WA, WV, WI and WY. TN recently passed legislation to create a high risk pool. See Appendix E.

Both reinsurance and high risk programs are mechanisms to spread the costs of high risk cases broadly across the insurance market, thereby decreasing individual insurers' claims associated with high cost cases. However, if the costs are distributed only within the individual and small group markets, members will not see any premium cost relief. Financing strategies to more broadly distribute these costs include an assessment on all commercial insurers and third party administrators of employer plans, general revenues and/or designated funds, or some combination of the above. Failure to adequately finance these initiatives will likely result in unaffordable premium levels for either program. Table 1 compares the underlying structure and design of each of these market reforms.

Table 1: Three Market Reforms: A Comparison of Structure and Design

	Merger of Individual and Small Group Markets	Reinsurance	High Risk Pools
Market(s) and participation	Individual and small group markets	Individual or merged market	Individual market
Visibility of arrangement to contract holders	High risk individuals are included within existing insurance products; individuals formerly in the individual market may opt for products previously offered only in the former small group market.	High risk individuals are included within existing insurance products and health plans; reinsurance process is transparent to consumers.	High risk individuals are offered insurance within a separate, segregated insurance program.
Regulatory Environment	Guaranteed issuance and other existing reforms can remain in place. Group size premium adjustments are regulated.	Guaranteed issuance and other existing reforms remain in place.	No guaranteed issue.*
Spreading of risk/cost	Risk is pooled across the individual and small group market	Risk and costs associated with catastrophic cases are subsidized.	Prospectively identified risk is segmented out of the traditional individual market; cost for high risk cases are subsidized.
Protection for insurers	No new financial protection for insurers. [However, risk typically associated with the individual market is spread across a larger population.]	Financial protection, or reinsurance, is based on actual claims and not expected claims.	Financial protection is based on expected claims; i.e. eligibility for high risk pool is based on the predicted costs of individuals with potentially costly illnesses.
Funding	Not applicable	May be funded through assessments on commercial insurers and third party administrators of employer plans. May also be subsidized by state funds.	May be funded through assessments on commercial insurers and third party administrators of employer plans. May also be subsidized by state funds.
*Note: While states with high risk pools do not have guaranteed issuance for all individuals for all products, they may retain some form of guaranteed issuance. The state of Washington requires guaranteed issue for all products for individuals who score at a certain level on a standardized health questionnaire. Idaho has guaranteed issue for all individuals for the plans eligible for reinsurance.			

Study Team

In response to the Commission's recommendation, the Bureau of Insurance (BOI) assembled a team of actuaries and health policy experts to analyze each of these market reforms. Gorman Actuarial was enlisted to conduct the actuarial analysis and modeling, while the Muskie School of Public Service, Institute for Health Policy, was engaged to provide program and policy expertise and demographic data on the Maine population and the uninsured, and to author a final report inclusive of the actuarial analyses.

Summary of Methods

A summary of the analytical methods related to the merger of individual and small group markets, the introduction of a reinsurance program and the introduction of a high risk pool follows. The reader is referred to Appendix A for a more complete description of these methods.

Data Collection Process

In order to better understand Maine's current insurance market, Gorman Actuarial collected enrollment, premium and claims data from the largest active carriers in the individual and small group markets. Individual data specifications were developed for each insurer and varied according to what the insurers were able to provide.

Anthem Blue Cross and Blue Shield supplied data on its individual and small group markets for calendar years 2004-2006, as well as separate data on the claims experience and membership of DirigoChoice, a public-private program that is administered by Anthem and open to individuals, sole proprietors and small business members. Because DirigoChoice was implemented in January 2005, DirigoChoice data were only available for calendar years 2005-2006. Mega Life and Health Insurance Company, which entered the individual market in calendar year 2004, provided data for its individual market for the year ending September 30, 2006 and for calendar year 2005 and Aetna provided data on its small group experience for calendar years 2004, 2005 and for the first three quarters of 2006. When possible, data were adjusted to reflect a standardized reporting period.

The data collected for this study represents 82 percent of Maine's small group market and 96 percent of Maine's individual health insurance market. Data submitted allowed further analysis of each insurance market by variables such as benefit package, age, industry, geographic region and, for the small group market, group size. Table 2 summarizes the data set used in our analyses. For the purpose of our study, DirigoChoice sole proprietors were considered part of the individual market.

Table 2 - Summary of Data Set Included in Analyses

Individual Data *96% of Maine's Individual Market*	**Small Group Data** *82% of Maine's Small Group Market*
Anthem Individual Market DirigoChoice Individual Market DirigoChoice Sole Proprietors Mega Life/Health Individual Market	Anthem Small Group Market DirigoChoice Small Group Market Aetna Small Group Market
Approximately 41,000 Members Approximately 24,000 Subscribers	Approximately 94,000 Members Approximately 55,000 Subscribers
Average Paid Claims PMPM = $214	Average Paid Claims PMPM = $248
Average Premium PMPM = $237	Average Premium PMPM = $305

PMPM: Per Member Per Month

Merged Market Analysis

Because the premiums in the individual and small group insurance markets are developed separately based on the enrollee profiles and claims experience that is specific to each market, a merger of the markets that blends the experience can be expected to impact the premiums of all participants. In order to assess the impact of merging the individual and small group markets on premium costs, three methodologies were used to combine the characteristics of these two populations.

Certain characteristics of the two populations were simply added together. The number of persons by type of contract (individual, couple, or family) was combined to create a larger population reflecting the distribution of these characteristics in the total merged group. In some cases a weighted average was calculated to reflect the different contribution that each population would make in a merged market. For example, the projected annual rates of increase in premium costs (or trend rates) for individuals and small groups are different. The combined trend rate is a weighted average that reflects this difference and the respective size of each population.

Difference in other factors between the separate populations required an explicit adjustment in claims experience when these populations were combined. For example, the claims experience for a population with insurance coverage with a $2,500 deductible would be clearly different than the experience associated with a $10,000 deductible. To determine the combined claims experience of these two groups requires an actuarial adjustment in the value of the benefit and the relative number of persons covered under one plan versus the other. Similar adjustments were made for age, geography and group size variations in medical claims cost among different populations.

Finally, additional adjustments reflected rating restrictions that are consistent with a merged market. Insurance companies are currently permitted to rate small groups according to the size of the group ("Group Size Adjustment"). On average, the rates for groups of 1-2 persons are about 34 percent higher than the rates for a group of 10-50 persons. In the absence of any limit, the Group Size Adjustment in a merged market would likely reflect the risk level for individuals and effectively defeat the purpose of merging the populations. This analysis assumed that the Group Size Adjustment would be capped. Maximum adjustments for group size (or "bandwidth") of 10 and 20 percent were analyzed. The 1-2 person group received a 10 or 20 percent adjustment relative to groups of 10 – 50 and all companies between these points were scaled proportionately. To avoid a rate shock to larger businesses in the small group market, the Group Size Adjustment was not eliminated entirely. Once the Group Size Adjustments were determined, the baseline premium was adjusted to ensure revenue collected with the new group size adjustments was equivalent to the revenue collected with the old group size adjustments. This results in increased rates for the larger groups.

Within the new merged market, 73 percent of enrollment is from the small group market and 27 percent is from the individual market. The modeling assumed that those entering the market when prices decline will have, on average, health status that is 20 percent better than the average of current enrollees in the merged market. This assumption is based on the theory that persons with on-going health problems are the most likely to have already purchased insurance and be in the market, and that many of the uninsured are young adults. The report assumes the merged market will begin in January 2008 and presents the

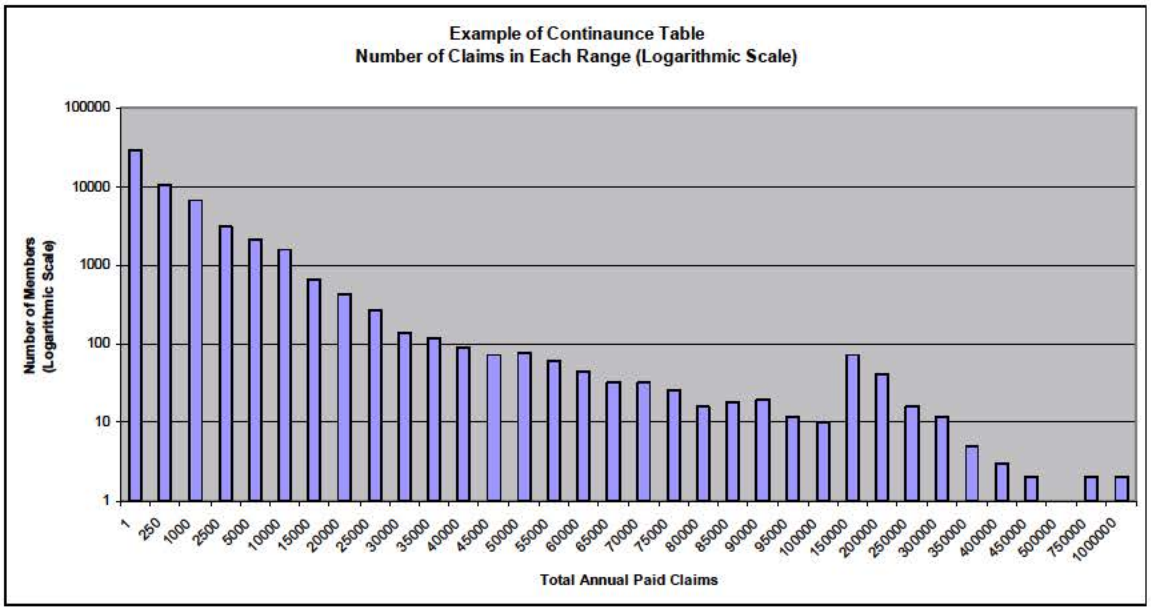
combined impact of all these changes on individual market and small group market premiums at the time of merger. The expected premium for the combined market is then compared to the premium in the small group and individual markets in the absence of a merger. Finally, the report presents estimates as to the number of individuals who are likely to join or leave the combined market as a result of an increase or decrease in premium costs. Assumptions regarding migration into and out of the market were based on a review of economic studies of the impact of changes in insurance price on individual purchases. This literature indicates that price sensitivity in the insurance market is relatively inelastic since the relative change in premium price is larger than the change in demand for insurance. That is, a 10 percent decrease in premium is likely to cause only a 5 percent increase in enrollment in the non-group market. (See Appendix B).

Reinsurance

A reinsurance model was developed that permitted analyses for the individual market alone, the small group market alone, and the merged individual and small group market.

This model is grounded in continuance tables which order the distribution of claims expenses, from lowest to highest, by the number of people in each expense bracket. For example, in a given year, over 1500 individuals might incur claims between $250 and $1000. In contrast, only one individual might incur claims between $300,000 and $350,000. Figure 1 shows an example of this distribution.

Figure 1



Separate continuance tables were generated for each of the study populations. Then a model was developed that allowed the testing of a variety of reinsurance strategies. The model encompassed two attachment points. The lower attachment point establishes a dollar value above which the reinsurance program is responsible for the claim costs. For example, an attachment point of $50,000 would mean that an insurance company would

transfer any additional claims costs to the reinsurance program incurred by an individual after that individual had incurred $50,000 in covered medical expenses. The model allowed testing the impact of attachment points at any dollar level. The second attachment point represents the point at which the insurance company resumes responsibility for the claim. For example, a state sponsored reinsurance program in New York takes responsibility for annual claims costs, on a per person basis, between $5,000 and $75,000. The individual insurer is responsible for paying claims both below and above these amounts. The model can also calculate the costs associated with no second limit or attachment point. In this case, the reinsurance program assumes some or all responsibility for claims costs above the initial attachment point.

A further refinement built into the model allowed variation in the percent of costs the reinsurance program covers above or between attachment points. For example, a reinsurance program might assume responsibility for 100 percent of the costs or, alternatively, 80 percent – leaving the primary insurer to share in some of the costs occurring after the attachment point is reached. Reinsurance options both with and without an upper limit on reinsurance as well as with and without cost sharing were modeled.

Presuming that the reinsurance program is funded entirely by premium revenue, an estimate of the impact to the premium is calculated under three scenarios:

1. All insured policies in Maine are assessed,
2. All insured policies in Maine, except those providing stop-loss only coverage, are assessed and
3. All insured small group and individual policies in Maine are assessed.

Clearly, these estimates would be impacted (and lowered) if sources of revenue for a reinsurance program were identified from sources other than insured premiums.

High Risk Pool

The methodology behind the analysis of this option required the modeling of premium impact and member migration due to an implementation of a high risk pool and associated rating rule changes in the individual market. Those individuals who would experience a significant premium reduction would join the new individual market. Those individuals who would experience a premium increase or be denied in the individual market would either join the high risk pool or stay in their product which we refer to as the Closed Block. Persons in the new individual market would enjoy reduced premium costs as a result of the lower health care costs associated with this population.

Currently, insurance companies cannot deny coverage or charge higher rates based on health status and cannot vary premium levels by more than +/- 20 percent for factors related to age, geography and industry type. In order to implement a high risk pool, greater flexibility would be afforded to insurance companies. By doing so, lower premiums would be made available to lower risk, i.e., healthier, persons. Higher risk, i.e., less healthy, persons entering the individual market, who would have been subsidized under current regulations would be charged more or directed to the high risk pool for coverage.
Based on an analysis of other states with operational high risk pools, a set of factors were developed to provide this greater flexibility to insurance companies. For example, an age band of 4:1 is utilized which permits up to a four fold difference in premium costs due to age.

A separate band of 1.5 to1 is permitted for health status. In order to assure affordability for those persons who are required to migrate to the high risk pool, the methodology also assumes that the high risk premium will be limited to 25 percent greater than the premium in the new individual market. The degree to which actual costs in the high risk pool exceed this premium maximum establishes the magnitude of the necessary subsidy that will be required in the high risk pool.

With the introduction of a high risk pool, it is assumed that persons will migrate to one of three insurance arrangements:

1. A number will remain in their current insurance program which continues to be subject to all current rules and regulations. This is referred to as the "Closed Block". No new enrollment would be permitted in the Closed Block.

2. Generally healthier persons who can enjoy the benefits (i.e. lower costs) of the revised premium setting rules will migrate to an "Open Block".

3. Persons denied access to the "Open Block" will be afforded access to the high risk pool.

Over time and as marginally healthier populations migrate, the premium costs of "Closed Block" will become increasingly more expensive in contrast to the other two options. Commonly referred to as a "death spiral", this eventuality can be delayed by subsidizing premium costs in the Closed Block as well as in the high risk pool.

Two alternative scenarios were modeled and are presented in the findings:

- No Subsidy of Closed Block: Insurance companies would be permitted greater flexibility in establishing premiums for a new Open Block of insured individuals. Those persons who are rejected from this Open Block will either remain in the Closed Block or enter the high risk pool. Premium costs are subsidized for the high risk pool but not for the Closed Block.

- Subsidy of Closed Block: The same as the above scenario, except that a subsidy is provided to those remaining in the Close Block in order to mitigate the impact of costs due to increasingly more expensive persons remaining in this group.

While the magnitude of the subsidy associated with each option is estimated, the potential sources of these subsidies are beyond the scope of this study.

Findings

The Current Status of Maine's Individual and Small Group Markets

This section of the report presents the results of modeling selected reform options for Maine's individual insurance market. To understand the new environment likely to develop if any of these reforms are adopted, it is first necessary to understand the current status of both the individual and small group markets in Maine and the differences between them.

- **Maine's small group and individual insurance markets have a small number of participating insurers.** Maine's small group market is currently dominated by two carriers, Anthem Blue Cross Blue Shield, which includes the DirigoChoice Small Group population, and Aetna. Anthem is the predominant carrier in the individual market with about 81 percent market share, including the DirigoChoice individual and sole proprietor market segments. Mega Life/Health Insurance, the only other major carrier of individual insurance in the state, represents 16 percent of the individual market.

- **Benefits in the small group market are, on average, 50 percent richer than in the individual market**. Small group plans purchased by small employers in Maine are on average 50 percent richer in benefits than the average benefit plan purchased in the individual market. A substantial portion of the difference in level of coverage derives from different deductible levels. ***Small group policies have an average deductible of approximately $1,000 compared to an average deductible for individual policies of about $7,000 per year.***

  In the individual market, $5,000 deductible policies are the most prevalent with a market share of about 51 percent, while approximately 15 percent of individual subscribers purchase catastrophic plans with a $15,000 deductible. In contrast, the three most popular policies for small groups have annual deductibles of $500, $1,000 and $0 respectively. Tables 3 and 4 present the top plan designs for each market and demonstrate the different cost structures applied to individual and small group market segments.

Table 3: Individual Plans in Maine by Market Share

Deductible	Market Share
$2,250	4%
$5,000	51%
$10,000	6%
$15,000	15%

Table 4: Small Group Plans by Market Share

Deductible	Coinsurance	Coin Max	OV Copay	Pharmacy Copay	Market Share
$500	70% IP & OP	$2,000	$20/$25	$10/$25/$40	7.0%
$1,000	70% IP & OP	$2,500	$20/$25	$10/$25/$40	6.7%
$2,500	90%/70%	$1,500	$20	$10/$25/$40	5.1%
$250	90%/70%	$1,000	$20	$10/$25/$40	5.1%
$1,000	90/70	$1,000	$20	$10/$25/$40	4.9%
$0	70% IP & OP	$1,500	$25	$15/$25/$40	6.4%

- **Average per person claim costs are higher in the individual market than in the small group market after adjusting for benefit differences, but most of the difference may be due to a small number of very high cost claimants**. The claims experience in the individual and small group markets reflects the combined effect of several factors.

  Age: The composition of the enrolled populations with regard to age will drive differences in the number, type, and intensity of health services used. ***Maine's small group market membership is 15 percent* younger *than the individual market***.

  Region: The price for health services (and patterns of care) varies by region within the state, contributing some variation to cost. ***The enrollment in the small group market in Maine is somewhat more heavily concentrated in lower cost areas, compared with the individual market enrollment***.

  Health status and benefit design: Differences in health status can significantly affect costs. ***Compared to the small group market, the individual market in Maine has a larger share of both high cost claimants (greater than $15,000) and members with zero claims***.

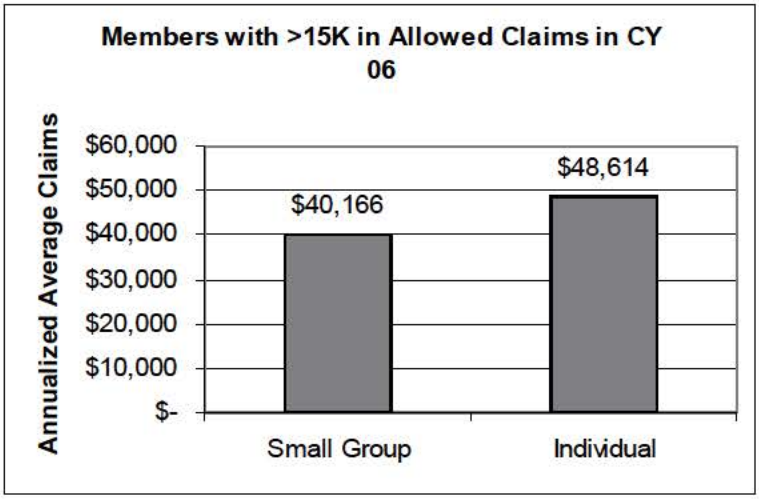
Table 5: Comparative Claims Continuance Tables for Maine's Individual and Small Group Market

Total Annual Allowed Claims	Percent Distribution Small Group Members	Percent Distribution Individual Market Members
$0 claims	13%	19%
Less than $1000	38%	38%
$1000 - $5000	34%	28%
$5000 - $10,000	8%	7%
$10,000 - $15,000	3%	3%
Greater than $15,000	4%	5%

"Zero claim" enrollees are those with no "allowed" claims. Allowed claims include both the amount paid by the insurer and the cost sharing paid by the enrollee. This means that an enrollee who pays the entire cost of services because the deductible has not been satisfied

is not included as a zero claim enrollee. However, the higher proportion of zero claim enrollees in the individual market may be related to the high concentration of enrollees in high deductible policies since some enrollees may be deterred from using health care services because of the direct cost to them. ***Among the high cost claimants, those in the individual market had higher aggregate expenses (by about $8,500 per claimant) than did the high cost claimants in the small group market***.

Figure 2: High Cost Claimants



The net effect of these factors leads to differences in the average amount insurers pay for claims and the average amount covered individuals pay for health services. The average cost per person per month to insurers (net claims) is $214 for individual market enrollees and $248 for small group market enrollees. When individual out-of-pocket payments for deductibles and coinsurance are added to paid claims (allowed claims) the individual market average is $357 per person per month and small group average is $312 per person per month.

