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# **Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets**

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**Prepared for the Massachusetts Division of Insurance  
and Market Merger Special Commission**

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# 1. Executive Summary

The enactment of Chapter 58 of the Acts of 2006, An Act Providing Access to Affordable, Quality, Accountable Health Care, changed the health insurance environment for the purchasers of Small Group and Non-group coverage. Upon implementation, the current Non-group and Small Group health insurance risk pools will be merged into one, a new distribution channel will be added, new products will be available, the Insurance Partnership program will be expanded, and rating requirements will change. Additional elements of Chapter 58 impacting Massachusetts residents and most employers (with the exception in some instances of employers with fewer than eleven full time employees) such as the individual mandate, the implementation of Commonwealth Care, and employer penalties for not providing health insurance coverage will impact both small and large employers alike.

One component of Chapter 58 is the requirement for a Special Commission to study the impact of the merger of the Small Group and Non-group rating pools. This report is designed to assist the Special Commission in preparing its report to the Legislature.

## 1.1. Major Findings

Our major findings are as follows:

- The effect of the merger of the Small Group and the Non-group markets is a decrease in current Non-group rates of approximately 15% and an increase in current Small Group rates of approximately 1 to 1.5%.
- The impact to rates will vary substantially by carrier. If enrollees stay with their current carriers, Non-group subscribers could experience rate decreases ranging from 2% to 50% as compared to present rates and Small Group subscribers could experience rate increases ranging from 1 to 4%.
- The addition of currently uninsured persons to the private market will impact the merged market. The approximate impact ranges from a 3% reduction to a 6% increase. “Medium” assumption estimates indicate a minimal impact. The impact varies as a result of varying assumptions relative to the morbidity of newly insured individuals, the current number of uninsured, and the absolute number of individuals joining the insured

market. The factors that might lead to rate reduction include a decrease in average age because many of the new entrants are younger or have a lower average morbidity.

- Based on “medium” uptake assumptions the number of remaining uninsured in 2012 is projected to be 75,000 to 110,000, depending on whether the total uninsured is taken from the Household Survey or from adjusted Census data.
- Reinsurance of approximately 33 million dollars, funded outside the health insurance system, is needed to offset each 1% increase in premium for the merged market, based on 2005 claims experience and in 2005 dollars.

## 1.2. Data Collection Process and Participating Carriers

In order to analyze the Small Group and Non-group health insurance markets, we collected enrollment, premium and claims data for each of the years 2003, 2004 and 2005 from the six largest carriers in the Small Group and Non-group markets. The claims data was provided on both a group basis and an individual member basis, although any identifying information about groups or individuals was eliminated. Carriers providing data were: Blue Cross Blue Shield of Massachusetts, Fallon Community Health Plan, Harvard Pilgrim Health Care, Health New England, Neighborhood Health Plan, and Tufts Health Plan.

The data provided constitutes over 92% of the Small Group insurance written by all carriers in Massachusetts in 2005, and nearly 100% of the Massachusetts Non-group health insurance market. The carriers were very diligent in providing the data quickly and in answering any questions we had. The data submitted allowed analysis of the data by important variables, including plan of benefits, age, family status, industry and geographic region. The availability of data at the subscriber, member and group levels allowed us to analyze the data by group size as well. Table 1 is a summary of the total data collected for 2005. It has not been normalized to reflect the size of the entire market.

	Groups / Purchasers	Subscribers	Members	Average Family Size	Average Claim PMPM	Average Premium PMPM	Average MLR
Non-group	42,500	42,500	66,000	1.55	\$375	\$413	91%
Small Group	112,000	350,000	700,000	2.00	\$262	\$304	86%
Combined	154,500	392,500	766,000	1.95	\$272	\$313	87%

**Table 1 – Summary of 2005 Data**

The carriers also provided detailed information about the benefits covered under each plan type sold. That enabled us to create a pricing model in order to assign a benefit value to each plan, and thereby to analyze the database by relative plan value as well as by the other variables.

### 1.3. Overview of the Small Group Market

The Massachusetts Small Group market covers employer groups with from one to fifty eligible employees, including self-employed individuals. Part time employees who work less than 30 hours per week are generally not eligible. The size of the Small Group market has been fairly stable over the period 2003-2005.

Medical loss ratio (MLR) has been increasing in this market, and was 82% in 2003. The annual trend in claims cost has been in the range of 10% to 12% over the data period.

Table 2 shows characteristics of the Small Group membership by geographic region in 2005. It does not contain data for which the geographic region was unknown.

Region	Number			Claim PMPM	Premium PMPM	MLR	Age Factor	Industry Factor	Plan Value
	of Groups	Subscribers	Members						
Cape	8,000	19,000	36,000	\$297	\$337	88%	1.07	1.02	0.871
MetroBoston	37,000	110,000	215,000	\$268	\$312	86%	0.97	1.00	0.894
MetroWest	17,000	50,000	107,000	\$260	\$301	86%	1.00	1.00	0.889
Northeast	20,000	63,000	133,000	\$260	\$300	87%	0.99	1.00	0.886
Southeast	11,000	34,000	70,000	\$267	\$314	85%	1.03	1.00	0.885
West	7,000	33,000	64,000	\$249	\$293	85%	1.02	1.01	0.894
Worcester	11,000	37,000	64,000	\$244	\$276	89%	1.02	1.00	0.885

**Table 2 – Small Group 2005 Data by Region**

Groups with only one employee represent 45% of Massachusetts Small Groups, but 15% of the Small Group subscribers. Groups of one are older than the average for all groups, and have a higher average family size and higher average costs. On the other hand, the average plan value purchased by a group of one is about 2.5% lower than for any other size group.

Groups of size two to five employees also have higher than average cost, while all groups of six or more taken together have costs about 5% lower than the average for all groups.

Table 3 analyzes the Small Group data by group size. It does not include data for groups that did not have available demographic information to enable us to determine the group size.

Group Size	Number		Claim PMPM	Premium PMPM	MLR	Age Factor	Industry Factor	Plan Value	
	of Groups	Subscribers							Members
1	52,000	52,000	112,000	\$296	\$305	97%	1.20	1.01	0.870
2 - 5	28,000	82,000	152,000	\$273	\$323	85%	1.03	1.01	0.890
6 - 10	8,000	60,000	117,000	\$250	\$309	81%	0.94	1.00	0.890
11 - 25	6,000	96,000	194,000	\$251	\$298	84%	0.94	1.00	0.900
26+	2,000	59,000	119,000	\$250	\$287	87%	0.93	1.00	0.900

**Table 3 – Small Group 2005 Data by Group Size**

Group premium rates are restricted to a range whereby the highest rate charged for a given plan of benefits cannot be more than twice the lowest rate charged. We refer to this as “2:1 compression”.

By average age factor, the youngest groups had average PMPM claims of about \$208, ranging up to approximately \$534 for the oldest groups. In part because 2:1 compression reduces rates for older groups and increases them for younger groups, the oldest groups have the highest MLR, and are therefore subsidized by the experience of the youngest groups.

In general, groups enrolled in the plans with more cost sharing have lower MLRs and those with more comprehensive benefits have higher MLRs, suggesting that people select their plan in part based on perceived medical care need. Industry is a less reliable indicator of cost, although in general the industries assigned “low” factors have lower PMPM claim cost than those we identified as “high”, but only by about 5%.

## 1.4. Overview of the Non-Group Market

The Massachusetts Non-group market covered approximately 42,500 subscribers in 2005 or about 11% of the combined Small Group and Non-group enrollment. Non-group subscribers can choose between two benefit plans, although some Non-group subscribers have continued in older benefit plans that are now closed to new entrants. In general, Non-group benefit plans are not as rich as the average plans purchased by Small Group subscribers. Non-group enrollment in 2005 is about 10% lower than it was in 2003, according to our data. The average number of people covered by a Non-group contract is lower than for Small Group.

Average PMPM claims cost for Non-group was approximately 40% higher than for Small Group in 2005. Part of the difference is explained by an older average subscriber age and a much lower number of children covered, but it is also related to higher average morbidity. MLR has been increasing for Non-group. It was 83% in 2003 and 91% in 2005.

Similar to Small Group, Non-group experience for members living on the Cape showed the fewest enrollees, the highest PMPM cost, the oldest average age, and the lowest average plan value. Worcester and Western Mass had the lowest PMPM cost, and Metro Boston had the most enrollees, approximately 30% of all Non-group subscribers. Table 4 summarizes the characteristics of the Non-group market by geographic region. The age factors shown here are all greater than 1.00 because they are shown in terms of the average 1.00 for the Small Group population.

Region	Subscribers	Claim PMPM	Premium PMPM	MLR	Age Factor	Plan Value
Cape	3,000	\$425	\$456	93%	1.29	0.812
MetroBoston	12,000	\$409	\$458	89%	1.06	0.822
MetroWest	6,000	\$374	\$404	93%	1.13	0.825
Northeast	8,000	\$348	\$397	88%	1.13	0.824
Southeast	5,000	\$336	\$367	92%	1.14	0.824
West	4,000	\$389	\$442	88%	1.17	0.824
Worcester	4,000	\$333	\$354	94%	1.18	0.824

**Table 4 – Non-Group 2005 Data by Region**

Average PMPM claims cost in the lower of the two active plan options was less than half that in the higher option, despite a difference in benefit value estimated at only about 15%. There is apparently a great deal of selection at work in the Non-group market.

Variation in experience by age showed that people in the range of 25 to 35 had the highest MLR. In general, the highest claims experience was on the individual subscribers themselves, while dependents were generally lower cost on average.

## **1.5. Key Changes to the Small Group and Non-Group Market**

The key changes to the Small Group and Non-group markets as a result of Chapter 58 are:

- The Commonwealth Health Insurance Connector Authority is empowered to arrange for the sale of health insurance products to all residents of the Commonwealth not eligible for coverage through a large employer. The Connector will offer Commonwealth Care, a subsidized product for persons with incomes at 300% or less of the Federal Poverty Level, and “seal of approval” products to individuals with higher incomes or small groups.
- Current Non-group enrollees or potential enrollees will be considered groups of one in the newly reformed market.
- 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 for the smallest groups (from 1.05 to 1.10). In addition, this adjustment may be applied outside the 2:1 band rather than within it. Both of these changes will serve to increase rates for the smallest groups from what they would have been otherwise.
- A young adult plan, available to individuals between 19 and 26 years of age, will be available only through the Connector, to persons not eligible for other coverage. This plan will be designed to be low cost in order to attract this segment of the uninsured into the market.

## 1.6. The Currently Uninsured

In order to estimate the impact of those currently uninsured on the merged Small Group and Non-group risk pools, we first needed to develop an understanding of the size of the current uninsured population and its demographic characteristics. Based on the demographic characteristics of the uninsured population we developed assumptions for each year of our projection for (i) the purchase of insurance coverage and (ii) the source of the insurance.

Based on the two sources of data (the U.S. Census and the Household Survey conducted by the Commonwealth of Massachusetts) we used to obtain information about the uninsured, we developed a range of the total uninsured population in Massachusetts in 2006. That range is 372,000 to 570,000 people. We made no assumptions about any change in the size of the uninsured population over the six year study period, other than the migration of some of the uninsured to insurance products as modeled in our projections.

## 1.7. Newly Enrolled and Remaining Uninsured

As part of our analysis to estimate the impact of the merger of the two rating pools, we had to develop estimates of those newly enrolled in private sector health insurance plans. We did this under two different estimates for the baseline number of uninsured and four different estimates for the uptake of coverage. The lowest of these uptake estimates (using an elasticity of demand formula) was modeled using assumptions about how changes in the cost of insurance would affect purchasing decisions. The low, medium, and high estimates were developed based on a review of data describing the uninsured, the impacts of Chapter 58, and a survey of key informants, and include inherently an elasticity of demand component. Our results for those entering the merged Small Group and Non-group market by 2012 are shown in Table 5.

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<b>Current Uninsured Buying Private Insurance by 2012</b>	<b>Adjusted U.S. Census</b>	<b>Household Survey</b>
Elasticity of Demand Formula	95,000	75,000
Low Uptake	125,000	110,000
Medium Uptake	145,000	125,000
High Uptake	165,000	140,000

**Table 5 – Estimate of Uninsured Entering Merged Market**

We also estimated the number of currently uninsured individuals obtaining coverage through Commonwealth Care or MassHealth by 2012, and those numbers are shown in Table 6.

<b>Current Uninsured Enrolled in CommonwealthCare or MassHealth by 2012</b>	<b>Adjusted U.S. Census</b>	<b>Household Survey</b>
Elasticity of Demand Formula	310,000	175,000
Low Uptake	260,000	145,000
Medium Uptake	310,000	175,000
High Uptake	345,000	190,000

**Table 6 – Estimate of Uninsured in Commonwealth Care or MassHealth by 2012**

Our range of estimates for the remaining uninsured are shown in Table 7.

<b>Remaining Uninsured in 2012 Using Differing Estimates of the Uptake of Insurance Coverage</b>	<b>Adjusted U.S. Census</b>	<b>Household Survey</b>
Elasticity of Demand Formula	165,000	125,000
Low Uptake	180,000	115,000
Medium Uptake	115,000	75,000
High Uptake	55,000	40,000

**Table 7 – Remaining Uninsured in CY 2012**

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and Small Group Health Insurance Markets

On a percentage basis, over the course of our projections, the remaining uninsured is shown in Table 8:

<b>Adjusted U.S. Census</b>						
<b>Remaining Uninsured</b>	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
Elasticity of Demand Formula	54%	42%	37%	34%	31%	29%
Informant Survey Low	49%	44%	38%	35%	33%	32%
Informant Survey Medium	40%	34%	27%	24%	21%	20%
Informant Survey High	32%	25%	18%	14%	12%	10%
<b>Household Survey</b>						
<b>Remaining Uninsured</b>	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
Elasticity of Demand Formula	58%	45%	40%	37%	35%	34%
Informant Survey Low	48%	43%	36%	33%	32%	32%
Informant Survey Medium	40%	33%	25%	22%	21%	20%
Informant Survey High	32%	24%	15%	13%	11%	10%

**Table 8 – Percent Remaining Uninsured**

Factors taken into account when developing these projections include, but are not limited to, the impact of the individual mandate, incentives to employers to provide coverage for employees, the increasing cost of coverage over time, affordability waivers, waivers from the requirement that if one is eligible for employer sponsored coverage one is not eligible for Commonwealth Care, the income and health status of the currently uninsured, and subscriber age.

## 1.8. Expected Rate Impact of the Merger and the New Rating Rules

Chapter 58 will result in the merger of the Small Group and the Non-group markets and the application of rating rules that encompass certain changes. The principal changes in the rating rules relate to the size adjustment factor. We have modeled the impact of the merger and the changes in the size adjustment factor, including the initial applicability of the size adjustment factor to what is currently the Non-group market. Our modeling is based on a snapshot of the 2005 data obtained from the participating carriers.

The merger of the Small Group and the Non-group markets, before reflecting the effect of the new rating rules, results in a decrease in Non-group rates of approximately 21.1% and an increase in Small Group rates of 2.0%.

The change in the upper bound of the size adjustment factor range and the application of this factor outside the 2:1 band, rather than within it has a major impact on the smallest small groups and in particular on what was the non-group business.

Table 9 indicates the additional premium generated by the changed size adjustment factor and the corresponding overall offsetting rate adjustment.

<b>Components of Rate Change Due to Size and 2:1 Compression</b>		
	<b>Non-Group</b>	<b>Small Group</b>
Change Due to 2:1 and Group Size	10.0%	1.6%
Reduction in Overall Premium Due to Extra Premium Collection from 2:1 and Group Size	-2.3%	-2.3%
<b>Resulting Rate Changes</b>	<b>7.5%</b>	<b>-0.7%</b>

**Table 9 – Premium Impact of Rating Rules**

The combined rate impact of the merger and the change due to the size adjustment factor is a reduction in Non-group rates of approximately 15% and an increase in Small Group Rates of approximately 1 to 1.5%.

The impact noted in the prior paragraph is reflective of the aggregate business of the contributing carriers. The impact on any individual carrier may vary from -2% to -50% for the Non-group risk pool and +1% to +4% for the Small Group risk pool.

### 1.8.1. Rate Projections for the Merged Markets

We projected the rates for the current Small Group and Non-group membership under a number of different scenarios:

- a) The markets remain separate.
- b) The markets are merged, no new enrollees enter the market, and new rating rules are applied.
- c) The markets are merged, new rating rules are applied, and currently uninsured individuals enter the merged market.

We developed a model to show the impact to the premium of current Small Group and Non-group subscribers both pre-merger and post merger. The key assumptions, including the presence and absence of benefit buy-down assumptions, are found in Sections 7.2.1 - 7.2.3.

With markets remaining separate and assuming no benefit buy-down, we project rates to increase as shown in Table 10.

<b>Premium PMPM</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<i>Small Group</i>	\$304	\$337	\$374	\$416	\$461	\$512	\$568	\$631
<i>Non-Group</i>	\$413	\$458	\$508	\$564	\$626	\$695	\$772	\$857
<i>Combined</i>	\$311	\$345	\$383	\$426	\$472	\$524	\$582	\$646

**Table 10 – Projected Premium PMPM for Separate Markets without Benefit Buy-down Assumptions**

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In a merged market, considering both the pooled populations and the change in rating rules called for in Chapter 58, and still assuming no benefit buy-down, we project rates to be as shown in Table 11.

<b>Premium PMPM</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<i>Small Group</i>	\$304	\$337	\$376	\$420	\$467	\$518	\$575	\$638
<i>Non-Group</i>	\$413	\$458	\$470	\$482	\$535	\$594	\$660	\$732
<i>Combined</i>	\$311	\$345	\$383	\$424	\$471	\$523	\$581	\$645

**Table 11 – Projected Premium PMPM for Merged Market without Benefit Buy-down Assumptions**

We also projected rates in a merged market, considering both the pooled populations and the change in rating rules called for in Chapter 58, but with our benefit buy-down assumptions as explained in Section 7.2.3:

- Benefit buy-down of 1.5% annually and
- One time buy-down for those small groups who have substantial premium increases
  - 1.5% buy-down if the increase is between 2.5% and 5%
  - 3.0% buy-down if the increase is greater than 5%

With these assumptions we project rates to be as shown in Table 12.

<b>Premium PMPM</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<i>Small Group</i>	\$304	\$332	\$364	\$400	\$437	\$478	\$522	\$571
<i>Non-Group</i>	\$413	\$451	\$457	\$464	\$507	\$555	\$606	\$663
<i>Combined</i>	\$311	\$340	\$370	\$404	\$442	\$483	\$528	\$577

**Table 12 – Projected Premium PMPM for Merged Market with Benefit Buy-down Assumptions**

We also reviewed average plan value by year which includes all the assumptions in the projection model as well our benefit buy-down assumptions. Table 13 shows the average plan value by year for Small Group, Non-group and combined.

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	2005	2006	2007	2008	2009	2010	2011	2012
<b>Plan Value</b>								
<i>Group</i>	0.889	0.875	0.861	0.846	0.833	0.820	0.808	0.796
<i>Non-Group</i>	0.823	0.811	0.799	0.788	0.776	0.765	0.754	0.744
<i>Combined</i>	0.884	0.871	0.857	0.842	0.829	0.817	0.804	0.792

**Table 13 – Average Plan Value with Benefit Buy-down Assumptions**

Average plan value is decreasing over time due to our benefit buy-down assumptions, and depending on the definition of Minimum Creditable Coverage some subscribers in "low" benefit plans may be impacted. Also, as shown in Table 51, in CY 2005 there are approximately 3.3% of insured subscribers in plans with a plan value less than or equal to .75.

### 1.8.2. Premium Impact of Newly Insured Individuals

An expected result of the individual mandate and incentives on employers to provide coverage for employees is an increase in enrollment in private sector plans, either through the Connector or purchased directly from carriers. In order to model the impact of the uninsured on the rates of current Small Group and Non-group subscribers, we developed a range of estimates for the number of newly insured individuals entering the market. We also estimated the impact this population will have on the overall population by using Small Group and Non-group claim costs for CY 2005 as a starting point. We then adjusted these costs by a demographic adjustment to reflect the younger demographics of the uninsured. A detailed summary of our demographic adjustments is shown in Table 30.

In addition, we assumed that those entering the insured population with a perceived health status of fair/poor would have morbidity of 150% or 200% of the average. Also, since Chapter 58 allows carriers to charge a 10% group size load, we modeled our scenarios two ways. Using the first method, we assumed that the extra premium collected due to the 10% group size load would be used to offset existing insured premium rates. A second method assumes that the extra premium from the group size load collected from the newly insured will be absorbed entirely by additional administrative expenses associated with the newly insured.

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By 2012, the rates resulting from adding currently uninsured individuals to the overall, merged pool compared to what rates otherwise would have been range from -3.2% to 6.2% depending upon the assumptions used, the baseline number of uninsured and the estimate of the uptake of coverage.

We have included in the report a significant range of assumptions, each of which impacts the increase (or decrease) in rates that results from adding those who are currently uninsured. If it is believed that the current uninsured would experience small group morbidity and medium uptake estimates are realized, the overall impact to the merged market results in a small decrease from the otherwise merged market premiums. Projected premiums are summarized in Section 8.6. Table 14 and Table 15 provide an example of two scenarios that illustrate moderate impact to premium. Table 14 is based on the Household survey and the informant survey “medium” estimate for enrollment. It assumes Small Group morbidity for the uninsured, a 150% morbidity assumption for those with the poorest health status, and assumes the 10% group size load is used to offset existing insured premium rates. Table 15 is based on the same assumptions as Table 14, except in this case the assumption is that the 10% group size load is not used to offset existing insured premium rates.

<b>Premium PMPM</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<i>Small Group</i>	\$304	\$337	\$375	\$416	\$460	\$510	\$566	\$628
<i>Non-Group</i>	\$413	\$458	\$469	\$477	\$528	\$585	\$649	\$720
<i>Combined</i>	\$311	\$345	\$381	\$420	\$465	\$515	\$571	\$634

**Table 14 – Premium Projection Using Scenario 15, Informant Survey Medium Estimate**

<b>Premium PMPM</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<i>Small Group</i>	\$304	\$337	\$377	\$421	\$466	\$517	\$574	\$637
<i>Non-Group</i>	\$413	\$458	\$470	\$483	\$535	\$593	\$658	\$730
<i>Combined</i>	\$311	\$345	\$383	\$425	\$471	\$522	\$579	\$643

**Table 15 – Premium Projection Using Scenario 11, Informant Survey Medium Estimate**

## 1.9. Identified Issues

As we conducted our analysis, a number of questions arose whose actual impact is still to be determined in the market place. We raise these issues now so that policymakers can consider them as implementation of Chapter 58 proceeds. Our main concerns are:

- List Billing and Composite Rating in the Same Marketplace: The ability of one segment of the market (the Connector) to list bill (that is, charge each subscriber a rate specific to his/her demographic characteristics) while the other major sector (the carriers) rates using composite billing (that is, a group is charged a rate based on the average demographic characteristics of its membership as a whole) creates the potential for confusion in the marketplace and an opportunity for selection by consumers. As individuals and employers compare rates from the two distribution channels, selection can occur.
- Underwriting and Product Selection Requirements for the Connector: Continuous open enrollment and the ability for individuals to change products at any time creates an opportunity for selection, particularly for groups of one, as individuals can move to a product which meets their immediate needs. On the other hand, a limited open enrollment period will limit the ability of people to purchase coverage and thus meet the individual mandate.
- Decreasing Plan Values: Plan values have been decreasing in both the Small Group and Non-group marketplace. The definition of Minimum Creditable Coverage will have an impact on existing plan values in the overall marketplace going forward.
- Administrative Expenses: There seems to be a potential for additional administrative expenses for purchases at the Connector. To the extent that the Connector can manage this during its competitive procurement processes, Connector products will not be disadvantaged in the marketplace and our uptake estimates will be more likely to be reached.
- The Young Adult Plan and 2:1 Compression: If the young adult plan is subject to 2:1 compression based on the entire merged risk pool, the rate differential between this plan and the plan offering minimum creditable will not be particularly significant. On the other hand, if the young adult plan is rated solely on its own experience, the rates for those remaining in the merged pool will increase slightly.

## 1.10. Reinsurance

One of the objectives of this study was to explore how reinsurance funded outside the system could be structured to help in moderating health insurance rates. .

We constructed a reinsurance model based on a continuance table of 2005 Small Group and Non-group claims on a member basis. Based on that table we evaluated a number of scenarios involving partial reimbursement of claims in excess of varying dollar values or attachment points.

We determined that a program that reimbursed 80% of claims in excess of \$75,000 on an individual claims basis would cost between \$100 million and \$125 million annually (based on 2005 claim data), and a program that reimbursed 50% of the excess of \$50,000 on an individual claim basis would cost a similar amount. This would be equivalent to approximately 4.5% of total claims, or slightly less than 4% of total premium.

Reinsurance of approximately 33 million dollars, funded outside the health insurance system, is needed to offset each 1% increase in premium, based on 2005 claims experience and in 2005 dollars.

To the extent the combined pool grows in size over time because of additional insureds and/or because of medical care cost trends, the reinsurance structure required to fund a given percent of premium will change. Because of differences in experience and membership by carrier, reinsurance based on a single formula will not necessarily immunize each carrier in a comparable manner.

## 1.11. Conclusion

Our analysis of recent experience in the Non-group marketplace provides evidence of the unfavorable morbidity when compared to Small Group. The merger of the Non-group and Small Group markets is intended to spread the morbidity risk over a larger population. Our projection of the merged experience of Non-group and Small Group claims experience indicates that Non-group rates will decrease approximately 15%, and Small Group rates will increase approximately 1 to 1.5%, based on the merger of the two risk pools and the change in Small Group rating rules. It is important to note that actual results may vary substantially by carrier, depending on the carrier's relative loss ratio experience and the proportion of Small Group and Non-group business.

The range of rate impacts of the currently uninsured on the newly merged market as they enter insurance varies based on the assumptions used in our projection model. These assumptions include the number of new members, the assumed morbidity of the new membership, and the carrier's ability to use the extra premium collected due to the 10% group size load to offset premium.

To the extent that the assumptions used in the projections do not materialize, the ultimate rate impacts will vary from our projections.

## 2. Acknowledgements

We would like to thank the following people for their time and assistance in helping us to model the impact of Chapter 58 of the Acts of 2006 on the Non-group and Small Group health insurance markets:

- The members of the Special Commission, for their advice on data analyses, modeling, and their ongoing support of our efforts
- The actuarial and information technology staffs at the Non-group and Small group carriers based in Massachusetts, for providing us with the data necessary to perform our analyses
- The staff at the three major health insurance intermediaries, for assisting us and the carriers in obtaining detailed data from the smallest insured groups
- Jon Kingsdale and Bob Carey from the Commonwealth Health Insurance Connector Authority, who met with us and with the Special Commission to answer questions we posed about potential directions the Connector might be taking
- Jonathan Gruber of MIT, for advice on assumptions regarding the uninsured and on the effects of price elasticity
- Marjorie Radin at the Massachusetts Division of Health Care Finance and Policy (DHCFP) for her targeted analyses of the Division's 2006 survey of the health insurance status of Massachusetts residents
- Katharine Nordahl and Nancy Turnbull at the Blue Cross Blue Shield of Massachusetts Foundation, for their support and assistance in working with the Urban Institute to provide on a priority basis current estimates of the uninsured in Massachusetts
- All respondents to the key informant survey, for their thoughts about the impact of various components of Chapter 58 on the number of uninsured in Massachusetts
- While all of these people were very helpful, the assumptions and conclusions contained in this report are solely those of the authors of this report.

While all of these people were very helpful, the assumptions and conclusions contained in this report are solely those of the authors of this report.

### 3. Introduction

Chapter 58 of the Acts of 2006, An Act Providing Access to Affordable, Quality, Accountable Health Care (“Chapter 58” or “the Act”) is a comprehensive plan for increasing access to health insurance coverage for all residents of Massachusetts. The Act expands coverage for low-income populations, mandates that all individuals obtain health insurance, merges the Non-group and Small Group risk pools, establishes the Commonwealth Health Insurance Connector Authority (“Connector”), and encourages employers to provide insurance to employees. In addition to these changes, the Act calls for a special commission to examine and study the impact of merging the Non-group and Small Group health insurance markets, as defined by Chapters 176M and 176J of the General Laws.

On behalf of the special commission, the Massachusetts Division of Insurance contracted with Gorman Actuarial, LLC to conduct this study and prepare a report. Gorman Actuarial subcontracted with DeWeese Consulting, Inc., an actuarial consulting firm, and Hinckley, Allen Tringale, LP, Health Strategies, a health care consulting firm, to assist with the study.

The merger of the Small Group and Non-group health insurance markets called for in the Act will have a major impact on the way small employers and individuals who do not receive health insurance coverage through an employer will purchase health insurance in Massachusetts. We therefore begin this report with a short description of the current situation, and an explanation of the changes in the private health insurance market called for in the Act.

The next major section of this report describes the methodology we used to obtain carrier data for those currently insured in Small Group or Non-group products. Based on the data obtained from the individual carriers, we analyzed the existing Small Group and Non-group markets in order to understand the demographics, distribution of the population by key factors (such as geography) and overall dynamics of these markets. We then modeled, as described in Section 7, the effect of the anticipated merger to analyze the impact on premiums for currently insured Small Groups and Non-group subscribers, taking into consideration the various prospective changes in rating methodology.

A major element of the Act is the requirement that all individuals, unless granted a waiver, purchase health insurance coverage by July, 2007, the “individual mandate.” The individual mandate is expected to result in a movement of currently uninsured individuals into the ranks of the insured. Thus, a key element of this study was an assessment of the number of currently uninsured individuals who will purchase coverage, and the timing of such purchases. Section 8.1 of the report explains our process for developing these assumptions. Given our assumptions about the number of individuals and small groups purchasing coverage, we applied assumptions about expected claims costs and then modeled the impact of the newly insured on health insurance rates of the merged Small Group and Non-group market.

Chapter 58 also called for an analysis of the potential impact of reinsurance on the newly merged market. We present the results of various reinsurance levels in Section 9.

During the course of our analyses, a number of issues came to our attention which we believe should be considered by policy makers, small employers, advocates, and carriers. We discuss these items in Section 10 “Identified Issues”.

Please refer to Appendix 12.1 for references, notes, and a bibliography. Appendix 12.2 contains a glossary of terms used in this report.

The findings reported here are based on the data analyses and assumptions we have made. Implementation of the Act is just beginning; many key details (including, for example, the requirements for one to receive an affordability waiver from the individual mandate, the definition of Minimum Creditable Coverage, and the terms of the Young Adult plan) are still to be determined. Therefore, it can be expected that some of our assumptions will not be borne out. We have tried to be explicit in our assumptions. To the extent that our assumptions are not realized, future events may turn out differently from these projections.

## 4. Background

### 4.1. Legislative Requirement

Section 114 of Chapter 58 calls for a special commission to conduct a study the merger of the Small Group and Non-group health insurance markets. Specifically, subsections (c) and (d) state:

**“(c) The commission shall conduct a study, which shall include examining the impact of merging the Non-group and Small Group health insurance markets on premiums charged to individuals and small groups. The report shall take into account the following factors:**

- (1) the individual mandate, established by chapter 111M of the General Laws;**
- (2) the commonwealth care health insurance program, established by chapter 118H of the General Laws;**
- (3) health benefit plans authorized to be sold through the commonwealth health insurance connector, established by chapter 176Q of the General Laws, and the operation of the connector;**
- (4) the requirement in chapter 151F of the General Laws for employers to establish plans under 26 U.S.C. 125;**
- (5) the fair share employer assessment, established by section 188 of chapter 149 of the General Laws;**
- (6) the free rider surcharge, established by section 18B of chapter 118E of the General Laws; and**
- (7) appropriate use by insurance plans of standardized industry codes as used as a rating factor in section 1 of chapter 176J of the General Laws.**

**(d) The commission shall then direct that the results of the study shall be further studied to analyze the potential impact of reinsurance on the new merged market.”**

## 4.2. Major Questions to Address

Our study was designed to answer the following questions:

- What will be the impact of the merger of the Small Group and Non-group markets on the typical health insurance premium rate paid by a small employer?
- What will be the impact of the merger on the health insurance premium rate for an existing Non-group subscriber?
- What will be the impact of the individual mandate and the various encouragements to employers (e.g., the requirement to make a “fair and reasonable” contribution to health insurance in order to avoid paying an assessment) to provide employees with health insurance on the total number of individuals enrolling in health insurance?
- What will be the impact of the currently uninsured population on the premium for the new, merged market?
- Based on our estimated range of the currently uninsured population and the impact of the changes resulting from the enactment of Chapter 58, what is the size of the remaining uninsured population in Massachusetts?
- What would be the impact to the health insurance premium rates of existing Non-group subscribers if the Non-group and Small Group populations are not merged?

These issues and more are addressed under a number of different scenarios in the following analyses. Our aim was to provide a snapshot of the newly merged Massachusetts Small Group marketplace in the years 2007 through 2012. This involved modeling multiple factors, all of which are changing over time.

It is important to note that the required completion date of this study presented unique hurdles. The Special Commission must report to the legislature by December 31, 2006. The Commonwealth Health Insurance Connector Authority (the “Connector”) the body authorized by the Act to “facilitate the availability, choice and adoption of private health insurance plans to eligible individuals and groups” is in the process of determining product offerings, waiver criteria, and distribution methods. As a result, we have made a number of assumptions about decisions

that are still evolving and about the impact of those decisions in the marketplace. These assumptions are described throughout the report.

### **4.3. Current and Revised Regulatory Environment**

Currently Massachusetts Non-group and Small Group health insurance policies are regulated differently. Small Group coverage (i.e., coverage for employers with fifty or fewer employees, including sole proprietors) is regulated by Chapter 176J of the General Laws, and Non-group coverage is regulated by Chapter 176M.

#### **4.3.1. Current Non-Group Market**

At the present time, two products are permitted to be offered for sale to potential Non-group subscribers. The standard Non-group product became available for sale in the latter half of 1997. At that time, all in force Non-group products became closed blocks of business. A second, alternative product was approved for sale in 2000.

Coverage is quite comprehensive, with the major difference between the two product designs being the level of copayments and/or deductibles and the presence or absence of prescription drug coverage. Enrollment is available on a guaranteed issue basis, with continuous open enrollment. Carriers are permitted to apply a waiting period (the time period at the start of coverage during which typically only claims for emergency care are covered) or a pre-existing condition exclusion period (the time period at the start of coverage during which claims for a particular medical condition are not covered) of up to six months. Any applicable waiting period or pre-existing exclusion period is reduced by any period of prior creditable coverage if the prior coverage was continuous to not more than 63 days prior to the application for coverage. Non-group rates for each rate basis type (e.g., individual or family composition) are permitted to be adjusted for age (within a 2:1 band) and for geographic region. A further adjustment is permitted for the benefit level of the alternative plan, if a carrier sells both the Standard and the Alternative plans. Non-group premium rates are subject to review and approval by the Division

of Insurance, according to standards spelled out in Chapter 176M. Non-group policies are primarily sold by carriers on a direct basis.

#### **4.3.2. Current Small Group Market**

There is no limit to the number of products carriers can offer to the Small Group market. However, the Division of Insurance must approve all Small Group product offerings. Carriers must file Small Group rates with the Division of Insurance on a “file and use” basis. Small Group premium rate calculations are permitted to take age, geography, rate basis type, employer size, and industry into account. Rates for Small Group groups must be within a 2:1 compression band – that is, the rate for the same product, rate basis type, and effective date for the group with the highest rate cannot be more than two times the rate for the same product, rate basis type, and effective date for the group with the lowest rate. Small Group policies are sold by carriers on a direct basis, through brokers, or through intermediaries.

#### **4.3.3. Chapter 58 Changes**

Chapter 58 changed the rating requirements, and added a distribution channel, for both Small Group and Non-group policies. Each carrier will combine its Non-group and Small Group business into a single rating pool by merging the claims experience of the two populations. Small Groups of one subscriber will now include both working and non-working persons. The rating process for the combined risk pool is based on the existing Small Group model, although chapter 58 has provided for some changes in allowable adjustments and their application to the base rate. Most notably, the permitted adjustment for group size has been increased, and this adjustment may now be applied outside the 2:1 band. See Section 7.1 for a discussion of the impact of the rating changes on the Small Group population.

Please refer to Appendix 12.5 for a more detailed discussion of the existing rating requirements and the difference between existing and revised Small Group rating requirements.

In addition to changes in rating methodology, Chapter 58 established a new distribution channel, the Commonwealth Health Insurance Connector Authority. The Connector will grant a “seal of approval” to products it deems of value to consumers and appropriate for sale to individuals and small employers. Small employers and both working and non-working individuals and families will be able to purchase these products through the Connector. This will enable employees to purchase coverage with pre-tax income as employers establish Section 125 plans. In addition, the Connector coordinates and oversees enrollment into Commonwealth Care, the subsidized health insurance program for persons at or below 300% of the Federal Poverty Level (FPL).

Chapter 58 also requires that employers with more than ten full time employees establish a Section 125 plan, allowing employees to pay their share of any health insurance premiums and other medical expenses on a pre-tax basis. All employers that do business with the Connector will be required to establish a Section 125 plan.

As mentioned above, Small Group employers may purchase coverage either directly from a carrier or directly from the Connector in the future. At the meeting between the Special Commission and Connector staff, the staff stated that they would expect an employee to be able to select any product with a Connector seal of approval. If the employer is making a contribution to the purchase of coverage, employees may enroll in any of the products selected by the employer. It is our understanding that all “seal of approval” product purchases are intended to be treated and rated as groups of one.

Elements of Chapter 58 which further encourage employers to provide health insurance coverage to their employees include the requirement for a “fair and reasonable” contribution to employee health insurance premiums or the “fair share contribution amount” if an employer has more than ten full time employees. Non-providing employers can be subject to an assessment of a portion of the state’s cost of caring for an employer’s uninsured employees under certain circumstances – the free rider surcharge.

Two other important roles of the Connector – the granting of affordability waivers from the requirements of the individual mandate and the granting of waivers for the enrollment into Commonwealth Care for persons eligible for employer sponsored coverage – also play an important part in our analysis. While not directly impacting rating rules or product selection, an assessment of the impact of these two waivers on enrollment into health plans at both the Connector and directly to carriers has a major impact on the number of uninsured individuals remaining in the population.

## 5. Data Collection Process

### 5.1. Carrier Data

The first step in our data collection process was convening a carrier Advisory Committee to assist in obtaining actual health plan membership and utilization data. The Advisory Committee was comprised of representatives of the six largest Small Group and Non-group health insurance carriers in Massachusetts. All of these carriers contributed data for our study. The carriers who contributed data are:

- Blue Cross Blue Shield of Massachusetts
- Fallon Community Health Plan
- Harvard Pilgrim Health Care
- Health New England
- Neighborhood Health Plan
- Tufts Health Plan

At the meeting, preliminary data specifications were reviewed and discussed. Following the meeting, final data specifications were sent out to the six carriers. We executed confidentiality agreements with all carriers. Detailed data specifications are found in Appendix 12.6.1.

A condition of conducting this study was that we were to incorporate data representing at least 80% of the Small Group and Non-group health insurance enrollment in Massachusetts. The carriers who participated in this study and provided data represented 92.1% of the Massachusetts Small Group enrollment and 99.8% of the Massachusetts Non-group enrollment, as detailed in Appendix 12.4. Given the required completion date of this project and the fact that these carriers represented such a high proportion of the total enrollment, and with the acquiescence of the Special Commission, we did not attempt to gather data from any carriers with smaller enrollment. Because of the small amount of business written by carriers other than

the six who participated in the study, inclusion of data from other carriers would not have affected any of the results of this study.

The data request was segregated into four Data Table formats. Data Table 1 contained employer sponsored Small Group data, Data Table 2a was Non-group subscriber level premium data and Data Table 2b included Non-group member level claims data. Data Table 3 was member level claim data for Small Group.

In addition to the data provided in the Data Tables, we also requested product descriptions of all products sold within the Small Group and Non-group markets. This information was requested in order to enable us to model plan benefit values on a comparable basis across all carriers and across Small Group and Non-group. For each product, we requested summary benefit descriptions for a limited number of benefit features. These features are listed below:

- Office Visit Copay
- Emergency Room Copay
- Inpatient Copay
- Outpatient Surgery Copay
- Pharmacy Benefit
- Deductible – if applicable
- Coinsurance – if applicable
- Out of Pocket Maximum – if applicable

Some carriers use intermediaries to distribute their products to the 1-5 life group size market. Those carriers do not have access to detailed employer group data for this market segment. We worked with the intermediaries to provide a crosswalk of member and employer group identification data to the health plans. The following intermediaries assisted us with obtaining data from the carriers:

- Massachusetts Businessman's Association
- Northeast Business Trust

- Small Business Service Bureau, Inc

The health plans then aggregated their data into employer groups. The carriers found some inconsistencies in the data. For example, some members were in one data source but not found in another. Some members switched from one intermediary to another or from one employer to another. Health plans developed algorithms to clean the data as much as possible.

We requested three years of Group level data and two years of Member level data. We requested premium, claims, member months, member count by tier, subscriber count by four rate basis types and eleven age groups. We also requested employer ZIP code for Small Group and subscriber ZIP code for Non-group, SIC code for employer groups, plan code, plan type, and anniversary date. With the exception of premium, claims, and members months, all data was requested as of July 1 of each year. Therefore, we did not collect demographic data for groups that terminated before July 1 or added coverage after July 1 of a year. Since employer groups in the Massachusetts market move from carrier to carrier, we assumed that demographic data missing from one carrier would be picked up in another carrier's data. By collecting demographic information as of a common date within a year, we avoided counting the same group twice if it was enrolled for part of a year with each of two different carriers. The data specification is shown in Appendix 12.6.1.

Due to the required completion date of this project, we had requested that data be provided within two weeks. All carriers worked extremely hard to provide this data within the requested timeline. Due to the intermediary issues and other complexities of the data retrieval process, the bulk of the data sets were received within three to four weeks and the final data sets were provided four to five weeks from the date of the initial request.

## **5.2. Data Issues**

Some carriers' employer group level data and member level data did not match when comparing total claims between the two reports. After investigation with the affected carriers, we found that different logic was used to pull the data for member level claims as compared to

employer group level claims. For example, if a member was assigned to a small employer any time during a given year, all claims for that member were assigned to the member in the member file. This does not mean that a member who was in multiple groups would have duplicate claims. When generating the data the carriers used logic to assign the claims of a member to a single employer group. However, the employer group data would only include claims for the member who was in the employer group during that calendar year. For example, if a member moved from a small group to a large group in a given year, all claims for the calendar year would show up in the member data, but not in the employer group data. Since we are using employer group data for our primary analysis, we felt comfortable with this approach. Another example in the differences between the member file and the employer group file is that the member file sometimes did not include payments that were not made through the claims payment system. The effect of these differences was quantified and resulted in a difference of less than .2% of the total claims. Therefore we did not adjust for the discrepancy.

In the member data, one carrier provided some duplicate records. This was mostly due to members switching benefit plans during the year, and the same member showing up once with each benefit plan. To correct for this problem, we collapsed data at the member level and calculated a blended plan value for each affected member. We also received a duplicate record from this carrier if a member switched contract types during the year (from Individual to Family, for example). When performing analyses on contract types, we excluded those individuals with duplicate contract types.

We did not receive Standard Industrial Classification (“SIC”) coding from certain carriers. Those carriers provided industry data by North American Industry Coding System (“NAICS”) codes instead. We mapped the NAICS codes to SIC codes to obtain consistent industry classifications.

One carrier was not able to provide pharmacy rider codes by employer group. Instead they provided an enrollment distribution of pharmacy codes and we developed a composite pharmacy adjustment that was applied to all groups from that carrier.

One carrier provided demographic information for employer groups in a separate table. When matching the demographic data to the claims/premium file, we found some groups that were missing from one of the files. We excluded these groups from our analyses. The total numbers were small and did not have a material impact to overall results (approximately .01%). We encountered similar issues with that carrier's Non-group data as well.

One carrier provided incorrect demographic information for CY 2003. After consideration of the total effect, we omitted age factor analyses from our data tables for CY 03.

One carrier was not able to provide premium at the subscriber level for the Non-group population. However, that carrier did provide total Non-group premium. We calculated an average premium per member per month ("PMPM") and applied it to all Non-group subscribers for this carrier.

In some cases, either negative premium or negative claims were reported for a given small employer group. In those cases, we used a value of zero. The overall effect of this issue is less than .01%.

As stated above, we had requested demographic data attributes as of July 1 of each year. Therefore, we were apparently missing demographic information, SIC code information, and plan code information for approximately 15% of employer groups and 4% of member months. Due to duplicate employer group records, we feel that the 15% is overstated and a better estimate of missing data is reflected by the member month calculation. Since employer groups in the Massachusetts market move from carrier to carrier, we felt that if demographic data was missing from one carrier it would be picked up in another carrier's data. These groups are normally found in the N/A category of the analysis tables found in the Appendices. To the extent we have demographic data included from another carrier for many of these groups, the number of groups for which data is truly not available is overstated.

## 6. Data Analyses: Group and Non-Group

We designed data templates in a common format for all carriers and for Small Group and Non-group to support the combination of all data for analysis purposes. After the carrier data was compiled into our database, we assigned age factors, group size factors, SIC-based industry factors and plan value factors to each employer group and to each Non-group subscriber in our database. We also calculated a combined rating factor pre-merger and post-merger. A description of the development and application of these factors is found below.

### 6.1. Age Factors

We determined age factors based on group data only, using member claims for subscribers only. The factors were determined by relative PMPM claims by age group. We used the resulting factors to develop group-by-group weighted age factor rates. The weighted age factor rates were then summarized across all groups to determine an average factor for all Small Group business and an average factor for all Non-group business. After applying the factors to the subscribers in the Small Group population, the average weighted age factor was 1.059. That average factor was then used to normalize all age factors back to a weighted average of 1.00 for the group population. The average age factor for the Non-group population based on the normalized group rates was 1.13 signifying that the Non-group population has approximately 13% higher morbidity on average than the group population. This is equivalent to approximately 2 to 4 years of age, which was estimated based on the range of age factor differences between age 40-44 and 45-49, and between 45-49 and 50-54.

Preliminary age factors were determined based on group data only from three largest data contributors, representing 90% of total group data for study. These were used because they represented adequate volume of lives and because data for the other plans was incomplete and not analyzable at the time this step was undertaken. However, the normalization process was done across all carriers' data. The result is consistent with what would have been obtained if all carriers' data had been available in time to calculate the preliminary factors.

Claim data was sorted for each plan for member based claims of subscribers only. Subscribers were chosen because we intended to apply age factors to subscribers. We used only the claims of subscribers themselves, and not of their dependents, in order to get comparability across age cohorts.

The 65+ group includes both people for whom group coverage is primary and Medicare coverage is secondary, and people for whom group coverage is secondary and Medicare coverage is primary. We were not able to obtain data that splits the 65+ age cohort by Medicare primary vs. secondary. Therefore, the average per member per year (“PMPY”) claims for people in the 65+ cohort in our dataset is lower than would be the case for a group of people for all of whom group coverage is primary.

In order to evaluate the effect of plan choice on morbidity, we measured relative morbidity by PMPY claims and separately by plan-adjusted PMPY claims. We obtained plan adjusted PMPY claims by dividing the PMPY claims for each subgroup line by the plan value for that subgroup line. The result of modeling the data both ways was that the difference was negligible with regard to whether or not plan design was adjusted out. Therefore, we based our preliminary age factors based on data not adjusted for plan.

We divided total claims for 2005 by total subscribers for 2005 in order to obtain PMPY claims. These claims are somewhat understated in aggregate, because we have the claims that were incurred by all subscribers, but some of those subscribers were exposed for only a part of a year. However, our judgment is that the ratio of these PMPY claims by cohort should be unaffected.

Our analysis by age was in the following age cohorts. Table 16 shows both the age factors as determined based on PMPY analysis and the revised and normalized factors to adjust to 1.00 for the average of all groups.

<u>Age From</u>	<u>Age To</u>	<u>Original Factors</u>	<u>Normalized Factors</u>
0	18	0.18	0.17
19	24	0.39	0.37
25	29	0.49	0.47
30	34	0.63	0.60
35	39	0.74	0.70
40	44	0.87	0.82
45	49	1.01	0.96
50	54	1.33	1.25
55	59	1.75	1.65
60	64	2.34	2.21
65		2.13	2.01

**Table 16 – Age Factors**

The group including people with ages 25-29 was split into two segments, so relative morbidity by age was available for both the standard five year cohorts often used by Small Group insurers and so the 25 and 26 year olds could be combined with younger individuals in order to assess the average cost of an under-26 product. The average factor for subscribers aged 26 and under was .42 before normalization and .39 after normalization.

## 6.2. Industry Factors

We based our initial industry factors on a table of factors used by a commercial insurer in another market setting. We obtained a relative factor for each available SIC code, and then truncated the table at the ends to keep adjustments within a +/-10% range from a 1.00 value. For groups without demographic data, we used a default value of 1.00. These factors were applied to all group subscribers and normalized back to an average value of 1.00. Non-group business is not subject to industry rating under current law, but will be subject to industry rating in the future. For purposes of combining Small Group and Non-group populations, we assumed an effective industry factor of 1.00 for all Non-group business. Table 17 shows the five most common industries by number of enrolled subscribers within each industry factor category (High, Medium, and Low) and the corresponding industry factor. These industry factors have been normalized by dividing them by 1.007.

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SIC CODE	SIC Code H,M,L	Industry Description	Normalized SIC Factor
8011	H	Medical Doctors Office and Clinics	1.092
5812	H	Eating and Drinking Places	1.092
8021	H	Dentists' Offices and Clinics	1.092
7231	H	Beauty Shops	1.092
5511	H	Motor Vehicle Dealers	1.092
8111	M	Legal Services	0.988
8742	M	Management and Public Relations	0.988
7371	M	Computer Programming and Data Processing	0.988
6531	M	Real Estate Agents and Managers	0.988
6411	M	Insurance Agents, Brokers and Service	0.988
8721	L	Accounting Auditing and Bookkeeping	0.936
8711	L	Engineering, Architectural and Surveying	0.936
3599	L	Misc Machinery and Equipment	0.936
8712	L	Engineering, Architectural and Surveying	0.936
5999	L	Other Retail Stores	0.936

**Table 17 – Most Common Industry Codes and Factors**

### 6.3. Group Size

Group size is a rating variable under the current law that is limited to an adjustment of .95 to 1.05. Group size is multiplied times age and industry factor and the resulting combined factor is subject to a requirement that the highest rate charged to any group be no more than two times the lowest rate charged. Under the new law, group size can be set in a range of .95 to 1.10, and it is not applied until after application of the 2:1 compression adjustment. Therefore, certain groups (the smallest) will have higher rates under the new law because they have increased group size factors, and other groups may have higher rates because their group size factors will be applied outside the 2:1 compression. We have assumed for the purpose of our modeling that group size factors under the new law will be set by carriers at 1.10 for groups of one employee, 1.05 for groups of two through five employees, 1.00 for groups of six through 25 employees and .95 for groups with more than 25 employees. For modeling purposes we chose not to normalize the group size adjustments, although the average group size adjustment value is greater than 1.00. This has no impact on the results since all rating factors were normalized in aggregate.

## 6.4. Plan Value

Carriers have provided high level plan descriptions for all plan codes provided to Small Group and Non-group markets. We requested benefit descriptions for the following benefits:

- Office Visit Copay
- Emergency Room Copay
- Inpatient Copay
- Outpatient Surgery Copay
- Pharmacy Benefit
- Deductible – if applicable
- Coinsurance – if applicable
- Out-of-pocket maximum – if applicable

We developed a pricing model based on our general experience in the Small Group and Non-group health insurance markets in a number of states to determine a reasonable benefit value for each of these components. We then calculated an overall plan value for each of the plan designs sold in today's market. The plan values we calculated did not make explicit assumptions for utilization differences. A sample of plan designs with corresponding plan values are shown below. The resulting sample plan values shown below were discussed with the actuaries on the Special Commission to gain the benefit of their perspective on the reasonableness of the factors. The actuaries advised us that they thought these plan values were reasonable for the purposes of our models.

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and Small Group Health Insurance Markets

	Office Visit	ER	Inpatient Copay	Outpatient Copay	RX	Plan Value
Benefit 1	5	25			10/25/45	0.94
Benefit 2	15	50	250	250	10/25/45	0.89
Benefit 3	25	100	1000	500	10/25/45	0.84
Benefit 4	20	1000 ded			10/25/45	0.83
Benefit 5	20	2000 ded			10/25/45	0.75
Benefit 6	15	50	250	250	NO	0.76

**Table 18 – Sample Plan Designs and Values**

This is a sample of the benefit values we created, and represents the most typical plan designs. Because of minor variations among plans, the carriers presented us with hundreds of plan options. Each plan was priced independently, but the overall relationships were consistent with this table.

**Small Group Top Benefit Designs**

Office Visit Copay	ER Copay	Inpatient Copay	Outpatient Copay	RX	Approx % of Total Group Market	Plan Value
15	50	250	150-250	10/20/45 or 10/20/40	27%	.88-.90
20	50-75	500	250-500	10/25/40, 10/30/45, 15/30/50	14%	.85-.87
5-10	25-50			10/20/45 or 10/20/40	10%	.93-.95
\$1000 ded - \$2000 ded plan				Rx and no RX	4%	.76-.83

**Table 19 – Small Group Most Common Benefit Designs**

**Non Group Top Benefit Designs**

Office Visit Copay	ER Copay	Inpatient Copay	Outpatient Copay	RX	Approx % of Total Non Group Market	Plan Value
15	50	500	300	20/25	47%	.87-.88
25	75-100	500-1000	300-1000	no	30%	.72-.75

**Table 20 – Non-Group Most Common Benefit Designs**

## 6.5. Rating Factors

We calculated a combined rating factor for each employer group and for each Non-group subscriber. The pre-merger rating factor for this study is defined as the multiplication of the age factor, industry factor, and group size factor. The post-merger rating factor for this study is defined as the multiplication of just the age factor and the industry factor. The rating factor was calculated on a pre-MA Health Reform (old) basis and on a post-MA Health Reform (new) basis. We then applied the old 2:1 compression rules to the old factor. If the old factor was greater than 1.32 or less than .66 we compressed the factor to the end points of our band. We also applied the new 2:1 compression rules to the new rating factors. If the combination of the industry and age factor was greater than 1.32 or less than .66, we compressed the factor to the end points of our band. We then applied the group size factor to our compressed new factor.

## 6.6. Category Assignments

Along with rating factor assignments, we also assigned Small Group and Non-group subscribers to a number of analysis categories. Based on ZIP code (employer for Small Group and subscriber for Non-group) we placed them into one of seven regions – Cape, Metro Boston, Metro West, Northeast, Southeast, West, Worcester, and an additional category where no location information was provided, which we have designated as “UNK”. These regions comply with Massachusetts Small Group regulations. A mapping of ZIP code and region is found in Appendix 12.19.

We also grouped Small Groups and Non-group subscribers into the following categories:

- age factor narrow bands
- age factor wide bands
- plan value narrow bands
- plan value High, Medium, Low
- MLR narrow Bands
- MLR High, Medium, Low

- claims PMPM narrow bands
- claims PMPM High, Medium, Low
- adjusted claims PMPM narrow bands
- adjusted claims PMPM High, Medium, Low

Adjusted Claims PMPM defined here is claims PMPM normalized for age factor and plan value. Definitions of High, Medium, Low categories, “wide bands” and “narrow bands” are shown in the data tables found in Appendix 12.6.2 and Appendices 12.7 through 12.12.

With the exception of plan value, assignment of rating factors and category assignments was done at the employer group level. For the purpose of this paper and study, we have analyzed employer groups with multiple product offerings as subgroups. We have collapsed subgroup data to the employer group level to assign appropriate rating factors and categories.

## **6.7. Data Tables, Analysis and Observations**

We have summarized the Small Group and Non-group data into various tables which are found in Appendices 12.7 through 12.12. This process produced a statistical overview of the entire Small Group and Non-group market which led to several general observations. We analyzed this information particularly with regard to the 2005 data, although we also drew some comparisons from year to year.

## 6.7.1. 2005 Small Group

### 6.7.1.1. Region

- Region is defined as where the employer group is located. The Cape Region has a relatively higher Age Factor (1.074) compared to the other Regions in Massachusetts. The next highest region was the Southeast at 1.025, while the average age factors in Worcester and the West were also higher than average. The other regions were all slightly below average.
- There was less variation in industry factor, although the Cape also had the highest average industry factor at 1.015.
- The Cape had the lowest average plan value, at .87, which was approximately 2% lower than the average of all regions.
- The Cape's average claims PMPM is also much higher than for the other Regions, at \$296 in 2005, compared to an average of \$262. Worcester was the lowest at \$244.
- The Regions with the greatest number of enrolled Employer Groups and Member Months are MetroBoston, Northeast and MetroWest.

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CY 2005 Group Region Employer Groups

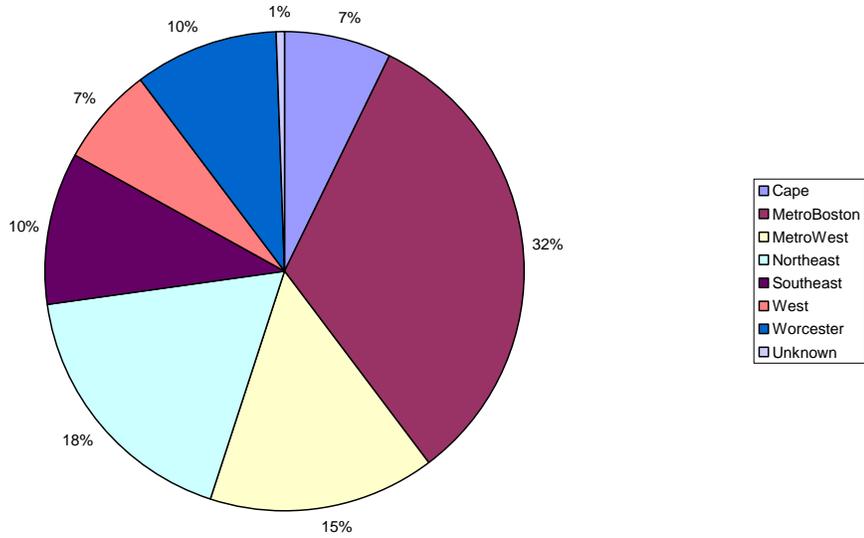


Figure 1: CY 2005 Small Group Employer Groups by Region

CY 2005 Group Region Member Months

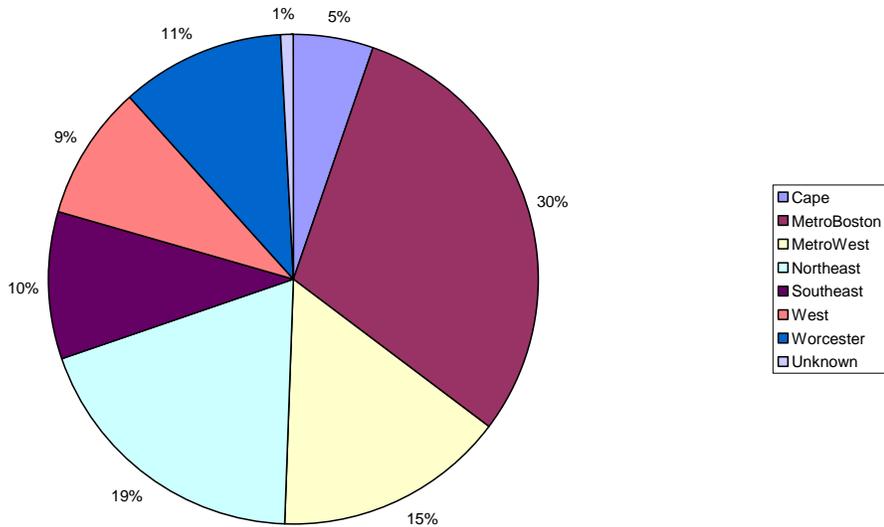
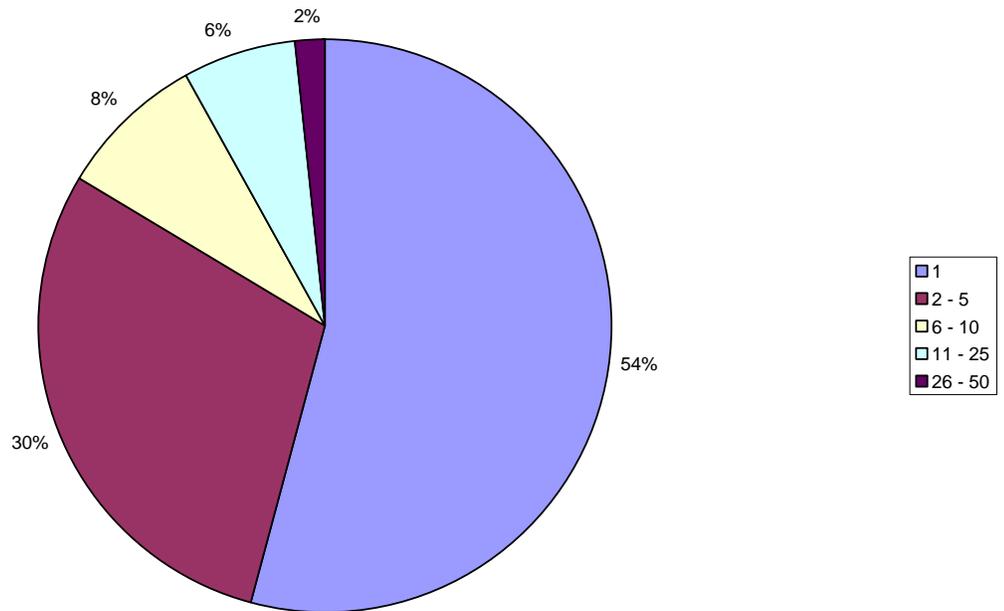


Figure 2: CY 2005 Small Group Member Months by Region

### 6.7.1.2. Group Size

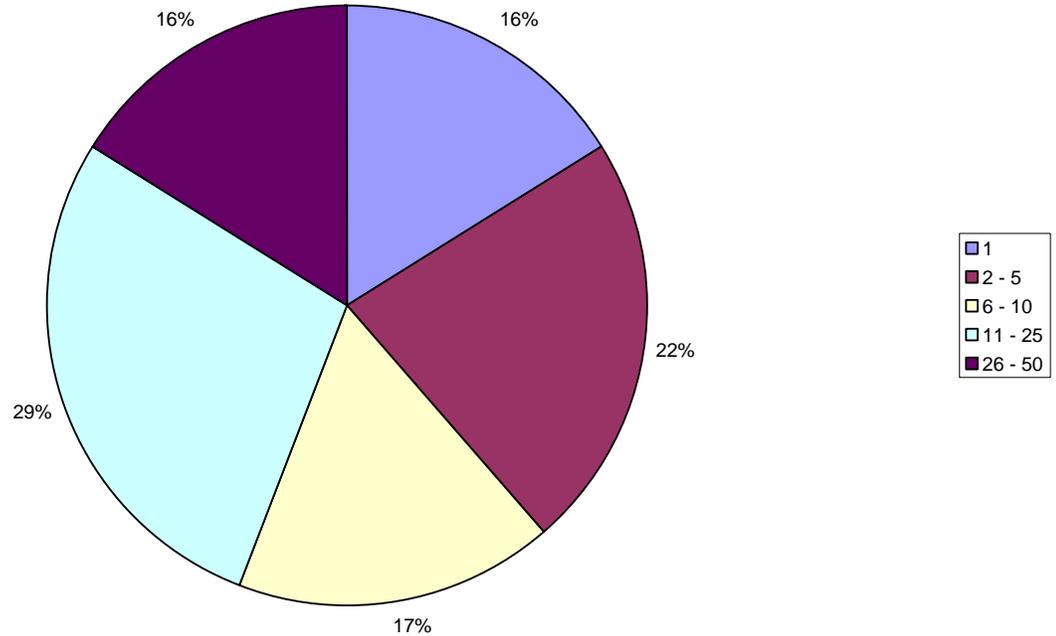
- More than half of all small employers are single subscriber groups, yet they only account for 16% of all member months.
- Groups with 26-50 subscribers represented only 2% of total groups, but they also included about 16% of total Small Group member months.
- Groups with only one subscriber had higher than average claims PMPM, loss ratio, age factor and industry factor, but they also had lower average plan values than any other size group.
- The group size with the greatest number of enrolled member months is 11-25 subscribers, which account for 29% of member months. However, the five major size groups we used for this study are roughly of equivalent size, with percentages ranging from 16% to 29%.

**CY 2005 Small Group Number of Employer Groups by Group Size**



**Figure 3: CY 2005 Small Group Number of Employer Groups by Group Size**

**CY 2005 Small Group Member Months by Group Size**



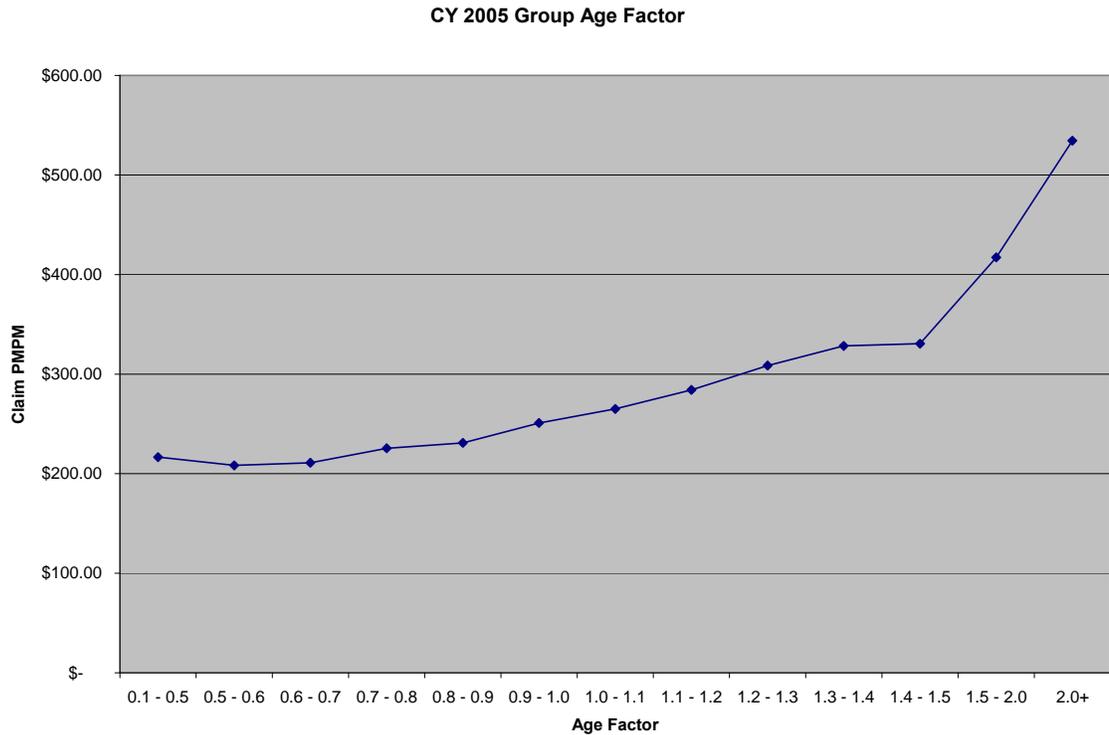
**Figure 4: CY 2005 Small Group Member Months by Group Size**

- As shown in Appendix 12.7, claims PMPM correlates with group size. That is, the highest claims PMPM level is associated with group size one, and the next highest with group size two-to-five. Groups with more than five employees tend to have comparable claims cost, however, with little differentiation by size band among those with more than five.
- The MLR for Group Size 1 is 97%. The high average age of these groups may be a contributing factor, since their average Age Factor is 1.2, and they are therefore more likely to be affected by 2:1 rate compression. Another contributing factor to the poor MLR may be the individual exercise of product selection in this market segment. Groups of one can make more precise decisions about which product is better for them than can larger groups; an alternate explanation is that groups of one may be more impacted by affordability issues with respect to the cost of health coverage than larger groups.

- The average plan value for Group Size 1 is about 2-3% lower than other group sizes (.865 vs. .889). Apparently this is because more people chose lower cost products, although those groups of one that experienced high utilization chose higher value plans, on average.

### 6.7.1.3. Age Factor

- As shown in Figure 5 claims PMPM is strongly correlated to age factor (as age factor increases, claims PMPM increases). This is not surprising, however, because the age factors were developed based on PMPM claims experience.



**Figure 5: CY 2005 Small Group Claim PMPM by Age Factor**

### 6.7.1.4. Plan Value

- 70% of the Small Group membership has plan values between 0.85 and 0.92, which we have characterized as “Medium.” This plan value level is generally consistent with plans

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that have \$15-20 office visit copays and some cost sharing on inpatient and outpatient services. Drug copays are typically \$10/25/40.

- Only 12% of the Small Group membership is in plans that we have characterized as “Low” cost, with plan values between 0.65 and 0.85.
- Approximately 3% of the Small Group population is enrolled in plans with plan values between 0.65 and 0.75. This is the range we expect High Deductible Health Plans (“HDHP”) to be in, and currently those plans have a relatively small percentage market share.

CY 2005 Group Member Months by Plan Value

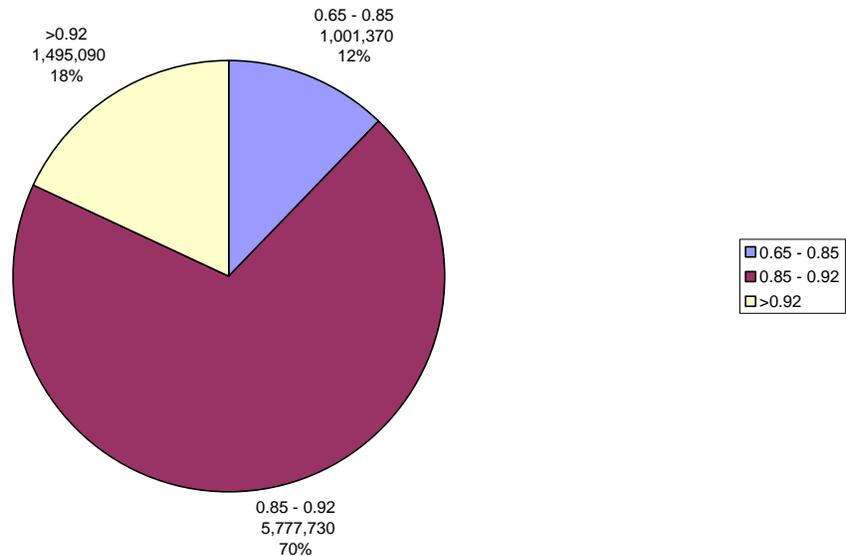


Figure 6: CY 2005 Small Group Member Months by Plan Value

- As shown in Appendix 12.7, the average age factor for people who purchase plans with lower plan values is higher than the average for all groups. This may be correlated to the greater cost of health insurance at older age, and to trade-offs between cost and benefits made by people who may expect to have relatively lower utilization than average

#### **6.7.1.5. Standard Industry Code (SIC)**

- Industry factor correlates with claims PMPM. That is, groups with lower industry factors have lower claims costs. However, claims PMPM is only loosely correlated with Industry Factor. Based on the SIC factors we used, the correlation was about 50%. That is, claims were about 5% higher for groups with a 10% higher industry factor, and about 5% lower for groups with a 10% lower industry factor. Industry factor has some predictivity for claim experience, but it is not a perfect indicator.

#### **6.7.1.6. Medical Loss Ratio (MLR)**

- Overall MLR for the Small Group market is approximately 86% for 2005. There was deterioration in MLR when compared to prior years. The MLR for 2004 Small Group was approximately 83%, and for 2003 Small Group it was approximately 82%.
- 23% of the groups within the Small Group market have an MLR greater than 100%. A relatively small number of groups have claims much higher than the average. For example, the five percent of Small Groups with the worst experience have an average loss ratio of almost 400%.
- On the other hand 45% of groups had a loss ratio of under 50% in 2005. This is consistent with experience in other markets.

#### **6.7.1.7. Claims PMPM**

- 11% of employer groups had average PMPM claims under \$50. These groups represented only about 3% of member months, however, so they were obviously concentrated among the smaller groups by number of subscribers.
- 9% of employer groups, including 5% of total members, had average PMPM claims of \$650 or more. Again, it is not surprising that the more extreme claims PMPM groups would be the smaller ones, because larger groups would average costs among subscribers with different utilization experience.
- The oldest average age groups tended to have the highest PMPM claims. For groups with average PMPM claims of \$650 or more, the average age factor was 24% higher than for the total Small Group market.

- Conversely, groups in each of the “narrow band” PMPM categories up through less than \$210 had age factors 3% to 7% lower than the average for all groups.
- Groups with PMPM claims less than \$50 also had the lowest average plan values, approximately 5% below the average for all groups. Groups with PMPM claim values between \$50 and \$100 also were below average in plan value, by 2% to 3.5%.
- Group categories with PMPM claims of at least \$210 and up were all fairly similar in the average plan value chosen.
- There was very little variation in industry code among the PMPM claim categories. The highest average industry code was for the lowest PMPM claim groups, but the range of variation in industry code was only 1%.
- The overall average Small Group Claims PMPM is \$262.
- When groups are aggregated into wider PMPM categories, the Low category, those groups with PMPM claims up to \$200, comprises almost 50% of total member months, and has an average loss ratio of 47%. Those groups have an average age factor 6% lower than the average for all groups.
- Conversely, those groups in the High category, with PMPM claims greater than \$350, comprise about 16% of member months, but have 42% of total claims. Those groups have an age factor 15% higher than the average for all groups, an MLR of 190%, and an average plan value 1% greater than the average for all groups.
- Figure 8 illustrates that those groups in the highest Claims PMPM category have very high claims.