Table 6: Average Per Person per Month Claims Cost in Individual and Small Group Market in Maine – 2006

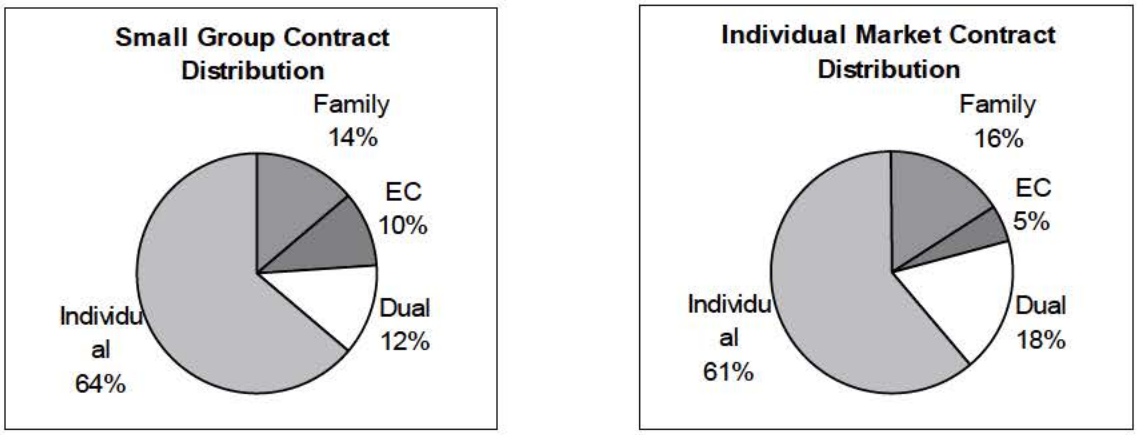
Average PMPM Claims Cost	Individual Market	Small Group Market
Net Claims (paid by insurer)	$214	$248
Allowed Claims (includes enrollee share of costs)	$357	$312

- **The trend for claims costs in the individual market is increasing at 16 percent per year, compared to 8 percent in the small group market**. A look back over the past three years (2004 through 2006) shows that the claims experience in the individual market has been deteriorating to the current unfavorable position (relative to the small group market).

- **Within the small group market, groups of 1 to 2 subscribers pay an additional 34 percent compared to groups of 10 to 50.** Smaller groups have higher average claim costs due to adverse selection. Also, insurer administrative costs tend to decrease, on a per enrollee basis, as group size increases, due to losses of economy of scale. Insurers use a group size adjustment factor that adjusts premiums by group size, holding all else constant, to reflect these differences in their costs. This group size adjustment factor is applied to different sized groups within the small group market. Currently, within the small group market, the group size adjustment factor results in premiums for groups of 1 to 2 employees that are approximately 34 percent higher than premiums for groups of 10 to 50.

- **Contract mix in terms of singles vs. families is very similar between the individual and small group market and does not contribute significantly to cost differences.** The proportion of children and adults and single adults vs. couples can impact premiums. In Maine, the contract mix is not dissimilar between the small group and individual market. The average contract size in the small group market is 1.71 persons, compared to 1.72 in the individual market. While the individual market has a somewhat higher proportion of couples and the small group a higher proportion of single parent and child contracts, the proportion of single contracts is very similar at 64 percent for small group compared to 61 percent in the individual market.

Figure 3: Contract Distribution in Maine's Small Group and Individual Markets



Impact of Small Group/Individual Market Merger

The impact of a small group/individual market merger in Maine was modeled assuming the merger would occur in 2008. The immediate impact of the merger was measured taking into account and appropriately weighting the different enrollee characteristics, benefit characteristics, and premium levels of the two markets (see Methods Section, page 11). The impact was then projected forward based on appropriately weighting the different premium trend lines of the two markets and projecting net in-migration and out-migration

based on the price changes faced by different segments of the market. The assumptions for developing the model included the following:

- In a merged market, the group size adjustment factor (page 11) would have to be limited. Various limits were modeled to test for sensitivity. At one end, the range in price associated with group size was limited to 10 percent. (The smallest groups would pay 10 percent more than groups sized 10 to 50.) At the other end of the range an adjustment factor allowing a range of 20 percent was used.

- Estimates of market in-migration and out-migration were based on assumptions that premium increases would cause a decline in enrollment and premium decreases would cause an increase in enrollment. Based on the experience in other states, as reported in economic studies, the initial rate of change assumed a five percent increase in enrollment for a 10 percent decrease in premium cost (see Appendix B).

- The modeling assumed that those entering the market when prices decline will have, on average, health status that is 20 percent better than the average of current enrollees in the merged market. This assumption is based on the theory that persons with on-going health problems are more likely to have already purchased insurance and be in the market, and that many of the uninsured are young adults.

The following key findings were noted in a merged market:

- **Individual policy holders would comprise about one quarter of the market and small groups, three-quarters.** The current individual market in Maine would comprise 27 percent of a merged market. By comparison, in Massachusetts (the only state, to date, that has merged markets) individuals make up 10 percent of the merged market.[3] In the merged Maine market, 39 percent of enrollees would be in groups sized 10 to 50. Fifteen percent would be in groups of 5 to 9, 10 percent would be in groups of 3 to 4, and 8.5 percent would be in groups of 1 to 2.

Table 7: Composition of a Merged Market in Maine by Group Size

Individual Market and Small Group Market by Group Size	Percent Distribution of Members
Individuals	27.0
Groups of:	
1 – 2	8.5
3 – 4	10.0
5 – 9	15.3
10 – 50	38.7

- **In a merged market, if the group size adjustment is limited to 10 or 20 percent, individual premiums would decrease. While small group**

[3] This is largely due to the fact that in Maine, most sole proprietors are in the individual market. In Massachusetts, they are in the small group market.

premiums, on average, would increase. Currently, the premiums in the individual market reflect the claim costs only of enrollees in the individual market. Similarly, small group premiums are set based on the experience of small group enrollees. In a merged market, the premiums of enrollees in both markets would be based on the average experience across both populations. Since the individual market claims costs are currently higher, their premiums will decline when averaged with small group market claims. The converse holds true for the small group market. With a 10 percent limit on the group size adjustment, individual premiums would see an initial decrease of around 8 percent and small group premiums, on average, would increase 3 percent. With a 20 percent limit, individual premiums would decline by 4 percent and small group premiums increase, on average, by 1 percent.

- **Within the small group market, rate changes would vary by group size, with the smallest businesses seeing a premium *reduction* and groups of 10 to 50 seeing a premium increase.** Within the small group market, premiums vary by group size and the impact of a merger would also vary by group size. With a 10 percent limit on the group size adjustment, the smallest small groups (1 to 2 members) would experience a premium reduction of about 12 percent compared to current rates, while the largest small groups (10 to 50 persons) would experience a premium increase of about 7 percent. With a 20 percent limit, the premiums for the smallest groups would decrease about 8 percent while premiums for the largest small groups would increase by about 3 percent. Figures 4 and 5 summarize rate changes that would result from a merged market in Maine.

Figure 4

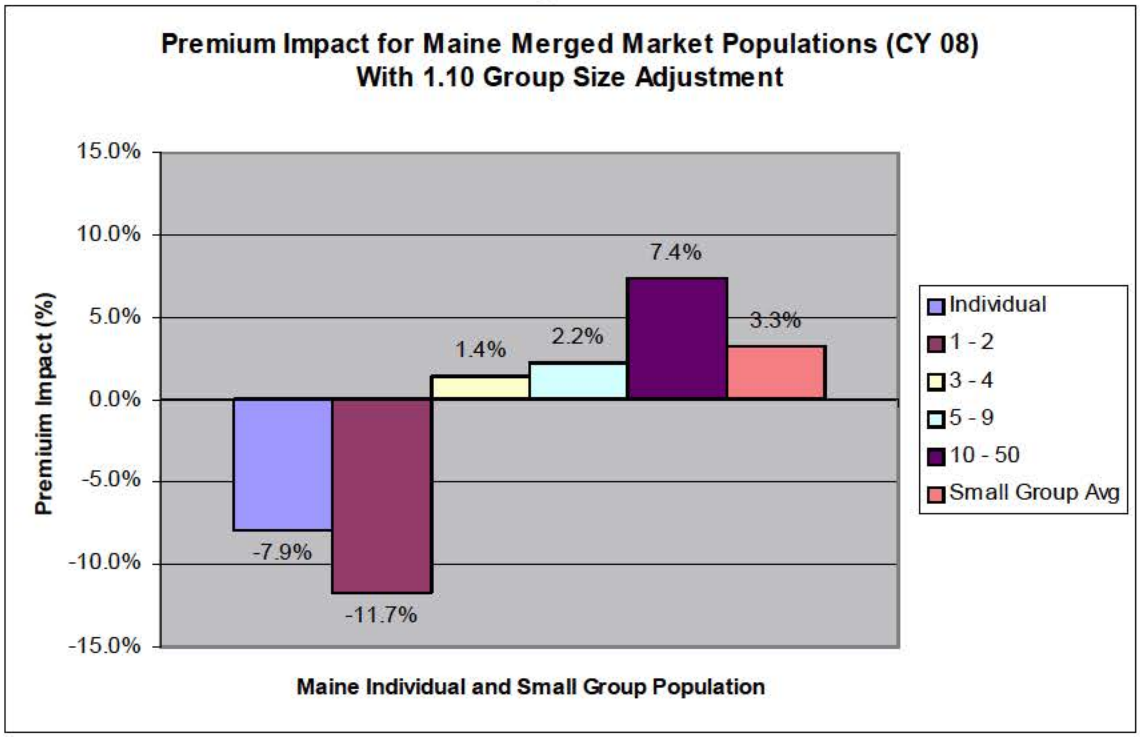
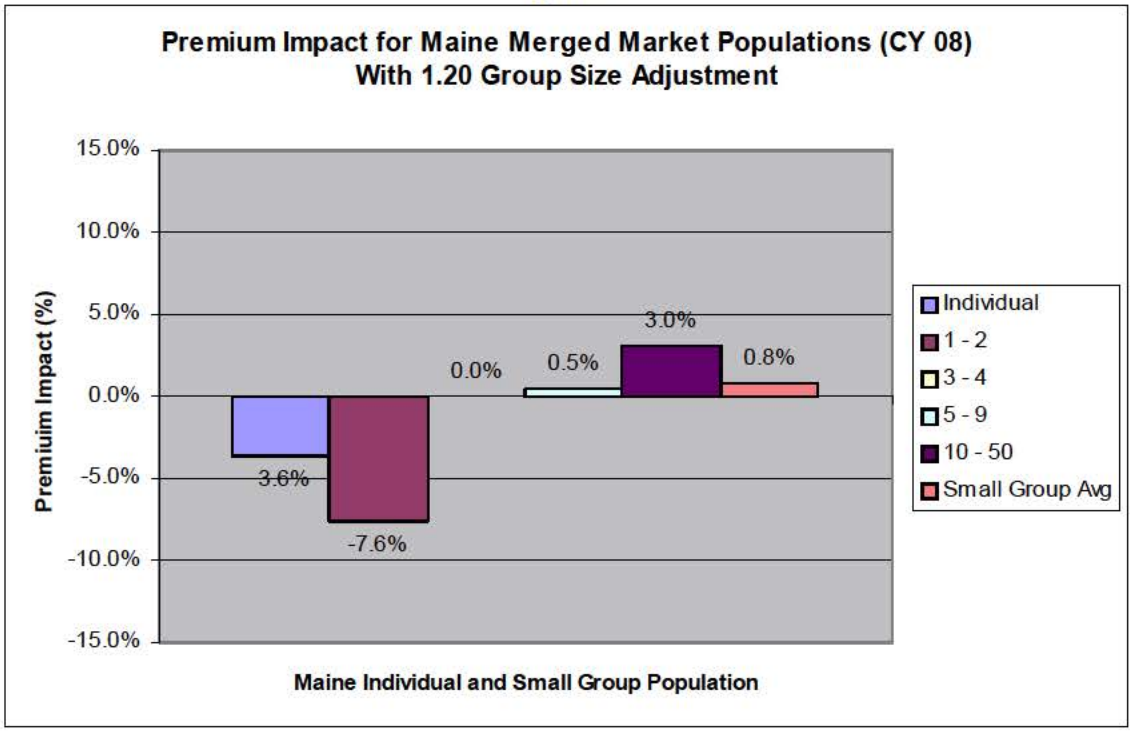


Figure 5



- **With the change in premiums associated with a 10 percent group size adjustment, the net increase in enrollment in the merged market is estimated to be 1,350. With the change associated with the 20 percent group size adjustment, the market is estimated to increase by 915 new members.** An algorithm to estimate in-migration and out-migration associated with premium changes based on economic studies that have analyzed consumers' responses to insurance market changes around the country was developed (see Appendix B). Based on this algorithm, only modest changes in enrollment are expected to occur based on the modeled market merger. Because of low price "elasticity," relatively few members would enter or exit the market in response to premium changes. In general, while the premiums in the individual market would be lower under a merged market scenario, they would not be low enough to induce a large number of new and currently uninsured individuals to purchase insurance in the merged market. The reverse of this statement is also true. Increases to current small group rates, while considerable for larger small groups, would not be high enough to motivate a significant share of small group members to exit the market. For small groups this inelasticity may be due to the group's ability to purchase alternative coverage with higher cost sharing provisions or change its contributions to premium costs.

  Overall, between 2007 and 2010, assuming a 10 percent group size adjustment with a resulting 8 percent decline in individual market premiums, the individual market is projected to increase by 1,729, with a corresponding decline among the uninsured. This increase is expected to be offset by a decline of 381 in the small group market associated with the average premium increase of about 3 percent. The net impact on the merged market size would be an increase of about 1,350. For the smaller rate

changes associated with a 20 percent group size adjustment, a net increase of 915 is projected. **Because member movement into the market is minimal over time, the demographics of the market are not expected to change at a level that would impact average premium costs.**

Impact of Reinsurance

Reinsurance is a mechanism that protects insurers from excessive costs. When a reinsurance program is funded from an external source, savings that accrue to the insurers due to the reinsurance program can be passed on to enrollees through reduced premiums. Most reinsurance programs absorb or share costs for individual, high cost cases. Some share costs when *aggregate* claims expenses exceed a threshold, such as a certain percent of premium revenue (see Appendix D). This study models only reinsurance triggered by individual high cost claims.

Table 8 illustrates the cost savings associated with reinsurance. In this hypothetical example, the costs of three members of an insurance plan vary greatly, but the average per person cost of the three is $55,003. This insurance plan has reinsurance for claims above a threshold of $50,000. In the case of the member who has $125,000 in claims in a given year, the insurer is responsible for the first $50,000 and the reinsurance plan pays the remaining $75,000. The average cost to the insurer for the three members, thus, is $30,003 rather than the $55,003 in actual claims costs, realizing a savings of 45 percent which can be used to reduce premiums.

Table 8: Illustration of Reinsurance Program
100% Coverage above $50,000

	Paid Claims	Reinsured Claims	Insurer Claims After Reinsurance
Member 1	$ 10	$ -	$ 10
Member 2	$ 40,000	$ -	$ 40,000
Member 3	$ 125,000	$ 75,000	$ 50,000
Total	$ 165,010	$ 75,000	$ 90,010
Per Member Costs	$ 55,003	$ 25,000	$ 30,003
Insurer Claims Reduction			-45%

- **A reinsurance program for the Maine <u>individual market</u> funded at $15 million would reduce premiums by 11 percent. A $30 million reinsurance**

program would reduce premiums 21 percent. Table 9 illustrates the impact on premiums of reinsurance programs at two different funding levels, based on the distribution of claims in Maine's individual market in 2006. At any given funding level, there are many design options. A reinsurance program might assume 100 percent of claims cost above a threshold level, for example, $200,000. Alternatively, the program can be designed so that the reinsurance pays a portion – for example, 50 percent – of the costs above a threshold. Another option is for a risk corridor, where the reinsurance program pays costs, on a per person basis, above a specified threshold and below a second attachment point (for example, claims between 30,000 and 50,000). In this situation, the primary insurer is responsible for claims costs both below and above the reinsurance corridor.

Table 9 shows that the overall funding level of the reinsurance program has a significant impact on premium reduction, but that at any particular funding level, there are multiple options for how a reinsurance program could be designed.

Table 9: Alternative Reinsurance Arrangements at Funding Levels of $15 and $30 Million- Individual Market-Calendar Year 2006

	Claims in Excess of	Claims Less than	Percent Reinsured	Funding (in millions)	Premium Impact
$15 Million fund	$40,000	Infinity	50%	$14.8	-10.7%
	$90,000	Infinity	100%	$14.7	-10.6%
	$35,000	$75,000	100%	$15.0	-10.8%
	$50,000	$200,000	80%	$16.0	-11.5%
$30 Million fund	$10,000	Infinity	50%	$29.6	-21.3%
	$30,000	Infinity	80%	$28.8	-20.7%
	$40,000	Infinity	100%	$29.6	-21.3%
	$5000	$20,000	100%	$29.5	-21.2%
	$5000	$75,000	50%	$28.5	-20.5%

- **A reinsurance program applied to a merged market inclusive of both individual insurance and small group insurance funded at $15 million would reduce premiums on average by about 3 percent. A $30 million reinsurance program would reduce premiums on average by about 5 percent.** Table 10 shows the impact of reinsurance at two different funding levels on the merged individual and small group market in Maine, given current claims distributions. The impact on premiums at a given funding level is much less than the impact of a program applied only to the individual market. The reduced impact is a function primarily of the fact that the reinsurance applies to a much larger population and so the dollars available for reinsurance are spread more thinly across the high cost claims.

Table 10: Alternative Reinsurance Arrangements at Funding Levels of $15 and $30 Million - Merged Small Group and Individual Markets – Calendar Year 2006

	Claims in Excess of	Claims Less than	Percent Reinsured	Funding (in millions)	Premium Impact
$15 Million fund	$150,000	Infinity	80%	$15.8	-2.8%
	$200,000	Infinity	100%	$12.7	-2.2%
	$30,000	$50,000	50%	$16.3	-2.9%
	$50,000	$70,000	90%	$16.0	-2.8%
$30 Million fund	$90,000	Infinity	80%	$30.3	-5.3%
	$100,000	Infinity	90%	$30.3	-5.3%
	$40,000	$75,000	90%	$30.9	-5.4%
	$50,000	$100,000	90%	$29.8	-5.2%

- **A reinsurance program costing $15 million would require an assessment of about one percent on all insured premiums in the state. A $30 million program would require about a 2 percent assessment. Expressed as a surcharge on member premiums, a $15 million program would add $2.58 to monthly premiums and a $30 million program would add $5.20 to monthly premiums.** There are many ways that policy initiatives can be funded, including appropriations from the general fund or earmarking a new tax. Because high risk pools are frequently funded through assessments on insurers participating in a given market, this study calculated the assessments that would be required for each of the studied reforms. Table11 below expresses the required assessments in two formats – as a percent surcharge on premium revenue and as an assessment per member per month. Three options are measured: the assessment required if the cost is spread across all premiums or members in the state; the cost across all insurance premiums or members excluding stop-loss premiums or members (this option excludes participation of self-insured employer plans); and the cost is the assessment were limited to the small group and individual market.

  All reinsurance estimates in this report are for 2006. It should be noted that if the threshold level remains constant, the required funding will increase over time as health care costs increase because the threshold level becomes smaller relative to claim costs. For example, if the threshold is $50,000, reinsurance will cover $25,000 of a $75,000 claim. If health care costs increase 10 percent, the $75,000 claim becomes $82,500. The reinsurance will then cover $32,500, a 30 percent increase over the $25,000 previously covered.

Table 11: The Cost of a Reinsurance Program Expressed as an Assessment on Premiums

Reinsurance Fund	Across All Insured in State	Across all Insured without Stop-loss Premiums	Across Small Group and Individual Market Premiums
	Assessment as Percent of Premium Revenue		
$15 million	0.9%	1.0%	2.6%
$ 30 million	1.9%	1.9%	5.3%
	Assessment per Member per Month		
$15 million	$2.58	$3.29	$7.86
$30 million	$5.20	$6.64	$15.85

Depending on the funding level and scope of reinsurance program, the models tested resulted in estimates of increased market participation ranging from 1,450 new members to 4,500 new members. Table 12 shows the enrollment impact expected from implementation of the various reinsurance programs modeled. These estimates were developed using the same algorithms for price elasticity that were used in estimating the impact of merging the individual and small group market. The estimates are based on the premium decline associated with the reinsurance models assuming an external funding source and do not presume an off-setting premium assessment to fund the program. A $30 million reinsurance program used to provide premium cost relief to the individual market is expected to reduce premiums by 21 percent and to expand market participation by 4,500 new members. The addition of the uninsured members results in a further premium reduction of 3 percent. A $15 million program that provided reinsurance to a merged individual and small group market would have a much smaller impact on premiums and is likely to bring in 1,450 new participants and a further premium reduction of 1.6 percent. A $30 million program in the merged market would bring in an estimated 2,900 new members. These increases are in addition to the increased membership resulting from merging the markets.

Table 12: Enrollment Impact of Reinsurance Program at Different Funding Levels

Reinsurance Model	Premium Impact	Net Membership Increase
$15 million program for Individual market	-13%	2,300
$30 million program for individual market	-24%	4,500
$15 million program for merged market	-3%	1,450
$30 million program for merged market	-5%	2,900

- **When compared to an operational small group/individual reinsurance plan in the State of New York, Maine's costs for an identical program are projected to be higher because a higher proportion of claims in Maine fall within the reinsurance corridor.** Healthy New York (NY) is perhaps the most visible and tested example of a public reinsurance program developed to

improve insurance affordability for the low-income uninsured. Healthy NY targets previously uninsured small businesses and working individuals with low incomes and reimburses health plans for 90 percent of claims between $5,000 and $75,000 for any member in a calendar year. Under the program, coverage is only available through HMOs, and premiums are reduced in part by pairing reinsurance with a scaled-back benefit program.