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CY 2005 Group Claim PMPM

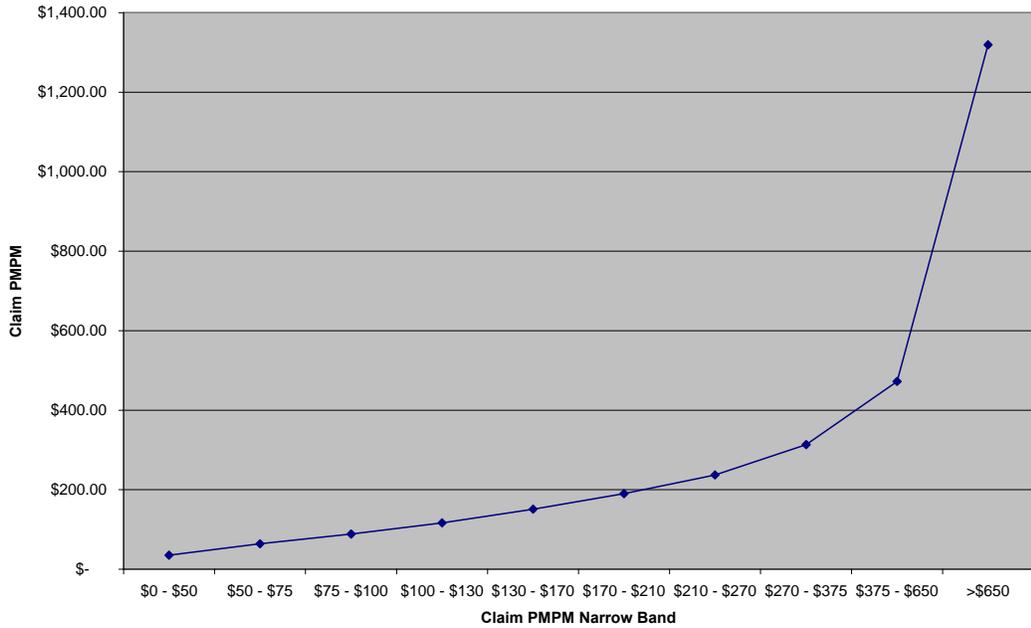


Figure 7: CY 2005 Small Group Claims PMPM Narrow Band

CY 2005 Group Claims PMPM

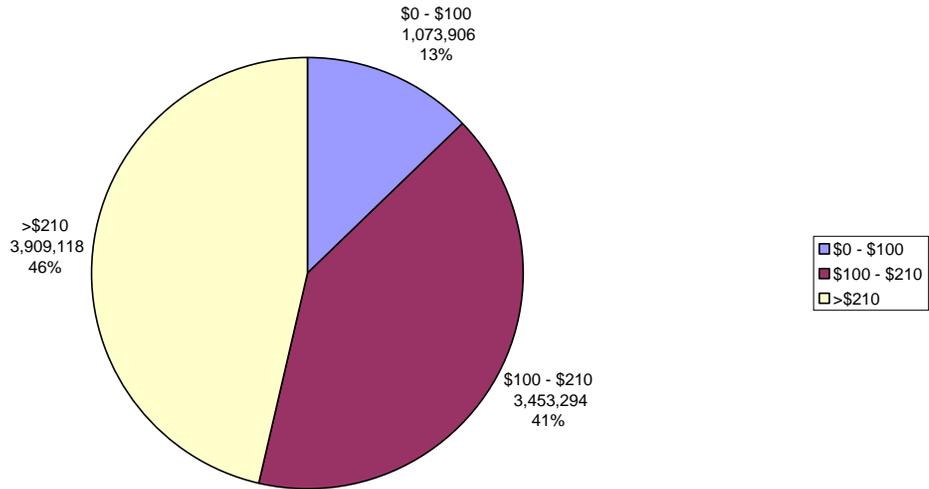


Figure 8: CY 2005 Small Group Claims PMPM Wide Band

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CY 2005 Group Claim PMPM Wide Bands

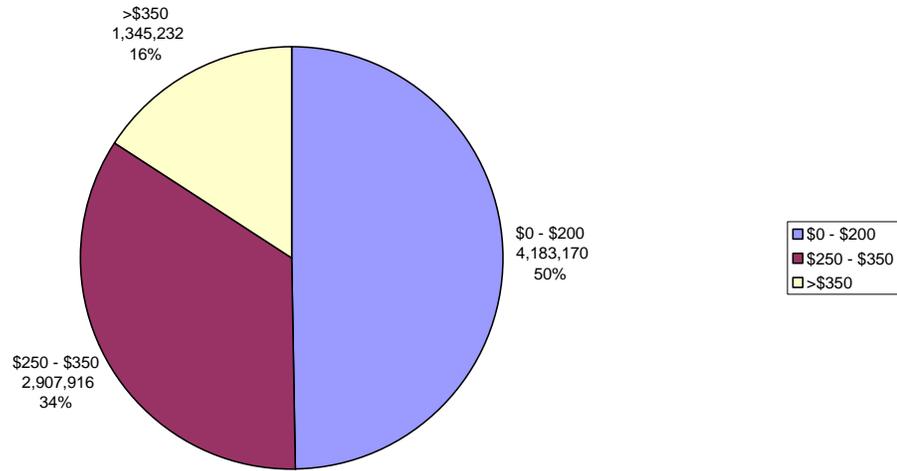


Figure 9: CY 2005 Small Group Claims PMPM Wide Band 2

### 6.7.1.8. Adjusted Claims PMPM

- We also analyzed PMPM claims adjusted for age factor and plan value. In this analysis, the “Low” adjusted PMPM claims groups had higher than average age factors, by about 9%, while the “High” groups had age factors about 7% below average. If age were the only factor that affected PMPM claims, we would have expected the adjusted groups by category to all have similar ages.

### 6.7.1.9. Group Size and Age Factor

The Age Bands shown in this section correspond to the employer age factor, which was calculated as an average of all subscribers for that employer.

- The overall age factor (“AF”) for “Group Size equal to 1” is 1.20, which indicates a higher age demographic, as shown in Figure 10.

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CY 2005 Group Size of 1 Subscriber Count

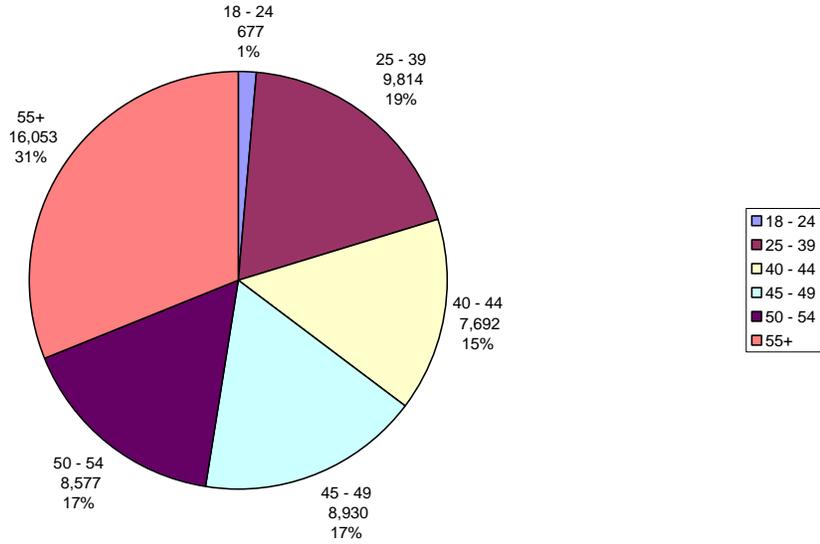


Figure 10: CY 2005 Group Size of 1 Subscriber Count by Age Category

CY 2005 Group Size 2-5 - Subscriber Count by Age

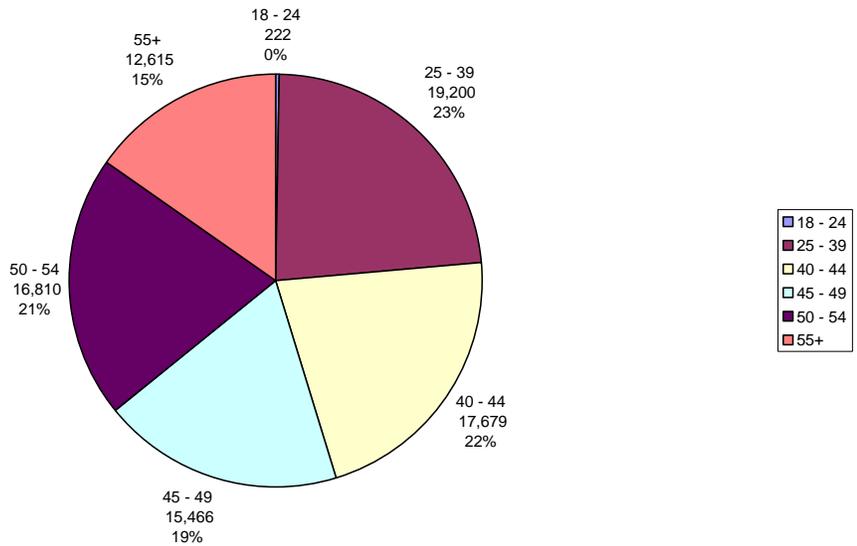


Figure 11: CY 2005 Group Size of 2-5 Subscriber Count by Age Category

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CY 2005 Group Size 6-10 - Subscriber Count by Age

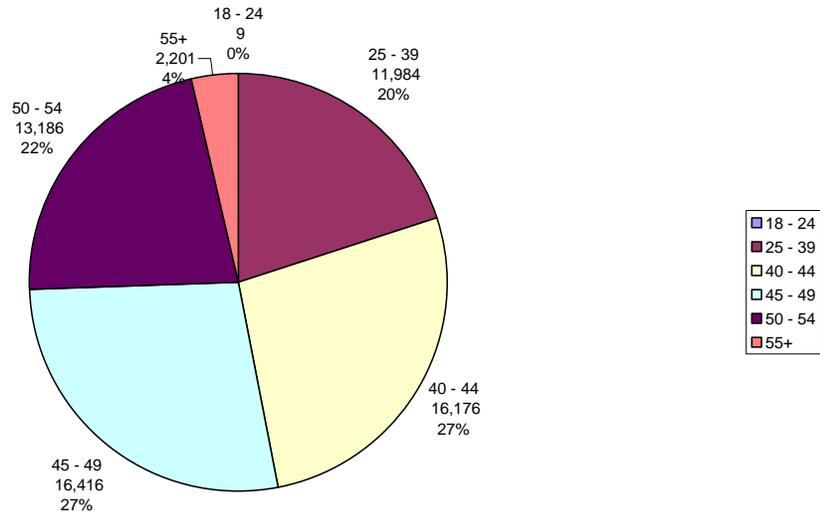


Figure 12: CY 2005 Group Size of 6-10 Subscriber Count by Age Category

CY 2005 Group Size 11-25 - Subscriber Count by Age

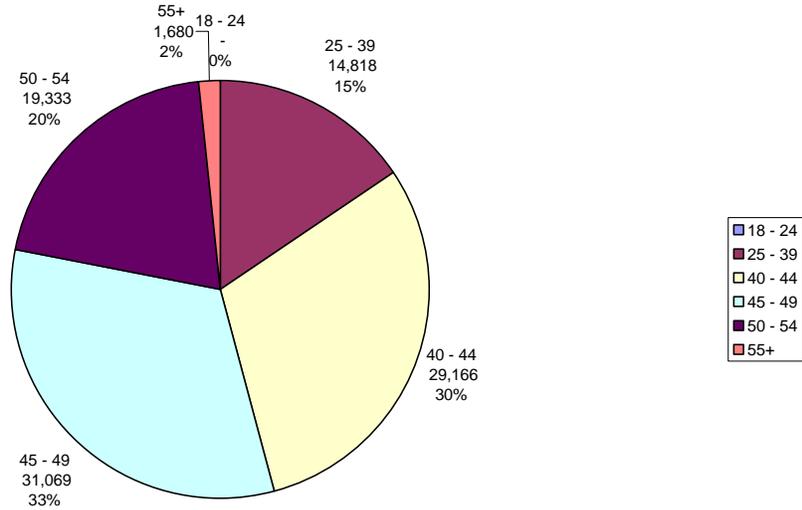
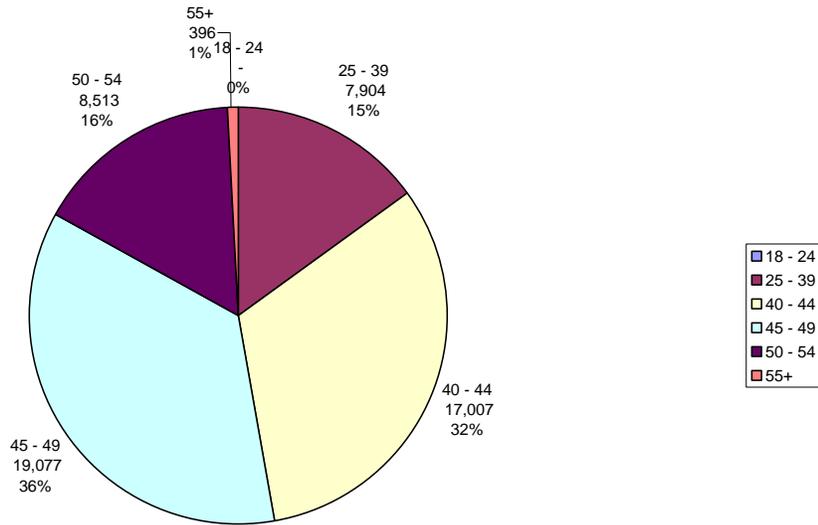


Figure 13: CY 2005 Group Size of 11-25 Subscriber Count by Age Category

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CY 2005 Group Size 26-50 - Subscriber Count by Age



**Figure 14: CY 2005 Group Size of 26-50 Subscriber Count by Age Category**

- o Note that the Age Bands in Figure 10 through Figure 14 represents the average age of the employer. So, for example there are no employers in the Group Size 11-25 with an average age less than 24.

**6.7.1.10. Group Size and Plan Value**

- o As shown in Appendix 12.7, it is interesting to note for “Group Size equal to 1” in the High plan category the average MLR is approximately 114%, which is the highest. For “Group Size equal to 1” in the Medium plan category, their MLR is approximately 102%. Finally, again for “Group Size equal to 1”, for those enrolled in the Low plan, their MLR is approximately 72%.
- o For “Group Size equal to 1”, the average Age Factor across all three product categories is consistent (1.20). Groups with high age factors are subject to having rates reduced by 2:1 compression, however, leading to the potential for higher than average MLR. In addition, product selection appears to be a significant contributor to the overall poor MLR for “Group Size equal to 1”.

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- The following five pie charts show for each group size category the proportion of subscribers who have a High, Medium or Low plan value, and the MLR associated with each group size and plan value segment. The effect of plan selection is most pronounced among groups with one subscriber, moderate within groups of two to five subscribers, and not particularly noticeable among groups of six or more subscribers. This suggests that the effects of group underwriting are important in controlling adverse selection by plan type, and an important risk factor for the post-merger market may be product choice being extended to individuals within a group when business is written through the Connector.
- When given the choice, an individual will select a product based on need whereas a group does not have that option. This selection reduces the subsidization that occurs across populations. The eventual result is that all premiums must increase to cover the selection. This was modeled and we estimate that this selection can increase overall costs by one to three percent.

CY 2005 Group Size 1 - Plan Value and Subscriber Count

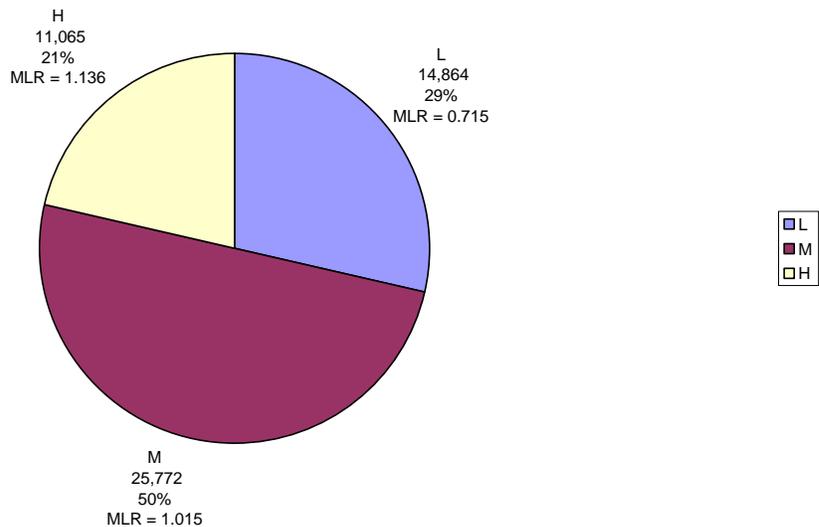


Figure 15: CY 2005 Group Size of 1 Plan Value and Subscriber Count

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CY 2005 Group Size 2-5 - Plan Value and Subscriber Count

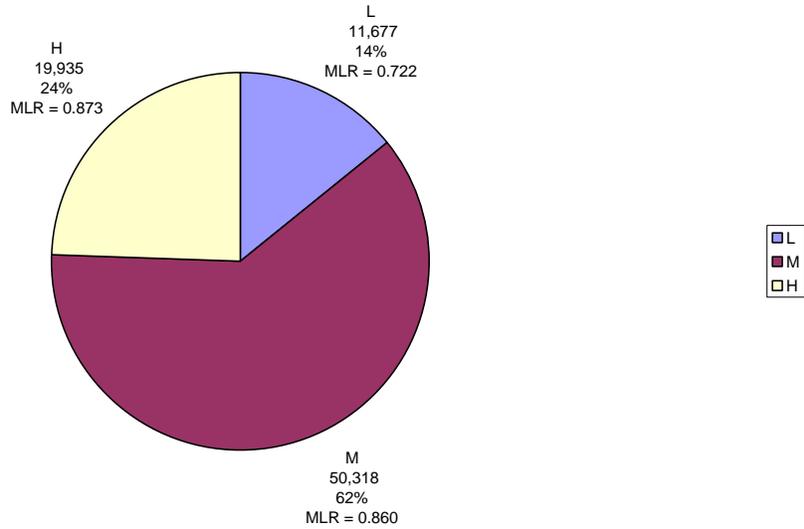


Figure 16: CY 2005 Group Size of 2-5 Plan Value and Subscriber Count

CY 2005 Group Size 6-10 - Plan Value and Subscriber Count

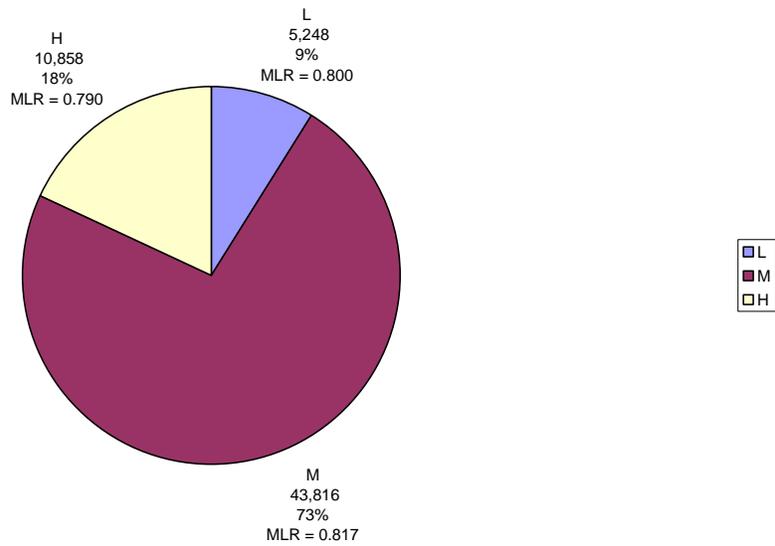


Figure 17: CY 2005 Group Size of 6-10 Plan Value and Subscriber Count

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CY 2005 Group Size 11-25 - Plan Value and Subscriber Count

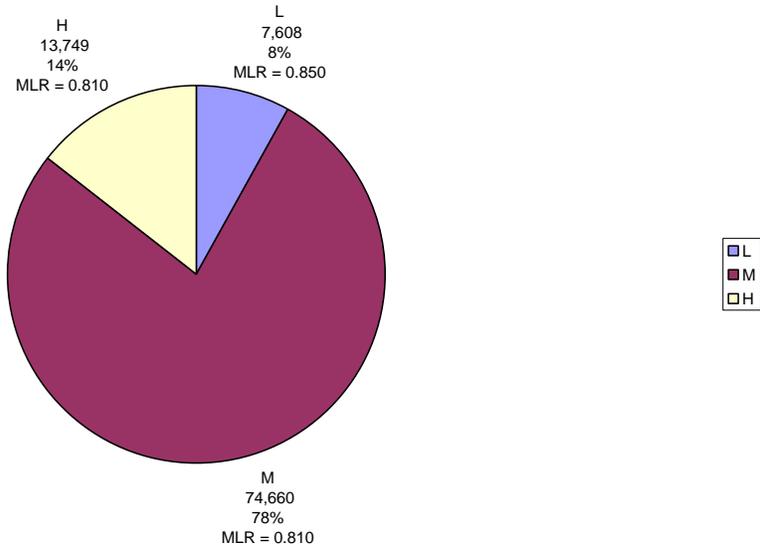


Figure 18: CY 2005 Group Size of 11-25 Plan Value and Subscriber Count

CY 2005 Group Size 26-50 - Plan Value and Subscriber Count

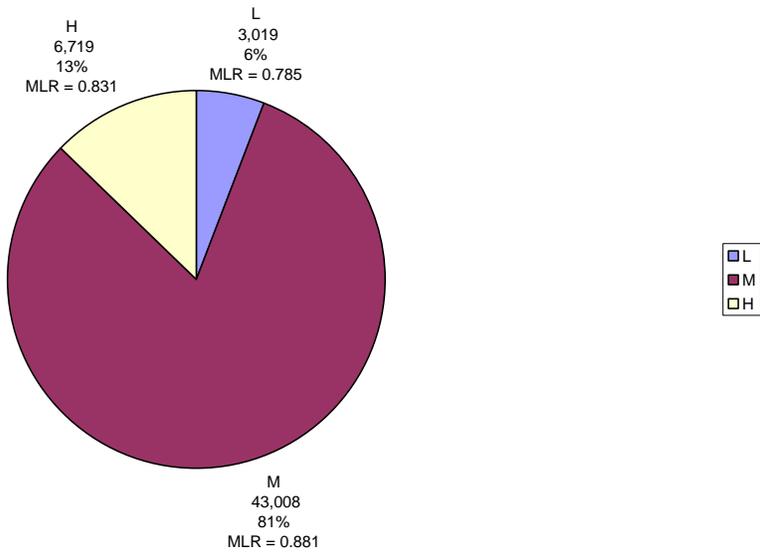
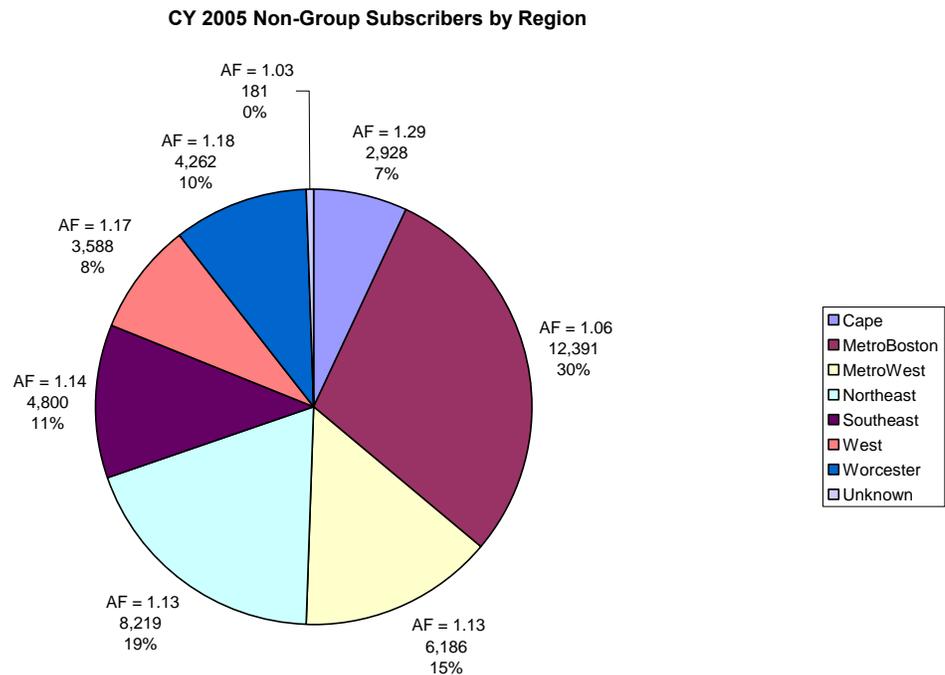


Figure 19: CY 2005 Group Size of 26-50 Plan Value and Subscriber Count

## 6.7.2. 2005 Non-Group

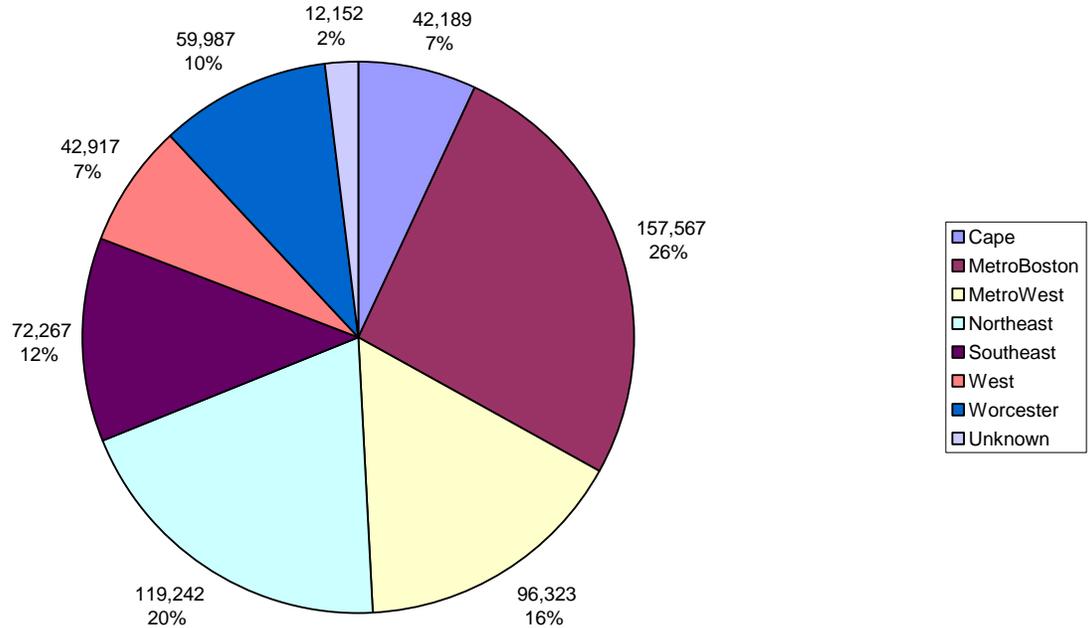
### 6.7.2.1. Region

- Non-group follows the Small Group pattern in that the Cape Region has a much higher average age factor compared to the other Regions in Massachusetts, while Metro Boston is the lowest age Region.
- In all Regions, the Non-group average age factor is higher than the corresponding Small Group average age factor.
- The Cape Region Claims PMPM is also much higher than any of the other Regions. The Cape is higher than average in MLR, but not the highest.
- The Cape is the lowest in terms of average plan value selected, although the disparity (about 1%) is less than it was for Small Group business (about 2%).
- Figure 20 shows the distribution of Subscribers by Region.



**Figure 20: CY 2005 Non-Group Subscribers by Region**

**CY 2005 Non-Group Member Months by Region**



**Figure 21: CY 2005 Non-Group Member Months by Region**

### 6.7.2.2. Age Factor

- Analysis shows variation in PMPM claims cost and MLR by age factor. The youngest people, those with age factors that would indicate they are 24 and under, have low claims cost. However, the next youngest group, those with age factors that suggest they are between ages 25 and 39, had relatively high PMPM claims cost, and the highest MLR of any age cohort modeled. This implies significant adverse selection, and shows that in Non-group a younger population is not necessarily a healthier population.
- The average age factor for Non-group is 1.13, or 13% higher than for Small Group. This is equivalent to approximately two to four years of age. This may be due in part to the fact that mandated obstetric and infertility costs are typically incurred in this age group,

and the fact that, after MassHealth coverage for dependents with chronic conditions ends, Non-group may be the only option for coverage.

### 6.7.2.3. Plan Value

- The average overall plan value for Non-group is 0.82 which is approximately 7% lower than for the Small Group population. This is consistent with the fact that the products available to Non-group subscribers have higher cost sharing than Small Group products, on average. Wider availability of richer products for Non-group subscribers is a risk factor for the merger of the two market segments, as that may promote adverse selection.
- Figure 22 shows that nearly half of all Member Months are associated with a plan value between 0.84 and 0.87. This is representative of the higher cost plan that is most generally available to Non-group subscribers.

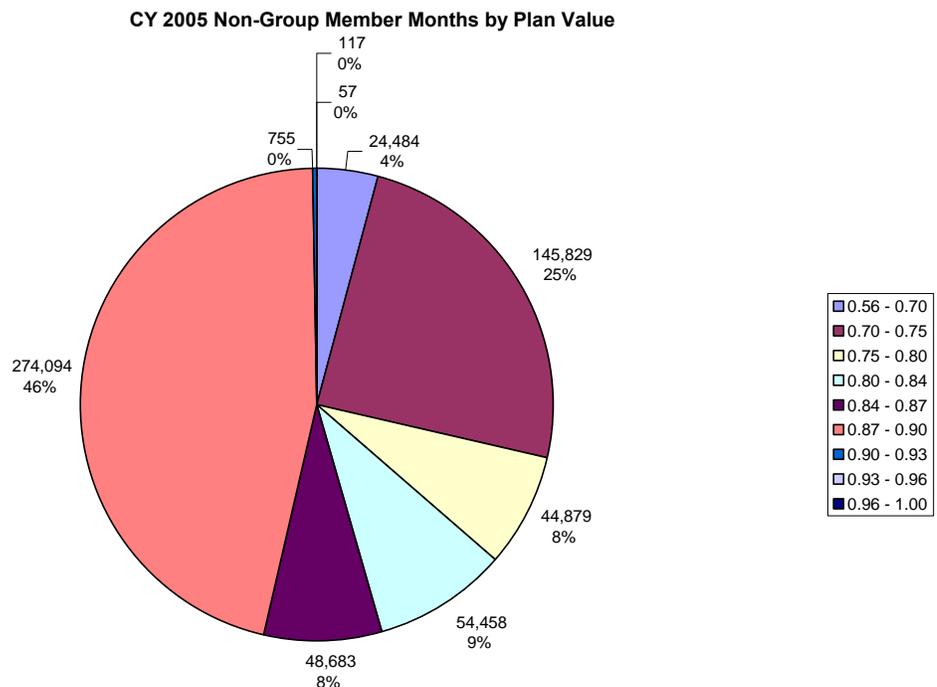


Figure 22: CY 2005 Non-Group Member Months by Plan Value

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- Approximately 4% of Non-group subscribers are enrolled in plans with Plan Value less than .75.
- It is important to note that plans with values other than between 0.84 to 0.87 or between 0.70 to 0.75 are not currently available for sale but have been continued in closed blocks

#### 6.7.2.4. MLR

- As shown in Figure 23 and Figure 24, 59% of the Non-group population (as measured by Member Months) is under 50% MLR, compared to 27% of Small Group member months associated with MLRs under 50%. This indicates that the Non-group high MLR is due to a relatively small percentage of high utilizing members, and also is indicative of the wider variation in experience to be expected among single subscribers as opposed to subscribers grouped within employer groups.

CY 2005 Non-Group Member Months by MLR

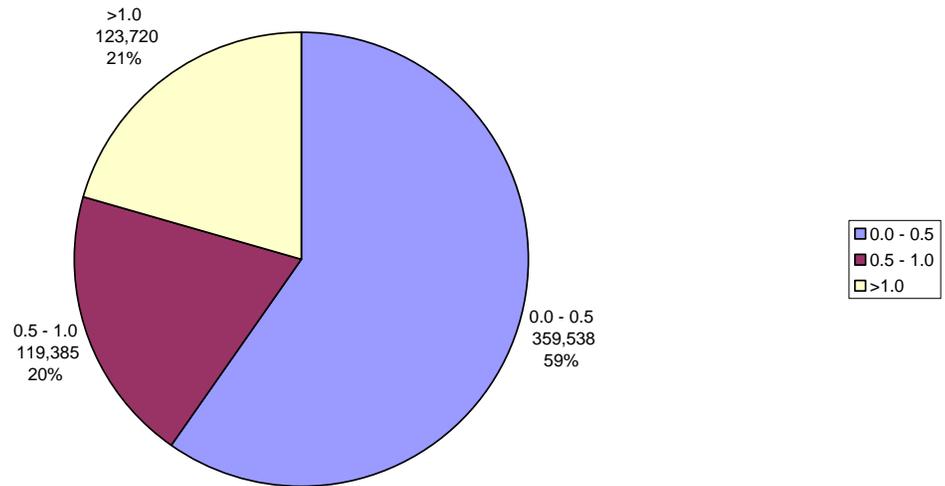


Figure 23: CY 2005 Non-Group Member Months by MLR

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CY 2005 Group Member Months by MLR

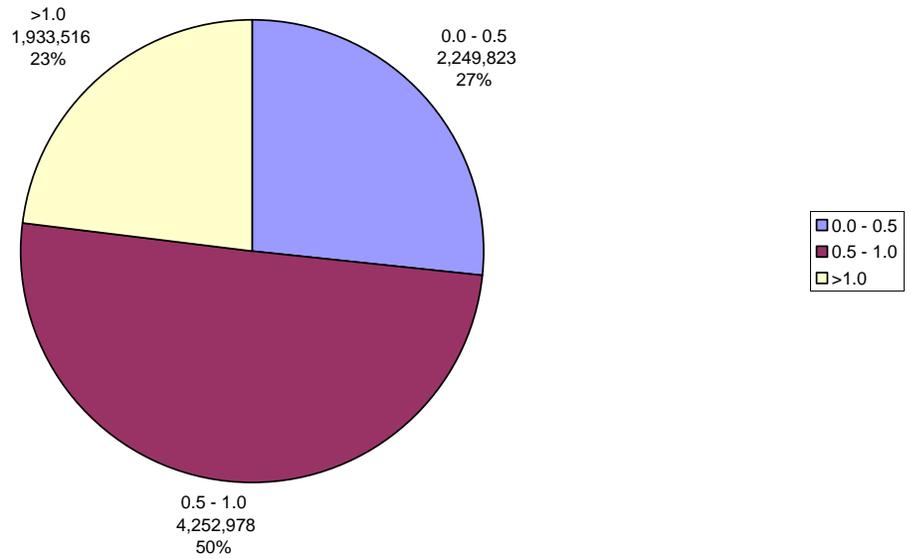
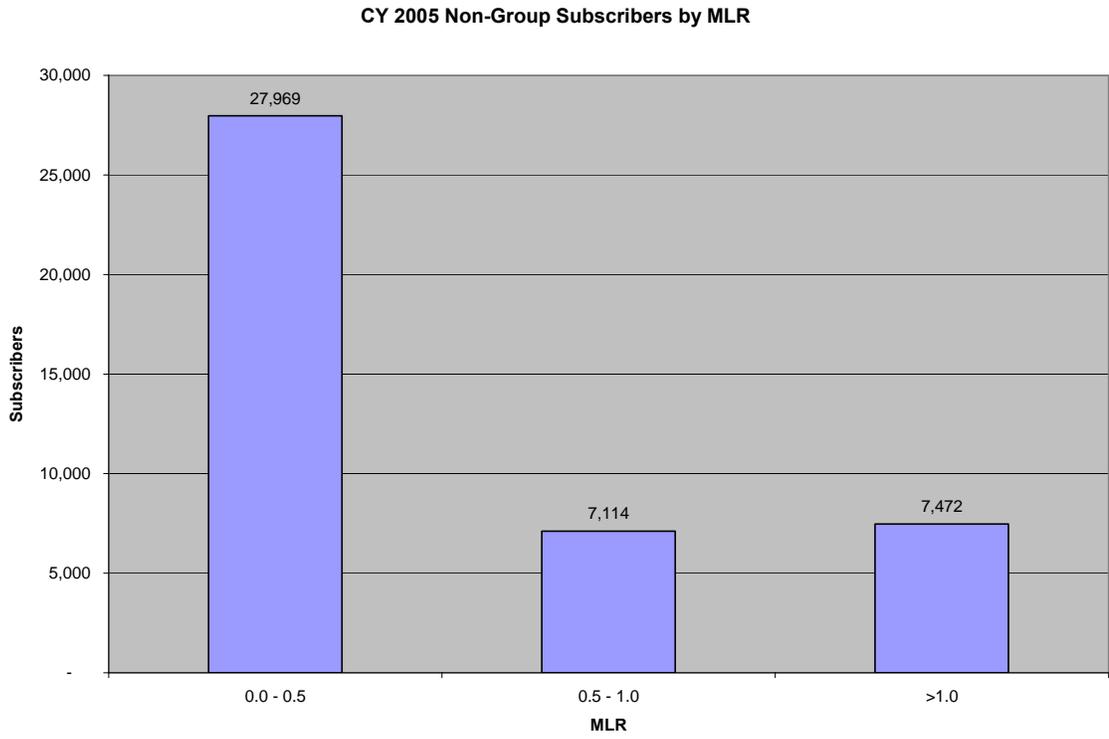


Figure 24: CY 2005 Small Group Member Months by MLR

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**Figure 25: CY 2005 Non-Group Subscribers by MLR**

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CY 2005 Non-Group Subscribers by MLR

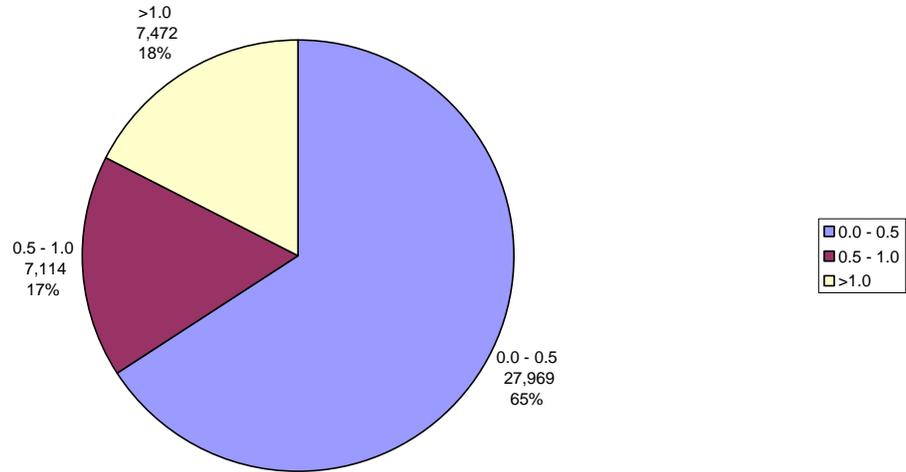


Figure 26: CY 2005 Non-Group Subscribers by MLR

- Claims PMPM for those subscribers associated with an MLR greater than 100% is 11 times larger than for those with an MLR less than 50%.
- Overall MLR for the Non-group Market is 91%. There has been deterioration in MLR when compared to prior years. The MLR for 2004 Non-group was approximately 89%, and for 2003 the Non-group MLR was approximately 83%). The MLR is also approximately 5 points higher than for Small Group, which implies that the overall merged market will have a higher MLR than the existing Small Group market, unless there are rate increases greater than medical claims trend or other forces operating to bring down costs.
- MLR varies by contract type in the Non-group market. MLR for subscribers with Individual coverage averages 94%, while for subscribers with Dual, Employee + Child, or Family Coverage, the MLR averages 83%. In addition, Non-group subscribers are much more likely than Small Group subscribers to buy Individual-only coverage. 77% of Non-group subscribers buy coverage for themselves only. This suggests that the greatest adverse selection in Non-group occurs when people buy coverage for their own

anticipated medical expenses, and that when they cover their families the experience is much more favorable. Figure 27 shows the Non-group MLR by contract type.

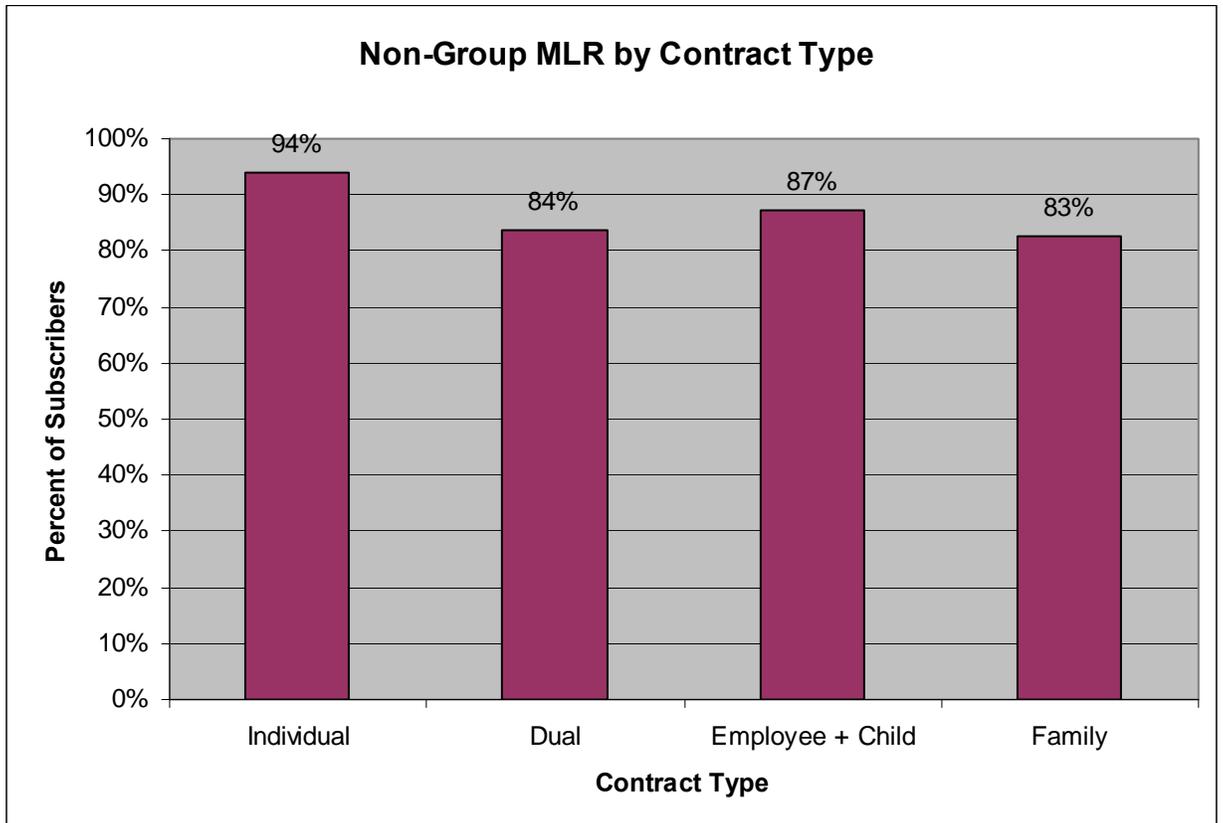


Figure 27: CY 2005 Non-Group MLR by Contract Type

#### 6.7.2.5. Claim PMPM

- Claims PMPM correlates with MLR and Age Factor.
- The overall average claims PMPM is \$375, which is 43% higher than group, despite a lower average plan value.

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CY 2005 Non-Group Member Months by Claim PMPM

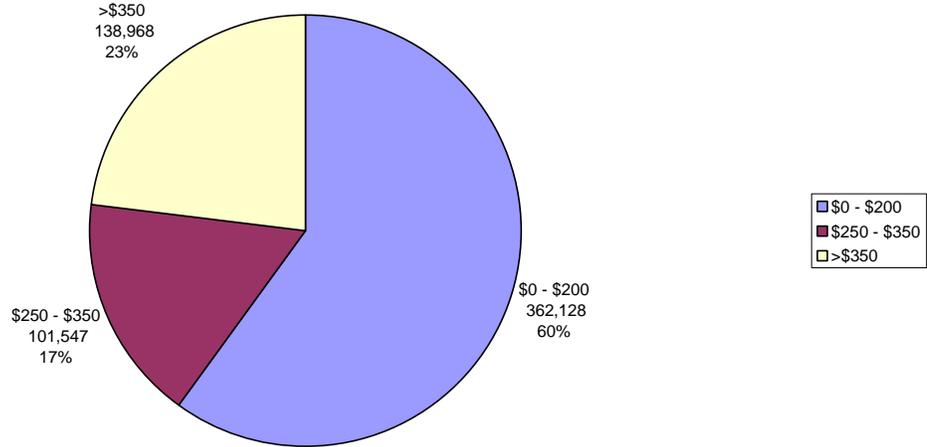


Figure 28: CY 2005 Non-Group Member Months by Claim PMPM

### 6.7.2.6. Adjusted Claims PMPM

Adjusted Claims PMPM is defined as claims PMPM normalized for age factor and plan value.

- Approximately 15% of Non-group members experienced PMPM claims greater than \$650, even when adjusted for plan value.
- The higher the plan value, the higher the average adjusted PMPM. Higher plan values therefore result in more paid claims both because the benefit levels result in more payments for the same claims and because people who choose higher value plans experience more claims utilization.
- While it is well recognized that the Non-group market segment experiences overall higher utilization than the Small Group market, it should be noted that there are wide differences among Non-group subscribers. 15% have adjusted claims PMPM of under \$50, and 50% have adjusted claims PMPM of under \$200. This is far more stratified than Small Group experience, where only 7% of Small Groups have adjusted claims PMPM

under \$50. In large part, this can be explained by the effects of averaging within Small Groups.

### **6.7.3. Trends**

#### **6.7.3.1. Plan Value**

- For Small Groups between 2003 and 2005 there has been a steady migration into higher cost sharing plans. The greatest migration has been from higher plan values to plan values in the range of 0.85 and 0.92. High option plans represented over 40% of the Small Group market in 2003, approximately 25% in 2004 and less than 20% in 2005. Medium option plans constituted almost 50% of the Small Group market in 2003, but by 2005 account for almost 70% of member months. Growth in the lower value plans has been modest, with low option plans holding less than 10% of the Small Group market in 2003 ranging up to approximately 12% in 2005.
- For the Non-group population there is very little enrollment in plans we have characterized as “high value.” This may be due largely to a lack of availability, as only two plans are permitted to be sold in the Non-group market. There has been a shift in enrollment from the medium option plans to the low option plans in Non-group. In 2003, approximately 35% of subscribers chose a low option plan, while in 2005 that proportion has increased to 45%. 2004 plan choice was intermediate.

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Group Member Months by Plan Value for 2003, 2004 and 2005

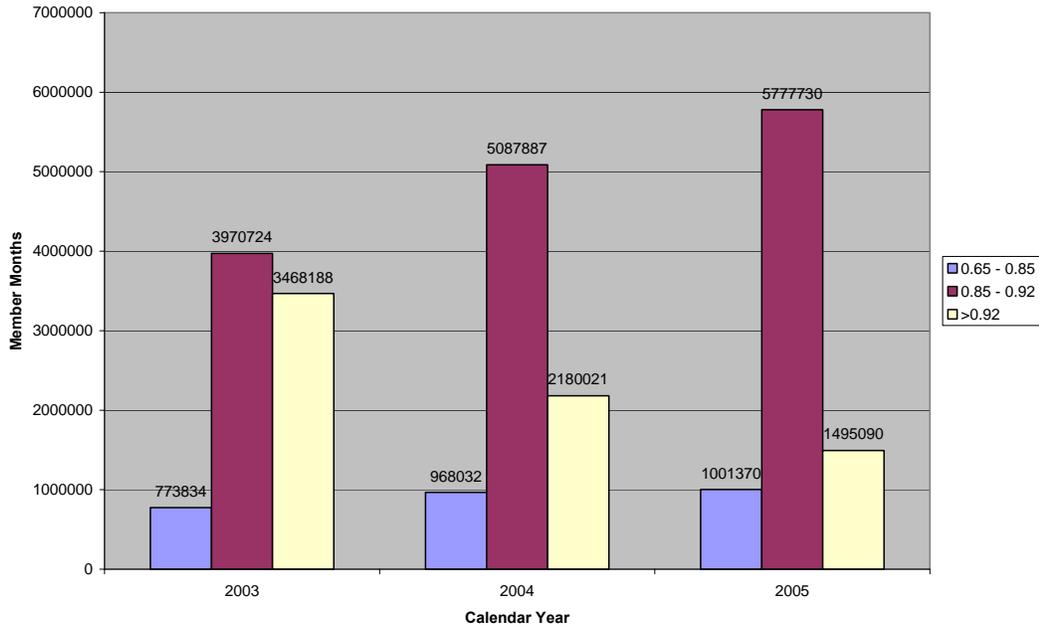


Figure 29: Small Group Member Months by Plan Value for 2003 – 2005

Non-Group Member Months by Plan Value for 2003, 2004 and 2005

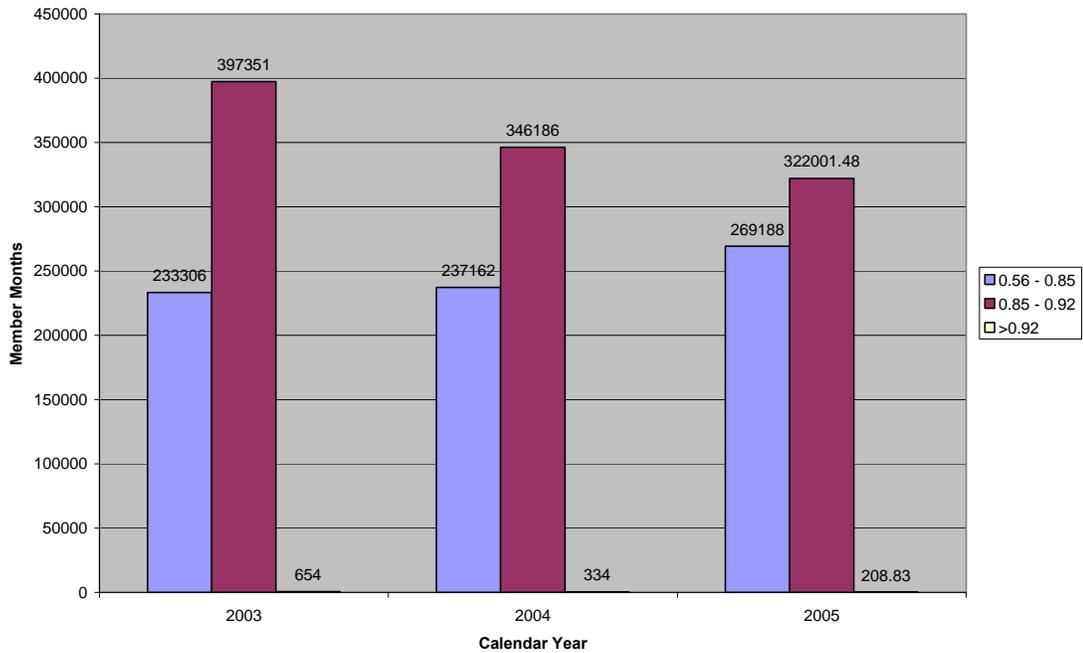
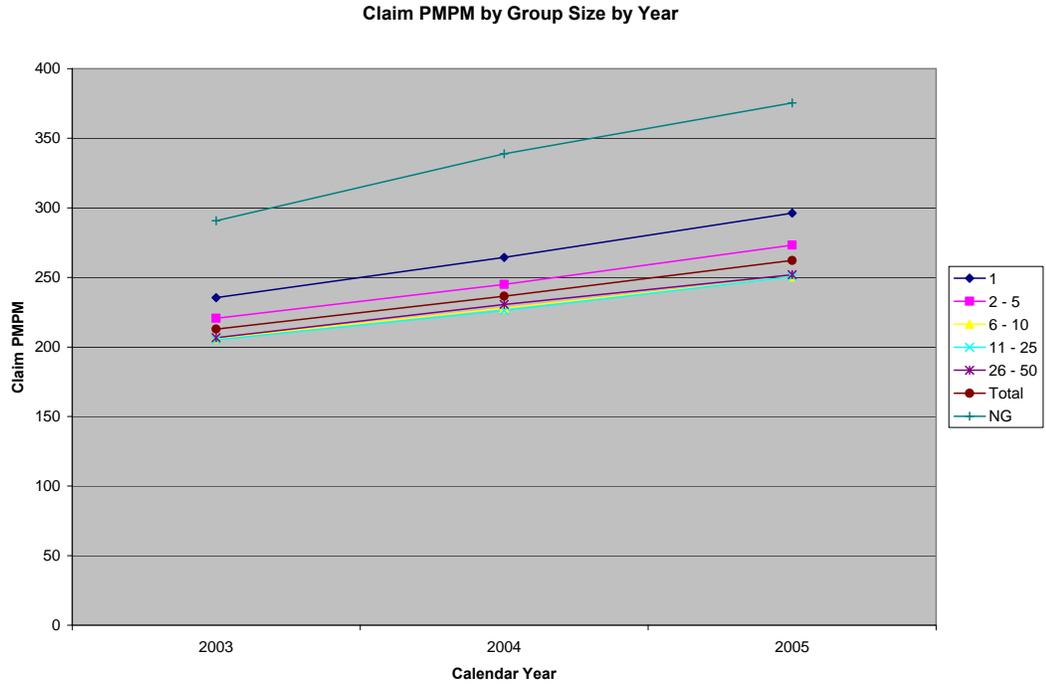
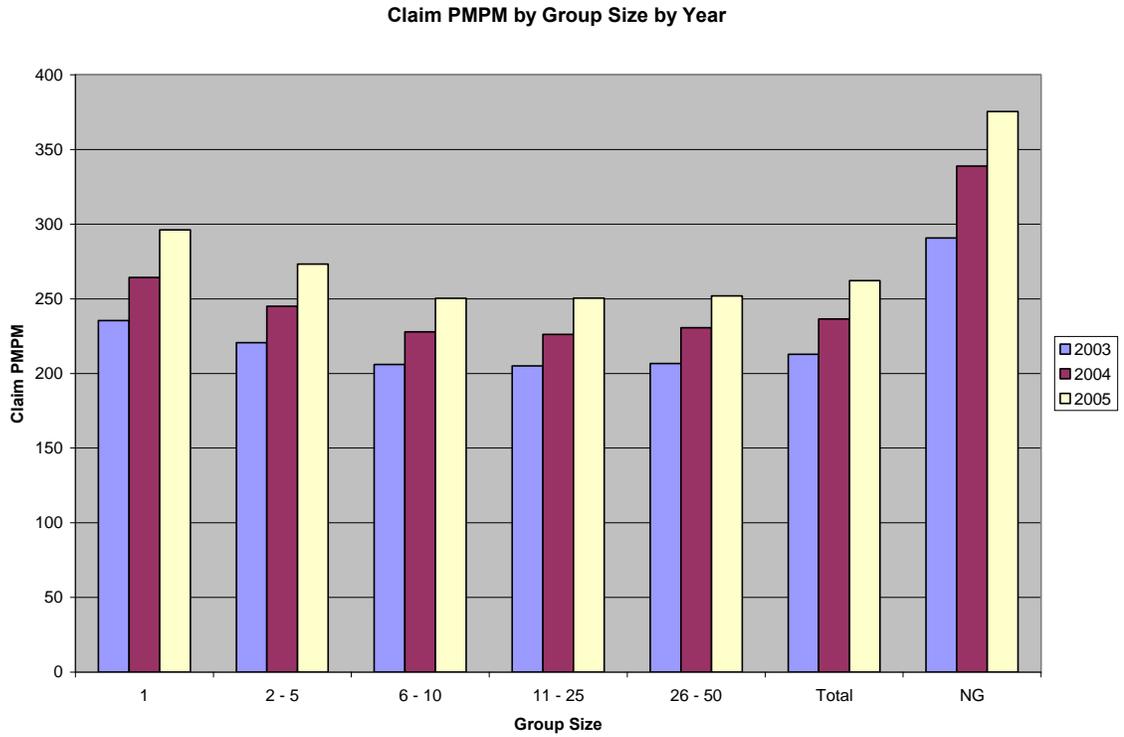


Figure 30: Non-Group Member Months by Plan Value for 2003 – 2005

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**Figure 31: Claim PMPM by Group Size by Year**



**Figure 32: Claim PMPM by Group Size by Year**

### **6.7.3.2. Age Factor**

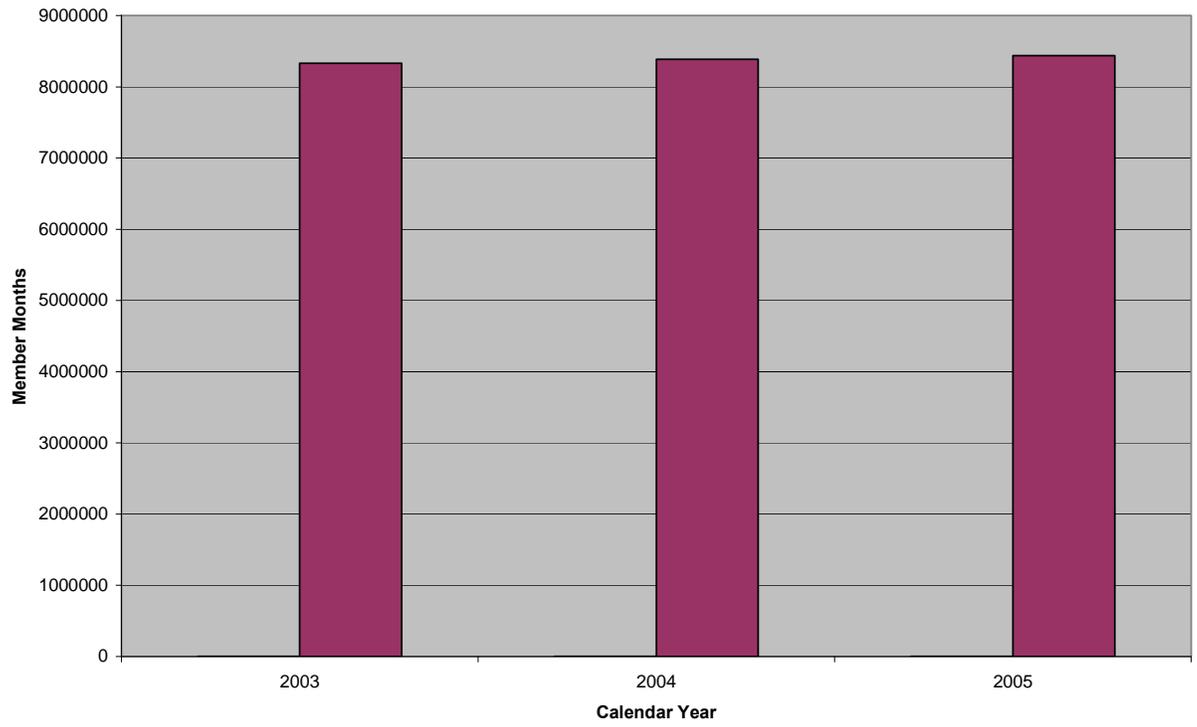
- Average age factor increased 1.3% from 2004 to 2005 for the Small Group population. This is equivalent to about one-half year of age, and is consistent with what we have observed in other Small Group and Non-group environments. Aging of the population implies that the overall population is getting older, and that take-up among new, younger subscribers is not adequate to keep the average age stable over time.

### **6.7.3.3. Market Size**

- The Small Group market, as measured by the data we have collected, has been fairly flat in enrollment over the period 2003 to 2005, with a modest increase in subscribers from approximately 346,000 to 348,000, or less than 1% growth in two years.
- There were approximately 43,000 subscribers and 660,000 member months insured under Non-group contracts in 2003 as represented in the data we collected for this study. The subscribers increased to 46,000 in 2004, but member months declined to approximately 600,000. In 2005, subscribers are back down to 43,000, while member months are again 600,000. Taken together, this implies somewhere in the range of flat enrollment to a modest decline in the size of the market over the last few years.

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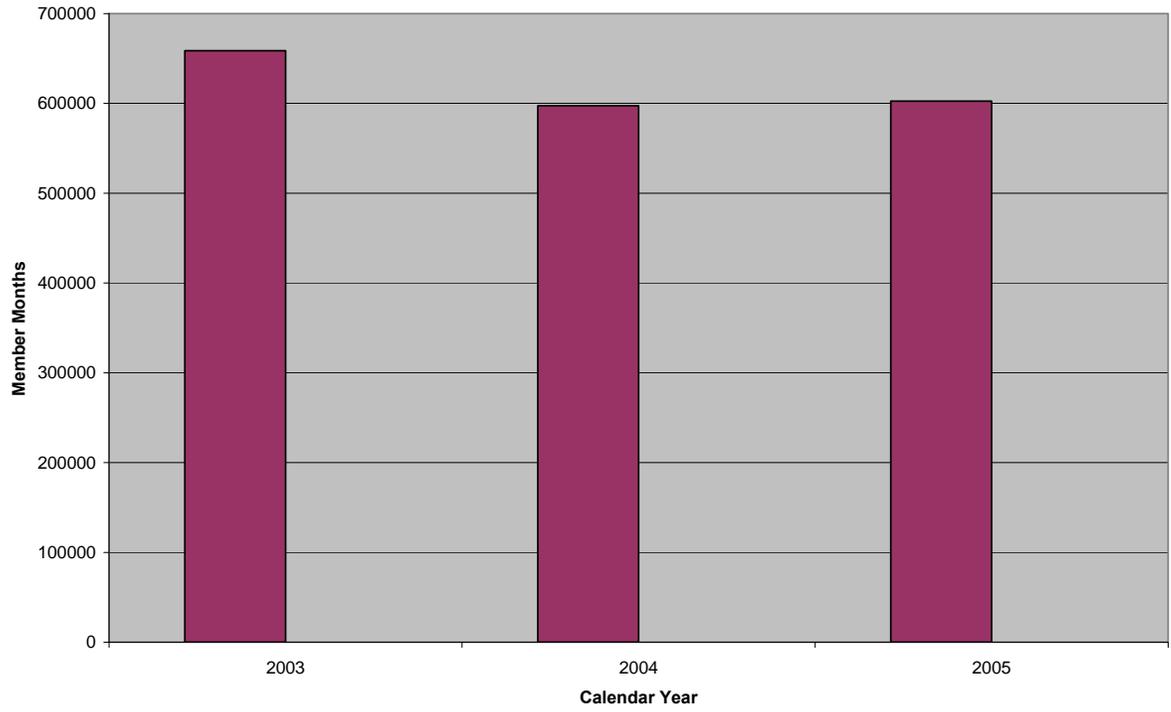
**Small Group Member Month Enrollment**



**Figure 33: Small Group Member Month Enrollment**

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**Non-Group Member Month Enrollment**



**Figure 34: Non-Group Member Month Enrollment**

## 7. Premium Analysis

### 7.1. Small Group and Non-Group Premium Analysis

After analyzing the Non-group and Small Group populations on a combined basis, we have determined that the price impact can be separated into three categories. First, the merging of the two populations will result in an impact to the overall claims base for each of the populations. After adjusting for age, benefit, geography, and industry we have determined that the premium for the merged population will be higher than Small Group by 2.4% and lower than Non-group population's claims base by 25% on a PMPM basis. In this analysis, we have assumed that the industry factor for Non-group is at 1.00, since we did not have information for Non-group industry. Also, we have performed an analysis on geographic Region and have noted that the distribution by Region for each population is almost the same. The results of the claims base analysis is shown in Table 21.

	CY 05 Claims PMPM	CY 05 Revenue PMPM	CY 05 Member Months	MLR	Age Factor	Plan Value	Geography Adjustment	Industry Factor	Adjusted Claims PMPM	Premium Rate Base Adj
Group	\$ 262.13	\$ 303.94	8,436,318	0.862	1.000	0.889	1.000	1.000	\$ 295.00	2.4%
Nongroup	\$ 375.44	\$ 412.68	602,643	0.910	1.130	0.823	1.001	1.000	\$ 403.24	-25.1%
Total Claims PMPM	\$ 269.68	\$ 311.19	9,038,961	0.867	1.009	0.884	1.000	1.000	\$ 302.21	

**Table 21 – Impact to Claims Base for Premium Rate Development**

Second, the merging of the populations will result in an impact to the overall conversion factor which is used to translate claims PMPM to premium rates. Since the Non-group population has a higher percentage of individual subscribers, its conversion factor was much lower than the Group population. The impact of the conversion factor is a relative decrease of 0.4% in per subscriber rates for Small Group and a relative increase of 5.4% for Non-group subscriber rates. The results of the conversion factor analysis are shown in Table 22.

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	Group Distribution	Nongroup Distribution	Combined Distribution	Market Rate Ratio	Group Average Family Size	Non-Group Average Family Size	Combined Average Family Size	Group Conversion Factor	Non-Group Conversion Factor	Combined Conversion Factor
Individual	57%	77.1%	59.3%	1.00	1.00	1.00	1.00			
Dual	9%	8.4%	9.2%	2.00	2.01	2.00	2.00			
EC	2%	3.4%	2.3%	1.70	2.49	2.74	2.53			
Family	31%	11.1%	29.2%	3.00	3.91	4.11	3.92			
Total	100%	100%	100%		2.03	1.49	1.98	1.196	1.129	1.191
<b>Rate Change</b>								<b>-0.42%</b>	<b>5.43%</b>	

**Table 22 – Impact to Conversion Factors Due to Demographic Differences**

The third category of price impact is attributable to the 2:1 rate compression changes. There are several things that take place. Group Size adjustment factors will no longer be restricted by the 2:1 compression band. The Group Size adjustment factor range goes from .95-1.05 to .95-1.10 which we have assumed will affect Small Groups with only one subscriber, as well as Non-group subscribers. Finally the 2:1 compression is restricted under the Act to a range of .66 to 1.32.

We assumed that carriers will use rating factors including industry, age and group size. Our data modeling resulted in a finding that, based on the age and industry factors we assigned, the range of .66 to 1.32 will result in a weighted average less than 1.00. Therefore, rate normalization will be needed to keep 2:1 compression rate neutral. Currently, health plans have the option of choosing the minimum and maximum values, as long as they are no further apart than 2:1, and then normalizing across their book of business to collect the appropriate revenue. For modeling purposes, we have assumed that the 2:1 compression range prior to the implementation of Chapter 58 is also .66 to 1.32, and we have normalized age factors accordingly.

The 2:1 compression changes impact individual employer groups in different ways. Again, for our modeling purposes, we fixed the minimum and maximum bands to .66 and 1.32 for pre-reform and post-reform. For employer groups of size one, we assumed that the group size adjustment increases from 1.05 to 1.10. For all other employer groups, we assumed that the group size adjustment stays the same, although after the merger it will apply outside the 2:1 compression limits. The group size adjustments we used are shown below. We modeled the impact of the rating band changes pre- and post-merger for Small Group and Non-group.

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	Pre Reform	Post Reform
Group Size 1	1.05	1.10
Group Size 2-5	1.05	1.05
Group Size 6-10	1.00	1.00
Group Size 10-25	1.00	1.00
Group Size 26-50	0.95	0.95

**Table 23 – Group Size Adjustments**

Due to the rating band changes, we have concluded the following for the various segments of the market by size:

- Group Size 1 – For groups with combined rating factors pre-reform (age, industry, and group size) less than .66 or greater than 1.32, groups will now see the full impact of the group size adjustment. Since the group size adjustment is modeled as 10%, they will see an increase of up to 10%.
- Group Size 1 – If the combined rating factor pre-reform (age, industry, and group size) was between .66 and 1.32 groups will see the impact of the change in group size adjustment (from 1.05 to 1.10).
- Group Size 2-5 – If the combined rating factor pre-reform (age, industry, and group size) was less than .66 or greater than 1.32, groups will now see the full impact of the group size adjustment. Since the group size adjustment is 5%, they will see an increase of 5%.
- Group Size 2-5 – If the combined rating factor pre-reform was between .66 and 1.32, they will see no impact to their rates.
- Group Size 6-25 – Since their group size factor is 1.00, these groups will not experience any change in rates due to the 2:1 compression changes.
- Group Size 26-50 – If the combined rating factor pre-reform was less than .66 or greater than 1.32, these groups will experience the full impact of the group size adjustment. For these groups, the group size adjustment will reduce overall rates.
- Group Size 26-50 – If the combined rating factor pre-reform was between .66 and 1.32, they will see no impact to their rates.
- Non-group – The current Non-group population will now experience a group size adjustment and rates will increase 10% for that factor. This will offset in part the approximately 25% decrease in rates for Non-group subscribers which would have

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occurred by merging the markets in the absence of the group size and demographic adjustments.

The results show that because of the application of the new rating rules, including the revised application of 2:1 compression and the increase in the available group size adjustment to 1.10, the overall premium rates will increase by 1.6% for Group and by 10% for Non-group. The results of this analysis are shown in Table 24. This extra premium has been spread evenly across Group and Non-group. The results of all three components of premium changes are shown in Table 26. For the market in total, we estimate the merging of the Small Group and Non-group populations will increase Small Group rates approximately 1 to 1.5% and decrease Non-group rates approximately 15%. Using CY 2005 dollars, if the merger had been effective in CY 2005, this translates into the Small Group market subsidizing the Non-group market by approximately \$25 to \$38 million.

**Impact of Rating Changes**

*Removing Group Size Adjustment out of 2-1 Band  
Increasing Group Size adjustment from 1.05 to 1.10 for 1 life groups  
Adding Group Size Adjustment 1.10 to Nongroup*

Group Size	Reason Code for rate impact	Impact of 2-1 band change	Total number of subscribers impacted	Total Member Months	CY 05 Total Premium Pre-MA Reform (000s)	CY 05 Total Premium Post MA Reform (000s)	Difference (000s)
Group 1	1						
Group 1	2						
Group 1		7.7%	51,774	1,286,308	392,839	422,905	30,066
Group 2-5	1	4.8%	32,798	583,150	209,124	219,117	9,993
Group 2-5	3	0.0%	49,236	1,198,604	365,696	365,696	-
Group 6-25	4	0.0%	155,965	3,586,357	1,084,531	1,084,531	-
Group 26-50	1	-3.7%	8,506	168,201	47,023	45,300	(1,723)
Group 26-50	3	0.0%	50,079	1,249,447	360,139	360,139	-
<b>Total Group Increase</b>		<b>1.6%</b>	<b>348,358</b>	<b>8,072,067</b>	<b>2,459,352</b>	<b>2,497,688</b>	<b>38,336</b>
Nongroup -1	5	10.0%	42,555	602,643	248,699	273,569	24,870
<b>Group and Nongroup Combined</b>		<b>2.3%</b>	<b>390,913</b>	<b>8,674,710</b>	<b>2,708,051</b>	<b>2,771,257</b>	<b>63,206</b>

**Table 24 – Impact of Rating Changes**

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Reason for Rate Impact	Reason Code
Groups that were outside the min/max bands pre-reform will now get the full impact of group size load	1
Groups that were within the min/max band pre-reform will now see their group size load shift from 1.05 to 1.10	2
Groups that were within the min/max band pre-reform will now see no impact to their rates	3
Groups will see no impact to rates	4
Individuals will now be surcharged a 10% group load	5

**Table 25 – Reason for Rate Impact**

Components of Rate change	Nongroup	Group
Change in Claims base	-25.1%	2.4%
Change in Conversion Factor	5.4%	-0.4%
Change due to 2:1 and group size factor	10.0%	1.6%
Reduction in overall premium due to extra premium collection from 2-1 and group size factor	-2.3%	-2.3%
<b>Resulting rate change</b>	<b>-15.1%</b>	<b>1.2%</b>

**Table 26 – Summary of Rate Changes**

Since health plans can use different minimum/maximum ranges today (as long as they comply with overall 2:1 compression), the results can differ. Each health plan will need to perform a similar exercise to the one noted above to understand the true implications of the rating band changes to specific groups. In addition, different carriers will have different proportions of Small Group and Non-group subscribers, and those subscribers will have different health and age characteristics, leading to further variability by carrier. We performed a sensitivity analysis to understand the variability across carriers. If enrollees stay with their current carriers, Non-group subscribers could experience rate decreases ranging from 2% to 50% as compared to present rates and Small Group subscribers could experience rate increases ranging from 1 to 4%.

We also performed an analysis assuming no rating band changes and the group size load remained at 1.05. Under this scenario, carriers would not collect any additional premium from

the Small Group population and would only charge an additional 5% to the Non-group population because of rating changes. Under this scenario, the aggregate decrease for Non-group would be 17.5% and the increase for Small Group would be 1.5%.

## 7.2. Projections

### 7.2.1. Pre-Merger Projections without Benefit Buy-down Assumptions

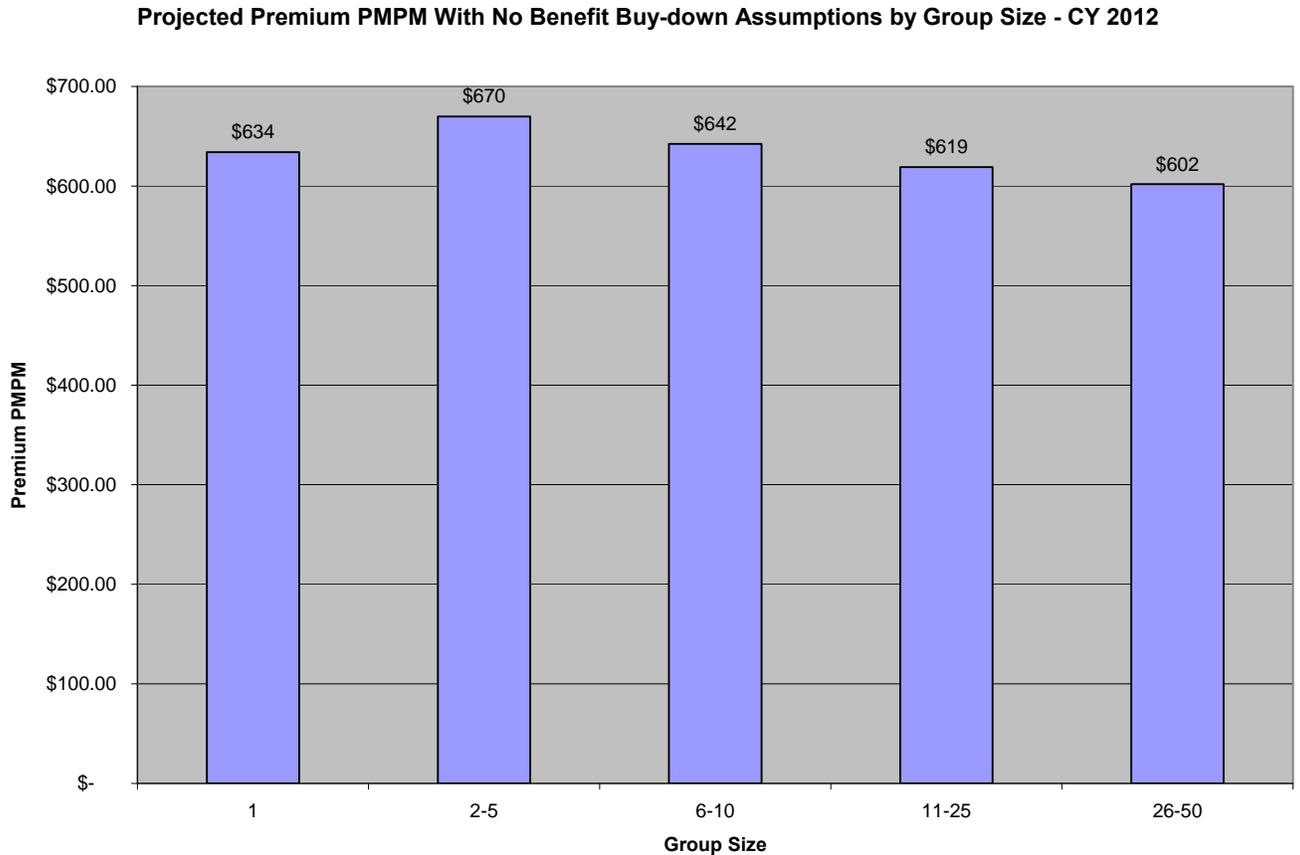
After analyzing the carrier data, we developed a baseline projection for the Small Group and Non-group populations assuming there was no merger of the populations. Calendar Year (“CY”) 2005 experience was used as the base, with some adjustments. First, we aggregated groups that were missing SIC code, demographic information or plan value into a “NUL” category. We then imputed subscriber count information and member count information for this category, based on the average of all groups that did have this information. Due to these adjustments to the base, there may be slight differences in the CY 05 base data for projection and the CY 05 data summaries mentioned above. We developed a model to show the impact to premium pre-merger and post merger, both with and without a buy-down in benefits.

We used the following assumptions for baseline projections:

- Medical claims trend – We used an annual trend of 11% to reflect price and utilization expectations. The actual trend for this market over the past 3 years has been in the 10-12% range. The Small Group market has exhibited approximately 11% trend from 2003-2005. The Non-group market exhibited approximately an 11% trend from 2004-2005. The trends for Non-group were approximately 16% from 2003-2004. However, since trends were decreasing, we felt comfortable using the 11% trend assumption.
- Premium projections – We have observed that the MLRs for both the Small Group market and Non-group market have been deteriorating over the past few years. The MLR for Small Group for CY 05 is 86.2% and for Non-group it is 91%. There may be continued pressure on MLR because of the competitive and experience forces that have resulted in the upward trend in the last few years, or MLR may come down because losses in the market will lead carriers to institute price increases greater than trend. However, for the purpose of this analysis, we have assumed that MLRs will remain constant from CY 2005 forward.