In calendar year 2004, the state of New York paid $31.5 million to cover the claims costs within the reinsurance corridor. Healthy NY had about 76,300 enrollees at the end of this year. The state's payment represented 29 percent of total claims costs within the Healthy NY program for that year. Recognizing that Maine's reform is aimed at the total market (rather than previously uninsured small businesses and employed, low income individuals), Table 13 presents New York's experience along with a comparison of what a similarly structured reinsurance program would look like in Maine. A reinsurance program like Healthy NY (i.e. 90 percent coverage of an enrollee's claims between $5,000 and $75,000) would cost the state of Maine about $176 million for both the individual and small group markets and about $51 million if it was applied only to the individual market. Maine's merged market has an enrollment of approximately 156,000 compared to the 76,000 enrolled in Healthy NY – accounting for a substantial portion of the difference in cost. But Maine's program would also be more expensive on a per person basis because about 40 percent of claims in Maine would fall within the reinsurance corridor compared to 29 percent in New York. [See Appendix D for more detail about the New York market and Healthy NY.]

Table 13: Comparison to Healthy New York

Healthy New York 2004: 90% of claims between $5,000 and $75,000 (Targeted Market) **Year End enrollment: 76,300**				
	Employer Groups	**Sole Proprietor**	**Individual**	**Total**
Total Claims Dollars	$ 19,076,064	$ 21,084,370	$ 69,866,272	**$ 110,026,707**
Total Reinsured Dollars	$ 4,973,310	$ 6,182,333	$ 20,339,114	**$ 31,494,756**
Percent Reinsured	26.1%	29.3%	29.1%	**28.6%**
Maine 2006: 90% of claims between $5,000 and $75,000 (Entire Market) **Year End enrollment: 156,031**				
	Small Groups		**Individual**	**Total**
Total Claims Dollars	$ 340,013,600		$ 108,284,053	**$ 446,299,769**
Total Reinsured Dollars	$ 124,359,683		$ 51,256,612	**$ 176,293,329**
Percent Reinsured	36.6%		47.3%	**39.5%**

The comparison between the experience of the Healthy NY Program and the model of a similar program in Maine illustrates the caution with which the experience of other states should be transported to Maine. The fact that close to 40 percent of claims experience in the individual and small group market in Maine falls into the reinsurance corridor of the Healthy NY program (whereas in New York's enrolled population less than 29 percent falls in this corridor) reflects a substantially different claims distributions and suggests that a higher proportion of small group and

individual market participants in Maine exceed the $5,000 threshold than is the case for the enrolled Healthy NY population. It is not known whether this difference is due to differences in underlying morbidity, health service utilization patterns, cost of services, or some combination of these factors. An additional important variable is that the Healthy NY program is a single, targeted product in the larger, small group and individual market in New York, while the Maine comparison is based on modeling a similar program for the entire individual and/or small group market.

Impact of High Risk Pool:

In markets where insurers are allowed to medically underwrite individual health insurance policies, or deny coverage based on health status, high risk pools offer health insurance to individuals with preexisting conditions who are denied coverage in the individual market or are quoted premium rates that are substantially higher than the standard rates. In order to keep high risk pools affordable to consumers, high risk pool premiums are typically capped at 125 to 200 percent of the standard market rate, and the program is typically subsidized through government revenues and/or assessments on insurance carriers in the state. Individuals who purchase policies in the individual market who are not deemed to be high risk by the carriers will enjoy lower premium rates since they are actuarially rated at a lower cost and some high cost cases will have been removed from the market.

In this section, we describe the immediate and short-term impact to premiums of two different high risk pool scenarios applied to Maine's individual market and estimate the total funding required for each scenario. Both scenarios assume that individual market members would migrate into one of three 'blocks' following the adoption of a high risk pool and regulatory changes that allow medical underwriting and expanded age rating. These three blocks are:

- **Open Block**. The Open Block consists of all members who purchase individual insurance policies under the new market rules where medical underwriting is permitted and where premium prices reflect health status. This block will include both persons who are new to the insurance market who will be attracted by lower premium prices and currently insured persons who apply for a new policy under the new rules. Many younger and healthier participants in the current market are expected to migrate to the Open Block where they could receive lower rates.

- **High risk pool**. Individuals who are denied coverage in the new individual market or who are quoted premium rates which are excessively high may opt to join the high risk pool.

- **Closed Block**. Some individuals will elect to stay with their current policies and remain in the Closed Block, i.e. the old individual market. Current individual market regulations, including guaranteed renewal and modified community rating would continue to apply to the Closed Block. Insurers cannot remove current subscribers to the high risk pool. Enrollees in this block may apply for coverage in the new plans but will be subjected to the same medical screening and underwriting as is applied to all other applicants. Those most likely to remain in the Closed Block are older and sicker individuals who would be charged high premiums under the new pricing and underwriting rules in the open block. In addition, some persons might remain in the

Closed Block due to a lack of understanding of the market changes or due simply to inertia.

This study models the impact of a high risk pool in terms of rate changes in both the Open and Closed blocks. In both scenarios, the premiums for the high risk pool are assumed to be 125 percent of average premiums in the Open Block.

Several other assumptions informed the high risk pool modeling:

(1) The age band in the open block is assumed to expand from the current ratio of 1.5 to 1 to a ratio of 4 to 1, thereby allowing insurers more flexibility to adjust premiums based on member age. A 4 to 1 age band ratio would mean that the oldest members could be asked to pay premiums four times as high as age groups with lower expected costs.[4]

(2) Insurers would be permitted an additional adjustment of up to 150 percent for variations in health status.

(3) The same elasticity of demand assumptions and assumptions about the health status of the uninsured that were applied in the merged market and reinsurance models were used to determine member migration and premium impact. Since the premium reductions are more significant than under the other health reform scenarios, the elasticity of demand assumptions were adjusted. These assumptions are detailed further in Appendix B.

These assumptions were used to develop a dynamic model of the expected movement of members and the uninsured into the three blocks, based on the premium impacts members would experience. Because the segregation of members into separate risk pools will have a substantial impact on premiums, creating a dynamic that will cause further in-migration and out-migration into the various blocks, the impact and expected costs of the high risk pool are modeled over a three year period. The expected impact on members and costs are described below.

- **Introducing a high risk pool in Maine's individual market would reduce premiums considerably for the majority of subscribers. On average, rates in the open block would be 30 percent lower than current premiums in the individual market.** Implementing a high risk pool in Maine's individual market would have a noticeable impact on member premiums, reducing rates, on average, by about 30 percent in the open block. Based on the model's assumptions about who in the current individual market would migrate to the open block, the vast majority of subscribers in the open block would experience rate reductions, with 65 percent of members experiencing at least a 15 percent rate reduction and 48 percent receiving rates that range between 20 to 50 percent less than current premiums (see Table 14).

- **Introducing a high risk pool would *not* impact all subscribers favorably. Approximately 12 percent of applicants would experience a rate**

[4] Current law allows a variation of +/-20%. This is equivalent to a ratio of 1.5 to 1 between the higher and lowest rates.

increase when applying for coverage in the open block, while about 11 percent of members would be denied coverage except in the high risk pool. Because insurers are allowed to medically underwrite and more extensively age rate premiums in the new open block, some members will experience rate increases or denials. About 13 percent of current members would receive a rate increase in the open block with these increases ranging from between 1 to 70 percent of current premiums. About 11 percent of applicants would be denied coverage in the new individual market, but would be eligible to purchase health insurance through the high risk pool and if currently insured, could opt to stay within the closed block.

- **Reduced open block premiums resulting from the creation of a high risk pool would attract approximately 3,500 new members into the individual market in program Year 1.** Even with the relative price inelasticity of health insurance, average premiums in the new open block would be reduced sufficiently to motivate about 3,500 new members to join the individual market in the initial year of the high risk pool program.

Table 14: High Risk Pool Open Block Premium Impact (Year 1)

Member Open Block Premium Rate Compared to Pre-Reform Rates	% of Individual Members Receiving Rate Change
-70% to -50%	5.2%
-50% to -20%	48.1%
-20% to -15%	11.9%
-15% to -10%	4.4%
-10% to -5%	6.9%
-5% to 5%	5.7%
5% to 10%	2.9%
10% to 15%	0.2%
15% to 20%	0.5%
20% to 50%	2.9%
50% to 70%	0.1%
70+%	0.0%
Denied Coverage	11.2%

- **The premium impact within the Closed Block would vary depending on the availability of subsidies to help offset rate increases due to the deteriorating health status of this pool.** The health status of the Closed Block will deteriorate as a disproportionate number of young and healthy current members will migrate to the Open Block where they can obtain lower premiums. Individuals who elect to remain with their existing policies in the Closed Block will typically do so because they have been quoted (or expect to be quoted) premium rates in the Open Block that are higher than their current premiums due to their age and/or preexisting medical conditions. As the average health status of the Closed Block deteriorates due to the out-migration, premiums will escalate to cover the remaining higher risk

and higher cost members. Without additional funding to help mitigate these accelerated rate increases, Closed Block premiums will skyrocket and a death spiral can be expected to occur. When funding is available to subsidize the Closed Block, rate increases can be limited and a death spiral delayed.

- **Without a subsidy, Closed Block premiums would rise as high as 170 percent of current rates by program Year 3. In order to limit Closed Block rate increases to 15 to 20 percent of current rates, a $8.3 million dollar subsidy would be required in Year 1, followed by additional subsidies of approximately $13 million in program Years 2 and 3.** If premiums in the Closed Block are not subsidized, premiums are estimated to climb 34 percent above current rates in Year 1 and up to 170 percent above current rates by Year 3. If premium increases in the closed block are limited to 15 to 20 percent, a $13.5 million subsidy would be required by year 3.

- **Without a subsidy, out-migration from the Closed Block will occur more rapidly and more members of the Closed Block can be expected to migrate to the high risk pool.** A fairly rapid decline in membership in the Closed Block can be expected with or without a subsidy due to the combined effect of new coverage options in the Open Block and high risk pool, and a premium death spiral in the Closed Block. Without a subsidy, the Closed Block is projected to lose 10,000 members over three years, declining to 3,000 members. With a subsidy, the Closed Block can be expected to decline more slowly, with 5,000 members after three years. Without a subsidy, a larger portion of Closed Block members are likely to find the capped premiums (albeit above standard market rate) of the high risk pool advantageous compared to their premiums in the Closed Block. High risk pool membership can be expected to increase 10 percent to 1100 members.

- **The cost of a high risk pool without subsidies to the Closed Block would rise to $15 million dollars annually by the third year of the program. A high risk pool combined with subsidies for subscribers remaining in the Closed Block would cost $15 million initially and rise to $27 million dollars annually after three years of the program operations.** Total high risk pool funding varies depending on whether or not Closed Block premiums are subsidized. A high risk pool alone is expected to cost $15 million dollars annually by its third year. This option would leave 3,000 individuals in the Closed Block with premium costs up to 170 percent of current individual market premiums, In addition, many of the 2000 additional individuals who leave the Closed Block (compared to the subsidized option) can be expected to face a choice of very high premiums in the Open Block or no coverage at all. The cost of funding a high risk pool while maintaining, through subsidies, premiums in the Closed Block at a price not more than 20 percent above current rates is projected to cost $27 million by the third year of program operations.

  Table 15 shows the impact upon membership and funding for both the high risk pool and Closed Block if the Closed Block is and is not subsidized.

Table 15: High Risk Pool (HRP) Impact Depending on Closed Block Subsidy (Year 1-3)

	HRP Membership	HRP Funding Requirement	Closed Block Membership	Closed Block Funding	Closed Block Premium Impact	**Total Annual Program Funding**
Closed Block Not Subsidized	900 to 1100	$7M to $15M	13K to 3K	none	34% to 170%	**$7M to $15M**
Closed Block Subsidized	900 to 1000	$7M to $13M	13K to 5K	$13.5M	15% to 20%	**$15M to $27M**

Limitations

A number of limitations are inherent in any study of this magnitude and must be kept in mind by policymakers, regulators, advocates and other audiences who reference this report.

The data which are used to develop projections, while reasonably current, are nonetheless retrospective. On a going forward basis, the distribution of claims, trend rates, take-up enrollment rates and other assumptions that were developed based on these data are subject to some level of uncertainty as a result of changing technology, changing government policy (both at the federal and state level) as well as other environmental factors external to the study populations. This uncertainty increases as projections are extended further into the future.

While every effort was made to base assumptions on relevant Maine data, information from other states, and/or relevant studies, for some assumptions the available information was scant. In those cases, the assumptions used were best estimates based on whatever information was available and the professional expertise of the analysts.

While a number of specific options are described within the framework of the three broad policy alternatives of this study, these options are not an exhaustive list. Policymakers may want to consider alternative permutations and/or combinations of the options that are presented in this report.

The analysis and alternatives discussed in this report focus on strategies to reconfigure financial risk associated with health care costs in a manner that will increase the affordability of insurance products to the individual market. This study does not speak to the underlying cost drivers associated with the delivery of health care services in Maine. Some of these drivers include lifestyle behaviors, technology, utilization and unit service costs. Nor does the study address retention and profit or surplus levels within the health care and health insurance industries. To the extent that these cost drivers can be moderated, increases in the cost of health insurance in Maine will also be moderated. To the extent health care costs continue to grow at their current rate, any relief provided by the reforms discussed in this report may be temporary.

Conclusions

A summary of the eight options described in this report is presented in Table 16. These strategies are permutations of three broad policy alternatives including the merger of individual and small group markets, the development of a reinsurance program and the development of a high risk pool program. For each option, the initial premium impact is estimated as is the increase in the number of persons insured and the total subsidy levels that are likely to be required. The estimates for reinsurance in a merged market reflect the combined impact of the reinsurance program and merging the markets.

Table 16: Summary of Results of Health Reform Impact

Health Reform	Average Premium Impact	Membership Increase	Funding
Merged Market 1.10 GSA	IM -8% SG +3%	1,350	none
Merged Market 1.20 GSA	IM -4% SG +1%	915	none
Reinsurance Individual Market $30M	IM -24%	4,500	$30M
Reinsurance Individual Market $15M	IM -13%	2,300	$15M
Reinsurance Merged Market $30M 1.10 GSA	IM -13% SG -2%	4,300	$30M
Reinsurance Merged Market $30M 1.20 GSA	IM -9% SG -4%	3,900	$30M
High Risk Pool Not Subsidized for Closed Block (CB)	IM OB -30% IM CB +34% to +170%	3,500	$7M to $15M
High Risk Pool Subsidized for Closed Block (CB)	IM OB -30% IM CB +15% to +20%	3,500	$15M to $27M

Legend: IM: Individual Market, SG: Small Group Market, OB: Open Block, CB: Closed Block, GSA: Group Size Adjustment.

Program Cost and Membership Impact

No external funding is projected for the merger of individual and small group markets. This alternative creates a single underwriting pool for two markets. While a merger of these markets will provide a broader base upon which to spread risk and, consequently, provide greater actuarial stability, a merger would result in a subsidy of individual premium costs by small groups. The magnitude of this subsidy is directly related to the rating flexibility that is provided to the insurers of small groups in allowing a premium adjustment for group size. Based on testing a range of rating restrictions, the cross-market subsidy varies from a 1 to 3 percent increase. The reduction in premium for individuals ranges, correspondingly, from -4 to -8 percent. At the lower subsidy ranges, the net enrollment increase is estimated to be 915 members, or persons. That is, not withstanding some possible decline in persons enrolled in small groups due to the premium increase, there will be a likely increase in persons purchasing individual coverage to more than offset the small group decline. At the higher range of subsidies, this increase is estimated to be 1,350 persons.

Three different reinsurance options are summarized in Table 16. Two of these options focus on providing reinsurance to the individual market only. Models based on subsidy levels of $30,000,000 and $15,000,000 estimate premium reductions of 24 and 13 percent,

respectively, in the individual market. The first year net increase in membership is estimated to be 4,500 persons at the higher subsidy level and 2,300 persons at the $15,000,000 level. In other words, a $30,000,000 commitment would reduce premiums in the individual market by 24 percent. This would attract 4,500 more individuals to purchase health insurance.

The third option models a reinsurance program for both the individual and small group market, given a subsidy level of $30,000,000. The impact will vary depending on the range of group size adjustments permitted. For a limit of 10 percent, the net increase in persons with insurance coverage is estimated to be 4,300 and premiums would be expected to decline approximately 13 percent for individuals and 2 percent for small groups, reflecting the greater number of high risk persons in the individual market. With a 20 percent limit on the group size adjustment, the net increase in enrollment is estimated to be 3,900 and premiums are projected to decrease by 9 percent for individuals and 4 percent for small groups.

Within each of these three options, there are a number of specific plan designs that can be adopted to realize the projected savings and membership increase. For example, under the merged market option, the reinsurance program can be designed to cover 80 percent of all claims in excess of $90,000. Alternatively, the design might be 90 percent of all claims between $50,000 and $100,000. Either design as well as many others will result in equivalent premium savings and the membership increases noted above.

A high risk pool is the third policy alternative that was analyzed. Two options were examined within this alternative. The first provides no subsidy for the Closed Block, i.e., the persons in the current individual market who cannot initially migrate to the Open Block and choose to remain insured under their current policy. Under new underwriting rules applied to the Open Block, younger and healthier individuals will enjoy substantial premium reductions. The Closed Block can be expected to experience severe adverse selection and premium levels in the Closed Block are expected to increase up to 170 percent by the third year of program implementation. For those who can purchase insurance in the Open Block, it is estimated that they will enjoy an average 30 percent reduction in first year premium expenses. Persons who are denied access to the Open Block will have the option to enroll in the established high risk pool. In order to maintain the affordability of the high risk pool, a first year subsidy of $7,000,000 is projected. A net increase in membership is projected to be 3,500 persons.

An additional subsidy arrangement is modeled in the event policymakers wish to moderate the impact of adverse selection in the Closed Block. A subsidy of $8,500,000 in the first year would be needed to hold premium increases in the Closed Block to 15 to 20 percent. The premium impact to the Open Block and net membership gain are the same under this additional subsidy arrangement.

Program Financing

Three decisions are needed to implement one of the presented alternatives:

1. The identification of a preferred policy alternative.

2. For either the reinsurance or high risk pool alternatives, the selection of a funding/subsidy level that will be provided to impact premium levels and new enrollment in the individual and/or small group market.

3. The source of funds/subsidies.

If program costs are funded through add-ons to premiums in the individual and small group markets, there would be no net premium savings and the initiative would be simply one of re-juggling the individual and small group markets into a new set of risk pools. If program costs are captured through assessments more widely spread across the whole insurance market (a strategy used by many states for their high risk pools), the premium impact to the small and individual markets will be mitigated although there will still be some premium increase offset against the savings measured by the models presented in this report. A source of funding external to the insurance market would result in the full savings modeled in this report being realized.

Table 17 illustrates the impact of different funding levels, if a decision were made to fund either a reinsurance program or high risk pool through assessments on insurers. Cost impact is shown both as a percent surcharge on premium revenues and as an assessment per member per month.

Table 17: Impact to Insurance Market Premiums of Funding Reform Options for either Reinsurance or High Risk Pool Alternatives

Program Funding level required	All health insurance premiums	All Premiums except stop-loss premiums	Individual and small group market only
$7,000,000 -% Premium -PMPM Assessment	0.4% $1.20	0.4% $1.53	1.2% $3.64
$15,000,000 -% Premium -PMPM Assessment	0.9% $2.57	1.0% $3.27	2.6% $7.81
$20,000,000 -% Premium -PMPM Assessment	1.3% $3.44	1.3% $4.39	3.5% $10.47
$30,000,000 -% Premium -PMPM Assessment	1.9% $5.16	1.9% $6.58	5.2% $15.71

Other sources of funds may be available and include general funds, grants or some combination of these different sources. The reader is referred to Appendices D and E for descriptions of funding strategies that have been adopted by other states.

Finally, the reader is cautioned that the above financial and membership impact of these different alternatives are for first few years only. The impact of each alternative is likely to vary considerably in future years. For example, while the Open Block under the high risk pool will offer a very attractive initial premium, there is good likelihood that these relative savings will diminish with time as persons in this group age, develop chronic diseases, experience major traumas, and simply become more expensive. Because determination of risk with high risk pools is done prospectively, insurers maintain responsibility in their open block insurance products for the costs of members who develop catastrophic or chronic illnesses after they have enrolled.[5] Insurers may not remove covered individuals to the high risk pool. The reinsurance options modeled show a less dramatic initial impact on premiums for young healthy individuals because existing individual market members are not segregated into a closed block and their claims experience continues to be spread across the entire individual market. However, because reinsurance covers all eligible high cost cases, regardless of when a person became insured, the impact on premium reductions is likely to be sustained over time.

An additional cautionary note regards the impact of health cost trends over time. Currently, the claims trend in the small group market is 8 percent per year and in the individual market it is 16 percent per year. While part of this increase is driven by changing membership, when young healthy individuals drop coverage, a substantial portion is driven by underlying health cost inflation. Similar rates of increase experienced by large employer groups with stable membership point to the important role played by changes in technology, health service use patterns, price inflation, and individual behaviors. Unless these underlying cost trends are mitigated, funding for any of the options described in this report would need to increase in accordance with the trend of health cost inflation[6] in order to maintain the same level of impact as modeled for the first few years.