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- Employer Group and Membership Trends – After reviewing total membership reports for the Small Group and Non-group markets, we have assumed a flat trend in the number of employer groups and members in the pre-merger insured market over the projection period, before addition of any currently uninsured.
- No benefit buy-down assumptions were made for these sets of projections



**Figure 35: Projected Premium PMPM without Benefit Buy-down Assumptions by Group Size – CY 2012**

By 2012, as shown in Figure 35, without benefit buy-down assumptions, premiums are projected to be \$600 - \$670 PMPM with the largest premiums associated with the smaller groups. There is an apparent anomaly in that average premiums projected for groups of one are lower than premiums for groups with 2 to 10 subscribers. Older employees in groups of size one are subsidized by 2:1 compression to an extent that more than offsets the group size load

for groups of one, resulting in average premiums projected to be lower than for groups of two to five employees. Appendix 12.13.1 provides details regarding premium and claim projections.

### **7.2.2. Post-Merger Projections without Benefit Buy-down Assumptions**

The following assumptions were made for the post merger projections:

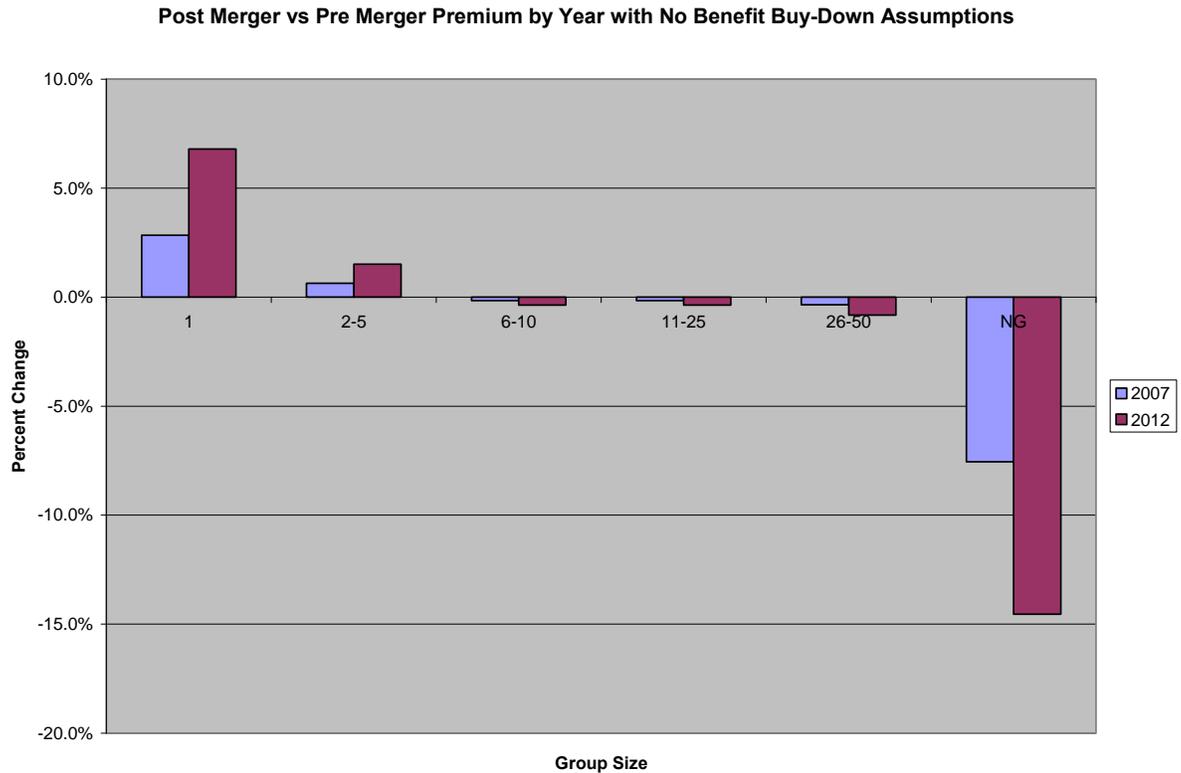
- We assumed that standard claims and premium trends remain at 11% consistent with the baseline projections. We then assumed further premium adjustments to account for the merged populations. For the current Non-group population, we assumed a 15.1% decrease. For the current Small Group population, we varied our premium adjustments by group size and age category. Premium adjustments by group size are shown in Table 24. We then refined these assumptions by reviewing the impact by age groupings.
- We assumed that the premium adjustments due to the merger would happen on 7/1/07 for the Non-group population and 4/1/07 for the Small Group population. This implies that people in the Non-group population who renew in December 2007 will take the opportunity to enroll in the merged market immediately to gain the benefit of lower rates and wider product availability. It also implies that carriers will begin to rate Small Groups to cover the additional costs of the merger beginning with April 2007 renewals, rather than wait and be faced with lowering rates for the current Non-group subscribers without the opportunity to make up the difference in Small Group rates. Because intermediary business all renews in April, April is the primary renewal month for Small Group business, with 34% of subscribers and 58% of groups renewing in April. By group size, 69% of groups of one and 60% of groups of two to five subscribers renew in April.
- We assumed a flat trend in the number of employer groups and members in the insured market over the projection period.
- No benefit buy-down assumptions were made for these sets of projections

Based on the above assumptions, we have concluded the following:

- The MLR for that segment of the combined market that was formerly Non-group will increase from 91% to 106% and the MLR for that segment of the combined market that

was formerly the Small Group segment will decrease from 86% to 85%. These changes result because Non-group premiums will go down while the claims will remain the same, and the opposite is true for Small Group.

- The resulting premium and claims projections pre-merger and post merger are shown in Appendix 12.13.1. The changes in premium do not match exactly with the results in Section 7.1, due to the way we have modeled the premium changes. We have assumed that the Group population will be receiving their increases on anniversary beginning April 1, 2007. For the Non-group population, we have assumed the entire population will receive their decrease on July 1, 2007. Due to these timing differences premium yields from the projections will be different when compared to the results in Section 7.1.
- Figure 36 shows the premium impact of the merged insured population by year. As shown, groups of size one will experience the highest increase and the Non-group population will receive the highest decrease. Further detail can be found in Appendix 12.13.1, Table 88 .



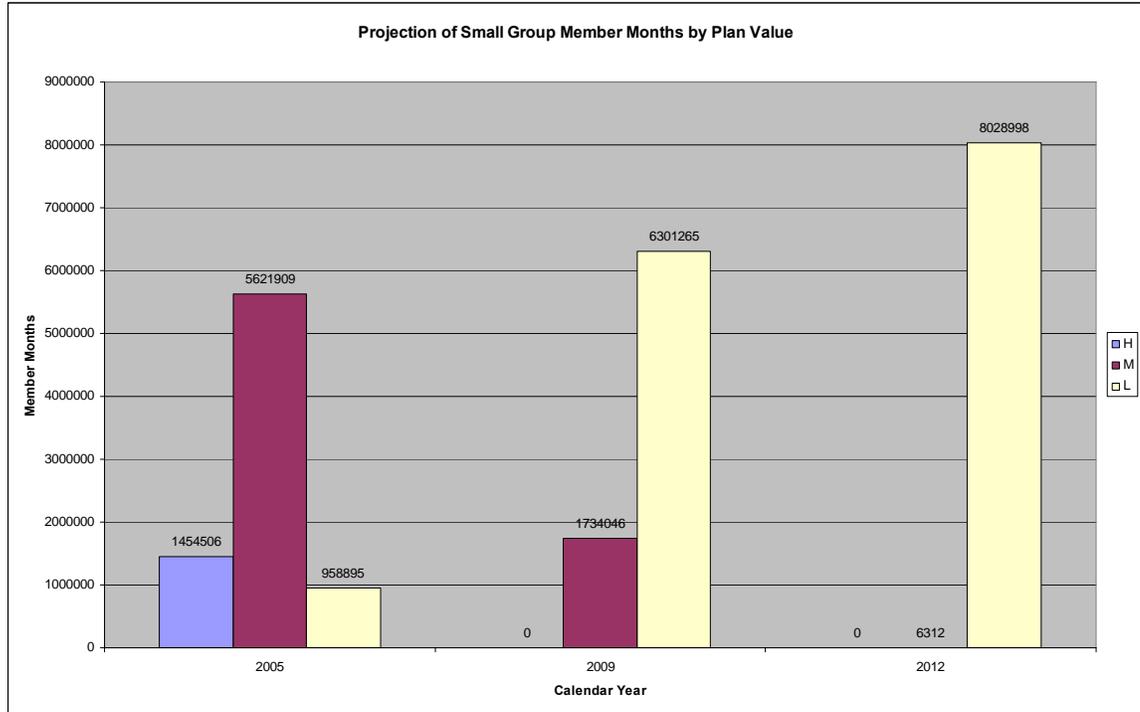
**Figure 36: Post Merger vs Pre Merger Premium by Year without Benefit Buy-down Assumptions**

### 7.2.3. Projections with Benefit Buy-down Assumptions

We incorporated all of the assumptions from earlier in Section 7.2 with the following additional benefit buy-down assumptions:

- We expect that there will be a continued trend toward higher cost sharing in the Small Group market and in the Non-group market. After analyzing the 2003-2005 benefit value trends, we set a benefit buy-down assumption consistent with approximately 1.5% annual decrease in plan value. We did not adjust the definition of High plan value products, and so this assumption results in no enrollment into High end products by the Small Group market by CY 2009 and no enrollment into High end products by the Non-group market by 2010, as shown in Figure 37. As mentioned earlier, there is relatively little enrollment in High plans among Non-group subscribers and that is all in closed blocks. We also assumed further benefit buy-down for those groups that would receive rate increases greater than 2.5% due to the merger. We assumed that this would be a one-time adjustment and that the additional benefit buy-down would be 1.5% for groups that received greater than 2.5% increases and 3% for groups that received a greater than 5% increase. Since these groups are smaller in membership, the overall impact with these additional one-time benefit buy-down assumptions was minimal.
- We considered an assumption that some Non-group subscribers would buy up in plan value when a wider range of plans become available and when Non-group premium rates are reduced by the effects of the merger, but ultimately we did not make any such assumption. It remains a possibility, however, that there will be some buy-up in the Non-group market because of those factors, at least initially.

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**Figure 37: Projection of Small Group Member Months by Plan Value**

We estimate that the average member cost share for the Small Group market is approximately \$400 per year and the average member cost share for the Non-group population is approximately \$1,000 per year. By CY 2012, we project that the average member cost share for Small Group will be \$1,500 per year and \$2,900 per year for a Non-group member. Member cost sharing on a dollar basis will increase by a factor of three to four times, because in seven years at 11% per year we are projecting that medical claims cost will double, and we are also projecting that the average cost sharing will go up by 50% to 100% over that period of time. It is important to note, however, that we did not make any specific assumptions around modeling out-of-pocket maximums. It is possible that increases in medical costs will not affect cost sharing equally because as claims increase on a subscriber by subscriber basis they may bump into out-of-pocket maximums. Therefore, it is possible that the projected cost sharing shown here is overstated.

As shown in Figure 38, by CY 2012 premiums are projected to be \$540 - \$600 PMPM with the largest premiums associated with the smaller groups. Again, these premium projections include benefit buy-down assumptions.

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Projected Premium PMPM by Group Size - CY 2012

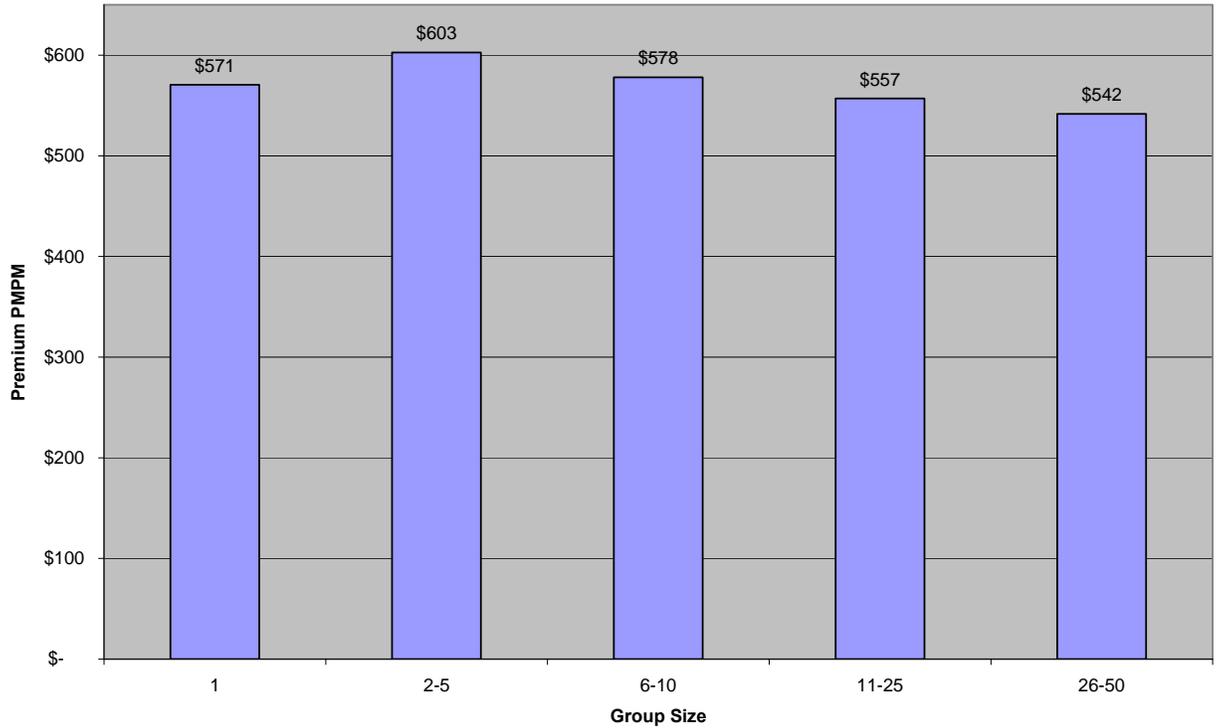
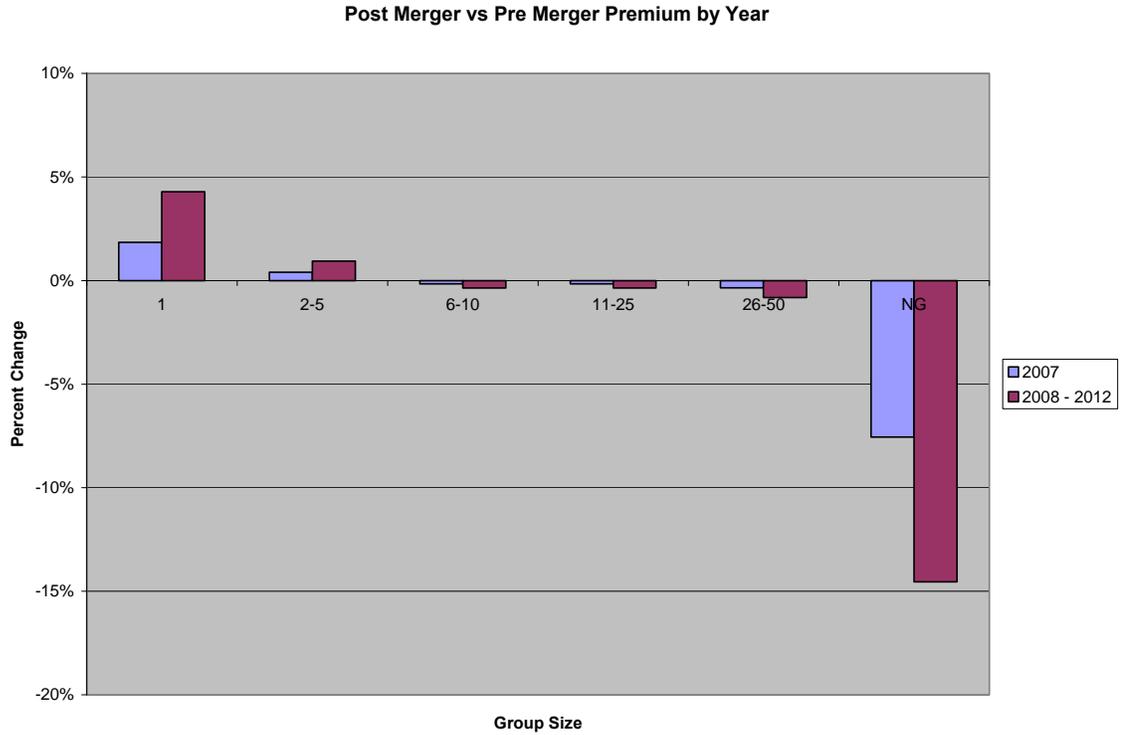


Figure 38: Projected Premium PMPM by Group Size – CY 2012

Figure 39 shows the premium impact of the merged insured population by year with benefit buy-down assumptions. As shown, groups of size one will experience the highest increase and the Non-group population will receive the highest decrease.

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**Figure 39: Post Merger vs Pre Merger Premium by Year**

We also reviewed average plan value by year which includes all the assumptions in the projection model as well our benefit buy-down assumptions. Table 27 shows the average plan value by year for Small Group, Non-group and combined.

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Plan Value</b>								
<i>Group</i>	0.889	0.875	0.861	0.846	0.833	0.820	0.808	0.796
<i>Non-Group</i>	0.823	0.811	0.799	0.788	0.776	0.765	0.754	0.744
<i>Combined</i>	0.884	0.871	0.857	0.842	0.829	0.817	0.804	0.792

**Table 27 – Average Plan Value with Benefit Buy-down Assumptions**

Average plan value is decreasing over time due to our benefit buy-down assumptions, and depending on the definition of Minimum Creditable Coverage some subscribers in "low" benefit plans may be impacted. Also, as shown in Table 51, in CY 2005 there are approximately 3.3% of insured subscribers in plans with a plan value less than or equal to .75.

## 8. Uninsured Data Analyses and Projections

### 8.1. Data to Develop Assumptions re: Baseline Uninsured and Uptake of Insurance Coverage

A key component of our analysis is the development of projections that reflect the proportion of currently uninsured individuals who will purchase coverage in future years. In order to do this, we had to develop estimates for:

- The current uninsured population
- The number of working uninsured who will obtain coverage through their employer, the Connector, or in the open market in future years
- The number of working uninsured who will continue to remain uninsured
- The number of non-working uninsured who will obtain coverage in future years
- The number of uninsured who will join Commonwealth Care or MassHealth in future years, and
- The number of non-working uninsured who will remain uninsured

In order to develop these assumptions, we in turn had to make assumptions about aspects of the implementation of Chapter 58 which are still to be determined:

- The strength of the individual mandate (e.g., the incentives for the current uninsured to purchase health insurance in lieu of paying a penalty)
- The strength of employer incentives (e.g., the fair share employer assessment and the free rider surcharge) to offer coverage to employees and dependents
- The impact of affordability waivers granted by the Connector, relieving people of their obligation to meet the individual mandate
- The impact of the waivers granted by the Connector to enable individuals eligible for employer sponsored coverage to join Commonwealth Care
- The design, pricing and availability of the Young Adult plan

- The overall pricing and marketing of products offered through the Connector

Our process for developing these assumptions is described below.

### **8.1.1. Meeting with Connector Staff**

At the request of the Special Commission, Jon Kingsdale, Executive Director of the Connector, and Bob Carey, Director of Planning and Development, joined a meeting of the Special Commission to respond to questions posed by the study team relating to the Connector. Issues discussed related to product offerings, the role of employers in product choice for products purchased through the Connector, rating practices, waiver criteria, and outreach efforts. Given that many of the questions posed pertained to decisions which the Connector Board had not yet made, it was difficult for the Connector's staff to provide definitive answers. However, the meeting proved helpful to the study team in making assumptions about the decisions that the Connector might take on these issues.

### **8.1.2. Baseline Number of Uninsured Individuals**

The requirements of the individual mandate and the encouragements to employers contained in Chapter 58 are expected to increase the insured population in Massachusetts.

Our starting point in projecting the increase in the insured population is a baseline for the current number of the uninsured in Massachusetts. There are three major sources of such data – a survey conducted by the Massachusetts Division of Health Care Finance and Policy (“the Household Survey”), the United States census data, and an analysis of the United States census data performed by the Urban Institute for the Blue Cross Blue Shield of Massachusetts Foundation (the “Urban/Foundation data”). The three data sources are known to produce different estimates of the uninsured population in Massachusetts. This is due, in part, to the different methods for data collection (the Household Survey is a telephone survey and such surveys are thought to undercount low income individuals), different methods for imputing income and different questions about the time period for being “uninsured.” We have not

conducted an independent analysis of the strengths and weaknesses of the varying survey methodologies and their results. Rather, we determined early on in this study that we would use two data sources – the Household Survey and the Urban/Foundation data – as the low and high ends of our range of estimates of the current uninsured population. The staff at the Blue Cross Blue Shield of Massachusetts Foundation (the “Foundation”) is presently in the process of analyzing the most recent Urban Institute analysis of census data, and while they generously shared with us the preliminary, unpublished results of the Urban/Foundation analysis, we were not able to incorporate their full results in our study. In establishing the high estimate of the uninsured population in Massachusetts, we relied on the U.S. census data as our starting point. We adjusted this data for the significant increases in MassHealth enrollment during FY 2006.

#### **8.1.2.1. Household Survey and Employer Data**

The Massachusetts Division of Health Care Finance and Policy conducts a biennial survey of the Health Insurance Status of Massachusetts Residents. At the start of this project, since the survey was in the field from February through August, 2006, the only public data from the 2006 survey was available in a press release. At the request of the study team, DHCFP performed analyses of the 2006 survey data to assist us in our work. Cross-tabulations depicting the uninsured by age, income<sup>1</sup>, work status, eligibility for employer sponsored coverage and utilization of health care services were developed. This information was used to develop baseline numbers of uninsured by age, income, and eligibility for employer based coverage.

Using data from the survey, the first step was to group the uninsured population into four categories:

- Employed and eligible for employer based health insurance coverage
- Employed where the employer offers coverage but the person is not eligible for employer-based coverage
- Employed but the employer does not offer health coverage
- Not working.

We then separated the population into four income groups, based on income as a percentage of the Federal Poverty Level (“FPL”), and calculated based on percentage distributions provided by DHCFP: <100% FPL, from 100-300% FPL, above 300% FPL up to and including 400% FPL, and above 400% FPL.

The next step was to determine the number of uninsured in each income category who fall into the four working/not working categories listed above. This process provided us with a baseline number of uninsured.

DHCFP also performs a Massachusetts Employer Health Insurance Survey. The 2005 survey results provided us with information on the number of small employers currently offering coverage, and the trend in coverage since 2001.

#### **8.1.2.2. Urban/Foundation Data**

The Foundation has been sponsoring a “Roadmap to Coverage” initiative to provide information and support to those working on health reform issues in Massachusetts. As part of this effort, the Foundation contracted with the Urban Institute to analyze the raw census data and, by adjusting the census data for a perceived undercount of people on Medicaid, provide information about the number of uninsured in Massachusetts.<sup>2</sup> The Census recently released 2005 information; the study team contacted the Foundation to determine if an updated analysis of Allison Cook’s 2005 report was being prepared. It was, and the Foundation offered to make the cross-tabulations that we were requesting “priority tables,” so that they would be available for use during the study time period.

Urban/Foundation used two years of data – the 2005 and 2006 Annual Social and Economic Supplement to the Current Population Survey – to obtain sufficient cell sizes to provide us with reliable cross-tabulations of age, poverty level, insurance coverage, and health status. Using a categorization of census industry codes which we labeled high, medium and low with respect to health risk, they also provided us with information about the industry risk of the working uninsured.

The Foundation is comfortable with us using the relationships developed in the analyses. Appendix 12.20 includes a selection of tables describing the current uninsured population in Massachusetts. However, the Foundation is not yet ready to release the absolute numbers from the analyses; they are still being reviewed for accuracy. As a result, in order to develop an upper limit of the range of the number of uninsured to compare to the Household Survey, we decided to use unadjusted figures from the Census as our starting point. Table H106 of the Census<sup>2</sup> details the number of uninsured, all ages<sup>4</sup> and income levels, as 618,000.

We then adjusted this number, since it is a 2005 number, for the significant increase in the number of people enrolled in MassHealth since 2005. The Snapshot Report<sup>10</sup> for September, 2006 provided by MassHealth provides information of the number of persons enrolled in various MassHealth programs, by month. We took the change in MassHealth enrollment from July 31, 2005 to July 31, 2006 and subtracted it from the 618,000 census figure. With assistance from Foundation staff, we apportioned the change in MassHealth membership by income by assuming that all MassHealth Essential enrollees were under 100% FPL, and that, of the remaining new MassHealth enrollees, 50% were below 100% FPL and 50% were between 100% and 300% FPL. Adult MassHealth enrollees were apportioned to age categories based on the proportion of each age category in the Urban/Foundation data.

### **8.1.2.3. Uptake Assumptions**

Appendix 15 depicts the baseline number of uninsured persons, by income category, from each of the two data sources.

Using the information gathered from a review of the Household Survey, the Urban/Foundation data, the meeting with Connector staff, and a review of the requirements of Chapter 58, we developed an initial set of “uptake assumptions” for each of the uninsured categories. Uptake refers to the number of currently uninsured individuals who will purchase coverage in the environment that results from the implementation of Chapter 58. These initial uptake assumptions are contained in the Key Informant Survey Instrument, included as Appendix 12.14 to this report. Uninsured individuals in each of the four categories – employed and eligible for

coverage, employed and not-eligible for coverage, employed but no employer coverage is available, and not working – are presumed to enter one of five categories over the next six years: Commonwealth Care, the Connector Seal of Approval Plans, the Open Market (purchasing coverage without going through the Connector), Employer Sponsored Coverage, or the remaining uninsured. We include in the numbers joining Commonwealth Care the expected, continuing increase in MassHealth enrollment. The rationale for our initial uptake assumptions is also included in the survey instrument.

Since so much of the thinking behind the uptake assumptions is based on decisions which are not yet finalized, we thought it prudent to discuss our initial thoughts with individuals familiar with Chapter 58 and its implications for employers, uninsured individuals, and carriers. We thus interviewed nine such individuals, asking them questions about various factors influencing the speed of purchase of health insurance, product choice, and the strength of both the affordability waiver and the waiver of eligibility for employer sponsored coverage to enroll in Commonwealth Care. We explicitly asked them to review our initial uptake assumptions, paying particular attention to the issues of the speed of uptake over the six year period, the distribution of the uptake between the open market and the Connector, the impact of the waivers, and the resulting number of remaining uninsured.

After reviewing the feedback that we obtained during the key informant survey interviews, we revised our estimates. The revised estimate for uptake became the “medium” uptake assumption. We also developed a low and high uptake estimate, to support sensitivity analyses in the model. In order to do this, we started by both increasing and decreasing our revised estimate by 15%. Results were adjusted for reasonableness (e.g., no negative percents or percents above 100) and to leave at least 5% uninsured in each category. Further review of each category resulted in slight changes to ensure reasonableness between categories (e.g., for those employed and eligible, we adjusted the >400% category so that there would be more remaining uninsured than in the <100% category, where there is no charge for coverage.)

The final uptake percentages associated with our assumptions – low, medium, and high – are contained in Appendix 12.16.

## 8.2. Key Informant Survey Results

The key informant survey was designed to provide the study team with feedback to an initial set of assumptions for modeling the uptake of the currently uninsured into the insured pool of individuals and small groups.

All informants acknowledged that developing uptake percentages involved making multiple assumptions for which there is no precedent. In particular, the combined impacts of the individual mandate, the implementation of the Commonwealth Care program, the activities of the Connector, and the employer incentives to provide health insurance coverage create an unprecedented environment. However, most respondents, understanding the necessity of establishing a baseline for projecting the rate impact of the merged market, agreed to participate to assist us in our work.

Some respondents considered our initial uptake assumptions reasonable. Others were concerned with specific aspects of the initial assumptions, such as projecting that any category of currently uninsured individuals would be at zero remaining uninsured by 2012.

As we probed further, additional issues were raised. With respect to the speed of uptake, many respondents did not think the individual mandate by itself would have the major impact in reducing the number of uninsured individuals. Rather, many seemed to feel that the increased availability of low priced products -- both the availability of Commonwealth Care and the availability of low-priced products from the Connector -- would have a greater influence than the individual mandate on insurance purchases.

The greatest disagreement among respondents was around the question of the change in employer behavior. For the initial uptake assumptions included in the survey instrument, we had assumed that there would be no net change in small employer behavior with respect to offering coverage. This assumption was based on the relatively stable employer offer levels among employers with under 50 eligible employees, as reported by DHCFP<sup>12</sup>, and the relatively low penalties, as compared to the cost of providing health insurance coverage, for the non-

provision of coverage contained in Chapter 58. Informant responses included the following points:

- Employee demands for health insurance coverage will increase, as the impact of the individual mandate takes hold. Thus, additional small employers will provide coverage
- Small employers will “game” the system with respect to worker hours so that they are not subject to Chapter 58 penalties
- The relative administrative burden of compliance vs. non-compliance, and the perception of employers as to the level of enforcement of the various mandates and penalties, will have a major impact on the level of employer offerings
- Employers will probably drop coverage and/or increase employee contribution levels as a means of encouraging employees to purchase Commonwealth Care or go to the Connector for coverage
- The smaller the employer, the more likely it will be to drop coverage, lower benefit levels, or provide a fixed dollar contribution toward an employee purchase of coverage.

There is a belief that the individual mandate will result in more employees electing family coverage as the least expensive way for family members to meet the mandate. To the extent that employers contribute to family coverage, such an increase in family coverage would increase the cost to the employer, possibly resulting in an employer response. With respect to the question re: employer response to a probable change in the mix of individual and family coverage (Question 8 of the survey in Appendix 12.14), all respondents thought that employers would either decrease benefit levels, decrease the employer contribution to family coverage, or both.

Questions about the strength of the affordability waiver (Questions 9 and 10) and the waiver to enable people eligible for employer sponsored coverage to join Commonwealth Care (Question 11) elicited quite a bit of discussion. While no respondent (or the study team) claimed the ability to accurately predict the ultimate strength of the mandate, respondents raised the following points:

- Public pressure to grant waivers will be extremely strong, as individuals face the prospect of purchasing coverage

- Available financing from the state will have a major impact on the level of waivers granted
- The inclusion or exclusion of out of pocket expenses in the calculation of “affordability” will have a major impact on the number of waivers granted
- Reviewing the difference between stated income and discretionary income, as well as a potential review of asset levels, will influence the number of waivers granted
- The waiver to enable individuals to enter Commonwealth Care even if eligible for employer sponsored coverage will probably be stricter than the affordability waiver, as this is an “optional” group
- Perhaps assume that all individuals for whom premium costs will be greater than 5% of income will receive a waiver
- Over time, waivers will have to increase quite a bit as individuals (both those eligible for employer sponsored coverage and those not) face rising premiums
- Once brokers understand the potential for obtaining waivers, applications will increase and there will be additional pressure to grant waivers
- Young adults should not be granted waivers, given the expected low price of the young adult product.

At the time of the survey, we were planning to include product selection in the modeling of the merged market. Therefore, a number of questions in the survey looked at potential influences on product selection. Most respondents felt that, for the young adults not eligible for Commonwealth Care or for continued coverage as a dependent on a parent’s policy (Chapter 58 extends the time period for dependent status to age 26 or two years after IRS-defined dependency is lost, whichever is sooner), 50-75% would select the Young Adult plan. For other individuals, the four most important factors influencing product choice, in order of importance, were perceived by our respondents to be 1) employer offer, 2) price, 3) health status, and 4) income.

Respondents also mentioned additional populations which they suggested, and we acknowledge, may or may not be captured in the baseline data or study methodology. These populations include:

- Undocumented immigrants, who might be undercounted in the various surveys
- Individuals counted as insured whose coverage is quite probably less than what the Connector will define as minimum creditable coverage. These individuals might therefore either drop coverage altogether or join the pool later, once they realize coverage does not meet the individual mandate
- Individuals from large employers who might drop coverage and thus become eligible for Commonwealth Care or for products through the Connector or carriers directly

Additionally, survey respondents' thoughts of interest on the uptake of insurance include the following:

- The proliferation of product designs and the individual choice of product will create a net cost to the system as more people choose a product to meet their specific needs of the moment
- One individual felt that, over time, as the requirement to purchase health insurance becomes an accepted part of being a Massachusetts resident, the number of uninsured will level off at a low level.
- With respect to the age of those remaining uninsured, individual opinions varied. One thought they would primarily be older than average, because older individuals would face higher rates and thus be granted more affordability waivers. Another thought young adults would comprise a large part of the remaining uninsured, as the individual mandate would not influence their current tendency to refrain from purchasing health insurance.
- There was considerable disagreement as to the health status of the uninsured. Some believed that they were healthier than insured individuals, others that they were less healthy.
- Future changes in eligibility criteria for the Health Safety Net (formerly the uncompensated care pool) will have an impact on how seriously people take the individual mandate.

### **8.3. Uptake Percentages and Absolute Numbers**

The study team reviewed the survey results against the initial uptake assumptions distributed as part of the questionnaire. As a result, the initial assumptions were adjusted (See Appendix 12.16) to take into consideration the various opinions that were received. This resulted in the medium estimate. Once we developed the medium estimate, we derived the low and high uptake assumptions.

These assumptions were then applied to the absolute population numbers from the Household Survey and the adjusted census data. (See Appendix 12.17) It is important to note that uptake assumptions were developed using income categories that included two categories above 300% FPL– 300-400% FPL and above 400% FPL. However, the census data was distributed by income using the percentage breakdowns from Urban/Foundation, which included income categories of 300-500% FPL and above 500% FPL. In the modeling, the study team applied the uptake percentages developed for the 300-400% grouping to the 300-500% grouping, and the percentage developed for over 400% to the population segment above 500%. As a result, in the aggregate, the uptake numbers using the census data are probably slightly understated.

### **8.4. Development of Enrollment Model using Elasticity of Demand**

Our second approach to developing an estimate of the number of Massachusetts residents joining the insured population was to use the large body of literature on the factors that influence the purchase of health insurance coverage. We did not rely solely on this literature because of the unique circumstances of Chapter 58 – the individual mandate and the various encouragements for employers to provide health insurance coverage. However, it is still interesting to determine what the literature would predict and, indeed, one key informant survey respondent suggested that we take the literature and adjust it for the impact of the mandate.

In this approach, in order to develop assumptions about the uptake of insurance among the currently uninsured, we considered factors that would promote the purchase of insurance, including the following items:

1. The ability for employed persons who are not eligible for group insurance to purchase insurance with pre-tax dollars. We assumed that the marginal tax rate would vary depending upon income, ranging from zero at incomes at or below 200% of FPL to 25% at higher incomes.
2. A reduction in premiums and wider availability of products in the Non-group market. We assumed that there would be approximately a 15% reduction in premiums for people in the Non-group market because of the effects of the merger of the Small Group and Non-group market segments. We did not consider the more modest increase in Small Group premiums in terms of modeling the effect on the uninsured who are eligible for employer sponsored insurance.
3. The effects of an individual mandate of \$150 in the first year and \$1500 in subsequent years, an amount estimated as half the cost of the lowest cost creditable plan beginning in year two of the model. We assumed that this mandate would apply equally to people who are eligible for employer sponsored insurance, and for those who are not eligible for employer sponsored insurance. We also assumed that the mandate would apply based on the cost of the lowest plan available at the age of the insured. Finally, we assumed that people with incomes below 300% of FPL would receive waivers with regard to the mandate, and that 25% of people at or around 300% of FPL would receive waivers. We also assumed that 50% of people age 45 and over would receive waivers, regardless of FPL level, but that people under age 45 would not.

We assumed that the uninsured would have an average elasticity of demand of approximately -0.5, consistent with economic studies we reviewed. We also considered that this elasticity would be susceptible to variation by income and relative cost, and we used a model which incorporated the ratio of the net cost of insurance to income.

The model we used assumed a baseline elasticity factor of -0.625, and a multiplicative factor based on the square of one minus the ratio of the net additional cost of insurance divided by income. A formula like this is discussed in a paper by Jonathan Gruber of the MIT Department of Economics.<sup>5,6</sup> We modeled various income levels, from 100% to 500% of the FPL, and we modeled low, medium and high age factors.

We assumed that mandated coverage waivers would be available to all people at below 300% if they ask, and that 25% of waivers at 300% would be approved. We assumed none would be approved above 300% of FPL, except that we assumed that waiver applications from people generally over age 50 would be approved, but that younger age persons would not.

We assumed the cost of the minimum creditable coverage would be approximately \$3,000 annually for an individual, and that the mandate would cost half the individual rate. We assumed that for people who do buy, approximately 75% would buy individual coverage, and the balance would buy family coverage.

We then made four separate sets of calculations to model first year (before the mandate applies) and subsequent year take-up, and to model the anticipated effects separately for those with and without eligibility for employer sponsored health insurance.

Based on the model, we projected the proportion of the uninsured that would be expected to purchase insurance in the future under the assumptions about cost, tax incentives and the mandate. The results of this analysis are contained in Appendix 12.16. The individual mandate is a more powerful motivator than the tax treatment of premiums. If the mandate becomes weaker, or if waivers are easier to obtain, then we might expect lower enrollment among the uninsured.

## **8.5. Impact of the Current Uninsured on the Merged Market**

We started with a base number of uninsured individuals in Massachusetts of approximately 372,000 according to the Household Survey and 570,000 according to the adjusted Census data, as shown in Appendix 12.15, Table 93.

Using the uptake assumptions developed from the informant survey and from the Elasticity of Demand modeling, total enrollment of the uninsured was estimated using the Adjusted Census and Household Survey data. Enrollment assumptions were differentiated for various segments of the uninsured population based on their status relative to employer sponsored health insurance, the age of the person who would be the primary insured if they became insured, and

their income level. This created a two dimensional grid. The categories of status with regard to employer sponsored health insurance were:

- Employed and eligible for employer sponsored health insurance
- Employed and not eligible for employer sponsored health insurance
- Employed but no sponsored health plan available
- Not employed
- Uninsured children (all uninsured under the age of 19 were presumed to be “child” dependents)

The age groups used were:

- 19-26
- 27-44
- 45-64

Finally, the uninsured were grouped by income level as defined in terms of percent of FPL. There are slight differences in the income brackets used by the different surveys. The groupings for the adjusted Census Data were:

- < 100% of FPL
- 100% - 300% of FPL
- 300% - 500% of FPL
- > 500% of FPL

The groupings for the Household Survey were:

- < 100% of FPL
- 100% - 300% of FPL
- 300% - 400% of FPL
- > 400% of FPL

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Based on assumptions derived from the surveys of the uninsured, the key informant survey and the model to interpret the elasticity effect of differences in price on demand for insurance among the uninsured, we developed a range of enrollment projections by year of the merged program. The range of projections is shown in Table 28. A more detailed enrollment table is provided in Appendix 12.17.