[5] It should be noted, however, that when insurers introduce new products, they often stop offering existing products to new applicants. Rates for the new product can be relatively low since all those applying for it will be newly underwritten. The old products then become a closed block for which rates increase as the health of its members deteriorates. This can lead to a death spiral within the closed block.

[6] For a reinsurance program, unless the attachment point is indexed to increase as healthcare costs rise, the funding requirement will increase faster than the underlying health cost trend. The impact on premiums would also increase over time.

Appendix A

Actuarial Report and Technical Notes

Actuarial Report of Reform Options for Maine's Individual Health Insurance Market

Prepared for the Maine Bureau of Insurance
May 25, 2007

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1. Introduction

In May of 2006, the Governor of Maine issued an Executive Order creating a Blue Ribbon Commission on Dirigo Health. One of the charges of this Commission was to recommend methods for reducing and controlling health care costs in Maine. The Commission called for a study of three market reforms, all intended to make health insurance more affordable, particularly for those in the Individual market. These options include:

- Merger of the Individual and Small Group markets
- Reinsurance options applied to the Individual and/or merged Small Group and Individual market
- High risk pools

In response to the Commission's recommendation, the Bureau of Insurance (BOI) assembled a team of actuaries and health policy experts to analyze each of these market reforms. Gorman Actuarial was enlisted to conduct the actuarial analysis and modeling, while the Muskie School of Public Service, Institute for Health Policy, was engaged to provide program and policy expertise and demographic data on the Maine population and the uninsured, and to author a final report inclusive of the actuarial analyses.

The following actuarial report provides additional information on the modeling and results of the three reforms outlined above.

2. Data Collection Process

2.1. Carrier Data

Central to the study of the Maine Individual and Small Group Health Insurance markets is the ability to obtain accurate data from the active carriers in the market. To that end Gorman Actuarial requested data pertaining to the Individual market from Anthem Blue Cross & Blue Shield (Anthem) and MEGA Life & Health Insurance Company (MEGA) and requested data regarding the Small Group market from Anthem and Aetna.

We have requested, received and reviewed data for the following populations:

- Small Group
    - Anthem Small Group Market
    - Dirigo Small Group Market
    - Aetna Small Group Market
- Individual
    - Anthem Individual Market
    - Dirigo Individual Market
    - Dirigo Sole Prop
    - MEGA Individual Market

2.2. Data Specifications

Since there are only three carriers participating in this study, individual data specifications were developed for each carrier. The specifications were sent to the carrier and we followed up with a separate teleconference with each carrier to make sure they understood what information was needed. Sometimes the carriers were unable to pull data in the requested format. In those instances we worked with the carrier to get the most accurate data possible.

2.3. Requested Data

In order to perform an analysis on the impact of merging the Individual and Small Group markets, a detailed analysis of the benefit packages sold in the market is required. Due to the timeline of our project, we requested a description of benefit packages marketed and sold in the Maine market first. We requested benefit attributes for each product that would have a significant impact on the premiums. Some of these benefit attributes include deductibles, coinsurance, out of pocket maximums, office visit copayments and pharmacy copayments.

We also analyzed the Small Group and Individual markets with and without the DirigoChoice (Dirigo) population. To that end, we requested and received data from Anthem that reported the Dirigo population separately.

We also required aggregated data by group size for the small employer market. The data included claims, premium and member months for a three year period. We requested data for CY 2006 to be incurred claims from 1/1/06 through 12/31/06 paid through January 31, 2007. We also required all claims to be completed with an estimated IBNR adjustment. Aggregated data was requested to be delivered in separate tables for each of the three years of interest.

In addition to the aggregated data, we requested snapshot data as of a specific date, specifically as of 7/1 for CY 2006, 2005 and 2004. This includes additional distributions of data, such as by age, geographic region and SIC code.

Additionally, for the reinsurance and high risk pool analysis we requested continuance tables for CY 2005 and CY 2006 for both the Individual and Small Group markets. We also requested member level data for the Individual market.

The following data was requested for the Maine Small Group and Individual markets:

- Benefit Package Description
- Small Group Data Aggregated by Group Size
- Aggregated Individual Data
- Snapshot Small Group Data Aggregated by Group Size
- Snapshot Individual Data
- Distribution Snapshot of Small Group Subscriber Data by Age

- Distribution Snapshot of Individual Subscriber Data by Age
- Distribution Snapshot of Small Group Employer Data by County
- Distribution Snapshot of Small Group Subscriber Data by County
- Distribution Snapshot of Individual Subscriber Data by County
- Distribution Snapshot of Small Group Subscriber Data by SIC code
- Distribution Snapshot of Small Group Member Count by Benefit Package
- Snapshot of Individual Member Count by Benefit Package
- Continuance Table of Claims for CY 2005 (Small Group market only)
- Continuance Table of Claims for CY 2006 (Small Group market only)
- Member Level Data for CY 2006 (Individual market only)
- High Cost Claimants (Anthem Only)

2.4. Summary of Received Data and Data Issues

Upon receiving data from the carriers, we validated the data for reasonability. This was done by comparing the provided data to several sources. We created a document that summarizes the data carriers provide to the state of Maine via the regulatory filings (940, 945 reports) along with market summary data from the Maine BOI website. We also summarized the data and verified that the control totals were correct and reasonable.

Note that the 945 reports include Dirigo Sole Proprietors as "Dirigo Group", whereas for our analysis we consider Dirigo Sole Proprietors as part of the Individual market. Also, the 945 reports include association business in the Small Group and Individual market reporting. However, the association market segment was not part of our data request. It is our understanding that the association market segment is rated using their own experience and any reform to the Small Group and Individual markets would not impact this segment.

2.4.1. Anthem Individual

Anthem delivered data separately for the following Individual populations:

- Individual
- Dirigo Individual
- Dirigo Sole Proprietors

We received corrected age demographic data during our analysis phase. The data by age was discovered to be in error near the end of the project, slightly modifying our results.

2.4.2. MEGA Individual

In general MEGA had a difficult time pulling relevant data for this study. They initially were unable to provide any member level data. We eventually did receive member level data on April 19th. At the time data was received, the study team was well into their analysis phase.

Based on conversations with MEGA, complete data for CY 2006 was unavailable (due to an assumed 3-5 month runoff) and therefore MEGA delivered data from 10/1/05 through 9/30/06 (paid through March 2007). Since MEGA entered the Individual market mid year CY 2004, we did not request CY 2004 data.

MEGA's benefit offerings did not fit neatly into the parameters requested in the data specification. MEGA sells their policies "cafeteria style", allowing consumers to pick and choose additional riders for various additional coverage. Therefore, we relied on MEGA's best judgment in providing useful benefit package descriptions and worked with MEGA to understand them.

Initial data deliveries did not agree with the data MEGA reported in the 940 and 945 reports. We worked with them to understand what they had provided and eventually they were able to correct the method for pulling the data. Ultimately we received new data whose differences with Maine regulatory filings could be justified.

The member level data was for the time period of October 1, 2005 through September 30, 2006. Therefore we needed to project this data forward three months to be consistent with CY 2006 data used in the reinsurance analysis.. In addition, MEGA was unable to deliver data regarding Allowed Claims.

2.4.3. Anthem Small Group

Anthem delivered data separately for the following Small Group populations:

- Small Group
- Dirigo Small Group

2.4.4. Aetna Small Group

Aetna provided data pertaining to the Maine Small Group market. They delivered separate data for the "Aetna Health Inc" (HMO) and "Aetna Life Insurance Company" (PPO). We aggregated these populations for the study. Aetna was unable to provide subscriber data by SIC code. They were also unable to provide Employer location by county, although they did provide Subscriber location by county.

At the time of the request, Aetna was not able to provide CY 2006 data. Instead, Aetna provided the first 3 quarters of 2006 which had been adjusted for IBNR. Again, in order to be consistent, we adjusted this data for trend so that we were working with CY 2006 data for all populations. For the Merged market analysis, we also annualized the member months to reflect CY 2006 membership

We also did not receive continuance table data from Aetna until mid-April. This information was critical in trend analysis and the reinsurance study. Although we received some of the data late, we were still able to meet the timeline for the Bureau of Insurance.

2.5. Data Observations

Since the majority of the insured market is concentrated in the carriers mentioned above, the data we received represented almost the entire population of insureds in Maine. We received data for 96% of the Individual market and 82% of the Small Group market. We have included the Dirigo populations in our study to maximize the sample size and get a more complete picture of the total Maine health insurance market.

Rates for each market are currently based on the claim costs of each population so we reviewed the rating characteristics of each to compare how they contribute to the difference in rates. The Individual market membership is considerably older than the Small Group membership. In the Individual market, 50% of subscribers are over the age of 50, while only 33% of the Small Group subscribers are over the age of 50. The age difference alone is estimated to result in claims costs that are 15% higher in the Individual market. Differences in area and account size are smaller, about 5% lower in total for the Small Group market.

Since Massachusetts has already merged their Individual and Small Group markets, we found it useful to compare the market distribution in Maine to that of Massachusetts. In Maine, 27% of the merged market is in the Individual segment, while only 10% of the Massachusetts merged market is in the Individual segment[7]. Compared to Massachusetts, the Maine Small Group market must subsidize a greater portion of the Individual market costs.

We also saw that the Individual market enrollment was concentrated in products with high deductibles, about $7,000 on average. Small Group products included lower deductible products, about $1,000 on average, and copay and coinsurance products (with no deductibles).

There is also greater adverse selection in the Individual market. We analyzed the allowed claim continuance table to understand the distribution of claims costs and the magnitude of those claims. We focused on the members with more than $15,000 in annual allowed claims for 2006. The Individual market has a greater percentage of high costing members (5.1%) than the Small Group market (4.1%). Additionally, the average costs per member per month for these high costing members are higher in the Individual market, $4,051 vs. $3,347 in the Small Group market. We have concluded that there are a larger number of high cost claimants and increased severity of those cases that are contributing to the difference in claims costs between the markets.

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[7] Gorman Actuarial, LLC, DeWeese Consulting, Inc. and Hinckley, Allen & Tringale LP. *Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets*. December 26, 2006.

We also saw that there were more $0 claimants in the Individual market, where 19% of members had no claims vs. only 13% of the Small group members had no claims. This suggests that high deductibles in the Individual market may discourage use and offset some of the risk difference between the markets.

3. Merged Market Analysis

3.1.1. Summary

This section contains the methodology used to determine the impact of merging the Maine Small Group and Individual markets.

The impact to Premium of merging the populations is separated into four distinct categories.

1. Claims Base Impact
2. New Group Size Adjustment (GSA) & Target Medical Loss Ratio (MLR)
3. Conversion Factor
4. Member Migration

We define premium impact as the change in premium if the markets are merged. In other words, a premium impact of -10% would mean that rates under a merged market scenario would be 10% lower than rates in a non merged market.

The first three categories are calculated first. We calculated these adjustments separately. The member migration impact is then determined during the projection phase of the analysis since the migration is dependent on the total premium impact resulting from the first three categories. Based on our assumptions, Table 1 illustrates the directional impact of the first three components and the overall impact on the Merged market premium by Group Size. The methodology and calculations for each category are provided in the rest of this section.

Group Type	Claims Base	Group Size Adjustment	Conversion Factor	Total Impact
Individual Market	Down	Up	Up	Down
1-2	Up	Down	Down	Down
3-4	Up	Down	Down	Up
5-9	Up	Down	Down	Up
10-25	Up	Up	Down	Up
26-50	Up	Up	Down	Up

Table 1 – Premium Impact

3.1.2. Claims Base Impact

We have assumed that the carriers in Maine follow standard actuarial practice when developing premium rates. Premium rates for each of the populations (Small Group, Individual) are developed using its own claims experience and then trended forward to the rating period. The claims experience for each population is normalized for the various rating factors allowed in each of the markets to develop a starting rate. Table 2 outlines the various rating factors used in each market. The normalized claims are then adjusted for a retention charge which generally includes administrative expenses, profit margin, sales commissions, etc.

Normalization Factors	Small Group Market Pricing	Individual Market Pricing	Comments
Age	Yes	Yes	Included in +/- 20% band for Small Group
Geography	Yes	Yes	Included in +/- 20% band for Small Group
Industry	Yes	No	Included in +/- 20% band for Small Group
Group Size Adjustment	Yes	No	No rating limitations
Actuarial Value	Yes	Yes	Reflects benefit design

Table 2 – Factors

In the new Merged market, the premium rates will be based on the combined normalized merged claims experience. The difference between the merged claims experience and each population's own claims experience will result in a claims base impact.

To determine the claims base impact, we reviewed the net claims pmpm for the Small Group and Individual markets separately. The Dirigo Individual and Sole Proprietor data is included in the analysis of Individual markets, while Dirigo Small Group data is included in the Small Group market analysis. Our data set reflected 82% of the entire Small Group market and 96% of the total Individual market. We then adjusted our data to account for the total populations enrolled in the Maine Small Group and Individual markets. Within the new Merged market, 73% of the enrollment is from Small Group and 27% is from the Individual market.

We analyzed the various rate filings for each of the market segments and determined a single set of age factors, geography factors, industry factors, and group size factors. These factors are found in Appendix I . The Small Group market age factor is 15% lower and in less costly regions (2% difference) than the Individual market. The Dirigo Individual and Sole Proprietor markets have the highest age factors, approximately 25% higher than the Small Group market.

Using our own pricing tools, we determined the actuarial values of all the products sold in each of the markets. There are approximately 34 products in the Individual market and 250 products in the Small Group market (of which approx. 90 products have more than 100 enrolled members). The average Small Group benefits are richer than the Individual market benefits. We have estimated the actuarial value for Small Group is ~ 25 basis points higher than the Individual market. While all of the Individual market products have some form of deductible, a significant portion of the Small Group market is in products without a deductible.

We have estimated the average deductible for the Small Group market at $1,000 while the average deductible for the Individual market is around $7,000. The benefits for the Small Group market are 50% richer than the benefits for the Individual market. The tables below illustrate the top plan designs in each market:

Individual Market Top Benefit Levels	
Individual Deductible	**Market Share**
$2,250	**4%**
$5,000	**51%**
$10,000	**6%**
$15,000	**15%**

Table 3 – Individual Market Benefit Designs

Small Group Market Top Plan Designs					
Deductible	**Coinsurance**	**Coin Max**	**OV Copay**	**Pharmacy Copay**	**Market Share**
$500	70% IP & OP	$2,000	$20/$25	$10/$25/$40	7.0%
$1,000	70% IP & OP	$2,500	$20/$25	$10/$25/$40	6.7%
$2,500	90%/70%	$1,500	$20	$10/$25/$40	5.1%
$250	90%/70%	$1,000	$20	$10/$25/$40	5.1%
$1,000	90/70	$1,000	$20	$10/$25/$40	4.9%
$0	70% IP & OP	$1,500	$25	$15/$25/$40	6.4%

Table 4 – Small Group Market Benefit Designs

Once we determined each population's rating factors, we normalized the claims costs for each of the populations (Individual, Small Group). Normalizing the claims removes variations due to the underlying demographics, area, benefit, and group size differences. Since industry rating is not used across all carriers and group sizes, we decided to omit this factor from our normalization process. Also, since we did not have data for individual employer groups, we could not assess which groups reach the lower and upper limits of the rating band in the Small Group market. We have assumed that the effect of groups above and below the band offset each other.

3.1.3. Claim Trend and Projection

We assume that the populations are merged in CY 2008. This required us to trend the normalized claims pmpm from CY 2006 to CY 2008 for the Individual market and Small Group market separately. The trend assumptions we developed were based on 3 years of historical information for each population. We were able to review both allowed and net paid (allowed minus member cost share) trends for Anthem and Aetna. We were able to review net paid data for MEGA as they were unable to provide allowed claims data. Also, since MEGA joined the Individual market in 2004 and Dirigo was established in 2005, it was difficult to perform credible trend analyses on these populations due to a lack of data.

The Individual market trends were much higher than Small Group trends due to leverage, a higher percentage of high cost claimants and a higher intensity for high cost claimants. The leveraging impact results from high deductible plans in which the Individual market is concentrated.

We looked at the continuance table data and compared the CY 2006 claims pmpm across the rating populations and annual allowed claims incidence. We observed that the Dirigo Individuals have higher pmpm's in all claim categories. There appears to be adverse selection affecting the Dirigo claims costs. The Individual market excluding Dirigo is only higher than Small Group for members with greater than $15,000 in annual claims. The higher deductibles in the Individual market may deter utilization or attract better risk. The variance in Allowed claims costs between the Small Group and Individual market is approximately 14%. Most of this variance can be explained by the older demographic in the Individual market.

Estimated CY 2006	Allowed Claims PMPM
Small Group	$ 312
Individual Market	$ 357
Total Merged Market	$ 329

Table 5 – CY 2006 Allowed Claims pmpm

The trends assumed for 2007 and 2008 are 8% for group and 16% for the Individual market, resulting in an 11% trend for the Merged market. Table 6 shows a trend analysis performed on all populations. Since the Dirigo and MEGA populations were not credible, we did not consider these populations when developing trend projections. We analyzed the Individual market trend further and found that approximately 4% of the trend is due to the high cost claimants and another 4% is due to the leverage impact. These contributions to trend account for the spread in trend from the Individual market and Small Group market. Once we trended each population separately, we combined the claims pmpm based on market share for CY 2008.

Estimated Overall Net Claims PMPM Trends

	CY 05	CY 06	CY 06 MM	CY 06 Estimated Members	Percent of "Study Population"
Individual w/o Dirigo	16.4%	15.4%	364,447	30,371	22%
Dirigo Individuals		5.5%	47,944	3,995	3%
Dirigo Sole Prop		8.4%	37,025	3,085	2%
Mega		5.9%	40,282	3,357	2%
Total			**489,698**	**40,808**	**30%**
Small Group w/o Dirigo	8.8%	9.8%	707,621	58,968	43%
Aetna	5.9%	3.3%	394,377	32,865	24%
Dirigo Group		7.5%	42,914	3,576	3%
Total			**1,144,912**	**95,409**	**70%**
Grand Total				**136,218**	

Table 6 – Net Claims PMPM Trends

After CY 2008 we have assumed that trends for both populations will converge. Since the trend difference between the populations is due to the high cost claimants, and rate increases will be mitigated for the Individual market, we believe the experience of the population will converge. The claims base impact is a one time impact which occurs in CY 2008. For the base rate change impact, the membership is assumed flat from 2006 forward. The table below shows the claims base impact to premium.

Base Rate Change	CY 04	CY 05	CY 06	CY 07	CY 08	CY 09	CY 10
Individual	2.9%	-0.2%	-4.3%	-9.0%	-13.4%	-13.4%	-13.4%
Small Group	-0.9%	0.1%	1.7%	3.8%	6.1%	6.1%	6.1%

Table 7 – Merged Market Impact

Excluding the high cost claimants, the risk pools of both markets appear similar. If the markets had merged in CY '04, the Individual market would have subsidized the Small Group market. Due to the trends, a market merge after 2005 results in the Small Group market subsidizing the Individual market, with a larger impact each subsequent year.

The claims base impact will then be adjusted for change in group size adjustment (GSA) and conversion factor changes to calculate the resulting premium impact to the various populations. Again, this is a one time impact which will take place in CY 2008.

3.1.4. New Group Size Adjustment and Target MLR

Small Group premium rates include the application of a group size factor. Current Small Group law does not limit the group size adjustment. The group size factor can reflect differences by account size for morbidity, administrative expense, and other risk factors. The market today uses high group size adjustments for small groups and low group size adjustments for larger groups. The bandwidth for group size adjustment in the Small Group

market is approximately 1.34. In other words, the rates for groups of 1-2 are approximately 34% higher than rates for group of 26-50. Under the Merged market scenario, carriers will be required to limit their group size adjustment. We have modeled a 1.10 and 1.20 bandwidth limitation to group size adjustment. We have also performed additional sensitivity analyses with the following bandwidths: 1.34 (current GSA), 1.15, 1.05 and 1.00 (no GSA).

To minimize rate shocks, we kept the GSA for the 10-50 groups the same pre-merger vs. post merger. We then applied the bandwidth to the 10-50 GSA to calculate the GSA for the 1-2 market. For example if the GSA for the 10-50 market is 1.00, the GSA for the 1-2 market segment would be 1.10. We then interpolated between our end points to develop the GSA for the 3-4 and 5-9 market segments. Table 8 shows what the assumed group size adjustments are pre-merger and post merger.

Size	old	new
Indiv	-	1.100
1-2	1.338	1.100
3-4	1.090	1.029
5-9	1.077	1.026
10-50	1.000	1.000

Table 8 – GSA Pre-Merger vs Post Merger 1.10 Bandwidth

Since there is no explicit GSA for the Individual market today, any GSA on this market will bring in additional revenue. In the Merged market, we are assuming the Individual market and groups of 1-2 will have the same GSA. This additional revenue from the Individual market offsets some of the premium increase on the Small Group market. Since we are assuming a bandwidth of 1.10, the premium rates for the existing 1-9 groups decrease. This segment represents approximately 32% of the entire Merged market. Finally, the 10-50 rates increase to make up the shortfall on the 1-9 groups. The extra revenue from the 10-50 also offsets some of the Individual market GSA. Table 9 illustrates the premium impact due to varying GSA limitations.

	Premium Rate Change by Varying Band Width Scenarios					
	1.000	1.050	**1.100**	1.150	1.200	1.338
indiv	0%	3%	**5%**	8%	10%	16%
1-2	-20%	-18%	**-16%**	-14%	-12%	-7%
3-4	-2%	-3%	**-3%**	-4%	-5%	-6%
5-9	-1%	-2%	**-3%**	-4%	-4%	-6%
10-50	7%	4%	**2%**	0%	-2%	-7%

Table 9 – Premium Rate change by Bandwidth scenarios

If the Merged market moves to no GSA (1.00 bandwidth), then there will be no impact to premium rates for the Individual market. Rates for the 1-9 groups decrease, while rates for the 10-50 groups increase. Similarly, if the Merged market continues with the existing GSA (1.338 bandwidth), the extra revenue from the Individual market offsets increases on the Small Group market. For our projection models, we have chosen the 1.10 bandwidth and the 1.20 bandwidth since both scenarios appears to minimize rate shocks across all market

segments and provides significant rate relief to the 1-2 groups with only a small increase to larger size accounts.

The target Medical Loss Ratio (MLR) is considered next. There are some who believe that the target MLR for the Individual market should be lower than the target MLR for the Small Group market. This is due to the assumption that administrative expenses are greater for the Individual market. After a review of the rate filings and regulations and discussions with various carriers in the market, the target MLRs for both market segments appear to be the same. We have assumed a target MLR of 78% (or, 0.78) for both market segments. Since the target MLRs are the same, there will be no cross subsidization of retention charge (which is defined as 1 minus the target MLR) across market segments.

We have performed sensitivity analyses around this assumption and varied the target MLRs for the Individual market keeping the target MLR for the Small Group market at 0.78. We have also assumed a bandwidth of 1.10 for this sensitivity analysis. If the Individual market's target MLR is lower than the Small Group market, then in the Merged market, the Small Group market will subsidize the Individual market's retention charge. If the Individual market's target MLR is higher than the Small Group market, then in the Merged market, the Individual market will subsidize the Small Group market's retention charge. Table 10 illustrates the premium impact due to varying target MLRs using a 1.10 bandwidth.

Prem Rate Change by Varying MLR for Indiv Market w/SG = 0.78			
	0.724	0.780	0.830
indiv	0%	5%	10%
1-2	-14%	-16%	-17%
3-4	-1%	-3%	-5%
5-9	0%	-3%	-4%
10-50	5%	2%	0%

Table 10 – Premium Rate change by Varying MLR

As shown in Table 10, with the Individual market's target MLR at 0.724, the Small Group market subsidizes the Individual market's retention charge. Also, this subsidy eliminates the additional 10% GSA for the Individual market. With the Individual market's target MLR at 0.78, there is no subsidization of retention charge. The additional GSA from the Individual market offsets some of the Small Group premium. Finally, with the Individual market's target MLR at 0.83, the Individual market is subsidizing the Small Group retention charge and also the additional GSA from the Individual market is offsetting additional premium for the Small Group market.

3.1.5. Conversion Factor Analysis

Premium rate development begins with a projected claims pmpm which is then adjusted for administrative expenses, profit margins, and other fees. The conversion factor then converts the pmpm to contract rates by tier. The conversion factor incorporates distribution of

contracts by tier, average family size, and rate ratios by tier. After a review of the rate filings, we have assumed the following rate ratios for the Small Group, Individual, and Merged markets.

Rate Ratios			
	SG	Ind	Merged Mkt
Individual	1.00	1.00	1.00
Dual	2.10	2.00	2.10
EC	1.80	1.80	1.80
Family	3.00	3.00	3.00

Table 11 – Rate Ratios

The resulting conversion factor for the Small Group market is estimated to be 2% higher than the conversion factor for the Individual market. The overall premium impact due to conversion factors is shown in Table 12 below. We assumed the same conversion factor impact for CY 2008, CY 2009, and CY 2010.

Percent of Policies			
	SG	Ind	Merged Mkt
Individual	64.2%	61.2%	63.3%
Dual	11.6%	17.9%	13.5%
EC	9.8%	5.1%	8.3%
Family	14.4%	15.8%	14.9%
Conversion Factor	1.144	1.121	1.133
Premium Impact	**-1.0%**	**1.0%**	

Table 12 – Conversion Factors

There are more dual policies in the Individual market as compared to the Small Group market, while the Small Group market has more Employee Child (EC) policies. The current dual policyholders from the Individual market may experience an additional rate increase if rate ratios move from 2.00 in the Individual market to 2.10 in the Merged market.

3.1.6. Uninsured Enrollment and Health Status Assumptions – Small Group/Individual Market Merger

Once the premium impact is determined for CY 2008, we then estimate the membership joining the pool and membership exiting the pool. We have relied on The Muskie School's research on the price elasticity of demand of health insurance. For the merger analysis we

have used an algorithm that results in a 5% enrollment increase for every 10% premium rate decrease. Similarly, for every 10% premium rate increase there is a 5% enrollment decrease. However, there has not been extensive research on the elasticity of demand for the current Small Group insured market. Due to employer contributions, and the option to switch to lower costing benefits, determining the elasticity of demand for this segment is difficult. Using the Individual market price elasticity as a starting point, we have varied the algorithm by group size.

	Prem % change	Elasticity of Demand
Uninsured Population	-10%	5.0%
Small Group:		
1	10%	-5.0%
2	10%	-5.0%
3-4	10%	-4.5%
5-9	10%	-4.0%
10-25	10%	-2.0%
26-50	10%	-2.0%
Total Small Group		-3.1%

Table 13 – Elasticity of Demand

The Muskie School has also done extensive research on the health status of the uninsured. Their studies show there is no real difference between the uninsured and insured in terms of health status. Their findings do however, demonstrate that the income distribution of the uninsured are similar to the Individual market. We have assumed the health status of the uninsured are 20%-30% healthier than the Merged market insured population. In other words, the health care costs of the average uninsured is 20-30% lower than the average insured. We have also varied our health status assumptions for the newly enrolled uninsured by year. We believe that the higher utilizers would join first and therefore be a higher risk. Since the increase in insured membership is small, the aggressive health status assumptions do not impact overall results significantly. Due to this result, we feel comfortable with our health status assumptions of the uninsured.

We used the member projections and health status assumptions to calculate a premium impact due to member migration. We assume the premium impact due to member migration in CY 2008 will take place in CY 2009. This assumption assumes that Carriers will retrospectively reflect any savings of improved health status in the CY 2009 premiums.

We have then modeled the impact to membership for CY 2009 and CY 2010 by applying the elasticity of demand algorithm to the cumulative impact to premium. Since there is very little impact to premium from CY 2008-CY 2010, the member migration into the pool in future years is minimal.

The final output of the premium impact is shown below in Table 14. In addition, Table 15 illustrates the membership projections. These tables show the impact with the assumption that the GSA limit is 1.10. By CY 2010, we estimate the overall insured Small Group & Individual market will grow by 1348 members. Table 16 and Table 17 show the same

analysis but with a GSA limit of 1.20. In this scenario, we estimate the insured market to group by 915 members.

	Size					
Premium Impact:	Individual	1 - 2	3 - 4	5 - 9	10 - 50	Total SG
Claim Base	-13.4%	6.1%	6.1%	6.1%	6.1%	6.1%
Conversion Factor	1.0%	-1.0%	-1.0%	-1.0%	-1.0%	-1.0%
Group Size Load	5.3%	-16.0%	-3.5%	-2.7%	2.2%	-2.2%
Member Migration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total 2008	**-7.9%**	**-11.7%**	**1.4%**	**2.2%**	**7.4%**	**3.3%**
Member Migration	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
Total 2009	**-8.1%**	**-11.9%**	**1.2%**	**2.0%**	**7.2%**	**3.1%**
Member Migration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total 2010	**-8.1%**	**-11.9%**	**1.2%**	**2.0%**	**7.2%**	**3.1%**

Table 14 – Merged Market Premium Impact 1.10 GSA

	Annual Member Change Indiv. & Small Group Market by Size					
	indiv	1 - 2	3 - 4	5 - 9	10 - 50	Total Ind & SG
2007	-	-	-	-	-	-
2008	1,684	774	(98)	(221)	(911)	1,228
2009	43	14	14	19	24	114
2010	2	1	1	1	1	6

Table 15 – Merged Market Member Impact 1.10 GSA

	Size					
Premium Impact:	Individual	1 - 2	3 - 4	5 - 9	10 - 50	Total SG
Claim Base	-13.4%	6.1%	6.1%	6.1%	6.1%	6.1%
Conversion Factor	1.0%	-1.0%	-1.0%	-1.0%	-1.0%	-1.0%
Group Size Load	10.2%	-12.1%	-4.8%	-4.4%	-1.9%	-4.3%
Member Migration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Premium Impact	**-3.6%**	**-7.6%**	**0.0%**	**0.5%**	**3.0%**	**0.8%**
Member Migration	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
Total 2009	**-3.7%**	**-7.7%**	**-0.1%**	**0.4%**	**2.9%**	**0.7%**
Member Migration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total 2010	**-3.7%**	**-7.7%**	**-0.1%**	**0.4%**	**2.9%**	**0.7%**

Table 16 – Merged Market Premium Impact 1.20 GSA

	Annual Member Change Indiv. & Small Group Market by Size					
	indiv	1 - 2	3 - 4	5 - 9	10 - 50	Total Ind & SG
2007	-	-	-	-	-	-
2008	771	503	-	(46)	(373)	855
2009	22	7	7	10	13	59
2010	1	-	-	-	-	1

Table 17 – Merged Market Member Impact 1.2 GSA

4. Reinsurance Analysis

4.1. Reinsurance Model

To estimate the effect of various reinsurance programs on the Maine health insurance market, Gorman Actuarial has created a reinsurance model. The underlying data that supports the model includes continuance tables. A continuance table captures the summation of each claimant's total claims dollars for a given time period. It also captures associated members months. Table 18 shows an example of a continuance table. It is also important to note that the model utilizes estimated CY 2006 data. The model does not attempt to project costs to future time periods.

The reinsurance model allows the user to choose the attachment points and also the percent of claims that are reinsured. It also allows the user to select whether the reinsurance program is based on Allowed Claims or Paid Claims. Since we did not receive complete "Allowed" data, the model has been set to only display results based on Paid Claims.

Min Allowed	Max Allowed	# of Claimaints	Allowed Claims	Paid Claims	Member Months
-2E+07	-0.01	0	$ -	$ -	0
-0.01	1	1602	$ -	$ -	4407
1	250	1067	$ 104,582	$ 69,269	4153
250	1000	1562	$ 695,985	$ 404,150	7917
1000	2500	1148	$ 1,485,206	$ 899,089	7437
2500	5000	823	$ 2,312,173	$ 1,523,806	6010
5000	10000	517	$ 2,862,927	$ 2,053,996	3900
10000	15000	188	$ 1,806,768	$ 1,413,342	1457
15000	20000	107	$ 1,470,105	$ 1,209,543	833
20000	25000	61	$ 1,081,005	$ 938,141	470
25000	30000	27	$ 569,602	$ 496,394	209
30000	35000	17	$ 432,928	$ 392,931	137
35000	40000	20	$ 587,993	$ 527,806	146
40000	45000	13	$ 434,255	$ 391,902	81
45000	50000	17	$ 640,096	$ 581,489	133
50000	55000	14	$ 580,859	$ 537,466	96
55000	60000	11	$ 496,891	$ 468,744	92
60000	65000	8	$ 394,196	$ 371,787	63
65000	70000	4	$ 212,416	$ 205,728	36
70000	75000	3	$ 167,314	$ 158,605	23
75000	80000	5	$ 307,098	$ 294,853	38
80000	85000	2	$ 131,088	$ 125,029	19
85000	90000	4	$ 279,352	$ 271,086	27
90000	95000	3	$ 221,007	$ 213,902	22
95000	100000	0	$ -	$ -	0
100000	150000	10	$ 985,126	$ 951,046	71
150000	200000	8	$ 1,164,263	$ 1,136,822	61
200000	250000	2	$ 323,748	$ 319,729	12
250000	300000	1	$ 224,983	$ 219,376	6
300000	350000	1	$ 257,241	$ 255,590	9
350000	400000	0	$ -	$ -	0
400000	450000	0	$ -	$ -	0
450000	500000	0	$ -	$ -	0
500000	750000	0	$ -	$ -	0
750000	1000000	0	$ -	$ -	0
1000000	2000000	0	$ -	$ -	0
2000000	2E+08	0	$ -	$ -	0

Table 18 – Continuance Table Example

4.1.1. Reinsurance Model Inputs

The reinsurance model allows the user to select parameters that model the structure of the program.

The following parameters can be modified by the user:

- Attachment Point 1 (AP1)

    - This is the value above which a claimant's aggregated claims will be reinsured. Each of the Range values from the Continuance Table are selectable using the pull-down menu.
- Attachment Point 2 (AP2)
    - This is the value below which a claimant's aggregated claims will be reinsured, subject to the threshold of AP1. AP2 must be greater than AP1. In the case where no "Reinsurance Corridor" is required (that is, the reinsurance program applies to all aggregated claims strictly greater than AP1), AP2 should be set to the largest selectable value. Each of the Range values from the Continuance Table are selectable using the pull-down menu.
- Percent of Claims Reinsured
    - This is a percentage between 0 and 100 that specifies what percent of eligible aggregated claims are reinsured. That is, all eligible claims dollars will be multiplied by this factor to calculate the total dollars reinsured.
- "Allowed Claims" or "Paid Claims"
    - The user can select whether the reinsurance program is based on either Allowed or Paid claims. Note that the Range values in the Continuance Table are based on the selected type of claims as is the total claims dollars. Further note that MEGA was unable to provide claims data based on Allowed Claims, therefore the model can only accurately model the Small Group market using Allowed claims. As such, this feature has been set to only display "Paid" dollars for this study.

4.1.2. Reinsurance Model Results

The reinsurance model calculates the following values based on the user selected inputs and the underlying claims data:

- Reinsurance Dollars Required
    - This is the total dollars required to fund the reinsurance program. The formula is:

Reinsurance Dollars Required = [(Sum of all aggregated claims > AP1 and <= AP2) - ((Number of Claimants > AP1 and <= AP2) * (AP1)) + ((Number of Claimants > AP2)*(AP2 – AP1))] * [Percentage of Claims Reinsured]

The "Reinsurance Dollars Required" value is based on the entire data set available for the analysis. Since the data covered is less than 100% of the market, the "Reinsurance Dollars Required, Adjusted for 100% of Maine Market" is also calculated and provided in the model:

Reinsurance Dollars Required for Entire Market = [Total Dollars Required] / [Percent Data Coverage]

- Claimants Affected

    - This is the number of claimants that are subject to reinsurance. This value is provided for only the data used for the analysis, and then adjusted to represent 100% of the Maine market.
- % of Claims Impact
    - This is the percent of reinsurance dollars required compared to all claims dollars for the population:

% of Claims Impact = [Reinsurance Dollars Required]/ [All Claims Dollars]

- % of Premium Impact
    - This is the percent of reinsurance dollars required compared to all premium dollars for the population:

% of Premium Impact = ([Reinsurance Dollars Required]/ [All Claims Dollars])*Target MLR

4.1.3. Funding Mechanisms

The reinsurance model calculates the following values based on the user selected inputs, the underlying claims data, and the market demographics.

- Member Assessment (PMPM)
    - This is the dollar amount that would be assessed to each member (on a PMPM basis), in order to recoup the cost of the reinsurance program.

Member Assessment (PMPM) = [Reinsurance Dollars Required for Entire Market] / ([All Insured]*12)

- Percent Premium Charge
    - This is the percent premium charge in order to recoup the cost of the reinsurance program.

Percent Premium Charge = [Reinsurance Dollars Required for Entire Market] / ([All Premium Dollars)

    - The Member Assessment and Percent Premium Charge are given for three scenarios:
        - Assuming that the assessment is spread across all insureds in the Maine Market
        - Assuming that the assessment is spread across all insureds in the Maine Market, except those in the stop-loss category
        - Assuming that the assessment is spread across all insureds in the Maine Small Group and Individual Markets

- Note that these assessments are calculated based on the number of insureds and collected premium reported in the 2005 Maine 945 filings, and adjusted to represent the actual market to the greatest extent possible.

4.1.4. Reinsurance Summary Info

The reinsurance model calculates the following values based on the user selected inputs and the underlying claims data and provides them to the user for informational purposes:

- Total Claims Dollars
- Total Claimants
- Total Member Months

These are summary values based on the parameters chosen by the user, and are provided for only the data used for the analysis, and then adjusted to represent 100% of the Maine market.

4.1.5. Market Summary Info

The following values are based on the 2005 Maine 945 filings and are provided to the user for informational purposes and are used in the model:

- Total premium for insureds in Maine
- Total insureds in Maine
- Market share represented by the data for the selected population

4.2. Reinsurance Modeling of Several Maine Market Segments

We have performed many reinsurance analyses for the various populations. One analysis is based solely on the current Individual market, one is based solely on the Small Group market, and one is based on the merged Small Group and Individual market.

The reinsurance model has been designed to allow the user flexibility in modeling proposed reinsurance programs. As described in Section 4.1.1, the user can select parameters that represent the desired reinsurance program structure.

4.2.1. Reinsurance Model of the Current Individual Market

The current Maine Individual market is dominated by a single carrier, Anthem Blue Cross & Blue Shield, which insures approximately 89% of the market. This market share includes the Dirigo Individual and Sole Proprietor market segments. MEGA is the only other major carrier and they represent approximately 7% of the market. Using member level data for 2006 from Anthem and projected member level data (base period YE 9/06) from MEGA, a continuance table representing the 2006 Maine Individual market was created.

First the MEGA data was projected from the 10/05 through 9/06 time period to CY 2006. This was done by applying a trend of 16% per annum for three months.

The modified MEGA member data was then combined with the Anthem 2006 member data. The resulting continuance table is used as the basis for the Individual Reinsurance Model and the examples in Section 4.2.1.1.

4.2.1.1. Individual Market Reinsurance Examples

Table 19 shows examples of various reinsurance programs based on the Maine Individual market. Reinsurance dollars (in millions) are for 100% reinsurance, and have been adjusted to account for 100% of the Maine market. Percent premium represents reinsured claims as a percent of total premium for the population. For example, to reinsure claims in excess of $25,000, the required funding is approximately $40 million and premium reductions would be approximately 29%.

Claims in Excess of	Claims Less Than	Reinsurance Dollars at 100% ($000,000)	Premium Impact
25,000	Infinity	$ 40	-29%
50,000	Infinity	$ 25	-18%
75,000	Infinity	$ 18	-13%
100,000	Infinity	$ 13	-9%
200,000	Infinity	$ 5	-4%
5,000	75,000	$ 57	-41%
35,000	75,000	$ 15	-11%
50,000	100,000	$ 12	-8%

Table 19 – Reinsurance for Individual Market (CY 2006)

Table 20 and Table 21 shows example of reinsurance programs for the Individual market that require either $15M or $30M of funding.

Claims in Excess of	Claims Less Than	Percent Reinsured	Reinsurance Dollars ($000,000)	Premium Impact
40,000	Infinity	50%	$ 14.8	-10.7%
90,000	Infinity	100%	$ 14.7	-10.6%
35,000	75,000	100%	$ 15.0	-10.8%
50,000	200,000	80%	$ 16.0	-11.5%

Table 20 – Reinsurance for Individual Market at $15M funding (CY 2006)

Claims in Excess of	Claims Less Than	Percent Reinsured	Reinsurance Dollars ($000,000)	Premium Impact
10,000	Infinity	50%	$ 29.6	-21.3%
30,000	Infinity	80%	$ 28.8	-20.7%
40,000	Infinity	100%	$ 29.6	-21.3%
5,000	20,000	100%	$ 29.5	-21.2%
5,000	75,000	50%	$ 28.5	-20.5%

Table 21 – Reinsurance for Individual Market at $30M funding (CY 2006)

The results above translated to impact on premium are -11% for the $15M reinsurance program and -21% and for the $30M program. This is a one time impact in the year that reinsurance is introduced.

4.2.1.2. Individual Market Reinsurance Member Projections

We also calculated the member migration resulting from the premium decrease from introducing reinsurance. Using the elasticity of demand assumptions from the Merged market analysis (see Section 3.1.6), we estimated the following increases in enrollment the Individual market:

Member Change:	CY 08
Reinsurance $15M	2,308
Reinsurance $30M	4,533

Table 22 – Member Migration Individual Market

The member migration further reduces premium as the relatively healthier uninsured join the Individual market. The better experience further reduces the claim component of premium as follows:

Premium Impact Member Migration	CY 08
Reinsurance $15M	-1.6%
Reinsurance $30M	-3.0%

Table 23 – Premium Impact of Member Migration

The premium impact is significant only in the initial year of introduction. It is also important to note that the leveraging impact on premium trend of level funding the fixed reinsurance amounts of $15M and $30M are 1.7% and 3.7% respectively in the 1st year following the introduction of reinsurance. The leveraging impact then lessens in subsequent years.

4.2.2. Reinsurance Model of the Current Small Group Market

The current Maine Small Group market is dominated by two carriers. Anthem has approximately 56% of the market and Aetna has approximately 26% of the Small Group market. The data also included the Small Group Dirigo population. For this analysis we had data for approximately 82% of the market.