<b>Adjusted U.S. Census</b>						
<b>Insured</b>	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
Elasticity of Demand	33,539	84,069	89,180	89,180	94,988	94,498
Informant Survey Low	96,231	109,114	125,547	125,547	125,547	125,547
Informant Survey Medium	112,331	127,807	147,191	147,191	147,191	147,191
Informant Survey High	127,521	144,709	166,069	166,069	166,069	166,069
<b>Household Survey</b>						
<b>Insured</b>	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
Elasticity of Demand	27,006	64,218	68,654	68,654	73,637	73,713
Informant Survey Low	81,822	92,599	107,550	107,550	107,550	107,550
Informant Survey Medium	95,684	108,376	125,868	125,868	125,868	125,868
Informant Survey High	106,652	120,970	140,636	140,636	140,636	140,636

**Table 28 – Number of Previously Uninsured Enrolled in the Merged Market By Year**

Since we used two sources for uninsured data which were obtained from surveys using different methodologies, we are using a range to represent the total number of uninsured individuals. As stated previously, the range as of 2006 is from 372,000 to 570,000. We have made no assumptions for population growth or change in the number of the uninsured except for our modeling of uninsured people becoming insured in the merged market.

The enrollment numbers provided by the two surveys are not only different in total population, but also vary by distribution of income and age category. For example, the U.S. Census has a smaller proportion of 45-64 year olds than does the Household survey.

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In addition to those that will enroll in the merged market, we have also estimated the number of people that will enroll in Commonwealth Care or MassHealth, as shown in Appendix 12.16. The total percent that remain uninsured is shown in Table 29.

<b>Adjusted U.S. Census</b>						
<b>Remaining Uninsured</b>	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
Elasticity of Demand	54%	42%	37%	34%	31%	29%
Informant Survey Low	52%	47%	40%	37%	35%	34%
Informant Survey Medium	40%	34%	27%	24%	21%	20%
Informant Survey High	32%	25%	18%	14%	12%	10%
<b>Household Survey</b>						
<b>Remaining Uninsured</b>	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
Elasticity of Demand	58%	45%	40%	37%	35%	34%
Informant Survey Low	48%	43%	36%	33%	32%	32%
Informant Survey Medium	40%	33%	25%	22%	21%	20%
Informant Survey High	32%	24%	15%	13%	11%	10%

**Table 29 – Percent Remaining Uninsured**

We then developed assumptions about expected claims of those people from the uninsured population who purchase insurance. The following factors were considered in developing those assumptions:

- As indicated from the informant survey, there is wide variability in opinions on the morbidity of the uninsured population. We chose a range to perform our analyses and chose as two starting points Small Group and Non-group claim costs for CY 2005. These claim costs were normalized for age, geography, industry, and plan value.
  - **Existing Non-group Morbidity** Our observations of income and family status showed the uninsured population to be more similar in basic demographics to the existing Non-group population than to the Small Group population. However, we considered the Non-group population to be a relatively high surrogate for anticipated claims for the currently uninsured, because the current Non-group population has affirmatively chosen insurance and would seem to represent the highest risk level. While we used the Non-group population as one of the starting points of the possible range of morbidity among the uninsured, it is our judgment

that it is less predictive of the likely experience of the uninsured than are the other data points.

- **Existing Small Group Morbidity** We took the existing Small Group population as more representative of a population not influenced by excessive adverse selection, because of the generally wide availability of employer sponsored insurance and the dynamics of group underwriting rules.
- **Demographics of the Uninsured** We then modified our two starting points (Small Group claim costs and Non-group claim costs) using a demographic adjustment to further reflect the estimated morbidity of the uninsured population. The uninsured are relatively younger, but there are fewer children among the uninsured, most likely due to eligibility for MassHealth. There were differences in the reported demographics between the Urban/Foundation data and Household surveys, with relatively more 45-64 year olds reported in the Household Survey. We calculated member age factors based on the insured population and applied them to the uninsured. A table of demographic adjustments for the various enrollment statuses is shown in Table 30. This resulted in approximately a 6% reduction in starting claim costs based on the Household Survey and a 12.6% reduction in starting claim costs based on the Urban/Foundation data Survey. Results vary for the Elasticity of Demand estimate due to assumptions that were explicitly made for waivers for an older demographic, namely that uptake assumptions were reduced by 40% in CY 2008 through 2012 for the 45-64 year olds.

Demographic Adjustment	CY 07	CY 08+
Elasticity of Demand Household	-6.0%	-10.0%
Elasticity of Demand Census	-12.8%	-15.3%
Informant Survey Household	-7.0%	-7.0%
Informant Survey Census	-12.6%	-12.6%

**Table 30 – Demographic Adjustment**

- Initial enrollment would be disproportionately high among those with higher expected utilization and we used self described health status from the Urban/Foundation data as a

guide. We assumed that half the people who perceive themselves as in fair or poor health join in the first year of the program, and the remainder of those people join in the second year. We did not assume that those people are necessarily the ones who experience the very highest claims, but we did assume a higher level of morbidity for these people than in the population at large. We reviewed the Medical Expenditure Panel Survey (MEPS) data to understand the relationship between perceived health status and actual morbidity. The data we obtained was for CY 2004 and data was separated into three populations:

- uninsured < 300% FPL
- uninsured > 300% FPL
- insured > 300% FPL

We obtained utilization data as well as medical expenditures for various categories. We then compared persons who perceive themselves as fair or poor health status for the uninsured population greater than 300% FPL to the overall numbers for the insured population. The results showed that the morbidity adjustment for inpatient services was approximately 1.5 or 50% higher than the insured population. For Emergency Room visits, the morbidity adjustment was 1.12 or 12% higher than the insured population. Outpatient hospital services and physician visits showed lower morbidity adjustments. There are a few caveats concerning this analysis. First, we were reviewing nationwide data. Second, we are comparing utilization and expenditure statistics of the uninsured to the insured. These morbidity adjustments may be higher, if the uninsured have access to insurance. Due to the reasons discussed in this paragraph, we assumed a range of 150% to 200% of average morbidity for persons who perceive themselves as fair or poor health status. The overall impact on the pool of including this disproportionate share of poorer health status individuals varies based on the varying scenarios of total enrollment among the uninsured. Generally, the impact is a half percent increase to overall premium rates.

- Expected pent-up demand among people who first become insured. We assumed that people first buying insurance would be more likely to use well visits than they would if they had been insured right along. We therefore assumed that utilization levels would be 5% higher in the first year of coverage and 2.5% in the second year of coverage than they would among those continuously insured. We validated these assumptions through

discussions with professionals familiar with the Massachusetts uninsured population. The use of the pent up demand assumptions did not have a significant impact on the overall results of the analysis.

- We assumed people would join uniformly throughout the year, beginning in July 2007.
- No explicit assumptions were made about product choice. Our projections of enrollment among the uninsured results in a comparison to the existing insured market on a benefit neutral basis. There were no benefit buy-down assumptions used.
- We know that a higher percentage of the working uninsured work in “high risk” industries and therefore the morbidity of these people may be higher. We felt that using the Non-group population as one of our starting points would already reflect the morbidity of the high risk industries and we did not want to double count the morbidity. Therefore, no explicit assumptions were made for an industry factor for the uninsured.
- No explicit assumptions were made on the number of uninsured individual policies vs. family policies. To the extent that the currently uninsured may have more individual policies than the insured population, premium may be reduced further.
- Due to Chapter 58, carriers can now charge groups of one a 10% group size load. We modeled our scenarios two ways. Using the first method, we assumed that the extra premium collected due to the 10% group size load would be used to offset existing insured premium rates. This is noted as “Assumes 10% Group Size Load is used to offset existing insured premium rates” in Scenarios 5-8 and 13-16 in Appendix 12.18. A second method assumes that the extra premium will be absorbed entirely by additional administrative expenses associated with the newly insured. In this case there is no additional impact to the existing insured premium rates. The effect of these assumptions is summarized in Scenarios 1-4 and 9-12 in Appendix 12.18.

Our expected claims assumptions were then applied to our enrollment assumptions and merged with the Small Group and Non-group merged population to understand the range of impacts to overall rate levels of adding uninsured people to the pool.

A summary of the range of effects of adding the uninsured is shown in Table 31 and Table 32. Table 31 shows the range of premium impacts under all scenarios when the extra premium

collected due to the 10% group size load is spread across the merged pool, thus reducing overall premium costs. Table 32 shows the range of premium impacts under all scenarios when the additional premium collected due to the 10% group size load is fully absorbed by the additional administrative expenses associated with the newly insured. A detailed summary of all scenarios is provided in Appendix 12.18.

<b>10% Group Size Load is used to offset existing insured premium rates</b>												
All Scenarios	CY 07		CY 08		CY 09		CY 10		CY 11		CY 12	
	Min	Max										
Range of premium impact	-0.7%	1.1%	-2.4%	3.8%	-2.9%	4.0%	-3.1%	4.1%	-3.2%	4.0%	-3.2%	4.0%

**Table 31 – Premium Impact to Insured Market when group size load is used to offset premium**

<b>10% Group Size Load is not used to offset existing insured premium rates</b>												
All Scenarios	CY 07		CY 08		CY 09		CY 10		CY 11		CY 12	
	Min	Max										
Range of premium impact	-0.2%	1.7%	-1.0%	5.7%	-1.3%	6.0%	-1.5%	6.2%	-1.6%	6.2%	-1.6%	6.2%

**Table 32 – Premium Impact to Insured Market when group size load is not used to offset premium**

If the additional premium collected due to the 10% group size load is not used to offset existing insured premium rates, then rates will not be reduced as much as they would if the additional premium were spread across the merged pool. The impact of the group size load will vary by carrier. To the extent that a carrier experiences higher administrative costs due to the newly insured, the impact to premium will vary. Our assumptions and resulting premium impact as described in Appendix 12.18 provide endpoints. It is likely that the true impact will fall between these endpoints.

## 8.6. Summary of Premium Impact

This section summarizes the premium impact due to the enrollment of the uninsured into the merged market. As discussed in previous sections there are many assumptions that affect the estimates for the uninsured. The premium PMPM numbers projected for CY 2005 through 2012 are shown for several interesting cases. Note that none of the premium projections discussed in this section include benefit buy-down assumptions. First, pre-merger and post merger premiums of the insured market are shown. Next, we show three examples that illustrate the range of how the newly insured will impact premium. For each of the three examples, we show

two cases; one where the 10% group size load is used to offset insured premium rates and another where it is not.

1. **Pre-merger** Table 33 shows the expected premiums for the insured market in the absence of the Small Group and Non-group merger. No benefit buy-down assumptions were used to derive these premiums.

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Premium PMPM</b>								
<i>Small Group</i>	\$ 303.94	\$ 337.38	\$ 374.49	\$ 415.68	\$ 461.41	\$ 512.16	\$ 568.50	\$ 631.03
<i>Non-Group</i>	\$ 412.68	\$ 458.08	\$ 508.46	\$ 564.39	\$ 626.48	\$ 695.39	\$ 771.88	\$ 856.79
<i>Combined</i>	\$ 311.19	\$ 345.42	\$ 383.42	\$ 425.60	\$ 472.41	\$ 524.38	\$ 582.06	\$ 646.09

**Table 33 – Pre-merger Premium Projection**

2. **Post merger** Table 34 shows the expected premiums for the insured market after the Small Group and Non-group merger and after applying the new rating rules. Again, no benefit buy-down assumptions were used to derive these premiums.

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Premium PMPM</b>								
<i>Small Group</i>	\$ 303.94	\$ 337.38	\$ 376.28	\$ 420.37	\$ 466.70	\$ 518.05	\$ 575.03	\$ 638.29
<i>Non-Group</i>	\$ 412.68	\$ 458.08	\$ 470.04	\$ 482.31	\$ 535.37	\$ 594.26	\$ 659.62	\$ 732.18
<i>Combined</i>	\$ 311.19	\$ 345.42	\$ 382.53	\$ 424.50	\$ 471.28	\$ 523.13	\$ 580.67	\$ 644.55

**Table 34 – Post merger Premium Projection**

The following examples incorporate the newly insured population into the merged market. There are two cases are shown; one where the 10% group size load is used to offset insured premium rates and another where it is not. Again, no benefit buy-down assumptions were used in these examples. The examples were chosen to provide a range of results.

- A. Scenarios that assume a maximum reduction in premium. These correspond to the assumptions in Scenarios 13 and 9 in Appendix 12.18. The difference between these two scenarios is that Scenario 13 assumes the 10% group size load is used to offset existing insured premium rates and Scenario 9 does not.

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	2005	2006	2007	2008	2009	2010	2011	2012
<b>Premium PMPM</b>								
<i>Small Group</i>	\$ 303.94	\$ 337.38	\$ 373.70	\$ 410.23	\$ 453.25	\$ 501.82	\$ 556.44	\$ 617.56
<i>Non-Group</i>	\$ 412.68	\$ 458.08	\$ 466.81	\$ 470.68	\$ 519.93	\$ 575.65	\$ 638.30	\$ 708.41
<i>Combined</i>	\$ 311.19	\$ 345.42	\$ 379.90	\$ 414.26	\$ 457.69	\$ 506.75	\$ 561.90	\$ 623.62

**Table 35 – Premium Projection Using Scenario 13, Informant Survey High Estimate**

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Premium PMPM</b>								
<i>Small Group</i>	\$ 303.94	\$ 337.38	\$ 375.38	\$ 416.31	\$ 460.54	\$ 510.32	\$ 565.95	\$ 628.07
<i>Non-Group</i>	\$ 412.68	\$ 458.08	\$ 468.91	\$ 477.65	\$ 528.29	\$ 585.39	\$ 649.20	\$ 720.47
<i>Combined</i>	\$ 311.19	\$ 345.42	\$ 381.61	\$ 420.40	\$ 465.06	\$ 515.33	\$ 571.50	\$ 634.23

**Table 36 – Premium Projection Using Scenario 9, Informant Survey High Estimate**

- B. Scenarios that assume a moderate impact to premium. These correspond to the assumptions in Scenarios 15 and 11 in Appendix 12.18. The difference between these two scenarios is that Scenario 15 assumes the 10% group size load is used to offset existing insured premium rates and Scenario 11 does not.

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Premium PMPM</b>								
<i>Small Group</i>	\$ 303.94	\$ 337.38	\$ 375.21	\$ 415.79	\$ 460.17	\$ 509.95	\$ 565.60	\$ 627.73
<i>Non-Group</i>	\$ 412.68	\$ 458.08	\$ 468.70	\$ 477.06	\$ 527.87	\$ 584.96	\$ 648.81	\$ 720.08
<i>Combined</i>	\$ 311.19	\$ 345.42	\$ 381.44	\$ 419.87	\$ 464.68	\$ 514.95	\$ 571.15	\$ 633.89

**Table 37 – Premium Projection Using Scenario 15, Informant Survey Medium Estimate**

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Premium PMPM</b>								
<i>Small Group</i>	\$ 303.94	\$ 337.38	\$ 376.59	\$ 420.89	\$ 466.32	\$ 517.16	\$ 573.72	\$ 636.71
<i>Non-Group</i>	\$ 412.68	\$ 458.08	\$ 470.42	\$ 482.91	\$ 534.93	\$ 593.24	\$ 658.11	\$ 730.38
<i>Combined</i>	\$ 311.19	\$ 345.42	\$ 382.84	\$ 425.02	\$ 470.90	\$ 522.24	\$ 579.34	\$ 642.96

**Table 38 – Premium Projection Using Scenario 11, Informant Survey Medium Estimate**

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- C. Scenarios that assume a maximum increase in premium. These correspond to the assumptions in Scenarios 8 and 4 in Appendix 12.18. The difference between these two scenarios is that Scenario 8 assumes the 10% group size load is used to offset existing insured premium rates and Scenario 4 does not.

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Premium PMPM</b>								
<i>Small Group</i>	\$ 303.94	\$ 337.38	\$ 380.60	\$ 436.33	\$ 485.28	\$ 539.12	\$ 598.28	\$ 663.82
<i>Non-Group</i>	\$ 412.68	\$ 458.08	\$ 475.43	\$ 500.62	\$ 556.67	\$ 618.43	\$ 686.29	\$ 761.47
<i>Combined</i>	\$ 311.19	\$ 345.42	\$ 386.92	\$ 440.61	\$ 490.04	\$ 544.41	\$ 604.14	\$ 670.33

**Table 39 – Premium Projection Using Scenario 8, Informant Survey High Estimate**

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Premium PMPM</b>								
<i>Small Group</i>	\$ 303.94	\$ 337.38	\$ 382.74	\$ 444.27	\$ 494.89	\$ 550.37	\$ 610.93	\$ 677.82
<i>Non-Group</i>	\$ 412.68	\$ 458.08	\$ 478.10	\$ 509.74	\$ 567.70	\$ 631.33	\$ 700.80	\$ 777.53
<i>Combined</i>	\$ 311.19	\$ 345.42	\$ 389.09	\$ 448.64	\$ 499.74	\$ 555.76	\$ 616.92	\$ 684.46

**Table 40 – Premium Projection Using Scenario 4, Informant Survey High Estimate**

## 9. Reinsurance Analysis

One possible strategy for improving the affordability of Small Group and Non-group health insurance is the introduction of an external source of funding through a sponsored reinsurance program. Such a program could assume the risk of claims that exceed a certain threshold, either in total or in part. For example, a program could be designed to cover 80% of the excess of \$100,000 on all claims that exceed that level.

Such a program, if it exists, must be designed with recognition of the cost and the available funding, the prospects for increased affordability and increased enrollment, and for emphasizing partial, rather than complete reinsurance of excess claims to maintain insurance carrier incentives for care management on the largest claims.

Large claims on the relatively few sickest members of the insured population constitute a very large share of the total cost. For example, claims of \$100,000 or more involve only 0.1% of Small Group members and 0.2% of Non-group members, but represent 9% and 12% of claim dollars in each population, respectively, and 9.3% of total claims dollars in the combined population.

Conversely, 58% of Small Group members and 54% of Non-group members have annual claims of less than \$1,000, including all capitated amounts paid for their care. Even at the \$35,000 level, the lowest excess attachment point shown in Table 41, only 0.7% of members have claims at least that large, while those members have 22% of the total claims.

We built continuance tables based on 2005 Small Group and Non-group claims and analyzed them to determine the effect of different reinsurance strategies, both in dollars and in percent of claims. There would be trade-offs in developing a reinsurance program. For example, a program that paid 80% of the excess of \$75,000 would cost approximately \$114 million (in 2005 claims) or about 4.7% of total claims, which could then be passed back to consumers in the form of lower rates, assuming that the funding of the reinsurance program comes from outside the health insurance market.

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A similar size program could also be accomplished by providing 50% of the excess of \$50,000, at a cost of approximately \$108 million or 4.4% of claims. A program like this could fund 4.4% of claims cost, but a smaller percent of premiums, because it would not reduce or recover any administrative costs. Assuming an 86% loss ratio, it would represent approximately 3.8% of premiums.

Table 41 shows the effect in dollars and in percentage of reinsurance at different levels, as well as the number of members with claims that would be affected.

Claims in Excess of	Number of Members	Reinsurance \$ at 80% (000,000)	Reinsurance \$ at 50% (000,000)	Percent of Claims at 80%	Percent of Claims at 50%	Percent of Premium at 80%	Percent of Premium at 50%
\$35,000	6,810	\$236	\$148	9.7%	6.0%	8.4%	5.2%
\$50,000	4,111	\$173	\$108	7.1%	4.4%	6.2%	3.8%
\$75,000	2,105	\$114	\$71	4.7%	2.9%	4.1%	2.5%
\$100,000	1,261	\$81	\$51	3.3%	2.1%	2.9%	1.8%
\$150,000	590	\$46	\$29	1.9%	1.2%	1.7%	1.0%
\$200,000	321	\$29	\$18	1.2%	0.7%	1.0%	0.6%
\$300,000	114	\$13	\$8	0.6%	0.3%	0.5%	0.3%

**Table 41 – Reinsurance Effect**

These dollar estimates are based on claims levels only. They do not take into account any discounts that might be realized should a state authority, through a competitive procurement process, seek bids for the provision of reinsurance.

We determined that a program that reimbursed 80% of claims in excess of \$75,000 on an individual claims basis would cost between \$100 million and \$125 million annually (based on 2005 claim data), and a program that reimbursed 50% of the excess of \$50,000 on an individual claim basis would cost a similar amount. This would be equivalent to approximately 4.5% of total claims, or slightly less than 4% of total premium.

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Reinsurance of approximately \$33 million dollars, funded outside the health insurance system, is needed to offset each 1% increase in premium, based on 2005 claims experience and in 2005 dollars.

To the extent the combined pool grows in size over time because of additional insureds and/or because of medical care cost trends, the reinsurance structure required to fund a given percent of premium will change. Because of differences in experience and membership by carrier, reinsurance based on a single formula will not necessarily immunize each carrier against the cost of the merger in a comparable manner.

## **10. Identified Issues**

We have identified several additional issues that may have an impact on the insured market after the merger of the Small Group and Non-group markets.

### **10.1. Administrative Cost**

We see the potential for significant administrative costs associated with the implementation of the merger of the Small Group and Non Group markets, both at the Connector and at the carriers. As the uninsured enter the insured population, the proportion of one-life groups may increase, thereby increasing overall administrative costs. In addition, the Connector's operational expenses and Sub-Connector expenses need to be covered by premiums.

We are concerned about the potential level of the administrative load, due to the group size adjustment and/or distribution costs, on products purchased through the Connector. Higher administrative costs will adversely impact the uptake assumptions developed in this report. To the extent that the Connector can manage this during its competitive procurement processes, Connector products will not be disadvantaged in the marketplace and our uptake assumptions will be more likely to be reached.

### **10.2. Connector and List Bill Rating - Implications to the Carrier**

It is our understanding that employer groups will be able to purchase insurance through the Connector on a basis where each employee is rated on his/her own individual demographics. It is also our understanding that under certain circumstances each employee can make an independent choice of benefit plan. This could result in a situation where groups which enter the market through the Connector are list-billed, while those who enroll in the open market will be rated based on group composite rates.

If there is free access to insurance either on a list-bill or composite rate basis, there will be the opportunity for selection. Groups with some older employees but an average mix of ages would not have their rates affected by 2:1 compression on a composite group basis, but would have rates reduced when each employee's rate is analyzed based on the 2:1 compression limits, rather than it applying on an average for the group.

If an employer group can get a quote both ways, it will be motivated to choose the lowest total premium. The effects of any such selection would be an additional cost that will be borne by the entire market.

In order to understand the potential effect of a list billing option on the market, we modeled Small Group data to see how groups would be affected by having an opportunity to select list billing.

We analyzed the combined Small Group data files in order to estimate the number of groups (and subscribers) who might be better off changing to individual billing through the Connector. We did this in order to see what the rate impact might be of groups dropping coverage, setting up cafeteria plans, and letting their employees enroll through the Connector. We have assumed that people purchasing through the Connector would be the equivalent of groups of one, and would be rated with a group size factor of 1.10. If that turns out not to be the case, rate relationships will be different, and there may be a greater incentive for some groups to attempt to access the market through the Connector.

The following simplifying assumptions were made:

- Analysis was done at the subgroup level because of the way the Small Group data was organized. This implies a bias in that the modeled size of groups is too small. It also is subject to error because in some cases the model looks only at part of a group.

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- We assumed that employees who enrolled as groups of one would get a size factor of 1.10. This offsets some of the potential savings to groups from enrolling as individuals.
- We assumed that all the same employees who were enrolled under the group plans would enroll through the Connector.

We then calculated a separate age factor for each individual within each group, and applied the industry factor for the group and 2:1 rate compression on an individual basis, multiplying the total by the 1.10 size adjustment factor to be allowed under the new law. The results were summed for each subgroup and compared to the group's modeled 2:1 limited rate adjustment factor on the post-merger basis.

We then compared each group's total rate adjustment factor to the average of the rate adjustment factors for the members as individuals, and identified those groups who would have lower rates on an individually rated basis. Separate calculations were made to determine how many groups and subscribers would have rates at least 10% lower if they switched to individual rating. Calculations were also made at 15%, 20% and 25% savings.

The results of this analysis varied substantially by carrier and by intermediary vs. non-intermediary business. In aggregate, the results are shown in Table 42.

	<u>Avg Group Size</u>	<u>% of Total Groups</u>	<u>% of Total Subscribers</u>
<b>Total</b>	<b>3.7</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Save with Individual Rates</b>	<b>6.0</b>	<b>12.6%</b>	<b>20.6%</b>
<b>Save at least 10% with Individual Rates</b>	<b>4.2</b>	<b>4.7%</b>	<b>5.3%</b>
<b>Save at least 15% with Individual Rates</b>	<b>3.9</b>	<b>3.4%</b>	<b>3.6%</b>
<b>Save at least 20% with Individual Rates</b>	<b>2.8</b>	<b>1.3%</b>	<b>1.0%</b>
<b>Save at least 25% with Individual Rates</b>	<b>2.4</b>	<b>0.7%</b>	<b>0.5%</b>

**Table 42 – Impact of List Billing**

It was interesting to see that the average size of groups that would save under individual rating was quite a bit higher than the average for all groups, but there was substantial falloff among the groups that would save more than 10%.

The implementation of list billing at the Connector but not in the open market gives the Connector a marketing advantage with respect to attracting and enrolling employers with younger employees and to younger individuals in general.

There would obviously be some cost associated with implementing cafeteria plans and some substantial disruption in the change to an individual selection basis. We assumed people would sign up for the same plans they have now, but of course there would be added cost because of selection issues with employees each choosing plans that they individually find most appealing.

We assumed that only groups which could save at least 10% by making this change would do so. Based on that assumption, the overall impact on cost would be an increase in premium rates of approximately 0.5% to replace the premium lost because of selection by rating method.

In addition to rating impacts, list billing has implications for the employer market as well. List billing provides employers with immediate information about the rate impact of hiring (or maintaining on the payroll) an older employee, or an employee with an older dependent. To the extent that employers are not aware of the impact of age on health insurance rates, list billing might highlight for employers the correlation between age and benefit costs.

It might also expose the older individuals to paying either higher rates or, if the employer is contributing, more of the cost of their health insurance themselves. Affordability might then become more of an issue than it might otherwise be for older individuals.

### 10.3. Open Enrollment

Ongoing open enrollment procedures for the Connector products will have an impact on existing Small Group and Non-group subscribers as well as on uninsured people coming in. Among the factors are:

- If list billing is available to groups coming in through the Connector while composite billing is used in the open market, it will create selection opportunities. For example, it could lead to employers withdrawing from the Small Group market and directing their employees to the Connector. The smaller the group, the easier it is for the employer to model the effect, and therefore the easier it is to select against the pool.
- A brief open enrollment period for the Connector could operate against the desire to encourage enrollment among the uninsured. An extensive open enrollment period, at least in the first year, will offer the best chance of getting a high uptake of health insurance among the currently uninsured population. Continuous open enrollment may lead to additional cost associated with selection, particularly if subscribers are able to change plans easily at times when their medical needs change.
- An annual open enrollment with an exception for “insurable events” (e.g., losing employer sponsored coverage) might resolve some of the conflicts described above.

### 10.4. Product Selection from the Connector

One of the byproducts of allowing individuals from the small employer market to choose and purchase products on their own is the issue of selection. This is where individuals choose health insurance products based on their own needs. This therefore reduces the cross subsidization that occurs across populations. The result of this phenomenon is that all costs will eventually increase.

We modeled the impact of selection by reviewing small employer and Non-group member claims costs for CY 05 and stratified them into three categories: individuals that have the lowest costs, representing 58% of the population; individuals that have “middle” claims costs

representing 25% of the population; and individuals that have the “highest” claims costs representing 17% of the population. We then estimated PMPM claims costs for each of these categories. These claims costs represent 100% claims costs and are not adjusted for benefits. The table below shows that for 58% of the population (“Lowest”), the average claims PMPM is approximately \$45, or 85% below the average for all claims. The claims PMPM for 17% of the population (“Highest”) is approximately \$1,240 which is more than four times the average for all claims.

Members Categorized by Costs	Percent of Insured Population	Estimated PMPM Costs no benefit adjustment
Lowest	58%	\$45
Middle	25%	\$216
Highest	17%	\$1,240
Total	100%	\$295

**Table 43 – Stratified Estimated Cost**

We then determined a target revenue requirement for four product categories based on the overall costs of the population and a target MLR of 86%. These product categories are High, Medium, Low, and HDHP. We also assigned plan values for each of these product categories based on what is sold in the market today.

Finally, we made enrollment assumptions into the various products. We first assumed that all members would choose products based generally on their health status. In other words, a low costing member would choose a Low or HDHP product offering. A high costing member would choose a High product. When modeling this out, the resulting selection factor was 1.13. That is, due to selection, overall premium for all products for the insured market would need to increase 13% to cover all expenses. We realize this is an unrealistic scenario since members are risk averse and also not everyone understands their current health status. For example, a “low costing” member may choose a high value product because they are risk averse or they

perceive their health status as worse than it is. In addition, the affordability of a product has an impact on product selection, both at the individual and the employer level.

Therefore, we then reviewed the enrollment into product categories for the one-life groups from our data. Using these enrollment percentages, we made various enrollment assumptions of members categorized by costs into each product category. We have estimated that overall premium would increase 1 to 3% due to selection if individuals from the Small Group market are allowed to choose and purchase products on their own.

Product selection based either on morbidity or affordability issues, would result in less subsidization across populations; the result would be that overall premiums will need to increase.

As we reviewed the data for the current Small Group market, selection appears evident for groups of one. As stated in Section 5.7.10, MLRs for the Low Products are much lower for groups of one. Also, the MLRs for the Medium and High Products are greater than 1. This suggests that members are enrolling into products based on perceived health status. This is somewhat evident in groups of two to five subscribers. There does not seem to be a selection issue for groups of six or more.

## **10.5. Underwriting Rules for Business Written Through the Connector**

If the Connector offers coverage on a basis without waiting periods, subscribers, including subscribers who would, prior to market merger, have entered the market as Small Group subscribers, will have greater opportunity to select against the merged pool of coverage, which would result in additional cost. In particular, if subscribers are allowed free change of anniversary from one plan to another, there will be significant selection opportunity. For the benefit of the overall market, it may be necessary for the Connector to set limits on the ability of individuals to change plans more often than on anniversary or during an open enrollment period. This will not be fully understood until the Connector's underwriting rules are established.

## **10.6. Continuing Decreases in Plan Values, and the Defined Level of Minimum Creditable Coverage**

The data for existing Non-group and Small group members clearly demonstrates that plan values are decreasing. If this is due in part to the affordability of health insurance in Massachusetts, we believe policy-makers, and in particular the Quality and Cost Council established by Chapter 58, monitor this closely as the implementation of Chapter 58 progresses.

To the extent that low plan values generate bad debt for providers, premium rates may rise faster than they otherwise would in order to make up for the shortfall. To the extent that high out of pocket expenses, due to lower plan values, mean that individuals forego or postpone treatment, the health of Massachusetts residents could be at risk.

To the extent that increasing out of pocket costs create changes in behavior that result in a more efficient use of health care services, overall costs may decrease, and health insurance premiums will decrease as well.

The definition of Minimum Creditable Coverage will have an impact on plan values in the overall marketplace going forward.

## **10.7. Young Adult and 2:1 Compression**

The Young Adult plan is intended to provide a low cost health plan specifically appropriate for people ages 19-26. It seems appropriate that such a plan should provide for easy access to the health care system, perhaps through a limited network, and should also be low cost, in order to be attractive to people who might otherwise find health care insurance unaffordable.

Currently, it is our understanding that all plans (other than this new Young Adult plan) must be available to all subscribers, and that the pricing of the plans be based on the actuarial benefit value, without reference to who buys what plan. In addition, there is a requirement articulated in the new law that for all coverage the lowest rate should be no lower than 66% of the average rate.

If the Young Adult plan is priced based on relative benefit value compared to plans offered to others in the Small Group market, and if the rate is then required to be at least 66% of the average rate that would be charged to the whole market if that plan were widely available, it will end up costing substantially more than the expected claim cost for just the 19 to 26 market. This may be a significant barrier to offering good access to health care (as opposed to a high deductible plan) and a significant barrier to attracting the people for whom the plan is designed.

Alternatively, if the plan does have unique features that can separate it from the plans generally offered to group and Non-group subscribers, and if it can be rated based on the expected experience of only its target market, then a higher value, lower cost plan design can be achieved.

If the Young Adult plan is allowed to be rated on a basis that is basically self-supporting and not averaged in with the overall pool, that will affect the demographic profile of the remaining uninsured, and result in relatively higher costs for the pool in aggregate. We modeled that 50% -75% of the 19-26 year olds earning greater than 300% FPL would not be included in the pool. There are approximately 38,000 - 44,000 young adults earning greater than 300% FPL. We estimate the effect of this demographic leaving the pool to be an increase to premium for the insured market of approximately 0.5 to 1.0%.

## 11. Conclusion

Our analysis of recent experience in the Non-group marketplace provides evidence of the unfavorable morbidity when compared to Small Group. The merger of the Non-group and Small Group markets is intended to spread the morbidity risk over a larger population. Our projection of the merged experience of Non-group and Small Group claims experience indicates that Non-group rates will decrease approximately 15%, and Small Group rates will increase approximately 1 to 1.5%, based on the merger of the two risk pools and the change in Small Group rating rules. It is important to note that actual results may vary substantially by carrier, depending on the carrier's relative loss ratio experience and the proportion of Small Group and Non-group business.

The range of rate impacts of the currently uninsured on the newly merged market as they enter insurance varies based on the assumptions used in our projection model. These assumptions include the number of new members, the assumed morbidity of the new membership, and the carrier's ability to use the extra premium collected due to the 10% group size load to offset premium.

To the extent that the assumptions used in the projections do not materialize, the ultimate rate impacts will vary from our projections.

## 12. Appendix

### 12.1. Appendix 1 – References and Bibliography

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## 12.2. Appendix 2 – Glossary

**2:1 Compression:** A statutory limitation on the variability of premium rates. The effect of specified rating variables for a carrier's book of business is limited such that the highest rate cannot be greater than two times the lowest rate.

**Adjusted Claims PMPM:** A value calculated by adjusting the "Average Claims PMPM" to a standard age factor and a standard benefit value.

**Adverse Selection:** The propensity of buyers of insurance to act in their own self-interest. When given choices, the healthier individuals may buy the cheaper products, or opt out entirely, while the least healthy individuals or groups are likely to buy the most comprehensive coverage. This can result in imbalance among carriers and in additional cost for the market as a whole.

**Age Factor:** Age is an allowed rating variable. The effect of age on claim cost (typically an increase from the average for older age brackets and a decrease from the average for younger age brackets) is reflected by an age factor that is associated with each age range.

**Age/Gender Adjustments:** A factor developed by a carrier to account for the influence of age and gender on expected claims costs. Typically, the older an individual the more claims one can expect him/her to generate. With respect to gender, male and female claim costs change in a different pattern as people age. For example, females of child-bearing age generally use more services than males of the same age.

**Average Claims PMPM:** A ratio that is calculated with the amount of claims for a specified number of months in the numerator and the number of member months that correspond to the time period of the claims in the denominator.

**Average Plan Value:** The average actuarial value of the benefits. Typically, the plan with the most comprehensive benefits is assigned a value of "1;" all other plans are evaluated in comparison to this.

**Base Rate:** The base rate is the starting premium rate which is adjusted by plan factor and allowed demographic factors to produce the adjusted community rate.

**Benefit Buy-down:** The tendency to purchase lower cost plans in lieu of absorbing rate increases on an existing, more comprehensive plan.

**Benefit Plan:** The specific benefits covered by the product that the small employer purchases. The term benefit plan includes both the network of providers (e.g., hospital, physician), the

services covered by the plan(e.g., radiology, laboratory, office visits) and the amounts that the patient pays for the specific service (deductibles, coinsurance, and co-payments). In this paper, benefit plan and product may be used interchangeably.

**Broker:** A person licensed as an insurance producer by the Commonwealth of Massachusetts who assists individuals and employers with the purchase of health insurance. Typically, a broker receives a commission that is paid by the insurance carrier, either directly or indirectly. Carriers typically build this expense into the rates charged to all small groups.

**Carrier:** A Health Maintenance Organization (“HMO”) or insurance company

**Chapter 58:** An Act Providing Access to Affordable, Quality, Accountable Health Care, also known as the Massachusetts Health Reform law.

**Coinsurance:** A percentage amount (usually the percent of a carrier’s allowed charge) that is not payable by the carrier and is instead the responsibility of the patient. Coinsurance is one type of cost-sharing.

**Commonwealth Care:** The subsidized health insurance product offered by the Connector to residents of Massachusetts whose incomes are at or below 300% of the Federal Poverty Level.

**Community Rating:** A rating methodology that reflects the anticipated claim experience of the enrolled population and the benefit plan chosen. In full community rating, everyone with the same rate effective date and the same benefit plan and rate basis type pays the same premium rate. Under community rating, rates would not vary by sex, age, and health status. **Composite**

**Rating:** A methodology for calculating premiums where the demographic characteristics of the enrollees are averaged over the group and all individuals with the same rate basis type are charged the same premium. In contrast, under list billing, each employee with a given rate basis type in a group may pay a different rate for the identical product.

**Connector:** The Commonwealth Health Insurance Connector Authority, the body established by Chapter 58 to offer and manage Commonwealth Care and to serve as a distribution channel for small employers and other individuals to purchase health insurance.

**Continuance Table (Claim Cost Continuance Table):** A distribution of claims costs ordered by size of claim. Used as a model to indicate the percentage of individuals who will reach various levels of increasing claims cost.

**Contract Type:** Also see “Rate Basis Type” Each employee purchases coverage for him/herself and potentially a number of dependents, e.g., children or a spouse. Typically, the contract types offered are:

- Individual, Single or Employee only
- Individual and Child(ren) or Employee and child(ren)
- Dual, Individual and spouse or Employee and spouse
- Family or Employee, spouse, and child(ren)

Examples of other possible combinations are:

- Two contract types—Employee only and Family or
- Three contract types—individual, two person, and family.

**Copayment:** A flat dollar amount payable by the patient to the health care provider (e.g., physician, pharmacist) at the time of a particular service. A copayment is one type of cost-sharing.

**Cost Sharing:** The component of a covered expense that is not paid by the carrier and is therefore the responsibility of the subscriber. Cost-sharing includes deductibles, coinsurance, and copayments.

**Deductible:** A flat dollar amount payable by the insured to providers of care prior to the start of insurance coverage. An insured may need to pay multiple providers for multiple services prior to satisfying the entire deductible. A deductible is one type of cost-sharing.

**Dependent:** family members of the subscriber or applicant for coverage. An eligible dependent is a dependent who can enroll in the health plan.

**Dual Coverage:** Also referred to as “Husband and Spouse” coverage or “Two Adults” coverage

**Elasticity of Demand:** Price Elasticity of Demand measures the rate of response in the quantity demanded by a market resulting from a change in price. For example, a decrease in the price of health insurance should result in an increase in enrollment (i.e. a reduction of the uninsured population. The individual mandate has attached a penalty for non-compliance. The penalty for non-compliance is in effect a reduction in the price of health insurance.

**Enrollee:** Every individual who is a member of the health insurance plan.

**Family Coverage:** One of the individual and family composition types for which a carrier is allowed to compute a premium. This is also described as coverage for “two adults and one or more child(ren)”

**Geographic Regions:** See “Region”

**Group Size Adjustment:** A rating variable allowed in the determination of a premium rate. The group size adjustment may vary from 0.95 to 1.05 (increased to 1.10 by Chapter 58) and must be based only on differences in administrative cost.

Group Size Factor: See “Group Size Adjustment”

**High Deductible Health Plan (“HDHP”):** A health plan with a deductible high enough to meet the IRS requirements for favorable tax treatment for contributions made to a Health Savings Account. Funds deposited in a Health Savings Account can be spent pre-tax for health care expenses.

**HMO:** Health Maintenance Organization

**Household Survey:** A biennial survey conducted by the Massachusetts Division of Health Care Finance and Policy. The survey gathers information about the number of uninsured individuals in the state, their income levels and work situation.

**Individual Coverage:** One of the individual and family composition types for which a carrier is allowed to compute a premium, and is used when the subscriber is the only person covered on the contract.

**Individual Mandate:** the requirement in Chapter 58 that all Massachusetts residents purchase health insurance coverage of sufficient quality by July 1, 2007 or be subject to financial penalties.

**Individual Plus Child(ren) Coverage:** One of the individual and family composition types for which a carrier is allowed to compute a premium

**Industry Factor:** Chapter 176J allows “Industry” as a rating variable. The “Industry Factor” is a percentage rating adjustment that is generally based on the SIC code associated with the workplace.

**Intermediary:** An independent organization under contract to an insurance carrier to perform various administrative functions such as billing, collecting premium, and enrolling members.

**List Billing:** A method for calculating the premium for a group of individuals. Under this method a premium amount is determined for each individual subscriber that takes into consideration all the demographic characteristics of that subscriber that are allowed as rating variables. This contrasts to a group composite premium calculation, where the demographic characteristics of the enrollees are reviewed and averaged. Under list billing, each employee with a given rate basis type in a group may pay a different rate for the identical product; under composite rating each person with a given rate basis type in the group pays the same rate.

**Loss Ratio:** See Medical Loss Ratio

**MA Health Reform:** The changes brought about by Chapter 58

**Medical Loss Ratio (“MLR”):** A ratio that consists of an amount of claim cost in the numerator and the amount of premium related to the claims in the denominator. The loss ratio is an indication of the percent of revenue remaining for a carrier to pay administrative expenses and incur a profit after all claims have been paid

**Member:** Each person covered under an insurance contract. The subscriber is a member as are each of the subscriber’s dependents who are enrolled under the same contract.

**Medical Expenditure Panel Survey (“MEPS”):** A set of large-scale surveys of families and individuals, their medical providers, and employers across the United States.

**Merger:** The joining together of the Small Group and Non-group risk pools called for in Chapter 58.

**Minimum Creditable Coverage:** The level of coverage necessary to meet the requirements of the individual mandate. This level will be determined by the Connector.

**Non-group Health Plan:** A health plan that is issued to an individual and that is subject to Chapter 176M. In contrast to Small Group, Non-group health plans are typically sold to individuals who are not eligible for an employer sponsored health plan.

**Open Enrollment:** A portion of the calendar year during which an individual can enroll in a health benefit plan without the restrictions that may otherwise be imposed. For example, Chapter 58, Section 115 provides for an open enrollment period from March 1, 2007 to May 31, 2007 during which a carrier cannot impose a pre-existing condition limitation or waiting period.

**Plan Value:** The ratio of the anticipated cost of a specific plan of benefits to that of the cost of a standard plan, where the standard plan is one generally providing the most comprehensive benefits. The standard plan is typically given a plan value of 1.00, so that other plans would have values less than 1.00.

**PMPM:** Per Member Per Month. Obtained by dividing monthly cost (claim cost, premiums, etc.) by the number of members.

**PMPY:** Per Member Per Year. Annual cost (claim cost, premiums, etc.) divided by the number of members.

**Pre-existing Conditions Provision (or Pre-existing Conditions Limitation):** A provision in the health plan that excludes coverage for certain expenses during a specified period following the insured's effective date for medical conditions which existed prior to the effective date of the insurance.

**Rate Basis Type:** The categories of individual and family composition for which a carrier charges separate rates. Chapter 176J and Regulation 211 CMR 66.04 allow a carrier to use the following rate basis types:

- Individual,
- Two adults,
- One adult and one or more children, and
- Two adults and one or more children

**Rating Factor (or Rating Variable):** Chapter 176J and the accompanying regulation allow rates to vary based on various demographic and plan of benefits criteria. The allowed criteria are generally referred to as rating variables or rating factors. Under this chapter, the allowed rating variables are age, geography, industry, group size, participation level, reinsurance, and smoking.

**Region:** Geographic location is a rating variable ("Area Rate Adjustment") that is allowed by Chapter 176J. To the extent that costs vary by region, carriers can adjust rates accordingly.

**Reinsurance:** insurance purchased by a health insurance carrier to protect it from major losses. A carrier might purchase reinsurance to reimburse them for a percent of all claims that exceed a certain dollar amount (for example, 80% of the excess of \$100,000). Reinsurance can be purchased by the carrier, or could also be mandated for the market by legislation. In the latter

case, reinsurance could imply money from outside the system (if available) to defray the cost of the largest claims and thereby reduce premium need.

**Renewal business:** A group which has already had coverage for at least one year.

**Risk Pool:** The group of individuals and/or small employers who are included in a particular subset of a carrier's business and whose claim experience is combined for the purpose of developing rates. For example, the small employer risk pool is composed of all subscribers and their dependents enrolled in small employer health plans.

**Selection:** An insurance term that is commonly used to reflect that an applicant will apply for a plan of insurance that the applicant perceives to be most favorable to the applicant in terms of value received for the premium paid.

**Small Group:** A small employer or small business. Businesses with 50 or fewer eligible employees are small groups as defined in Chapter 176J.

**Subscriber:** The subscriber is the term given to an individual who enrolls him/herself and his/her eligible dependents in an insurance plan. The number of subscribers is thus the same as the number of total subscriber contracts.

**Underwriting:** the processes used to determine:

- whether or not an individual or small employer group is eligible for a health plan,
- the eligibility of each employee and the employee's dependents to enroll in an employer sponsored health plan,
- Whether or not the group meets the carrier's participation and contribution requirements,
- Pricing, and
- the applicability of creditable coverage for the purpose of reducing any pre-existing condition exclusion period

**Uninsured:** An individual who is not a participant in a health insurance plan. For the purpose of this definition, health insurance plan includes all public and private health insurance plans

**Urban/Foundation Data:** The analysis of census data commissioned by the Blue Cross Blue Shield of Massachusetts Foundation and conducted by the Urban Institute.

**Waiting Period:** A period immediately subsequent to the effective date of coverage under a health benefit plan during which the plan does not pay for some or all medical expenses.

**Waiver:** A determination by the Connector that, due to affordability reasons, a person is exempt from the requirements of the individual mandate. In addition, we use the term “waiver” in this report to refer to the determination by the Connector that a person is eligible for Commonwealth Care even if he/she is eligible for employer sponsored coverage.

**Young Adult Plan:** The health benefit plan specified in Section 90 of Chapter 58. The “Young Adult Plan” is a health benefit plan that is restricted to individuals between the ages of 19 and 26 inclusive; it can be sold only through the Connector.

### 12.3. Appendix 3 – Abbreviations and Acronyms

<b>Acronym</b>	<b>Description</b>
AF	Age Factor
DHCFP	Massachusetts Division of Health Care Finance and Policy
FPL	Federal Poverty Level
HDHP	High Deductible Health Plans
MCC	Minimum Creditable Coverage
MEPS	Medical Expenditure Panel Survey
MLR	Medical Loss Ratio
NAICS	North American Industry Classification System
PMPM	Per Member Per Month
PMPY	Per Member Per Year
SIC	Standard Industrial Classification

**Table 44 – Acronyms**

## 12.4. Appendix 4 – Carrier Market Share

### Total Membership Percentage Represented by Contacted Carriers

Based on Reports Posted by the Massachusetts Division of Insurance

Membership as of December 31, 2005

Carrier Contacted	12/31/05 Market Share
<b>HMOs</b>	
BCBSMA Standard Plan	39.3%
BCBSMA Alternate Plan	28.9%
FCHP Standard Plan	2.0%
FCHP Alternate Plan	1.1%
HPHC Standard Plan	7.9%
HPHC Alternate Plan	7.8%
HNE Standard Plan	0.9%
HNE Alternate Plan	0.0%
NHP	0.1%
TAHMO	1.7%
<b>PPOs</b>	
BCBSMA Standard Plan	7.7%
BCBSMA Alternate Plan	2.4%
<b>Subtotal – Contacted Plans</b>	<b>99.8%</b>

**Table 45 – Non-Group Membership by Carrier**

Carrier Contacted	12/31/05 Market Share
<b>BCBSMA</b>	
BCBSMA	7.0%
<b>Commercial Carriers</b>	
Fallon Health & Life	0%
HPHC Insurance Company	0%
Tufts Insurance Company	0.9%
<b>HMOs</b>	
BCBSMA HMO Blue	40.1%
FCHP	4.6%
HPHC	17.8%
HNE	3.3%
NHP	1.4%
TAHMO	17.0%
<b>Subtotal – Contacted Plans</b>	<b>92.1%</b>

**Table 46 – Small Group Membership by Carrier**

## **12.5. Appendix 5 – Eligibility and Rating Requirements**

### **12.5.1. Current**

#### **Small Employer Health Insurance Eligibility and Rating Requirements**

##### **Current**

The following is an outline of the eligibility and rating requirements that are applicable to health plans issued to an Eligible Small Business:

- An Eligible Small Business is any sole proprietorship, firm, corporation, partnership, or association actively engaged in business which on at least 50% of its working days during the preceding year employed at least one but not more than fifty eligible employees, the majority of whom worked in Massachusetts.
- An Eligible Employee is an employee who works on a full-time basis with a normal work week of thirty or more hours, and includes an owner, sole proprietor, and partner. The term Eligible Employee does not include temporary employees.
- Availability of health plans: Every carrier must make available to every eligible small business every health plan in its portfolio. Exceptions can be made for HMOs outside the employer's service area.
- A carrier must provide coverage to all eligible employees and all eligible dependents. There are special provisions for late entrants and employees who live outside the service area of an HMO.
- Pre-existing Condition Limitation – A carrier cannot impose a pre-existing condition limitation that exceeds six months. The limitation period is reduced by any qualifying period of prior creditable coverage.
- Renewability of health plans: Every health plan is renewable at the option of the eligible small business, with exceptions noted in 211CMR 66.06.
- A carrier may require groups of five or fewer eligible employees to enroll through an intermediary, provided that it does so for all groups of five or fewer eligible employees.

- Participation requirement: The carrier may impose a participation requirement. For groups of five or fewer eligible employees the carrier may require that 100% of the eligible employees enroll in the health plan. For groups of six or more eligible employees, the carrier may require a level of participation that cannot exceed 75%.
- Rate Basis Type: Requires a carrier to determine rates for a health plan for each of the following family composition types:
  - Individual
  - Two adults
  - One adult and one or more children
  - Two adults and one or more children
- Carriers can vary the premium to be charged to a small business based on one or more of the following:
  - Age
  - Industry
  - Group Size – the adjustment can vary in the range of .95 to 1.05
  - Participation level – an adjustment may be applied for participation at a level less than 100% for groups of five or fewer eligible employees and for participation at a level less than 75% for groups of six or more. The adjustment must be based on an analysis of differences in experience of health plan business with different levels of participation.
  - A surcharge rate adjustment that is consistent with the reinsurance premium charged to the carrier.
- The highest premium, based on the rating variables stated in the prior bullet, that is charged to a small business for each rate basis type cannot exceed more than two times the lowest premium charged to a small business. This limitation on variability of rates is generally referred to as “2:1 compression”.
- The carrier is allowed to make additional rate adjustments that are not subject to the 2:1 compression limitation:
  - Area adjustments
  - Discounts for wellness programs
  - Discounts for intermediaries (reflecting administrative cost savings)

## **12.5.2. Changes Effected by Chapter 58 of the Acts of 2006**

### **Small Employer and Individual Health Insurance**

#### **Eligibility and Rating Requirements**

#### **Changes Effected by Chapter 58 of the Acts of 2006**

The following is an outline of the changes to the eligibility and rating requirements that are applicable to health plans issued to an Eligible Small Business or individual:

- The small employer risk pool and the Non-group risk pool are merged. Premium rates are based on the combined experience of individually enrolled subscribers and small employers.
- An individual resident is eligible to apply for any small employer health plan offered by a carrier.
- An individual can purchase one of the health plans offered by the Connector or can purchase a health plan in the open market.
- An individual is subject to the same rating rules as a small employer.
- The range allowed for the group size adjustment is increased from 0.95-1.05 to 0.95-1.10.
- The size adjustment is removed from any restriction imposed by the 2:1 compression requirement; that is, the size adjustment is outside the compression band.
- A requirement is added that the range of the 2:1 compression band must be from .66 to 1.32 times the applicable base premium.
- A carrier is allowed to apply a discount to eligible individuals and their dependents who have not used tobacco products within the past year. The tobacco discount is subject to the 2:1 compression limitation.

## 12.6. Appendix 6 – Data Formats and Specifications

### 12.6.1. Data Specifications Provided to Carriers

#### Data Set 1 – Small Employer Group Data for Employers ≤ 50 eligible employees

<b>Data Field</b>	<b>Field Type</b>	<b>Detail specification</b>
Calendar Year	Date	CY 2003 CY 2004 CY 2005 Each year separate
Employer Group Identifier	Text	Ensure that Group identity is obscured  Identity should be consistent from year to year and with data set 3
CY Earned Premium	Numeric	
CY Incurred Claims	Numeric	Net of member cost sharing Admin Expense excluded Before reinsurance recoveries  Claims costs to include all costs related to claims such as estimated risk sharing payments to providers, capitation, management fees  Claims to be completed – i.e. adjusted for IBNR
CY Member Months	Numeric	
Member Count by Contract Type	Numeric	All data valid as of 7/1 of each year  Contract Type as defined as Individual policies, Dual policies, Employee + Children policies and Family policies
Subscriber Count by	Numeric	All data valid as of 7/1 of

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Age Category and Contract Type		<p>each year</p> <p>Contract Type as defined as Individual policies, Dual policies, Employee + Children policies and Family policies</p> <p>Age Categories: 0-18, 19-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65+</p>
SIC code	Numeric	As of 7/1 of each year
Employer Group Zip Code	Numeric	As of 7/1 of each year. Zip Code where employer is located
Product Code	Text	<p>As of 7/1 of each year</p> <p>Health plan to provide a legend describing codes and benefit descriptions – Please see Excel Spreadsheet titled “MA Merger Benefit Plan Grid.xls”.</p>
Pharmacy Product Code	Text	<p>Only required when products offered are “mix and match” medical benefit with pharmacy benefit</p> <p>If required, Carrier to provide a legend describing codes and benefit descriptions – Please see Excel Spreadsheet titled “MA Merger Benefit Plan Grid.xls”.</p>
Product Type	Text	HMO, POS, PPO, other
Anniversary Date	Date	

## Data Set 2a – Non-Group Member Data

<b>Data Field</b>	<b>Field Type</b>	<b>Detail specification</b>
Calendar Year	Date	2003 2004 2005 Each year separate
Member Identifier	Text	Ensure that member identity is obscured
Relationship Code	Text	Subscriber ID and Unique Dependent ID i.e. Subscriber - 00 Dependent 1 - 01 Dependent 2 - 02 Dependent 3 - 03 Etc.
Subscriber Identifier	Text	Ensure that subscriber identity is obscured Should be consistent with Data Set 2b
CY Incurred Claims	Numeric	Net of member cost sharing Admin Expense excluded Before Reinsurance recoveries  CY Claims costs  Claims costs to include all costs related to claims such as estimated risk sharing payments to providers, capitation, management fees

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		Claims to be completed –i.e. adjusted for IBNR
CY Member Months	Numeric	
Effective Date	Date	Date when member first becomes active in health plan
Termination Date	Date	When member terminates from health plan  For active status -field may be blank or default to an invalid date i.e. 999999
Member Age	Numeric	As of 7/1 of each year
Member Sex	Text	As of 7/1 of each year

## Data Set 2b– Non-Group Subscriber Data

<b>Data Field</b>	<b>Field Type</b>	<b>Detail specification</b>
Calendar Year	Date	2003 2004 2005 Each year separate
Subscriber Identifier	Text	Ensure that subscriber identity is obscured Should be consistent with Data Set 3
Contract Type	Text	Contract Type as defined as Individual policies, Dual policies, Employee + Children policies and Family policies
CY Earned Premium	Numeric	
Subscriber Age	Numeric	
Subscriber Zip Code	Text	Zip Code of Subscriber
Product Code	Text	As of 7/1 of each year Health plan to provide a legend describing codes and benefit descriptions – Please see Excel Spreadsheet titled “MA Merger Benefit Plan Grid.xls”.
Product Type	Text	HMO, POS, PPO, Other

**Data Set 3 –Member Data for Small Employers ≤ 50 eligible employees**

<b>Data Field</b>	<b>Field Type</b>	<b>Detail specification</b>
Calendar Year dates of Service	Date	2004 2005
Member Identifier	Text	Ensure that Member identity is obscured
Employer Group ID	Text	For Small Employer Groups only
Relationship code	Text	Subscriber ID and Unique Dependent ID i.e. Subscriber - 00 Dependent 1 - 01 Dependent 2 - 02 Dependent 3 - 03 Etc.
Incurred Claims	Numeric	Net of member cost sharing Admin Expense excluded Before reinsurance recoveries  CY Claims costs  Claims costs to include all costs related to claims such as estimated risk sharing payments to providers, capitation, management fees Claims to be completed –i.e. adjusted for IBNR
Contract Type (Tier)	Text	Contract Type as

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		defined as Individual policies, Dual policies, Employee + Children policies and Family policies
Member Age	Numeric	As of 7/1 of each year
Member Sex	Text	
Product Code	Text	As of 7/1 of each year Health plan to provide a legend describing codes and benefit descriptions – Please see Excel Spreadsheet titled “MA Merger Benefit Plan Grid.xls”.
Pharmacy Product Code	Text	Only required when products offered are “mix and match” medical benefit with pharmacy benefit  If required, Carrier to provide a legend describing codes and benefit descriptions – Please see Excel Spreadsheet titled “MA Merger Benefit Plan Grid.xls”.
Effective Date	Date	Date when member first becomes active in health plan
Termination Date	Date	When member terminates from health plan  For active status -field may be blank or default to an invalid date i.e. 999999

### 12.6.2. Legends for Group and Non-Group Tables

Small Group Plan Values	Wide Bands	Member Cost Share
L	0.65 - 0.85	High Deductible or No Prescription Drugs or \$25+ OV, High IP & OPD Copay
M	0.85 - 0.92	\$15-20 OV, IP & OPD Copay
H	>0.92	\$5-10 OV, no IP or OPD Copay

Non-Group Plan Values	Wide Bands	Member Cost Share
L	0.56 - 0.85	High Deductible or No Prescription Drugs or \$25+ OV, High IP & OPD Copay
M	0.85 - 0.92	\$15-20 OV, IP & OPD Copay
H	>0.92	\$5-10 OV, no IP or OPD Copay

Age Factor Values:	Wide Bands	Age Range
	0.10 - 0.38	18 - 24
	0.38 - 0.72	25 - 39
	0.72 - 0.90	40 - 44
	0.90 - 1.10	45 - 49
	1.10 - 1.44	50 - 54
	> 1.44	55+

\* Adjusted Claim PMPM has been adjusted for Plan Value and Age Factor

## 12.7. Appendix 7 – Small Group 2005 Tables

REGION CY 2005 Group										
Region	Number of Employer Groups	Member Months	Subscriber Count	Member Count	Claim PMPM	Premium PMPM	MLR	Age Factor	Industry Factor	Plan Value
Cape	8,198	435,275	19,116	36,299	\$ 296.97	\$ 337.42	0.880	1.074	1.015	0.871
MetroBoston	36,623	2,539,493	109,746	215,324	\$ 268.07	\$ 312.25	0.859	0.973	1.004	0.894
MetroWest	17,065	1,296,016	50,055	107,035	\$ 260.04	\$ 301.09	0.864	0.999	1.003	0.889
Northeast	20,247	1,600,890	63,482	133,203	\$ 260.06	\$ 300.45	0.866	0.990	0.998	0.886
Southeast	11,444	833,534	34,144	69,732	\$ 266.67	\$ 313.62	0.850	1.025	1.003	0.885
West	7,442	752,791	32,697	63,929	\$ 248.93	\$ 293.32	0.849	1.017	1.005	0.894
Worcester	10,997	915,447	36,595	64,090	\$ 243.95	\$ 275.55	0.885	1.020	1.000	0.885
Unknown	733	62,872	2,523	5,240	\$ 239.27	\$ 296.44	0.807	1.055	0.991	0.893
<b>TOTAL</b>	<b>112,749</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$ 262.13</b>	<b>\$ 303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

**Table 47 – CY 2005 Small Group Region**

Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets

GROUP SIZE		CY 2005 Group								
GROUP SIZE	Number of Employer Groups	Member Months	Subscriber Count	Member Count	Claim PMPM	Premium PMPM	MLR	Age Factor	Industry Factor	Plan Value
1	51,744	1,285,446	51,744	112,370	\$296.16	\$305.34	0.970	1.202	1.007	0.865
2 - 5	28,251	1,781,039	81,992	152,221	\$273.25	\$322.68	0.847	1.034	1.009	0.888
6 - 10	7,938	1,352,491	59,972	116,603	\$250.41	\$309.37	0.809	0.944	1.003	0.894
11 - 25	6,056	2,236,219	96,066	194,408	\$250.54	\$298.18	0.840	0.941	0.999	0.895
26 - 50	1,609	1,277,565	52,897	111,437	\$251.97	\$290.06	0.869	0.922	0.995	0.896
51+	46	139,307	5,687	7,439	\$232.81	\$260.95	0.892	0.983	1.007	0.894
N/A	17,105	364,251	-	374	\$249.17	\$287.74	0.866	-	-	0.885
<b>TOTAL</b>	<b>112,749</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

Table 48 – CY 2005 Small Group – Group Size

Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets

<b>AGE FACTOR, NARROW BANDS      CY 2005 Group</b>										
<b>Age Factor Narrow Bands</b>	<b>Number of Employer Groups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Industry Factor</b>	<b>Plan Value</b>
0.1 - 0.5	3,437	89,942	6,252	8,173	\$216.62	\$261.67	0.828	0.448	1.015	0.888
0.5 - 0.6	5,832	343,462	17,382	30,451	\$208.29	\$251.98	0.827	0.566	1.014	0.888
0.6 - 0.7	9,456	788,372	33,722	68,915	\$210.99	\$254.01	0.831	0.661	1.007	0.890
0.7 - 0.8	5,432	997,345	40,934	86,129	\$225.48	\$267.94	0.842	0.751	1.001	0.895
0.8 - 0.9	13,878	1,428,836	55,303	122,892	\$230.90	\$273.06	0.846	0.844	1.000	0.890
0.9 - 1.0	13,791	1,334,577	52,762	113,980	\$250.81	\$290.90	0.862	0.949	1.001	0.890
1.0 - 1.1	4,872	1,005,354	42,303	83,664	\$264.97	\$311.38	0.851	1.050	1.001	0.893
1.1 - 1.2	3,034	593,936	25,702	51,240	\$284.11	\$336.55	0.844	1.147	0.997	0.891
1.2 - 1.3	11,737	634,210	27,143	54,951	\$308.59	\$345.83	0.892	1.246	1.002	0.879
1.3 - 1.4	1,612	214,118	10,266	18,430	\$328.28	\$384.99	0.853	1.346	1.004	0.884
1.4 - 1.5	1,717	133,528	6,759	11,551	\$330.52	\$406.96	0.812	1.442	1.004	0.887
1.5 - 2.0	12,541	368,400	20,324	31,896	\$417.18	\$442.73	0.942	1.667	1.007	0.874
2.0+	8,304	139,976	9,505	12,205	\$534.45	\$509.07	1.050	2.184	1.007	0.871
N/A	17,106	364,263	1	375	\$249.17	\$287.74	0.866	-	-	0.885
<b>TOTAL</b>	<b>112,749</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

**Table 49 – CY 2005 Small Group Age Factor, Narrow Bands**

<b>AGE FACTOR, WIDE BANDS      CY 2005 Group</b>										
<b>Age Factor Wide Bands</b>	<b>Number of Employer Groups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Industry Factor</b>	<b>Plan Value</b>
0.10 - 0.38	776	10,423	908	957	\$212.11	\$273.16	0.777	0.369	1.016	0.876
0.38 - 0.72	19,201	1,392,370	64,010	122,086	\$212.40	\$255.25	0.832	0.624	1.009	0.890
0.72 - 0.90	18,050	2,244,194	88,622	193,420	\$229.00	\$271.44	0.844	0.813	1.000	0.892
0.90 - 1.10	18,660	2,339,173	95,033	197,581	\$256.89	\$299.71	0.857	0.994	1.001	0.891
1.10 - 1.44	17,435	1,513,822	66,839	130,899	\$302.51	\$350.83	0.862	1.233	1.000	0.884
> 1.44	21,521	572,073	32,945	49,534	\$436.86	\$454.10	0.962	1.796	1.011	0.880
N/A	17,106	364,263	1	375	\$249.17	\$287.74	0.866	-	1.092	0.885
<b>TOTAL</b>	<b>112,749</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

**Table 50 – CY 2005 Small Group Age Factor, Wide Bands**

<b>Age Factor Values:</b>	<b>Wide Bands</b>	<b>Age Range</b>
	<b>0.10 - 0.38</b>	<b>18 - 24</b>
	<b>0.38 - 0.72</b>	<b>25 - 39</b>
	<b>0.72 - 0.90</b>	<b>40 - 44</b>
	<b>0.90 - 1.10</b>	<b>45 - 49</b>
	<b>1.10 - 1.44</b>	<b>50 - 54</b>
	<b>&gt; 1.44</b>	<b>55+</b>

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PLAN VALUE, NARROW BANDS		CY 2005 Group								
Plan Value Narrow Bands	Number of Employer Subgroups	Member Months	Subscriber Count	Member Count	Claim PMPM	Premium PMPM	MLR	Age Factor	Industry Factor	Plan Value
0.65 - 0.70	1,901	62,084	2,759	5,391	\$133.61	\$244.63	0.546	1.156	1.003	0.667
0.70 - 0.75	6,332	197,208	8,748	17,195	\$170.22	\$261.21	0.652	1.130	1.012	0.740
0.75 - 0.80	7,868	236,534	9,828	19,765	\$182.40	\$265.77	0.686	1.116	1.009	0.771
0.80 - 0.84	2,746	150,728	6,328	12,770	\$270.32	\$307.32	0.880	1.062	1.014	0.831
0.84 - 0.87	20,740	1,422,752	61,797	120,332	\$237.91	\$284.36	0.837	1.023	1.010	0.859
0.87 - 0.90	25,492	1,675,842	72,290	143,246	\$260.76	\$291.74	0.894	0.983	1.008	0.885
0.90 - 0.93	38,682	3,292,489	134,757	271,419	\$269.15	\$309.60	0.869	0.967	0.997	0.910
0.93 - 0.96	22,801	1,201,931	49,880	100,905	\$312.20	\$350.12	0.892	1.022	0.999	0.935
0.96 - 1.00	1,076	34,724	1,616	3,173	\$269.49	\$285.25	0.945	1.026	1.024	0.971
N/A	8,076	162,026	355	656	\$243.10	\$275.81	0.881	0.975	1.014	-
<b>TOTAL</b>	<b>135,714</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

Table 51 – CY 2005 Small Group Plan Value, Narrow Bands

Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets

PLAN VALUE, WIDE BANDS		CY 2005 Group								
Plan Value Wide Bands	Number of Employer Subgroups	Member Months	Subscriber Count	Member Count	Claim PMPM	Premium PMPM	MLR	Age Factor	Industry Factor	Plan Value
0.65 - 0.85	24,024	1,001,370	42,561	85,961	\$204.40	\$272.91	0.749	1.084	1.012	0.793
0.85 - 0.92	75,505	5,777,730	242,807	481,908	\$260.07	\$298.41	0.872	0.981	1.002	0.894
>0.92	28,102	1,495,090	62,635	126,327	\$310.81	\$349.16	0.890	1.015	1.001	0.934
N/A	8,083	162,128	355	656	\$243.21	\$275.82	0.882	0.975	1.014	-
<b>TOTAL</b>	<b>135,714</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

Table 52 – CY 2005 Small Group Plan Value, Wide Bands

Small Group Plan Values	Wide Bands	Member Cost Share
L	0.65 - 0.85	High Deductible or No Prescription Drugs or \$25+ OV, High IP & OPD Copay
M	0.85 - 0.92	\$15-20 OV, IP & OPD Copay
H	>0.92	\$5-10 OV, no IP or OPD Copay

STANDARD INDUSTRY CODE (SIC), WIDE BANDS					CY 2005 Group					
SIC Wide Bands	Number Of Employer Groups	Member Months	Subscriber Count	Member Count	Claim PMPM	Premium PMPM	MLR	Age Factor	Industry Factor	Plan Value
0.90 - 0.95	14,407	1,554,239	61,544	128,356	\$255.96	\$301.11	0.850	1.011	0.936	0.893
0.95 - 1.05	67,187	5,024,758	204,116	411,648	\$261.65	\$301.61	0.868	0.990	0.990	0.889
>1.05	23,987	1,579,210	70,779	130,175	\$270.72	\$315.98	0.857	1.005	1.098	0.883
N/A	7,168	278,111	11,919	24,673	\$256.49	\$293.52	0.874	1.089	-	0.889
<b>TOTAL</b>	<b>112,749</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

**Table 53 – CY 2005 Small Group SIC, Wide Bands**

Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets

<b>MEDICAL LOSS RATIO (MLR), NARROW BANDS      CY 2005 Group</b>										
<b>MLR Narrow Bands</b>	<b>Number Of Employer Groups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Industry Factor</b>	<b>Plan Value</b>
0.0 - 0.5	51,615	2,252,274	100,400	185,064	\$109.02	\$320.70	0.340	1.036	1.007	0.878
0.5 - 0.6	10,014	982,288	39,948	81,262	\$168.84	\$305.84	0.552	0.985	1.001	0.891
0.6 - 0.7	8,577	1,082,854	43,327	89,522	\$194.26	\$297.25	0.654	0.960	0.999	0.892
0.7 - 0.8	6,708	865,023	33,843	71,226	\$221.29	\$295.69	0.748	0.964	0.999	0.896
0.8 - 0.9	6,440	763,025	30,136	63,433	\$248.07	\$292.03	0.849	0.969	1.002	0.893
0.9 - 1.0	4,459	563,637	22,116	45,068	\$276.55	\$291.46	0.949	0.979	1.001	0.894
1.0 - 1.1	3,406	396,907	15,872	32,375	\$305.67	\$292.56	1.045	0.989	1.003	0.892
1.1 - 1.2	2,717	292,680	11,723	24,462	\$336.71	\$294.55	1.143	0.985	1.002	0.888
1.2 - 1.3	2,215	218,428	8,673	18,170	\$370.33	\$296.22	1.250	1.003	0.997	0.890
1.3 - 1.4	1,831	168,111	6,669	13,735	\$401.68	\$298.23	1.347	1.005	1.001	0.893
1.4 - 1.5	1,565	137,453	5,789	11,545	\$440.17	\$304.28	1.447	1.000	1.003	0.894
1.5 - 2.0	4,807	334,272	13,641	27,501	\$516.52	\$303.55	1.702	1.025	1.005	0.892
>2.0	8,395	379,368	16,221	31,489	\$1,190.53	\$306.32	3.887	1.077	1.005	0.888
<b>TOTAL</b>	<b>112,749</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

**Table 54 – CY 2005 Small Group MLR, Narrow Bands**

<b>MEDICAL LOSS RATIO (MLR), WIDE BANDS      CY 2005 Group</b>										
<b>MLR Wide Bands</b>	<b>Number Of Employer Groups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Industry Factor</b>	<b>Plan Value</b>
0.0 - 0.5	51,606	2,249,823	100,265	184,818	\$108.80	\$320.72	0.339	1.036	1.006	0.877
0.5 - 1.0	36,186	4,252,978	169,200	350,144	\$214.25	\$297.15	0.721	0.971	1.000	0.892
>1.0	24,957	1,933,516	78,893	159,890	\$545.87	\$299.36	1.823	1.017	1.004	0.894
<b>TOTAL</b>	<b>112,749</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

**Table 55 – CY 2005 Small Group MLR, Wide Bands**

<b>CLAIM PMPM, NARROW BANDS</b>		<b>CY 2005 Group</b>									
<b>Claim PMPM Narrow Bands</b>	<b>Number Of Employer Groups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Industry Factor</b>	<b>Plan Value</b>	
\$0 - \$50	12,267	257,402	11,955	20,509	\$35.40	\$275.40	0.129	0.973	1.011	0.840	
\$50 - \$75	9,143	340,223	13,310	27,596	\$64.20	\$263.10	0.244	0.952	1.012	0.856	
\$75 - \$100	9,326	476,280	18,468	38,375	\$88.55	\$271.08	0.327	0.935	1.006	0.870	
\$100 - \$130	10,993	777,355	30,358	63,623	\$116.57	\$278.71	0.418	0.927	1.003	0.882	
\$130 - \$170	13,297	1,299,733	51,149	106,790	\$151.08	\$285.54	0.529	0.932	1.001	0.890	
\$170 - \$210	11,250	1,376,205	55,281	114,142	\$190.05	\$295.02	0.644	0.955	1.000	0.892	
\$210 - \$270	12,860	1,527,906	61,664	125,102	\$237.40	\$307.35	0.772	0.996	1.000	0.897	
\$270 - \$375	12,174	1,218,095	51,796	101,516	\$313.54	\$324.22	0.967	1.043	1.003	0.897	
\$375 - \$650	11,891	813,921	36,955	68,180	\$472.43	\$346.31	1.364	1.113	1.005	0.896	
>\$650	9,548	349,197	17,422	29,019	\$1,319.01	\$385.05	3.426	1.237	1.006	0.895	
<b>TOTAL</b>	<b>112,749</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>	

**Table 56 – CY 2005 Small Group Claims PMPM, Narrow Bands**

<b>CLAIM PMPM, WIDE BANDS      CY 2005 Group</b>										
<b>Claim PMPM Wide Bands</b>	<b>Number Of Employer Groups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Industry Factor</b>	<b>Plan Value</b>
\$0 - \$200	63,656	4,183,170	166,594	342,481	\$131.67	\$282.25	0.467	0.941	1.003	0.880
\$250 - \$350	25,486	2,907,916	119,465	240,089	\$257.77	\$311.58	0.827	1.007	1.001	0.896
>\$350	23,607	1,345,232	62,299	112,282	\$677.23	\$354.90	1.908	1.145	1.007	0.899
<b>TOTAL</b>	<b>112,749</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

**Table 57 – CY 2005 Small Group Claims PMPM, Wide Bands**

<b>ADJUSTED CLAIM PMPM, NARROW BANDS      CY 2005 Group</b>										
<b>Adjusted Claim PMPM Narrow Bands</b>	<b>Number Of Employer Subgroups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Industry Factor</b>	<b>Plan Value</b>
\$1 - \$50	9,527	173,346	9,210	14,554	\$34.05	\$335.05	0.102	1.295	1.005	0.849
\$50 - \$75	7,503	230,297	10,184	19,607	\$62.37	\$304.21	0.205	1.202	1.008	0.856
\$75 - \$100	8,519	336,804	13,877	28,322	\$83.44	\$299.22	0.279	1.137	1.006	0.868
\$100 - \$130	10,402	542,227	22,301	46,204	\$108.25	\$301.78	0.359	1.101	1.002	0.878
\$130 - \$170	13,711	935,249	38,124	79,096	\$136.04	\$299.81	0.454	1.048	1.001	0.884
\$170 - \$210	12,259	1,089,988	45,383	94,450	\$169.07	\$301.45	0.561	1.018	1.000	0.891
\$210 - \$270	13,875	1,486,261	62,341	127,873	\$202.68	\$297.49	0.681	0.964	1.000	0.893
\$270 - \$375	15,166	1,622,524	69,610	139,557	\$260.34	\$299.83	0.868	0.939	1.002	0.896
\$375 - \$650	14,594	1,150,093	52,420	100,861	\$384.13	\$312.12	1.231	0.920	1.005	0.896
>\$650	11,573	492,402	24,385	43,093	\$1,085.29	\$337.10	3.219	0.962	1.009	0.894
N/A	18,585	377,128	523	1,235	\$246.60	\$289.13	0.853	1.055	1.011	0.884
<b>TOTAL</b>	<b>135,714</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