Each of the carriers provided Continuance Tables that had ranges that were based on Allowed Claims and Paid Claims. Aetna was unable to provide data for 2006, so the continuance tables for 2005 were projected to 2006 by applying a trend of 8% per annum:

The modified Aetna data was then combined with the Anthem 2006 data. The resulting continuance table is used as the basis for the Small Group Reinsurance Model and the examples in Section 4.2.2.1.

4.2.2.1. Small Group Market Reinsurance Examples

Table 24 shows examples of various reinsurance programs based on the Maine Small Group market. Reinsurance dollars (in millions) are for 100% reinsurance, and have been adjusted to account for 100% of the Maine market. Percent premium represents reinsured claims as a percent of total premium for the population.

Claims in Excess of	Claims Less Than	Reinsurance Dollars at 100% ($000,000)	Premium Impact
25,000	Infinity	$ 70	-16%
50,000	Infinity	$ 41	-9%
75,000	Infinity	$ 27	-6%
100,000	Infinity	$ 20	-5%
200,000	Infinity	$ 8	-2%
5,000	75,000	$ 138	-32%
35,000	75,000	$ 28	-6%
50,000	100,000	$ 21	-5%

Table 24 – Reinsurance for Small Group Market (CY 2006)

4.2.3. Reinsurance Model of the Merged Market

The Merged market consists of the combination of the Maine Individual and Small Group markets.

4.2.3.1. Merged Market Reinsurance Examples

Table 25 shows examples of various reinsurance programs based on the combined Maine Individual and Small Group markets. Reinsurance dollars (in millions) are for 100%

reinsurance, and have been adjusted to account for 100% of the Maine market. Percent premium represents reinsured claims as a percent of total premium for the population. To amount required to fund a reinsurance program that reinsures 100% of claims in excess of $25,000 is $112 million. Note that this amount is three times as large as the same program for the Individual market.

Claims in Excess of	Claims Less Than	Reinsurance Dollars at 100% ($000,000)	Premium Impact
25,000	Infinity	$ 112	-20%
50,000	Infinity	$ 67	-12%
75,000	Infinity	$ 46	-8%
100,000	Infinity	$ 34	-6%
200,000	Infinity	$ 13	-2%
5,000	75,000	$ 196	-34%
35,000	75,000	$ 43	-8%
50,000	100,000	$ 33	-6%

Table 25 – Reinsurance for Merged Market (CY 2006)

Table 26 and Table 27 shows example of reinsurance programs for the Merged market that require either $15M or $30M.

Claims in Excess of	Claims Less Than	Percent Reinsured	Reinsurance Dollars ($000,000)	Premium Impact
150,000	Infinity	80%	$ 15.8	-2.8%
200,000	Infinity	100%	$ 12.7	-2.2%
30,000	50,000	50%	$ 16.3	-2.9%
50,000	70,000	90%	$ 16.0	-2.8%

Table 26 – Reinsurance for Merged Market at $15M funding (CY 2006)

Claims in Excess of	Claims Less Than	Percent Reinsured	Reinsurance Dollars ($000,000)	Premium Impact
90,000	Infinity	80%	$ 30.3	-5.3%
100,000	Infinity	90%	$ 30.3	-5.3%
40,000	75,000	90%	$ 30.9	-5.4%
50,000	100,000	90%	$ 29.8	-5.2%

Table 27 – Reinsurance for Merged Market at $30M funding (CY 2006)

The results above translated to impact on premium are -2.6% for the $15M reinsurance program and -5.2% and for the $30M program. This is a one time impact in the year that reinsurance is introduced.

4.2.3.2. Merged Market Reinsurance Member Projections

We also calculated the member migration resulting from the premium decrease resulting from reinsurance. Using the elasticity of demand assumptions from the Merged market analysis (see Section 3.1.6), we estimated the following increases in enrollment in the Merged market:

Member Change:	CY 08
Reinsurance $15M	1,455
Reinsurance $30M	2,911

Table 28 – Member Migration Merged Market

The member migration further reduces premium as the relatively healthier uninsured join the Merged market. The better experience further reduces the claim component of premium as follows:

Premium Impact Member Migration	CY 08
Reinsurance $15M	-0.3%
Reinsurance $30M	-0.4%

Table 29 – Premium Impact of Member Migration

The premium impact is significant only in the initial year of introduction. It is also important to note that the leveraging impact on premium trend of level funding the fixed reinsurance amounts of $15M and $30M are 0.3% and 0.5% respectively in the 1st year following the introduction of reinsurance. The leveraging impact then lessens in subsequent years.

5. High Risk Pool Analysis

5.1. Background

The introduction of a high risk pool into the Maine market will require other changes to the current Individual market. These changes will ultimately separate the current market into three populations and will add some further complexity in the administration and subsidization of the market.

One of the changes to the current market is to allow carriers to use a health questionnaire to assess the risk of a prospective member. Depending on how the high risk model is structured, the questionnaire can be used to assist with setting a premium rate for that individual or it can just be used to deny individuals coverage in the standard Individual market. Since Maine is currently a state that requires guaranteed renewability, we envision that the current block will become a "closed block". This means that the "closed block" will be subject to the old rating rules and no new business will be sold. When the High Risk Pool

is implemented and health underwriting is allowed, the members from the closed block can migrate to the new Individual market with health underwriting, which we will refer to as the "open market." Those members that are denied in the open market or receive rates that are high will then be eligible to apply to the high risk pool. Other eligibility requirements could include having a specified high cost condition and HIPAA eligibility. Thus, the 3 populations we were referring to earlier are the closed block (CB), the open block (OB), and the high risk pool (HRP).

5.2. High Risk Pool State Comparisons

We have done extensive research on high risk pools implemented in several states. We have highlighted those states that had guaranteed issue and then switched to a High Risk Pool Model. Since Maine also requires guaranteed issue, we thought these states would be of interest. However, no states are alike in administration of the HRP and Maine will not be an exception.

5.2.1.1. Washington State Health Insurance Plan (WSHIP)

WSHIP in its current state began in 1999. In Washington, carriers are allowed to administer a health questionnaire. The questionnaire is only allowed to deny members. Health status as a rating factor is not allowed. The questionnaire and scoring tool are designed by the state and are meant to target the highest costing 8%. To this date, WA has the highest HRP costs and one of the highest medical loss ratios (3.00) in the country. Premiums for HRP members are set at 125-150% of the standard rates. Discounts are given to low income elderly as well as for persistency. Washington also offers a Medicare product.

5.2.1.2. New Hampshire Health Plan (NHHP)

NHHP began in July of 2002. In New Hampshire, carriers are allowed to administer a health questionnaire. The questionnaire is used to deny members as well as use a health status rating factor in setting premium rates. New Hampshire had a small Individual market block before the implementation of the NHHP. This block was closed off (approximately 7,000) and a new block was introduced.[8] This closed block is subsidized by the state. Today, New Hampshire has around 900 members in its HRP and an overall medical loss ratio around 1.5.

5.2.1.3. Kentucky Access

Kentucky Access became operational in January, 2001. Kentucky had required guaranteed issue but also allowed the use of health status when developing rates. With the implementation of Kentucky Access, carriers were now allowed to deny coverage based on information from the health questionnaire. Since there was no change in rating rules for the

[8] **"**Supplemental Report Of The 2001-2004 Health Insurance Market In New Hampshire"

Individual market, the current market did not need to be "closed". The medical loss ratio for Kentucky Access has ranged from 1.5 to 2.00.

Table 30 outlines the Individual market rating rules for the 3 states. All three states have a significantly wide age band. Other things to note are that the state of Washington does not allow health status in premium rate development and Kentucky allows a change in health status adjustment from 1 year to the next.

	NH	WA	KY
Age Band	4 to 1 starting at age 19	3.75 to 1	3 to 1
Health Status	1.5 to 1	none	1.25 to 1
Overall Band	3.5 to 1	none	5 to 1
Change in Health Status	none	none	10%
Area	unknown	Y	Y
Family Size	none	Y	Y
Industry/Occupation			1.15 to 1

Table 30 – Individual Market Rating Rules

We have also summarized financial data for the high risk pools of the three states. Table 31 outlines membership, premium, claims and assessment for the three states. As shown, the medical loss ratios range from 1.3 to 3.7. The average medical loss ratio for the country is approximately 1.5. Also, it is interesting to note that the Individual market enrollment increases over the time periods shown for all three states. Upon further investigation, we have observed that there may be a shift of the Small Group market to the Individual market in New Hampshire and Kentucky. Finally, the high risk pool membership is relatively small (1% to 3%) when compared to the Individual market membership.

	Washington		New Hampshire		Kentucky	
	CY 2001	CY 2005	CY 2002	CY 2005*	CY 2002	CY 2005
HRP Members	2062	3087	63	638	843	3612
HRP Premium PMPM	$ 256.83	$ 471.98	$ 73.08	$ 386.31	$ 55.56	$ 398.80
HRP Claims PMPM	$ 951.35	$ 1,380.47	$ 216.23	$ 508.93	$ 113.59	$ 731.10
HRP MLR	3.70	2.92	2.96	1.32	2.04	1.83
HRP Assessment $M	$ 16	$ 38	$ 4	$ 5	$ 9	$ 10
Individual Market Members	142,664	223,320	7,119	36,143	90,462	139,061
Percent	1.4%	1.4%	0.9%	1.8%	0.9%	2.6%

*Individual Market Members - CY 04

Table 31 – High Risk Pool Financials[9]

Most membership is enrolled in plan designs with either a low deductible, $400 to $500, or in deductibles that range from $1,000 to $5,000. Approximately 70% of New Hampshire's

[9] "Comprehensive Health Insurance for High Risk Individuals: A State by State Analysis"

HRP membership is in deductible plans that range from $1,000 to $2,500. Washington and Kentucky have about a quarter of their membership in a low deductible plan. Most of the members are enrolled in PPO type products.

	NH ~ 70%	WA ~25%	WA ~28%	KY ~ 40%	KY ~ 28%
Product	PPO	PPO	PPO	PPO	PPO
Deductible	1000-2500	500	1000-5000	1500	400
Coinsurance	20%	20%	20%	20%	20%
OOP Max	3500-5000	1000	1650-10000	4500	1900

Table 32 – High Risk Pool Plan Designs

5.3. High Risk Pool Model

5.3.1.1. Health Status Assumptions

One of the key assumptions in developing the high risk pool model was to determine a sound method to assign health status to the member. Since we did not have detailed claims data with diagnoses code for every member in the Individual market, we could not design an algorithm to assess health status. Furthermore, this type of modeling would take time and resources that were not within the scope of this project. Due to our limitations, we sought out alternative methods to assess health status for each member

5.3.1.2. Highest Costing Members

Since Washington attempts to identify the "highest costing" 8% of the market for their HRP, we analyzed our data to see what the costs look like for the highest costing members. The highest claims pmpm for a HRP in the country is for the state of Washington with a cost of $1,400 for approx. 3,000 members. For Maine, the highest costing 8% reflects a cost of $1,900 with about 4,500 members. As shown in Table 33, we also looked at the highest costing 1% in Maine, which results shows a paid claims per member per month of $8,400.

It was obvious to us with this analysis, that we could not use this information to assess health status or to assign who would join the High Risk Pool. First, the costs for the highest costing members are too high. This suggests that the health questionnaire is not a perfect tool to assess health status and does not necessarily assign a high score to a high risk individual. Second, if we targeted the highest costing 8% like Washington, the $1,900 cost pmpm is similar to Washington but the volume of members is too high (4,500 in Maine vs 3,000 in WA).

The table below also shows that the highest costing 10% represent around 93% of the Individual market costs. This suggests that the costs of the Individual market can be attributed to a very small percent of the population. This also suggests that the members

enrolled in the high deductible plans are skewing our distribution of costs. To further investigate our theories, we reviewed allowed claims data for the highest costing 10%.

Highest Costing	Percent of Paid Claims	Net Paid Claims PMPM	Claimants
1%	48.8%	$ 8,381.63	559
2%	63.1%	$ 5,410.02	1,118
3%	71.6%	$ 4,080.30	1,676
4%	77.4%	$ 3,304.24	2,236
5%	81.6%	$ 2,803.57	2,793
6%	84.9%	$ 2,431.63	3,352
7%	87.5%	$ 2,159.38	3,910
8%	89.5%	$ 1,939.52	4,470
9%	91.2%	$ 1,764.23	5,029
10%	92.6%	$ 1,619.76	5,589

Table 33 – CY 2006 Highest Costing Members Individual Market Paid Claims

Table 34 illustrates the highest costing members on an allowed basis. This shows that the highest costing 10% represent approximately 75% of allowed costs. In general, most populations exhibit the 80/20 rule where 20% of the population represents 80% of the costs. We reviewed the highest costing 20% for the Individual market and it represented approximately 88% of costs. We also reviewed the highest costing 20% for the Small Group market which did represent approximately 80% of costs. Again, this suggests that there are fewer members in the Individual market that incur a greater percentage of costs than a standard population.

Highest Costing	Percent of Allowed Claims	Allowed Claims PMPM	Claimants
1%	32.8%	$ 9,470.03	506
2%	44.4%	$ 6,407.57	1,012
3%	51.7%	$ 4,955.90	1,517
4%	57.2%	$ 4,117.16	2,023
5%	61.5%	$ 3,550.91	2,529
6%	65.1%	$ 3,128.15	3,035
7%	57.2%	$ 4,117.16	3,540
8%	70.8%	$ 2,553.49	4,046
9%	73.1%	$ 2,344.17	4,552
10%	75.2%	$ 2,172.20	5,058

Table 34 – CY 2006 Highest Costing Members Individual Market Allowed Claims

5.3.1.3. High Cost Claimants Review

We also reviewed high cost claimant information for the Individual market. We defined high cost claimants as members who incurred claims greater than $50,000 in a given year. The number of high cost claimants over a 3 year period increased from 0.9% to 1.2% of the total population. The cost per claimant increased 14% over the three year period. The high cost claimants are also generally older than the Individual market as a whole. Approximately 75% of the high cost claimants are over the age of 50.

We also analyzed the diagnoses codes of the high cost claimants. We were able to summarize our information at a high level. We found that approximately 41% of the cases were cancer cases. This results in a 60% increase in cancer cases in 1 year. Since our analysis is based on a small cohort, this increase could be attributed to a data anomaly. We did not have enough information to assess the reason for this increase. We also found that 12% of cases were due to heart related diseases, 2% due to diabetes, and 1.5% for pancreas related sicknesses.

While this information gave us insight into the high cost claimant population, we did not find a way to use this information to develop health status assumptions for the high risk pool model.

5.3.1.4. Health Status Research

We reviewed other studies that illustrated distributions of assignment of health status by a carrier. One study performed in CY 2001 by Pollitz, Sorian, and Thomas included creating 7 fictitious applicants, all of whom had a preexisting condition. The applicants were sent to 60 different insurance companies for a health status decision. One major finding was that "different insurers in the same market treated identical applicants very differently; someone rejected by some carriers might receive a "clean" offer—unrestricted coverage at standard rates—from others"[10]. This suggests that assignment of health status is not consistent and there is some randomness to it.

Another study was a survey performed by AHIP (America's Health Insurance Plans) on 11 carriers. The total study sample was approximately 500,000 members applying for Individual health insurance. This survey summarized applicants into 5 categories of risk. The results of this study are shown in Table 35. The percentages do not add up to 100 because there is some overlap between the categories. What is interesting to note, is that approximately 12% of applicants in this study are denied and 71% of applicants receive a standard rate.

[10]Mark Merlis, "Fundamentals of Underwriting in the Nongroup Health Insurance Market: Access to Coverage and Options for Reform"

AHIP Survey -11 insurers 500K mem	% of members applying for Individual HI
Standard Rate	71.2%
Extra Premium	5.9%
Exclusion Waiver	13.5%
Exclusion Waiver & Extra Premium	2.8%
Denied	11.8%

Table 35 – AHIP Survey of Health Questionnaire Results[11]

Another study performed by Pauly and Nichols also categorized applicants for Individual health insurance into various categories of premium surcharge. The results of this study are shown in Table 36. What is interesting to note here is that 14% of applicants are denied and 57% receive a standard rate.

Pauly & Nichols Study	% of members applying for Individual HI
Standard Rate	57%
1.25 Surcharge	21%
1.77 Surcharge	6%
>1.77 Surcharge	3%
Denied	14%

Table 36 – Pauly & Nichols Study of Health Questionnaire Results[12]

5.3.1.5. Health Status Model Assumptions

Based on our research and analysis of the Individual market population, we developed assumptions for our high risk pool model. These assumptions are outlined in Table 37. We have assumed a different distribution of Health Status for subscribers with less than $50,000 in claims and for subscribers with greater than $50,000 in claims (high cost claimants or HCC). We are also assuming that the health status rating factor will range from 1.00 to 1.50 and assigned these health status factors to the various categories of risk.

Assumed Distribution	Assumed Factor	Excluding HCC	HCC
Standard	1.00	68%	40%
Substandard 1	1.15	6%	10%
Substandard 2	1.30	13%	24%
Substandard 3	1.50	3%	5%
Denied		11%	21%

[11] Ibid
[12] Ibid

Table 37 – Health Status Distribution Assumptions for the High Risk Pool Model

There are a few limitations to these distribution assumptions that should be mentioned here. First, we did not vary our distributions of risk by age. This may cause some bias in that there may be a greater proportion of a younger demographic in our substandard risk populations. Another limitation to these distribution assumptions is that we only varied our distributions for subscribers with less than $50,000 of annual claims and subscribers greater than $50,000 of annual claims. We could have developed distribution assumptions for more populations (e.g. subscribers with claims costs between $20,000 and $50,000). Due to these limitations, there is some conservatism in our estimates of premium reduction for the "Open Block."

5.3.2. Age Factor Assumptions

Along with assumptions concerning the health status factor, we also developed assumptions for the use of age factor in the new Individual market ("open block"). We assumed the age factor limitations change from 1.5 to 1.0, to 4.0 to 1.0. We also assumed that the Individual market today uses subscriber age factors to adjust their premium rates and the new Individual market would use member age factors to adjust their premium. Since many of the High Risk Pools in the country have rates at the member age level, we thought this approach was reasonable. However, there are states with High Risk Pools today that use subscriber rates and not member rates.

We developed member age factors based on the Maine data. Since the population is small, the credibility of these factors were in question. We then reviewed High Risk Pool rates by member age for Washington, New Hampshire, and Kentucky. We assumed that the slope of rates for the High Risk Pool are representative of the slope of rates by age for the Individual market. We then smoothed our new Maine member age factors based on the slope of High Risk Pool rates.

We then utilized the old subscriber age factors, the old tier factors and the new member age factors to calculate a premium impact to each subscriber. The age factors and tiers assumed for this part of the analysis is shown in Appendix I .

Our analysis assumes that entire families will migrate to the High Risk Pool. Since we developed premium impacts at the subscriber level, it limited our ability to model migration assumptions for members separating from their families. Also, since we are using member age factors, some of the premium impacts may be overstated for the larger families.

5.3.3. Other High Risk Pool Assumptions

As mentioned earlier, with the implementation of the High Risk Pool, we are assuming that the current Individual market members will be separated into one of three populations, the Open Block (OB), the Closed Block (CB), and the High Risk Pool (HRP). Since Maine has guaranteed renewability, we have assumed that the current Individual market will be "closed" and no new business will be sold. The current "Closed Block" will be subject to the old rating rules. Based on our data and some high level modeling, we are assuming that the market will anticipate a 30% reduction in overlying claims costs in the Open Block. This reflects that the highest costing members are either staying in the Closed Block or moving to the High Risk Pool. Finally, we are assuming the premium for the High Risk Pool will be 1.25 times the standard rate in the Open Block. Current High Risk Pool pricing practice ranges from 1.10 to 2.00 times the standard rate. Since there is an older demographic in the High Risk Pool, we have adjusted the High Risk Pool premium for age using the demographics for the WA and the NH High Risk Pool.

5.3.4. Member Migration Assumptions

We have developed member migration assumptions for the current Individual market. With the implementation of health underwriting, the changes in age factor band, and the High Risk Pool, there will be significant premium impacts to the current Individual market. Each person will have the choice of applying to the OB or staying in the CB. Furthermore, upon denial or high premium quotes from the OB, each Individual will have the option of applying to the HRP.

We have made the following assumptions for year 1:

- Denied Subscribers
  - 90% will stay in CB
  - 10% will move to HRP
- For subscribers whose HRP premium < OB premium
  - 70% will stay in CB
  - 30% will move to HRP
- For subscribers whose premium reduction will be 15% or more in the OB
  - Everyone moves to OB
- Everyone else remains in the CB

5.3.5. High Risk Pool Year 1 Results

After calculating premium impacts and utilizing membership migration assumptions, the current Individual market is separated into three populations. These results are shown in Table 38. As shown, the new Individual market (OB) has 26,000 members with an average claims pmpm of $153.80. This is a base reduction of 29% which is quite close to the market assumptions of a 30% reduction. The CB membership includes ~13,000 members and its average claims pmpm is $287.80 which results in a 34% base increase. There are about 900 members in the HRP which is about 2% of the Individual market. Finally the claims pmpm

for the HRP is about 6 times greater than the OB. All results appear reasonable and in line with what other states were experiencing with a HRP.

	Estimated Members	Estimated MM	Net Claims PMPM	Claims Base Impact
Open Block	25,885	310,617	$ 153.80	-29%
High Risk Pool	887	10,647	$ 909.58	
Closed Block	13,425	161,097	$ 287.80	34%
Total	40,197	482,361	$ 215.23	

Table 38 – Year 1 High Risk Pool Results- based on CY 2006 data

In order for us to model the above results, we had to calculate what the premium impact would be to the current Individual market if everyone applied to the OB. The results of this analysis are shown in Figure 1. Approximately 48% of the Individual market would receive a premium reduction from 20% to 50%. Approximately 2.9% of the market would receive a premium increase of 20% to 50%. Finally, approximately 11% of the population would be denied.

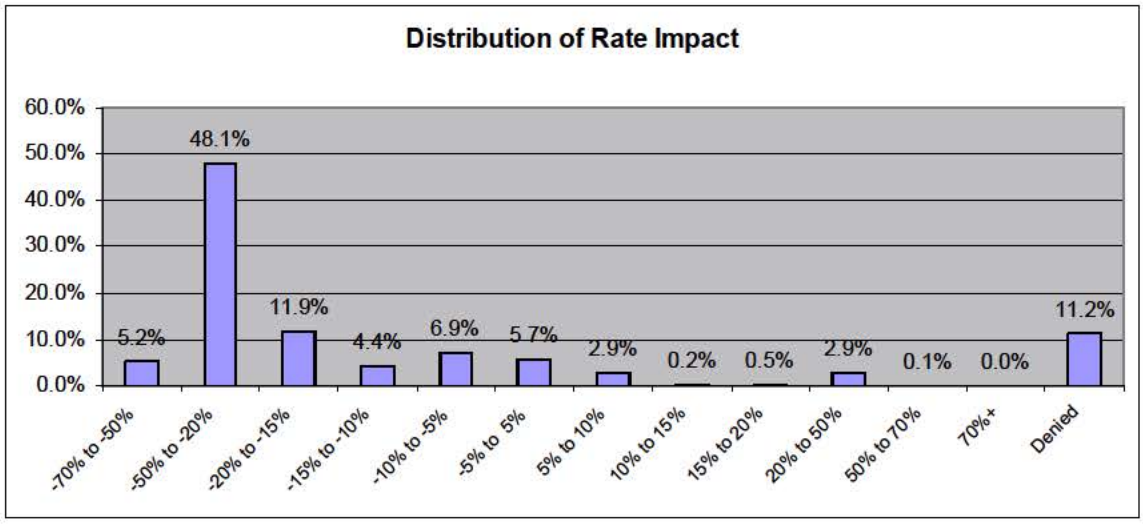

Figure 1 – Year 1 High Risk Pool Results- based on CY 2006 data

5.3.6. High Risk Pool Closed Block Assumptions

Since we are assuming that the current Individual market will be closed, some members from this market will be migrating to the OB. Typically these members will have a better than average health status and will be a younger demographic. Due to this migration, the current CB will begin to "death spiral." In other words, the unhealthy risk will remain and there will be fewer healthy people left in the CB to subsidize the unhealthy risk. We have modeled our results two ways. One is that the CB is not subsidized and the death spiral happens quickly,

and members will experience significant rate shocks. The second scenario includes a subsidization for the CB. This scenario limits the rate shocks to 15% to 20% but also requires additional funding. Finally, the second scenario will slow down the migration from the CB to the OB.

5.3.6.1. Closed Block Member Assumptions

Along with subsidization assumptions we also developed assumptions on member migration into the OB and their corresponding health status. These assumptions are outlined below.

Closed Block Not Subsidized:

- Assumes members in the CB will experience significant rate shocks.
- In Year 2, assumes 65% of the CB will migrate into the OB.
- In Year 3, assumes 30% of the CB will migrate into the OB.
- Health Status Assumption:
    - Assumed that the members migrating to the OB are 40% better than the existing CB average.
    - Performed Sensitivity Analysis on the health status assumption.

Closed Block Subsidized:

- Assumes members in the CB will experience 15%-20% rate shocks.
- In Year 2, assumes 30% of CB will migrate into the OB.
- In Year 3, assumes 40% of CB will migrate into the OB.
- Health Status Assumption
    - Assumed that the members migrating to the OB are 40% better than the existing CB average.
    - Performed Sensitivity Analysis on the health status assumption.

5.3.7. Uninsured Assumptions

Since the OB will experience significant rate decreases, we are also assuming new insured members will join the pool. Like our previous analyses, we are assuming the health status of the uninsured is approximately 20% better than the insured Merged market. Also, we are assuming a price elasticity of demand algorithm that is linear for changes up to -20%, and non-linear for deep discounts or increases, as shown in Table 39.

Premium Reduction	% of Member Uptake
-10%	5%
-20%	10%
-30%	14%
-40%	17%
-50%	19%

Table 39 – Elasticity of Demand for Individual Market

5.3.8. High Risk Pool Assumptions

We assumed modest increases in the HRP for years 2 and 3. We have assumed a greater migration into the HRP when the CB is not subsidized. Finally, we have adjusted the required funding for the HRP and for the CB for trend in Years 2 and 3.

5.4. High Risk Pool Results

Table 40 shows the results of our modeling when the CB is not subsidized. The premium impact ranges from -29% to -24% for the OB. There are approximately 39,500 members in the OB and 3,500 newly insured members. We are showing that the HRP membership grows from 900 to 1,100 members and the required funding ranges from $7M to $15M. Finally, since the CB is not subsidized, the resulting increases are significant and range from 34% to 166%. Membership in this block decreases from 13,400 to 3,000.

Health Status for those migrating from CB to OB	CB Not Subsidized		
-40%	Year 1	Year 2	Year 3
Premium Impact to Open Block	-29%	-27%	-24%
Cumulative Uninsured Enrollment		3,448	3,448
Total Cumulative Open Block Enrollment	**25,885**	**38,183**	**39,528**
Premium Impact to Closed Block	34%	133%	166%
Cumulative Closed Block Enrollment	**13,425**	**4,483**	**2,981**
Cumulative High Risk Pool Enrollment	**887**	**979**	**1,136**
Total Cumulative Insured Population	**40,197**	**43,645**	**43,645**
Annual High Risk Pool Funding ($M)	**$ (6.9)**	**$ (8.8)**	**$ (14.6)**

Table 40 – High Risk Pool – Closed Block Not Subsidized

We performed sensitivity analysis on the health status assumption of the CB that migrates to the OB. If we assume the health status of this population looks exactly like the Open OB, the death spiral in the CB is exacerbated and the premium impact to the OB is a slight increase to premium.

Table 41 shows the results of our modeling to the High Risk Pool if we assume the CB is subsidized. The premium rate impact for the OB ranges from -29% to -26%. By year 3, the membership in the OB is around 37,000. There are 3,500 new insured members in the block. The HRP enrollment increases from 900 to 1,000 and the funding required for this population ranges from $7M to $13M. The premium impact for the CB is limited to 15% to 20% and membership decreases to 5,500. The subsidy required for this population is approximately $13M by year 3. Total funding required under this scenario ranges from $15M to $27M.

Health Status for those migrating from CB to OB -40%	CB Subsidized Year 1	Year 2	Year 3
Premium Impact to Open Block	-29%	-28%	-26%
Cumulative Uninsured Enrollment		3,448	3,448
Total Cumulative Open Block Enrollment	**25,885**	**33,360**	**36,959**
Closed Block Premium Cap	15%	20%	20%
Cumulative Closed Block Enrollment	**13,425**	**9,350**	**5,526**
Cumulative High Risk Pool Enrollment	**887**	**934**	**1,018**
Total Cumulative Insured Population	**40,197**	**43,645**	**43,503**
Annual Closed Block Subsidy ($M)	**$ (8.3)**	**$ (12.7)**	**$ (13.4)**
Annual High Risk Pool Funding ($M)	**$ (6.9)**	**$ (8.5)**	**$ (13.1)**
Total Annual Subsidy ($M)	**$ (15.2)**	**$ (21.1)**	**$ (26.5)**

Table 41 – High Risk Pool – Closed Block Subsidized

6. Summary of Results

We have summarized our results in Table 42. The largest premium and membership impact comes from a $30 million reinsurance program for the Individual market. We have modeled a 24% rate decrease with 4,500 new members into the pool. One of the caveats with a reinsurance model is that it is a one time impact where premium levels are reduced one time. Future trends will increase these premiums. The largest premium impact comes from implementing a high risk pool and changing rating rules for the Individual market to allow health underwriting. While this may have a larger premium impact, and also a more lasting effect then the other reforms, it also allows for significant rate shocks for a subpopulation of the Individual market. Finally, a Merged market scenario has the smallest premium rate reductions on the Individual market, with minimal increases on the Small Group market.

Health Reform	Average Premium Impact	Membership Increase	Funding
Merged Market 1.10 GSA	IM -8% SG +3%	1,350	none
Merged Market 1.20 GSA	IM -4% SG +1%	915	none
Reinsurance Individual Market $30M	IM -24%	4,500	$30M
Reinsurance Individual Market $15M	IM -13%	2,300	$15M
Reinsurance Merged Market $30M 1.10 GSA	IM -13% SG -2%	4,300	$30M
Reinsurance Merged Market $30M 1.20 GSA	IM -9% SG -4%	3,900	$30M
High Risk Pool Not Subsidized for Closed Block (CB)	IM OB -30% IM CB +34% to +170%	3,500	$7M to $15M
High Risk Pool Subsidized for Closed Block (CB)	IM OB -30% IM CB +15% to +20%	3,500	$15M to $27M

Table 42 – Health Reform Summary of Results

Some of the health reforms modeled will allow for significant rate impacts across populations. Since these impacts are not consistent and can be quite variable, Table 43 shows the range of premium impacts for each health reform. As shown, the high risk pool reforms will result in the greatest range of premium impacts.

Health Reform	Premium Impact Range		
	Minimum	Maximum	Average
Merged Market 1.10 GSA Individual Market	-8%	-8%	-8%
Merged Market 1.10 GSA SG Market	-12%	7%	3%
Merged Market 1.20 GSA Individual Market	-4%	-4%	-4%
Merged Market 1.20 GSA SG Market	-8%	3%	1%
Reinsurance Individual Market $30M	-24%	-24%	-24%
Reinsurance Individual Market $15M	-13%	-13%	-13%
Reinsurance Merged Market $30M 1.10 GSA IM	-13%	-13%	-13%
Reinsurance Merged Market $30M 1.10 GSA SG	-17%	2%	-2%
Reinsurance Merged Market $30M 1.20 GSA IM	-9%	-9%	-9%
Reinsurance Merged Market $30M 1.20 GSA SG	-13%	-2%	-4%
High Risk Pool Not Subsidized for Closed Block (CB)	-60%	170%	-9%
High Risk Pool Subsidized for Closed Block (CB)	-60%	60%	-17%

Table 43 – Health Reform Range of Premium Impacts

Appendix I Factors

1. Age Factors

Age Band	Individual	Two Adult	Adult and Dependents	Family
< 20	0.510	2.005	1.219	2.005
20 - 24	0.510	2.005	1.219	2.005
25 - 29	0.510	2.005	1.219	2.005
30 - 34	0.712	2.060	1.394	2.060
35 - 39	0.712	2.060	1.394	2.060
40 - 44	0.857	2.148	1.520	2.148
45 - 49	1.086	2.546	1.756	2.546
50 - 54	1.234	2.868	1.900	2.868
55 - 59	1.476	3.411	2.169	3.411
60 - 64	1.719	3.912	2.428	3.912
65 - 69	1.823	3.229	2.763	3.229
70+	1.823	3.229	2.763	3.229

Table 44 – Age Factors for Merged Analysis

2. Area Factors

County	Area Factor
Androscoggin	0.965
Aroostook	1.150
Cumberland	0.900
Franklin	1.025
Hancock	1.150
Kennebec	0.925
Knox	0.950
Lincoln	0.975
Outside of Maine	1.000
Oxford	0.975
Penobscot	1.150
Piscataquis	1.150
Sagadahoc	0.950
Somerset	1.150
Waldo	1.050
Washington	1.150
York	0.900

Table 45 – Area Factors for Merged Analysis

3. Group Size Adjustment Factors

Group Size	GSA Factor
1-2	1.224
3-4	0.997
5-9	0.986
10-50	0.915
26-50	0.915

Table 46 – Group Size Factors Pre Merger for Merged Analysis

4. Age Factors for High Risk Pool Analysis

Age Range	Subscriber Age Factor Current	Normalized Smoothed Age Factors	MM Mkt Share
0-18	0.800	**0.383**	19%
19-24	0.800	**0.526**	6%
25-29	0.800	**0.669**	3%
30-34	0.825	**0.669**	3%
35-39	0.825	**0.783**	6%
40-44	1.000	**0.901**	8%
45-49	1.075	**1.036**	10%
50-54	1.075	**1.191**	13%
55-59	1.200	**1.370**	14%
60-64	1.200	**1.575**	15%
65+	1.200	**1.733**	2%

Table 47 – Age Factors for High Risk Pool

5. Assumed Tier Factors for High Risk Pool

Category	Assumed Current Tier Factors
1 adult	1.00
2 adults	2.00
2 adults &child	2.65
1 adult & child	1.65
1 or more child	0.65

Table 48 – Tier Factors for High Risk Pool

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Maine Regulatory Filings
Small Group and Individual Market Rate Filings
940 and 945 Reports

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Appendix B

Price Elasticity and Health Status Assumptions

Adverse Selection and Price Elasticity for Discounted Nongroup Insurance

Key Observations from the Literature

Summary:

Reducing the price of insurance has a modest effect on demand, inducing only a small percentage of the uninsured to purchase coverage voluntarily. Most studies estimate a price elasticity of -0.3 to -0.7, meaning that a 10 percent decrease in price would lead to an increase of between 3 to 7 percent in the number of individuals purchasing insurance. There is little evidence that those who decide to take advantage of price reductions are in worse health than those who decide to remain uninsured or that newly insured utilize an especially high amount of health services. In fact, a number of studies suggest that individuals who voluntarily purchase insurance are in better health and more educated than individuals deciding not to obtain coverage.

There is less literature regarding who leaves the market when insurance premiums increase. Studies of employees with "cafeteria-style" benefit plans (wherein employees pay all the additional cost of purchasing more generous coverage) suggest that employees are sensitive to increasing premiums, particularly when they face the full marginal cost of purchasing more expensive health plans.

Key Findings:

- There is little evidence of adverse selection when states offer discounted health insurance to previously uninsured individuals. Individuals who decide to purchase coverage generally report as good, if not better, health than those who decide to remain uninsured. [This finding, along with the studies summarized below, do not rule out the possibility that the uninsured as a group may still be sicker than those who have already purchased insurance.]

    - Health Status: A number of studies have shown that individuals and families in good health are actually *more likely* to purchase non-group insurance than similar individuals and families reporting poor or fair health status (Auerbach and Ohri, 2006; Marquis et al, 2004; Marquis and Long, 1995; Madden et al., 1995).

    - In their study of New Jersey's short-lived premium subsidy program (Health Access New Jersey), Swartz and Garnick (2000) did not find enrollees to be significantly healthier than non-enrollees, but concluded that residents who enrolled in the program were not in any worse health than uninsured people with similar incomes.

    - Bernard and Selden (2006) studied workers who declined employer offered coverage and found mixed results on health status. In comparison to families who took up coverage, decliners were more likely to report poor health but were also *less likely* to have high cost medical conditions, such as heart

disease, diabetes, cancer and others. [One possible explanation for these contrasting results is that greater contact with medical providers may heighten awareness of the presence of medical condition.]

- Utilization and Health Status: Kilbreth et al. (1998) studied the utilization experience of two state programs offering subsidized coverage (non-group and small group) in commercial managed care organizations and found that program participants used services similarly to people enrolled in the same HMOs through large employer benefit plans. Additionally, the study found that self-reported health status measures were slightly, but significantly poorer for participants in the two demonstration programs when compared to participants receiving employer-based coverage. However, there was no evidence of pent-up demand or an unusual level of chronic illness in demonstration populations.

- There *are* substantial differences in the take-up of non-group insurance among subgroups. Individuals who purchase insurance are more likely to be older, female, college educated and reporting good health status.

Characteristics of Individuals and Families who are More Likely to Purchase Non-Group Insurance, Results from the Literature

Characteristics	Study	Comparison Group
Older age of individual or family head	Auerbach and Ohri, 2006; *Adults 55-64* Swartz and Garnick, 2000; *Adults 45-64** Marquis and Long, 1995	Uninsured individuals Uninsured individuals Others w/o characteristic
College education	Auerbach and Ohri, 2006 Marquis et al, 2004 Madden et al, 1995*	Uninsured individuals Others w/o characteristic WA Basic Health Plan (BHP) decliners
White	Auerbach and Ohri, 2006	Uninsured individuals
Female (individual or family head)	Auerbach and Ohri, 2006 Swartz and Garnick, 2000* Marquis and Long, 1995 Madden et al, 1995*	Uninsured individuals Uninsured individuals Others w/o characteristic WA BHP decliners
Good health (individual or family)	Auerbach and Ohri, 2006 Marquis et al, 2004 Marquis and Long, 1995 Madden et al, 1995*	Uninsured individuals Others w/o characteristic Others w/o characteristic WA BHP decliners
Self-employed (vs. waiting for employer to offer coverage)	Auerbach and Ohri, 2006	Uninsured individuals
Live in a metropolitan statistical area	Auerbach and Ohri, 2006	Uninsured individuals
Young dependents	Madden et al, 1995*	WA BHP decliners
Adult w/part-time job	Madden et al, 1995*	WA BHP decliners
Note: *Asterisk* denotes studies that looked at the take-up of subsidized insurance among low-income individuals.		

- Previous studies have used a variety of approaches to estimate the effect of price on demand for individual insurance. Most studies estimate a price elasticity of demand between -0.3 and -0.7, meaning that a 10 percent decrease in price would lead to an increase of between 3 to 7 percent in the number of individuals purchasing insurance.

Price Elasticity of Demand for Individual Insurance, Results from the Literature

Study	Source of Price Variation	Population	Elasticity of Participation
Marquis and Buchanan, 1992	Hypothetical offers	All families	-0.5
Marquis and Long, 1995	Insurer price schedule	Working families without group plan ❖ Families < 200% poverty ❖ Families > 200% poverty	 -0.3 to -0.6 -0.3 to -0.5
Pauly and Herring, 2001(a)	Estimated reservation price	Working families	-0.3 to -0.4
Long and Marquis, 2002	Public subsidy schedule	Low-income persons	-0.3 to -0.7
Marquis et al, 2004	Insurer price schedule	Families	-0.2 to -0.4
Auerbach and Ohri, 2006	Insurer price schedule with adjustments[1]	Individuals	-0.59

Note:
1. Adjusted premiums by health status and state-level premium rating regulations

- Modest subsidies for non-group coverage have a small effect on participation rates. In order to make a real impact on reducing the uninsured, premium discounts must be sizeable, along the lines of an employer contribution.

  - In a study of a national sample of single workers in the market for nongroup insurance, Auerbach and Ohri (2006) found that roughly 2.1 percent of their uninsured sample would purchase coverage with a 25 percent premium subsidy, and 4.4 percent would purchase with a 50 percent subsidy.

  - Marquis et al. (2004) estimated that a 50 percent subsidy would only reduce the number of uninsured families in California's individual insurance market by about 4 to 8 percent.

  - Although a dated study, Marquis and Long (1995) suggested that even a 60 percent price subsidy would only induce about one-quarter of working families who do not have insurance coverage to purchase insurance.

  - Using Maine numbers for the uninsured and an estimated price elasticity of -0.5 (an average of elasticities reported in the literature), we estimate that a 20 percent premium reduction would decrease the number of uninsured in Maine

by about 3 percent, while a 40 percent reduction would decrease the number of uninsured by roughly 6 percent.

Estimate of Premium Reduction and Individual Insurance in Maine - Using an Average Price Elasticity of -0.5

% Reduction in Premium	# Taking up Insurance	# Individual Market	% Increase Individuals w/Insurance	# Uninsured in Individual Market	% Decrease in Uninsured	% of Total Individual Market w/Insurance
Baseline (0%)	n/a	39,000	n/a	134,000	n/a	23%
10%	1,950	40,950	5%	132,050	-1%	24%
20%	3,900	42,900	10%	130,100	-3%	25%
30%	5,850	44,850	15%	128,150	-4%	26%
40%	7,800	46,800	20%	126,200	-6%	27%

Assumptions:

(1) Price Elasticity of Demand was estimated at -0.5, an average of elasticities reported in the literature.

(2) Individuals with insurance estimate was based on Aetna, Anthem and Mega 945 Reports.

(3) Uninsured estimate was based on CPS data for Maine (3 year average 2003-2005).

(4) The final column, % of total with insurance, assumes that everyone who is currently uninsured would be a candidate for the individual market.

Note:

Maine estimates are based on a point elasticity of demand, or linear estimate of elasticity, rather than on an arc elasticity of demand, or non-linear approach. For deep discounts, a non linear approach was used.

- There is less literature regarding who leaves the market when insurance premiums increase. Studies of employees with "cafeteria-style" benefit plans (wherein employees pay all the additional cost of purchasing more generous coverage) suggest that employees are responsive to increasing premiums, particularly when they face the full marginal cost of purchasing more expensive health plans. [Note that these studies may have limited application to Maine's small group market since employees with cafeteria-style benefits typically have a number of lower priced options which they can select and switch into.]

  - In their study of employee plan choices at a single large firm, Goldman et al. (1996) found that premium increases induced substantial plan switching. Single employees were more likely to respond to premium increases by dropping coverage, whereas families tended to switch to another plan. Premium increases of 10 percent induced 7 percent of single employees and 11 percent of those with family contracts to drop or severely cut back coverage. When faced with a dramatic increase in premiums - on the order of 20 percent - nearly one fifth of single employees dropped coverage compared with 10 percent of those with family coverage.

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Appendix C

Merged Market: State Example

MERGED MARKET

State Example

Massachusetts:

In April 2006, Massachusetts passed legislation to merge its individual and small group markets. This merger, slated for July 2007, is one component of a larger initiative around health care reform that also includes a universal mandate to purchase insurance, requirements for "fair and reasonable" contributions on the part of employers, and a new insurance distribution channel.

As part of the merger, each insurance carrier will combine its individual and small group business into a single rating pool by blending the claims experience of these two populations. Insurers operating in one market will be required to do business in both. Individuals will be considered groups of one, and the rating process for the combined risk pool will be based on the former small group model, although new legislation has provided for several changes in allowable adjustments and their application to the base rate. Health insurance carriers will maintain the ability to adjust average rates by age, group size, geography and benefit plan. However, the upper bound of the permitted group size adjustment has been increased from 1.05 to 1.10 for the smallest groups. This change will serve to increase rates for the smallest groups from what they would have been prior to the merger.

The merger's impact on premiums will likely vary substantially by carrier. During its initial planning phase, the state anticipated an average decrease in current individual premiums of approximately 15 percent and an average increase in current small group rates of about 1 to 1.5 percent.

Source:

Gorman Actuarial, DeWeese Consulting, Inc. and Hinckley, Allen & Tringale LP. *Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets*. December 26, 2006.

Appendix D

Reinsurance: State Example and Overview of State Reinsurance Designs

REINSURANCE

State Example and Overview of State Reinsurance Designs

Healthy New York:

Initiated in 2001, Healthy New York (NY) is a state subsidized reinsurance program that offers more affordable insurance to low-income small group employees, sole proprietors and individuals. The program is unique in that it creates a state sponsored health insurance program, delivered by the private market, where insurance risk is shared between participating carriers and the state. The program is offered only through HMOs (which are mandated to participate in the program) and reduces premiums by pairing reinsurance with a benefit program that includes significant cost sharing provisions.

In 2006, employers with 50 or fewer employees may participate if at least 30 percent of employees earn less than $34,000 annually, and the employer did not offer (or contribute substantially) to comprehensive group coverage in the prior year. This income level is adjusted each year. Participating employers must also contribute at least half of the premium, and the state requires that at least half of eligible employees participate in the program.

Sole proprietors and individuals qualify if they earn less than 250 percent of the federal poverty level, are currently employed, full or part-time, or have been employed at some point during the previous year, and have been uninsured for the past twelve months.

As of December 2005, Healthy NY had approximately 107,000 active enrollees; roughly 60 percent of which were individuals, while 20 percent were sole proprietors and 20 percent were small group employees.

All HMOs are mandated to offer a Healthy NY plan which includes a streamlined benefit package and the option for a prescription drug benefit. Premiums are community-rated, do not vary by eligibility category (i.e. small group, sole proprietor, individual) and are divided into four tiers: one adult, two adults, one parent with child(ren), and family.

Healthy NY reimburses health plans for 90 percent of claims costs between $5,000 and $75,000 for any member in a calendar year. The program originally set the reinsurance corridor at $30,000 to $100,000; however, it was lowered in July 2003 due to lower-than-expected claims activity and an increase in state funding and subsidies. Most health plans responded to this change by reducing their premiums by approximately 17 percent.

Participating HMOs set the premium cost for their Healthy NY program based on their actual cost experience, taking into account the reimbursement they receive from the state. However, State regulations limit the proportion of premium charged that can be retained by the HMO for administrative costs or profit, to ensure that savings attributable the reinsurance program are returned to consumers in the form of lower premiums. Currently,

Healthy NY premiums are, on average, more than 40 percent lower than the cost of comparable coverage in the individual and small group market in New York.

Table D-1: An Overview of Other States' Reinsurance Programs

State/Program	Enrollment	Market(s) and Participation	Funding Source	Structure
Arizona *Health Care Group* (2001)	20,798 people as of 5/2006; about 70% sole proprietors	• Small groups (<50) and sole proprietors. • At least 80% of employees in small groups with 6 or more employees must enroll. • For smaller groups 100% of employees must enroll. • Guaranteed issue; unlike the commercial market, premiums are age-rated.	State appropriated $4 million per year for 2004-2006 to pay losses and buy commercial reinsurance for annual claims of $100,000 or more.	Reimburse insurers the amount that total claims exceed 86% of total premiums charged to enrollees.
Connecticut *Small Employer Health Reinsurance Pool* (1990)	3,116 people as of 10/2004	• Small groups (<50) and sole proprietors. • Permanent employees working 30+ hours/week and/or their dependents. • Insurers may reinsure specific enrollees within 60 days of issuing the policy or on each three anniversary of issuing the policy.	Insurers pay premiums per person (as of Oct. 2004 average premiums were $4,500/yr) and assessment based on market share (not more than 1% of small group premium base).	100% coverage of claims above $5,000 per person
Idaho *Small Employer Health Reinsurance Program* (1994)	Enrollment unknown	• Small groups (<50). • May reinsure specific enrollees within 60 days of issuing the policy or at renewal.	Insurers pay premiums per person, and there is an assessment on all insurers in the market.	90% coverage of claims: • Basic plan: $13,000-$25,000 • Standard: $87,000-$100,00 • Catastrophic: $130,000-$200,000
Idaho (cont) *Individual High-Risk Reinsurance Pool* (2001)	1,358 people as of 3/2004	• Standard plans, guaranteed issue, modified community rating based on health. • May reinsure specific enrollees within 60 days of issuing the policy or at renewal.	Insurers pay premiums per person. Also, there is supplemental funding from a state premium tax.	90% coverage of claims between $5,000 and $25,000 and 100% coverage over $25,000.
Massachusetts *Small Employer Health Reinsurance Plan* (1992)	13 people as of 10/2004	• Small groups (<50), sole proprietors. • Permanent employees working 30+ hours/week • May reinsure specific enrollees within 60 days of issuing the policy or at renewal if reinsuring at least 75% of eligible employees in the group. • HMOs may not reinsure enrollees.	Insurers pay premiums per person.	90% coverage of claims between $5,000 and $55,000; 100% coverage of claims $55,000 and up.

Table D-1: An Overview of Other States' Reinsurance Programs

State/Program	Enrollment	Market(s) and Participation	Funding Source	Structure
Massachusetts (cont) *Non-Group Health Reinsurance Plan* (2001)	3 people as of 10/2004	• Guaranteed issue market. • May reinsure specific enrollees within 60 days of issuing the policy or at renewal.	Insurers pay premiums per person, and an assessment of up to 1% of market premiums is possible but has never been used.	90% coverage of claims between $10,000 and $50,000; 100% coverage of claims $50,000 and up.
New Mexico *New Mexico Health Insurance Alliance* (1994)	4,000 people as of 10/2004	• Small groups (<50), sole proprietors and individuals who have involuntarily lost coverage. • Employees working 20+ hours/week. • At least half of eligible employees in small firms must choose to enroll. • For individuals this is the only guaranteed issue health insurance plan in the state.	• Premium surcharge of up to 5% in the first year and up to 10% in renewal years for small groups and up to 10% in the first and up to 15% in renewal years for individuals. • Also, assessments on all insurance carriers in the state to cover losses.	Reimburses insurers the amount that total claims and reinsurance premiums exceed 75% of total premiums charged to enrollees.
New York *Healthy NY* (2001)	106,944 people as of 12/2005	• Small groups (<50) if at least 30% of employees are middle to low wage workers and the employer did not provide coverage in the past year. • Employers must pay half the premium and at least half of eligible employees must participate. • Sole proprietors and individuals accepted if income is at or below 250% FPL and have been uninsured the past year. Guaranteed issue, community rated market.	Entirely state subsidized.	90% coverage of claims between $5,000 and $75,000.
Source: Excerpted from: State of New Jersey Department of Human Services and Rutgers Center for State Health Policy. *Reinsurance Options for New Jersey's Health Insurance Markets*. January 2007.				

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Appendix E

High Risk Pools: State Examples and Overview of State High Risk Pool Designs

HIGH RISK POOLS

State Examples and Overview of State High Risk Pool Designs

New Hampshire High Risk Insurance Pool:

New Hampshire's High Risk Pool is relatively new. Prior to its inception in 2002, New Hampshire, like Maine, had guaranteed issuance and modified community rating. The individual market was deteriorating, and few carriers offered insurance in the individual market. A high risk pool was proposed as one means to stabilize the market and make it more attractive for insurers.

In July 2002, the state passed legislation to institute a high risk pool along with other market reforms which repealed guaranteed issue and community rating. Insurers now have maximum flexibility to underwrite policies and can deny applicants coverage on the basis of health status. Individuals are eligible for the high risk pool if they meet one of the following criteria: (1) are denied coverage in private market, (2) are quoted a premium rate by a carrier that is greater than the premium rate for the high risk pool, or (3) have a pre-qualifying condition, such as chronic kidney failure or major organ transplant. High risk subscribers who purchased insurance in the private market prior to the creation of the high risk pool are "grandfathered" and may continue to hold existing policies if they choose to do so. However, existing policies from the period prior to market deregulation are maintained by insurers in a "closed block" which is rated separately from new policies written since the market rules changed. This has meant that insurers can price new policies based on their anticipated improved experience with the advent of screening and medical underwriting and without regard to their costs associated with their closed block of business.

High risk pool premiums are limited to 125 to 150 percent of the standard rate for comparable coverage. The pool is financed through an assessment on carrier premiums, as well as a broader assessment based on the number of lives covered by fully-insured carriers and self-insured employers.

Since the high risk pool was introduced, several carriers, including Anthem Blue Cross Blue Shield, have entered the individual market in New Hampshire. As of early 2007, approximately 1,000 members were enrolled in the high risk pool.

Washington State Health Insurance Pool:

The Washington State Health Insurance Pool has been operational since 1988. Eligibility for the pool is determined using a standard health questionnaire that targets the eight percent of applicants who represent the highest risk within the individual market. Unlike many states with high risk pools, Washington does not allow medical underwriting. Individuals who do not meet the criteria for the high risk pool (according to the standard health questionnaire) can obtain guaranteed issue policies within the private market. These guaranteed issuance laws, in combination with the state's standard health

questionnaire, limit enrollment in the high risk pool. When compared to other states, this approach imposes more constraints on the diversion of individuals to the high risk pool by insurance companies.

As of 2006, the high risk pool had an enrollment of approximately 3,100 persons. Members pay a premium that is typically 150 percent of the standard risk rate, but may be as low as 125 percent of the standard rate if the member belongs to the pool's preferred provider plan. Premium discounts are given to low-income persons between the ages of 50 and 64, as well as to individuals who have had prior coverage for at least 18 months and those who have been enrolled in the high risk pool for three years.

Washington's high risk pool is funded through premiums and assessments to insurers with a medical loss ratio of less than .72.

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Table E-1: An Overview of Other States' High Risk Pools

State/Program	Enrollment *Approximate*	Premium Caps	Funding	Notes
Alabama *Alabama Health Plan* (1998)	3,000 people as of June 2006	200% of market rate for comparable coverage	Member premiums and assessments to the insurance industry based on premium volume in the state	
Alaska *Alaska Comprehensive Health Insurance Association* (1993)	500 persons as of June 2006	150% of market rate for comparable coverage	Subscribers' premiums and assessments on insurers	
Arkansas *Arkansas Comprehensive Health Insurance Pool* (1996)	2,900 as of June, 2006	150% of market rate for comparable coverage	Subscribers' premiums and assessments on insurers	
California *California Major Risk Medical Insurance Program* (1991)	Just under 8,000 persons as of December 2006	125 to 137.5% percent of each participating plan's average standard individual rate	Cigarette and tobacco tax	After 36 months, risk pool subscribers are disenrolled and given access to guaranteed issue individual market products (GIP). GIP losses are shared jointly by the insurance industry via assessments and the state via annual appropriations. Premiums for GIP are approximately 10 percent higher than risk pool products. As of June 2005, over 6,700 persons were enrolled in a GIP product.
Colorado *CoverColorado* (1991)	Just over 5,000 persons as of June 2006.	150% of market rate for comparable coverage	The state's unclaimed property trust fund, premiums paid by recipients, and a premium tax credit	For recipients who earn less than $50,000 per year, premium subsidies may be available. Premium discounts represent an approximately 20 percent reduction from the standard PPO rate.
Connecticut *Connecticut Health Reinsurance Association* (1976)	More than 2,400 persons at the end of 2005	125% of market rate for comparable coverage at initial enrollment and 150 percent at maximum	Premiums and assessments on insurers	Connecticut charges a lower premium for recipients who have income less than 200% FPL.

Table E-1: An Overview of Other States' High Risk Pools

State/Program	Enrollment *Approximate*	Premium Caps	Funding	Notes
Florida *Florida Comprehensive Health Association* (1983)	500 persons	The premium cap varies between 200 and 250% and is determined by risk.	Premiums and assessments on insurers	Has been closed to new enrollment since 1991.
Idaho *Idaho Individual High-Risk Reinsurance Pool* (2001)	1,400 persons	125 to 150% of the rates applicable to standard risk	Premiums, a portion of the state premium tax and, if necessary, an assessment on insurers	Idaho operates a hybrid high risk pool/reinsurance program. All carriers offering individual insurance are required to offer a guaranteed issue product to high risk applicants. These "high-risk" plans are then integrated into a state reinsurance pool.
Illinois *Illinois Comprehensive Health Insurance Plan* (1989)	16,409 at the end of 2004	143% of the average charged for comparable coverage for traditional risk pool; 135% of comparable coverage for HIPAA-pool	Traditional risk pool is funded by premiums and state general funds; HIPAA-pool is funded through premiums and an assessment on the insurance industry	The traditional high risk pool covers the medically uninsurable, while the HIPAA pools covers HIPAA and HCTC qualified individuals.
Indiana *Indiana Comprehensive Health Insurance Association* (1982)	Just over 7,200 as of June 2006	150% of average commercial rates for individual rates	Assessment on insurers	
Iowa *Health Insurance Plan of Iowa*	Just over 100 persons at the end of 2004	150% of average commercial rates for individual rates	Assessment on insurers	Iowa's Individual Health Benefit Reinsurance Association was merged into the Health Insurance Plan of Iowa in January, 2005.
Kentucky *Kentucky Access* (2001)	3,700 persons as of May 2006	The program's premium cap is set at 175% of the market rate for comparable coverage but the program currently sets rates at 130%.	Participant premiums, tobacco settlement funds and an assessment on insurers	

Table E-1: An Overview of Other States' High Risk Pools

State/Program	Enrollment *Approximate*	Premium Caps	Funding	Notes
Louisiana *Louisiana Health Plan* (1992)	Just under 1,200 at the end of 2005	125 to 200% of market rate for comparable coverage	State general revenues, the Louisiana mandated service charge, insurer assessments and policyholder premiums	
Maryland *Maryland Health Insurance Plan* (2003)	More than 9,500 enrollees as of November 2006	n/r	Assessments on hospitals' net patient revenues	A special subsidy program offers discounted premiums and deductibles to individuals with incomes under 225 FPL. In addition, Maryland's risk pool serves as a fallback option for individuals transitioning from group to individual coverage.
Minnesota *Minnesota Comprehensive Health Association* (1976)	About 31,000 persons at the end of 2005	101 to 125% of the weighted average for comparable policies	Member premiums and an annual assessment on all health plans	
Mississippi *Mississippi Comprehensive Health Insurance Risk Pool Association* (1992)	4,300 persons at the end of 2005	150% of comparable coverage at initial enrollment with a maximum of 175% of private coverage	Subscriber premiums and an assessment on insurers	
Missouri *Missouri Health Insurance Pool* (1991)	2,800 at the end of 2005	150 to 200% of market rate for comparable coverage	Enrollee premiums and assessments paid by health insurers and HMOs	Missouri's high risk pool offers coverage through four major medical plans which differ only in the amount of the annual deductible and out-of-pocket maximums.
Montana *Montana Comprehensive Health Insurance Association* (1987)	3,200 persons as of June 2006	200% uninsurable; 150% HIPAA	Premiums and assessments on insurers	The Montana Comprehensive Health Insurance Association (MCHA) also serves as a HIPAA alternative mechanism that guarantees coverage for individuals who lose access to group coverage and provides coverage for specific federally eligible individuals. There is a premium assistance pilot program designed to assist low-income individuals.

Table E-1: An Overview of Other States' High Risk Pools

State/Program	Enrollment *Approximate*	Premium Caps	Funding	Notes
Nebraska *Nebraska Comprehensive Health Insurance Pool* (1986)	Just over 5,400 persons at the end of May 2006	135% of average standard health insurance rates; 50% of the standard rate for children	Premiums and assessments to insurers	
New Hampshire *New Hampshire Health Plan* (2002)	Approximately 1,000 members as of early 2007	Not less than 125% and not higher than 150% of the standard risk rate for comparable coverage	Participant premiums, as well as assessments of insurance plans based on a "per covered lives" basis	
New Mexico *New Mexico Medical Insurance Pool* (1988)	2,300 persons as of June 2006	140% of the standard risk rate	Premiums and assessments to insurers	New Mexico operates a 75% premium subsidy for recipients who earn between 0 and 200% FPL and a 50% premium reduction for recipients between 200% FPL and 399% FPL. Also, NM will be offering a group product designed for high-risk members of the small employer insurance program.
North Dakota *Comprehensive Health Association of North Dakota* (1982)	Just over 1,730 at the end of 2005	135% of the individual premium rate charged for similar coverage throughout the state	Assessments on accidents and health insurers that write more than $100,000 in premium volume within the state	
Oklahoma *Oklahoma Health Insurance High Risk Pool* (1996)	2,729 as of October 2005	150% of the average premium rate charged	Premiums and assessments on insurers	
Oregon *Oregon Medical Insurance High Risk Pool* (1990)	15,000 as of June 2006	125% of average rates for individual coverage but portability premiums cannot be more than 100% of average portability rate charged by insurers	Premiums and assessments on insurers and reinsurers	

Table E-1: An Overview of Other States' High Risk Pools

State/Program	Enrollment *Approximate*	Premium Caps	Funding	Notes
South Carolina *South Carolina Health Insurance Pool* (1990)	2,250 persons at the end of 2005	200% for comparable coverage on the market	Premiums and assessments on insurers	
South Dakota *South Dakota Risk Pool* (2003)	675 persons as of May 2006	150% of the average in force premium or payment rate for that classification charged by the three carriers with the largest number of individual health plans in the state during the previous calendar year	Premiums paid by members, state general revenue, assessments on health insurance carriers and an initial start-up grant from CMS' risk pool grant program	Unlike most high risk pools, the program does not serve uninsured individuals who have a pre-existing condition or illness that causes them to be declined by private insurers unless the person recently lost creditable coverage.
Tennessee *AccessTN* (new legislation)	n/r	150 to 200% of a commercial benchmark plan after moderate medical underwriting	Premiums, assessments on insurers and third party administrators, state appropriations and possibly federal funding	The state has authorized a premium assistance program to subsidize individuals who cannot afford premiums.
Texas *Texas Health Insurance Risk Pool* (1998)	28,000 people at the end of July 2006	200% of the average standard rate for commercial health insurance	Premiums and assessments on insurers	
Utah *Utah Comprehensive Health Insurance Pool* (1991)	3,300 persons as of June 2006	200% of standard risk rate	State comprehensive health insurance enterprise fund and legislature appropriations	
Washington *Washington State Health Insurance Pool* (1988)	3,100 persons at the end 2006	150% of the standard risk rate; 125% for the pool's preferred provider plan	Premiums and assessments on insurers	Pool eligibility is determined using a standard health questionnaire that targets the worst eight percent of applicants within the individual market

Table E-1: An Overview of Other States' High Risk Pools

State/Program	Enrollment *Approximate*	Premium Caps	Funding	Notes
West Virginia *AccessWV* (2005)	Over 200 individuals at the end of June 2006	Not less than 125% and not higher than 150% of the standard risk rate for comparable coverage	Premiums and assessments on hospitals	
Wisconsin *Wisconsin Health Insurance Risk Sharing Plan* (1981)	Just under 19,000 at the end of 2005	200% of the rate that a standard risk would be charged under a policy providing the same coverage deductible	Premiums, assessments on insurers and provider discounts	Provides a choice of three benefit coverage options. Also, premium subsidies are available for qualified low income policyholders
Wyoming *Wyoming Health Insurance Pool* (1991)	Almost 650 persons as of May 2006	200% of the standard market rate	Assessments on all insurers writing health insurance business in the state plus any self-insured plans not governed by ERISA	

Source(s):
1. State Coverage Initiatives. Matrix Glossary: High-Risk Pools: http://www.statecoverage net/matrix/highriskpools htm; accessed May 7, 2007.
2. Achman, L. and D. Chollet. *Insuring the Uninsurable: An Overview of State High-Risk Health Insurance Pools*. The Commonwealth Fund, August 2001.