**Table 58 – CY 2005 Small Group Adjusted Claims PMPM, Narrow Bands**

**\* Adjusted Claim PMPM has been adjusted for Plan Value and Age Factor**

<b>ADJUSTED CLAIM PMPM, WIDE BANDS      CY 2005 Group</b>										
<b>Adjusted Claim PMPM Wide Bands</b>	<b>Number Of Employer Subgroups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Industry Factor</b>	<b>Plan Value</b>
\$1 - \$200	59,000	3,029,359	127,272	258,101	\$121.56	\$302.87	0.401	1.090	1.002	0.879
\$200 - \$350	29,240	3,122,618	132,100	268,556	\$222.75	\$298.58	0.746	0.958	1.001	0.894
>\$350	28,889	1,907,213	88,463	166,960	\$552.94	\$317.36	1.742	0.933	1.006	0.895
N/A	18,585	377,128	523	1,235	\$246.60	\$289.13	0.853	1.055	1.011	0.884
<b>TOTAL</b>	<b>135,714</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

**Table 59 – CY 2005 Small Group Adjusted Claims PMPM, Wide Bands**

**\* Adjusted Claim PMPM has been adjusted for Plan Value and Age Factor**

<b>GROUP SIZE AND AGE FACTOR (WIDE BANDS)      CY 2005 Group</b>											
<b>Group Size</b>	<b>Age Range</b>	<b>Number of Employer Groups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Industry Factor</b>	<b>Plan Value</b>
1	18 - 24	677	7,999	677	725	\$214.61	\$273.19	0.786	0.369	1.015	0.875
1	25 - 39	9,814	247,381	9,814	22,126	\$228.82	\$236.49	0.968	0.621	1.009	0.866
1	40 - 44	7,692	250,362	7,692	21,621	\$210.57	\$232.45	0.906	0.809	1.005	0.862
1	45 - 49	8,930	275,040	8,930	23,722	\$250.34	\$261.15	0.959	0.948	1.006	0.865
1	50 - 54	8,577	222,582	8,577	19,416	\$315.81	\$326.07	0.969	1.242	1.007	0.865
1	55+	16,053	282,070	16,053	24,759	\$462.68	\$458.07	1.010	1.901	1.007	0.866
2 - 5	18 - 24	98	2,320	222	223	\$210.65	\$274.17	0.768	0.368	1.023	0.877
2 - 5	25 - 39	6,585	411,416	19,200	35,778	\$205.28	\$257.59	0.797	0.607	1.013	0.887
2 - 5	40 - 44	5,871	444,480	17,679	37,998	\$242.99	\$278.11	0.874	0.810	1.007	0.890
2 - 5	45 - 49	5,051	366,259	15,466	30,821	\$258.21	\$318.05	0.812	1.003	1.009	0.889
2 - 5	50 - 54	5,607	348,796	16,810	29,671	\$316.37	\$379.01	0.835	1.263	1.007	0.889
2 - 5	55+	5,039	207,768	12,615	17,730	\$427.36	\$461.05	0.927	1.742	1.010	0.887
6 - 10	18 - 24	1	104	9	9	\$52.82	\$248.09	0.213	0.367	0.988	0.872
6 - 10	25 - 39	1,611	247,485	11,984	21,635	\$206.10	\$260.91	0.790	0.622	1.011	0.898
6 - 10	40 - 44	2,123	382,142	16,176	32,906	\$225.03	\$282.47	0.797	0.810	1.005	0.895
6 - 10	45 - 49	2,140	385,658	16,416	33,214	\$259.14	\$314.39	0.824	0.995	1.000	0.893
6 - 10	50 - 54	1,756	294,122	13,186	25,249	\$292.04	\$361.20	0.809	1.235	0.998	0.892
6 - 10	55+	307	42,981	2,201	3,590	\$368.62	\$427.93	0.861	1.574	1.011	0.899

Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets

11 - 25	18 - 24	-	-	-	-	-	-	0.000	-	-	-
11 - 25	25 - 39	948	307,580	14,818	26,989	\$215.13	\$259.75	0.828	0.639	1.005	0.898
11 - 25	40 - 44	1,833	711,756	29,166	61,446	\$227.53	\$276.24	0.824	0.815	0.995	0.897
11 - 25	45 - 49	1,931	747,623	31,069	64,805	\$256.38	\$303.60	0.844	0.995	0.998	0.894
11 - 25	50 - 54	1,234	437,462	19,333	38,384	\$294.15	\$343.27	0.857	1.220	0.996	0.887
11 - 25	55+	110	31,798	1,680	2,784	\$370.90	\$413.39	0.897	1.554	1.062	0.921
26 - 50	18 - 24	-	-	-	-	-	-	0.000	-	-	-
26 - 50	25 - 39	238	172,642	7,904	15,045	\$210.46	\$260.28	0.809	0.644	1.001	0.902
26 - 50	40 - 44	517	430,691	17,007	37,554	\$230.37	\$269.34	0.855	0.814	0.993	0.898
26 - 50	45 - 49	586	465,241	19,077	40,525	\$264.19	\$299.00	0.884	1.000	0.994	0.900
26 - 50	50 - 54	256	201,536	8,513	17,642	\$300.03	\$333.85	0.899	1.196	0.991	0.876
26 - 50	55+	12	7,456	396	671	\$399.70	\$434.25	0.920	1.500	1.022	0.994
51+	18 - 24	-	-	-	-	-	-	0.000	-	-	-
51+	25 - 39	5	5,866	290	513	\$199.92	\$259.89	0.769	0.603	1.009	0.916
51+	40 - 44	14	24,765	902	1,895	\$243.56	\$273.66	0.890	0.830	1.011	0.899
51+	45 - 49	22	99,352	4,075	4,494	\$231.08	\$255.85	0.903	1.020	1.009	0.893
51+	50 - 54	5	9,324	420	537	\$243.41	\$282.14	0.863	1.220	0.981	0.875
51+	55+	-	-	-	-	-	-	0.000	-	-	-
N/A		17,106	364,263	375	-						
Total		112,749	8,436,318	348,358	694,852	\$262.13	\$303.94	0.862	1.000	1.003	0.889

Table 60 – CY 2005 Small Group, Group Size and Age Factor

<b>GROUP SIZE AND PLAN VALUE (WIDE BANDS) CY 2005 Group</b>											
Group Size	Plan Value Group *	Number of Employer Subgroups	Member Months	Subscriber Count	Member Count	Claim PMPM	Premium PMPM	MLR	Age Factor	Industry Factor	Plan Value
1	L	15,579	368,614	14,864	32,711	\$188.34	\$263.43	0.715	1.200	1.008	0.769
2 - 5	L	4,725	242,099	11,677	21,333	\$205.19	\$284.09	0.722	1.076	1.015	0.790
6 - 10	L	880	115,576	5,248	10,265	\$225.20	\$281.44	0.800	0.984	1.016	0.816
11 - 25	L	765	167,794	7,608	15,064	\$221.82	\$273.97	0.810	0.986	1.017	0.819
26 - 50	L	216	70,503	3,019	6,258	\$212.51	\$270.55	0.785	0.974	1.005	0.819
51+	L	4	3,027	145	196	\$229.04	\$246.53	0.929	0.902	0.979	0.796
1	M	29,918	646,525	25,772	55,864	\$314.48	\$309.70	1.015	1.200	1.006	0.890
2 - 5	M	20,394	1,101,323	50,318	93,130	\$268.82	\$312.60	0.860	1.016	1.009	0.892
6 - 10	M	8,099	984,547	43,816	84,838	\$246.48	\$301.84	0.817	0.943	1.002	0.893
11 - 25	M	7,879	1,732,573	74,660	150,799	\$249.50	\$293.58	0.850	0.939	0.998	0.895
26 - 50	M	2,733	1,036,155	43,008	90,786	\$252.21	\$286.12	0.881	0.920	0.995	0.896
51+	M	79	125,955	5,233	6,478	\$232.72	\$257.86	0.903	0.994	1.009	0.893
1	H	12,875	269,462	11,065	23,730	\$399.82	\$352.02	1.136	1.209	1.008	0.934
2 - 5	H	9,012	435,932	19,935	37,639	\$322.43	\$369.54	0.873	1.055	1.006	0.934
6 - 10	H	2,204	251,108	10,858	21,407	\$277.89	\$351.85	0.790	0.933	1.002	0.934
11 - 25	H	1,613	332,990	13,749	28,466	\$270.88	\$334.33	0.810	0.920	0.994	0.934
26 - 50	H	453	167,005	6,719	14,093	\$268.14	\$322.75	0.831	0.916	0.989	0.933
51+	H	22	10,321	309	765	\$234.89	\$302.87	0.776	0.844	0.992	0.933
N/A	N/A	18,264	374,807	355	1,030	\$248.00	\$288.25	0.860	0.975	1.014	0.885
<b>TOTAL</b>		<b>135,714</b>	<b>8,436,318</b>	<b>348,358</b>	<b>694,852</b>	<b>\$262.13</b>	<b>\$303.94</b>	<b>0.862</b>	<b>1.000</b>	<b>1.003</b>	<b>0.889</b>

**Table 61 – CY 2005 Small Group, Group Size and Plan Value**

Small Group Plan Values	Wide Bands	Member Cost Share
L	0.65 - 0.85	High Deductible or No Prescription Drugs or \$25+ OV, High IP & OPD Copay
M	0.85 - 0.92	\$15-20 OV, IP & OPD Copay
H	>0.92	\$5-10 OV, no IP or OPD Copay

**AGE FACTOR AND PLAN VALUE (WIDE BANDS) CY 2005 Group**

Age Range	Plan Value Group *	Number or Employer Groups	Member Months	Subscriber Count	Member Count	Claim PMPM	Premium PMPM	MLR	Age Factor	Industry Factor	Plan Value
18 - 24	L	186	2,240	204	214	\$126.57	\$240.52	0.526	0.369	1.015	0.778
25 - 39	L	3,933	154,462	7,039	13,967	\$164.92	\$218.46	0.755	0.620	1.017	0.782
40 - 44	L	3,747	228,711	8,630	20,016	\$168.54	\$231.85	0.727	0.810	1.012	0.797
45 - 49	L	4,211	253,924	10,157	22,618	\$198.83	\$258.22	0.770	0.987	1.012	0.799
50 - 54	L	4,294	208,614	9,447	18,529	\$235.49	\$308.22	0.764	1.243	1.012	0.797
55+	L	5,798	119,663	7,084	10,483	\$284.99	\$392.97	0.725	1.826	1.010	0.776
18 - 24	M	445	5,869	513	531	\$251.71	\$271.37	0.928	0.368	1.014	0.889
25 - 39	M	13,553	957,745	44,097	83,749	\$212.12	\$252.29	0.841	0.626	1.008	0.894
40 - 44	M	14,417	1,622,572	64,722	139,809	\$228.22	\$268.01	0.852	0.813	0.999	0.895
45 - 49	M	14,656	1,685,712	69,400	140,881	\$256.36	\$296.41	0.865	0.996	1.000	0.894
50 - 54	M	12,817	1,034,941	45,945	89,359	\$304.06	\$345.56	0.880	1.231	0.999	0.892
55+	M	13,214	320,240	18,130	27,566	\$447.15	\$449.28	0.995	1.778	1.007	0.891
18 - 24	H	182	2,278	190	209	\$197.15	\$309.30	0.637	0.369	1.025	0.936
25 - 39	H	5,097	276,571	12,758	24,127	\$240.41	\$286.05	0.840	0.618	1.004	0.933
40 - 44	H	4,898	390,206	15,178	33,440	\$267.76	\$308.78	0.867	0.813	0.998	0.933
45 - 49	H	5,173	394,303	15,272	33,707	\$296.47	\$339.52	0.873	0.989	0.998	0.934
50 - 54	H	4,818	274,255	11,691	23,442	\$348.46	\$403.65	0.863	1.237	1.000	0.935
55+	H	6,010	129,193	7,545	11,174	\$554.14	\$524.54	1.056	1.821	1.009	0.935
N/A	N/A	18,265	374,819	356	1,031	\$248.00	\$288.25	0.860	0.972	1.014	0.885
Total		135,714	8,436,318	348,358	694,852	\$262.13	\$303.94	0.862	1.000	1.003	0.889

**Table 62 – CY 2005 Small Group Age Factor and Plan Value**

Small Group Plan Values	Wide Bands	Member Cost Share
L	0.65 - 0.85	High Deductible or No Prescription Drugs or \$25+ OV, High IP & OPD Copay
M	0.85 - 0.92	\$15-20 OV, IP & OPD Copay
H	>0.92	\$5-10 OV, no IP or OPD Copay

**12.8. Appendix 8 – Small Group 2004 Tables**

<b>REGION</b>	<b>CY 2004 Group</b>									
<b>GROUP SIZE</b>	<b>Number of Employer Groups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Industry Factor</b>	<b>Plan Value</b>
Cape	8,209	433,800	18,953	36,019	\$262.80	\$311.70	0.843	1.054	1.015	0.878
MetroBoston	36,044	2,539,083	109,164	213,603	\$241.23	\$291.95	0.826	0.961	1.004	0.902
MetroWest	16,934	1,294,028	49,670	106,597	\$232.85	\$282.48	0.824	0.988	1.002	0.897
Northeast	20,032	1,601,270	63,809	133,574	\$231.35	\$281.63	0.821	0.976	0.999	0.894
Southeast	11,465	834,865	34,268	69,789	\$242.57	\$295.68	0.820	1.015	1.003	0.893
West	7,410	745,879	32,851	64,356	\$232.47	\$282.28	0.824	1.005	1.005	0.900
Worcester	10,525	870,406	34,947	60,950	\$220.72	\$256.06	0.862	1.003	1.002	0.896
Unknown	798	67,900	2,792	5,819	\$246.96	\$281.04	0.879	1.017	0.992	0.902
<b>TOTAL</b>	<b>111,417</b>	<b>8,387,230</b>	<b>346,454</b>	<b>690,707</b>	<b>\$236.44</b>	<b>\$285.24</b>	<b>0.829</b>	<b>0.987</b>	<b>1.003</b>	<b>0.897</b>

**Table 63 – CY 2004 Small Group Region**

Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets

GROUP SIZE CY 2004 Group										
GROUP SIZE	Number of Employer Groups	Member Months	Subscriber Count	Member Count	Claim PMPM	Premium PMPM	MLR	Age Factor	Industry Factor	Plan Value
1	51,366	1,282,282	51,366	111,119	\$264.40	\$283.74	0.932	1.178	1.007	0.871
2 - 5	28,621	1,800,334	82,707	153,099	\$244.98	\$302.87	0.809	1.023	1.010	0.897
6 - 10	8,047	1,377,041	60,778	118,294	\$227.90	\$291.39	0.782	0.935	1.003	0.903
11 - 25	5,926	2,212,378	94,190	191,044	\$226.21	\$281.15	0.805	0.924	0.999	0.903
26 - 50	1,545	1,218,324	50,417	106,116	\$230.59	\$274.61	0.840	0.914	0.997	0.904
51+	65	172,767	6,996	10,577	\$210.48	\$251.27	0.838	0.979	1.003	0.910
N/A	15,847	324,104	-	458	\$220.40	\$253.05	0.871	-	-	0.897
<b>TOTAL</b>	<b>111,417</b>	<b>8,387,230</b>	<b>346,454</b>	<b>690,707</b>	<b>\$236.44</b>	<b>\$285.24</b>	<b>0.829</b>	<b>0.987</b>	<b>1.003</b>	<b>0.897</b>

Table 64 – CY 2004 Small Group – Group Size

<b>AGE FACTOR, WIDE BANDS</b>		<b>CY 2004 Group</b>								
<b>Age Factor Wide Bands</b>	<b>Number of Employer Groups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Industry Factor</b>	<b>Plan Value</b>
0.10 - 0.38	796	11,065	924	1,003	\$175.72	\$253.38	0.694	0.369	1.014	0.881
0.38 - 0.72	20,631	1,496,447	67,899	130,022	\$195.94	\$240.73	0.814	0.624	1.008	0.896
0.72 - 0.90	18,386	2,300,779	90,841	198,197	\$210.02	\$258.88	0.811	0.812	1.000	0.900
0.90 - 1.10	18,350	2,276,629	92,027	191,705	\$230.64	\$284.41	0.811	0.991	1.002	0.899
1.10 - 1.44	16,918	1,439,950	63,506	122,971	\$277.94	\$331.56	0.838	1.231	1.002	0.895
> 1.44	20,489	538,256	31,257	46,351	\$386.43	\$421.25	0.917	1.795	1.009	0.887
N/A	15,847	324,104	-	458	\$220.40	\$253.05	0.871	-	-	0.897
<b>TOTAL</b>	<b>111,417</b>	<b>8,387,230</b>	<b>346,454</b>	<b>690,707</b>	<b>\$236.44</b>	<b>\$285.24</b>	<b>0.829</b>	<b>0.987</b>	<b>1.003</b>	<b>0.897</b>

Table 65 – CY 2004 Small Group Age Factor, Wide Bands

<b>Age Factor Values:</b>	<b>Wide Bands</b>	<b>Age Range</b>
	<b>0.10 - 0.38</b>	<b>18 - 24</b>
	<b>0.38 - 0.72</b>	<b>25 - 39</b>
	<b>0.72 - 0.90</b>	<b>40 - 44</b>
	<b>0.90 - 1.10</b>	<b>45 - 49</b>
	<b>1.10 - 1.44</b>	<b>50 - 54</b>
	<b>&gt; 1.44</b>	<b>55+</b>

<b>PLAN VALUE, WIDE BANDS      CY 2004 Group</b>										
<b>Plan Value Wide Bands</b>	<b>Number of Employer Subgroups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Industry Factor</b>	<b>Plan Value</b>
0.65 - 0.85	23,826	968,032	41,371	84,047	\$175.39	\$250.33	0.701	1.066	1.010	0.795
0.85 - 0.92	69,478	5,087,887	216,041	426,475	\$231.51	\$276.53	0.837	0.969	1.003	0.899
>0.92	43,335	2,180,021	88,700	179,488	\$276.28	\$325.25	0.849	0.994	1.001	0.936
N/A	7,331	151,290	342	697	\$218.84	\$224.85	0.973	1.026	1.008	-
<b>TOTAL</b>	<b>143,970</b>	<b>8,387,230</b>	<b>346,454</b>	<b>690,707</b>	<b>\$236.44</b>	<b>\$285.24</b>	<b>0.829</b>	<b>0.987</b>	<b>1.003</b>	<b>0.897</b>

**Table 66 – CY 2004 Small Group Plan Value, Wide Bands**

<b>Small Group Plan Values</b>	<b>Wide Bands</b>	<b>Member Cost Share</b>
<b>L</b>	<b>0.65 - 0.85</b>	<b>High Deductible or No Prescription Drugs or \$25+ OV, High IP &amp; OPD Copay</b>
<b>M</b>	<b>0.85 - 0.92</b>	<b>\$15-20 OV, IP &amp; OPD Copay</b>
<b>H</b>	<b>&gt;0.92</b>	<b>\$5-10 OV, no IP or OPD Copay</b>

**12.9. Appendix 9 – Small Group 2003 Tables**

<b>REGION CY 2003 Group</b>									
<b>GROUP SIZE</b>	<b>Number of Employer Groups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Industry Factor</b>	<b>Plan Value</b>
Cape	8,403	431,077	19,269	36,356	\$231.87	\$281.40	0.824	1.019	0.889
MetroBoston	35,884	2,506,089	109,403	214,331	\$216.53	\$269.43	0.804	1.005	0.912
MetroWest	16,923	1,274,741	49,234	105,402	\$211.89	\$258.58	0.819	1.002	0.906
Northeast	19,787	1,587,597	63,441	132,754	\$206.37	\$255.67	0.807	0.999	0.904
Southeast	11,907	850,671	34,756	70,961	\$219.38	\$265.86	0.825	1.005	0.903
West	7,840	787,853	34,395	67,734	\$213.47	\$256.12	0.833	1.005	0.910
Worcester	9,662	810,082	31,874	55,322	\$197.39	\$230.98	0.855	1.001	0.911
Unknown	901	83,916	3,496	7,967	\$212.57	\$250.35	0.849	0.992	0.914
<b>TOTAL</b>	<b>111,307</b>	<b>8,332,027</b>	<b>345,868</b>	<b>690,827</b>	<b>\$212.78</b>	<b>\$260.21</b>	<b>0.818</b>	<b>1.004</b>	<b>0.907</b>

**Table 67 – CY 2003 Small Group Region**

Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets

GROUP SIZE		CY 2003 Group								
GROUP SIZE	Number of Employer Groups	Member Months	Subscriber Count	Member Count	Claim PMPM	Premium PMPM	MLR	Industry Factor	Plan Value	
1	49,868	1,229,523	49,868	107,937	\$235.41	\$259.34	0.908	1.008	0.879	
2 - 5	28,158	1,764,074	81,522	150,720	\$220.63	\$275.34	0.801	1.010	0.905	
6 - 10	7,915	1,358,554	59,904	116,608	\$205.92	\$265.27	0.776	1.005	0.915	
11 - 25	6,001	2,220,668	95,539	193,397	\$204.98	\$255.60	0.802	1.000	0.914	
26 - 50	1,512	1,177,396	49,796	104,417	\$206.61	\$251.79	0.821	0.995	0.916	
51+	89	197,947	9,239	16,567	\$196.76	\$235.37	0.836	1.002	0.920	
N/A	17,764	383,865	-	1,181	\$200.76	\$240.90	0.833	-	0.912	
<b>TOTAL</b>	<b>111,307</b>	<b>8,332,027</b>	<b>345,868</b>	<b>690,827</b>	<b>\$212.78</b>	<b>\$260.21</b>	<b>0.818</b>	<b>1.004</b>	<b>0.907</b>	

Table 68 – CY 2003 Small Group – Group Size

<b>PLAN VALUE, WIDE BANDS      CY 2003 Group</b>									
<b>Plan Value Wide Bands</b>	<b>Number of Employer Subgroups</b>	<b>Member Months</b>	<b>Subscriber Count</b>	<b>Member Count</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Industry Factor</b>	<b>Plan Value</b>
0.65 - 0.85	21,716	773,834	31,676	65,760	\$148.49	\$222.07	0.669	1.009	0.792
0.85 - 0.92	52,960	3,970,724	171,680	338,845	\$201.99	\$245.03	0.824	1.005	0.902
>0.92	62,040	3,468,188	140,997	283,970	\$239.51	\$286.50	0.836	1.001	0.939
N/A	6,994	119,281	1,515	2,252	\$211.79	\$248.80	0.851	1.018	-
<b>TOTAL</b>	<b>143,710</b>	<b>8,332,027</b>	<b>345,868</b>	<b>690,827</b>	<b>\$212.78</b>	<b>\$260.21</b>	<b>0.818</b>	<b>1.004</b>	<b>0.907</b>

**Table 69 – CY 2003 Small Group Plan Value, Wide Bands**

<b>Small Group Plan Values</b>	<b>Wide Bands</b>	<b>Member Cost Share</b>
<b>L</b>	<b>0.65 - 0.85</b>	<b>High Deductible or No Prescription Drugs or \$25+ OV, High IP &amp; OPD Copay</b>
<b>M</b>	<b>0.85 - 0.92</b>	<b>\$15-20 OV, IP &amp; OPD Copay</b>
<b>H</b>	<b>&gt;0.92</b>	<b>\$5-10 OV, no IP or OPD Copay</b>

**12.10. Appendix 10 – Non-Group 2005 Tables**

<b>REGION CY 2005 Non-Group</b>							
<b>Region</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
Cape	42,189	2,928	\$425.12	\$455.93	0.932	1.292	0.812
MetroBoston	157,567	12,391	\$409.16	\$457.57	0.894	1.061	0.822
MetroWest	96,323	6,186	\$374.36	\$404.39	0.926	1.129	0.825
Northeast	119,242	8,219	\$348.06	\$396.61	0.878	1.131	0.824
Southeast	72,267	4,800	\$335.96	\$366.69	0.916	1.139	0.824
West	42,917	3,588	\$389.10	\$442.19	0.880	1.170	0.824
Worcester	59,987	4,262	\$333.01	\$354.12	0.940	1.183	0.824
Unknown	12,152	181	\$438.69	\$362.19	1.211	1.031	0.823
<b>TOTAL</b>	<b>602,643</b>	<b>42,555</b>	<b>\$375.44</b>	<b>\$412.68</b>	<b>0.910</b>	<b>1.130</b>	<b>0.823</b>

**Table 70 – CY 2005 Non-Group Region**

<b>AGE FACTOR, NARROW BANDS      CY 2005 Non-Group</b>							
<b>Age Factor Narrow Bands</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
0.1 - 0.5	70,980	9,079	\$248.10	\$329.50	0.753	0.408	0.808
0.5 - 0.6	48,842	3,492	\$319.23	\$284.19	1.123	0.591	0.826
0.6 - 0.7	79,115	4,117	\$282.92	\$274.27	1.032	0.693	0.826
0.7 - 0.8	-	-	-	-	0.000	-	-
0.8 - 0.9	77,413	3,960	\$276.87	\$322.94	0.857	0.809	0.828
0.9 - 1.0	68,140	3,853	\$301.91	\$ 80.76	0.793	0.948	0.824
1.0 - 1.1	-	-	-	-	0.000	-	-
1.1 - 1.2	-	-	-	-	0.000	-	-
1.2 - 1.3	64,661	4,127	\$423.97	\$458.88	0.924	1.242	0.821
1.3 - 1.4	-	-	-	-	0.000	-	-
1.4 - 1.5	-	-	-	-	0.000	-	-
1.5 - 2.0	78,027	6,263	\$484.29	\$557.68	0.868	1.709	0.826
2.0+	92,612	7,664	\$558.54	\$616.33	0.906	2.192	0.822
N/A	22,853	-	\$513.43	\$372.90	1.377	-	0.824
<b>TOTAL</b>	<b>602,643</b>	<b>42,555</b>	<b>\$375.44</b>	<b>\$412.68</b>	<b>0.910</b>	<b>1.130</b>	<b>0.823</b>

**Table 71 – CY 2005 Non-Group Age Factor, Narrow Bands**

<b>AGE FACTOR, WIDE BANDS</b>		<b>CY 2005 Non-Group</b>					
<b>Age Factor Wide Bands</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
0.10 - 0.38	32,406	4,762	\$206.97	\$328.70	0.630	0.359	0.799
0.38 - 0.72	166,532	11,926	\$293.51	\$290.13	1.012	0.579	0.823
0.72 - 0.90	77,413	3,960	\$276.87	\$322.94	0.857	0.809	0.828
0.90 - 1.10	68,140	3,853	\$301.91	\$380.76	0.793	0.948	0.824
1.10 - 1.44	64,661	4,127	\$423.97	\$458.88	0.924	1.242	0.821
> 1.44	170,639	13,927	\$524.59	\$589.51	0.890	1.975	0.824
N/A	22,853	-	\$513.43	\$372.90	1.377	-	0.824
<b>TOTAL</b>	<b>602,643</b>	<b>42,555</b>	<b>\$375.44</b>	<b>\$412.68</b>	<b>0.910</b>	<b>1.130</b>	<b>0.823</b>

**Table 72 – CY 2005 Non-Group Age Factor, Wide Bands**

<b>* Age Factor Values:</b>	<b>Wide Bands</b>	<b>Age Range</b>
	<b>0.10 - 0.38</b>	<b>18 - 24</b>
	<b>0.38 - 0.72</b>	<b>25 - 39</b>
	<b>0.72 - 0.90</b>	<b>40 - 44</b>
	<b>0.90 - 1.10</b>	<b>45 - 49</b>
	<b>1.10 - 1.44</b>	<b>50 - 54</b>
	<b>&gt; 1.44</b>	<b>55+</b>

<b>PLAN VALUE, NARROW BANDS      CY 2005 Non-Group</b>							
<b>Plan Value Category</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
0.56 - 0.70	24,484	2,321	\$173.33	\$286.53	0.605	1.185	0.609
0.70 - 0.75	145,829	11,441	\$178.77	\$297.02	0.602	0.985	0.746
0.75 - 0.80	44,879	3,249	\$221.61	\$383.92	0.577	1.153	0.757
0.80 - 0.84	54,458	3,509	\$558.98	\$535.05	1.045	1.240	0.828
0.84 - 0.87	48,683	3,421	\$486.32	\$510.01	0.954	1.528	0.866
0.87 - 0.90	274,094	18,300	\$464.91	\$449.18	1.035	1.117	0.883
0.90 - 0.93	755	127	\$497.40	\$422.52	1.177	0.946	0.917
0.93 - 0.96	117	15	\$140.95	\$428.44	0.329	0.639	0.946
0.96 - 1.00	57	10	\$451.77	\$345.87	1.306	0.568	0.993
N/A	9,287	162	\$434.22	\$394.70	1.100	1.146	-
<b>TOTAL</b>	<b>602,643</b>	<b>42,555</b>	<b>\$375.44</b>	<b>\$412.68</b>	<b>0.910</b>	<b>1.130</b>	<b>0.823</b>

**Table 73 – CY 2005 Non-Group Plan Value, Narrow Bands**

<b>PLAN VALUE, WIDE BANDS      CY 2005 Non-Group</b>							
<b>Plan Value Wide Bands</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
0.56 - 0.85	269,188	20,083	\$262.51	\$359.97	0.729	1.081	0.754
0.85 - 0.92	322,001	21,737	\$467.42	\$457.50	1.022	1.178	0.880
>0.92	209	29	\$224.87	\$467.52	0.481	0.726	0.954
N/A	11,245	706	\$447.56	\$390.03	1.148	1.030	-
<b>TOTAL</b>	<b>602,643</b>	<b>42,555</b>	<b>\$375.44</b>	<b>\$412.68</b>	<b>0.910</b>	<b>1.130</b>	<b>0.823</b>

**Table 74 – CY 2005 Non-Group Plan Value, Wide Bands**

<b>Non-Group Plan Values</b>	<b>Wide Bands</b>	<b>Member Cost Share</b>
L	0.56 - 0.85	High Deductible or No Prescription Drugs or \$25+ OV, High IP & OPD Copay
M	0.85 - 0.92	\$15-20 OV, IP & OPD Copay
H	>0.92	\$5-10 OV, no IP or OPD Copay

Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets

MEDICAL LOSS RATIO (MLR), NARROW BANDS					CY 2005 Non-Group		
MLR Narrow Bands	Member Months	Total Subscribers	Claim PMPM	Premium PMPM	MLR	Age Factor	Plan Value
0.0 - 0.5	359,538	27,969	\$109.04	\$416.86	0.262	1.129	0.811
0.5 - 0.6	34,658	2,064	\$231.67	\$424.12	0.546	1.244	0.838
0.6 - 0.7	28,598	1,671	\$260.38	\$402.72	0.647	1.162	0.839
0.7 - 0.8	21,270	1,281	\$302.21	\$404.19	0.748	1.125	0.841
0.8 - 0.9	18,671	1,143	\$341.23	\$401.78	0.849	1.068	0.841
0.9 - 1.0	16,188	955	\$368.22	\$387.92	0.949	1.075	0.836
1.0 - 1.1	12,829	707	\$396.49	\$377.89	1.049	1.083	0.842
1.1 - 1.2	10,281	582	\$447.08	\$389.29	1.148	1.104	0.842
1.2 - 1.3	8,265	474	\$505.67	\$404.90	1.249	1.157	0.842
1.3 - 1.4	6,921	374	\$514.54	\$382.14	1.346	1.096	0.841
1.4 - 1.5	7,059	378	\$558.10	\$384.97	1.450	1.121	0.843
1.5 - 2.0	25,718	1,379	\$673.09	\$389.57	1.728	1.120	0.840
>2.0	52,647	3,578	\$2,168.03	\$430.18	5.040	1.115	0.843
<b>TOTAL</b>	<b>602,643</b>	<b>42,555</b>	<b>\$375.44</b>	<b>\$412.68</b>	<b>0.910</b>	<b>1.130</b>	<b>0.823</b>

Table 75 – CY 2005 Non-Group MLR, Narrow Bands

<b>MEDICAL LOSS RATIO (MLR), WIDE BANDS</b>					<b>CY 2005 Non-Group</b>		
<b>MLR Wide Bands</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
0.0 - 0.5	359,538	27,969	\$109.04	\$416.86	0.262	1.129	0.811
0.5 - 1.0	119,385	7,114	\$286.76	\$407.04	0.705	1.152	0.839
>1.0	123,720	7,472	\$1,235.16	\$405.96	3.043	1.114	0.842
<b>TOTAL</b>	<b>602,643</b>	<b>42,555</b>	<b>\$375.44</b>	<b>\$412.68</b>	<b>0.910</b>	<b>1.130</b>	<b>0.823</b>

**Table 76 – CY 2005 Non-Group MLR, Wide Bands**

<b>CLAIM PMPM, NARROW BANDS</b>			<b>CY 2005 Non-Group</b>				
<b>Claim PMPM Narrow Bands</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
\$0 - \$50	131,434	12,470	\$22.49	\$355.01	0.063	0.937	0.775
\$50 - \$75	56,490	3,392	\$62.41	\$340.71	0.183	1.013	0.809
\$75 - \$100	45,917	2,617	\$86.97	\$355.86	0.244	1.083	0.819
\$100 - \$130	47,542	2,687	\$114.19	\$378.51	0.302	1.107	0.830
\$130 - \$170	48,726	2,918	\$149.03	\$402.53	0.370	1.157	0.835
\$170 - \$210	41,102	2,393	\$189.49	\$416.44	0.455	1.255	0.836
\$210 - \$270	52,263	3,370	\$241.71	\$417.41	0.579	1.210	0.834
\$270 - \$375	49,846	3,230	\$316.91	\$463.82	0.683	1.298	0.849
\$375 - \$650	57,806	3,878	\$488.98	\$492.06	0.994	1.347	0.850
>\$650	71,517	5,600	\$1,938.07	\$536.20	3.614	1.303	0.854
<b>TOTAL</b>	<b>602,643</b>	<b>42,555</b>	<b>\$375.44</b>	<b>\$412.68</b>	<b>0.910</b>	<b>1.130</b>	<b>0.823</b>

**Table 77 – CY 2005 Non-Group Claims PMPM, Narrow Bands**

<b>CLAIM PMPM, WIDE BANDS      CY 2005 Non-Group</b>							
<b>Claim PMPM Wide Bands</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
\$0 - \$200	362,128	25,957	\$80.34	\$367.59	0.219	1.027	0.806
\$250 - \$350	101,547	6,503	\$263.90	\$436.24	0.605	1.246	0.841
>\$350	138,968	10,095	\$1,225.92	\$512.96	2.390	1.321	0.852
<b>TOTAL</b>	<b>602,643</b>	<b>42,555</b>	<b>\$375.44</b>	<b>\$412.68</b>	<b>0.910</b>	<b>1.130</b>	<b>0.823</b>

**Table 78 – CY 2005 Non-Group Claims PMPM, Wide Bands**

<b>ADJUSTED CLAIM PMPM, NARROW BANDS      CY 2005 Non-Group</b>							
<b>Adjusted Claim PMPM</b>							
<b>Narrow Bands</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
\$1 - \$50	70,826	6,953	\$29.01	\$429.00	0.068	1.206	0.799
\$50 - \$75	46,053	3,431	\$59.93	\$395.89	0.151	1.126	0.810
\$75 - \$100	42,698	2,617	\$83.09	\$387.61	0.214	1.198	0.819
\$100 - \$130	46,183	2,782	\$114.83	\$411.59	0.279	1.293	0.826
\$130 - \$170	53,397	3,300	\$144.47	\$410.31	0.352	1.230	0.831
\$170 - \$210	43,995	2,755	\$182.22	\$422.67	0.431	1.218	0.830
\$210 - \$270	46,488	2,855	\$223.92	\$415.23	0.539	1.163	0.839
\$270 - \$375	53,070	3,325	\$283.57	\$407.34	0.696	1.100	0.841
\$375 - \$650	64,837	4,190	\$411.45	\$399.51	1.030	1.031	0.840
>\$650	84,037	6,983	\$1,575.91	\$454.44	3.468	0.932	0.847
N/A	51,060	3,364	\$240.66	\$372.24	0.647	1.160	0.737
<b>TOTAL</b>	<b>602,643</b>	<b>42,555</b>	<b>\$375.44</b>	<b>\$412.68</b>	<b>0.910</b>	<b>1.130</b>	<b>0.823</b>

**Table 79 – CY 2005 Non-Group Adjusted Claims PMPM, Narrow Bands**

**\* Adjusted Claim PMPM has been adjusted for Plan Value and Age Factor**

<b>ADJUSTED CLAIM PMPM, WIDE BANDS</b>				<b>CY 2005 Non-Group</b>			
<b>Adjusted Claim PMPM Wide Bands</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
\$1 - \$200	294,065	21,261	\$93.77	\$410.88	0.228	1.208	0.817
\$200 - \$350	98,157	6,083	\$244.58	\$413.04	0.592	1.147	0.839
>\$350	159,361	11,847	\$1,018.97	\$428.74	2.377	0.974	0.844
N/A	51,060	3,364	\$240.66	\$372.24	0.647	1.160	0.737
<b>TOTAL</b>	<b>602,643</b>	<b>42,555</b>	<b>\$375.44</b>	<b>\$412.68</b>	<b>0.910</b>	<b>1.130</b>	<b>0.823</b>

**Table 80 – CY 2005 Non-Group Adjusted Claims PMPM, Wide Bands**

**\* Adjusted Claim PMPM has been adjusted for Plan Value and Age Factor**

**12.11. Appendix 11 – Non-Group 2004 Tables**

<b>REGION CY 2004 Non-Group</b>							
<b>Region</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
Cape	40,698	2,959	\$423.98	\$432.30	0.981	1.292	0.820
MetroBoston	158,959	12,720	\$363.43	\$418.04	0.869	1.056	0.828
MetroWest	94,712	6,282	\$308.86	\$373.76	0.826	1.132	0.832
Northeast	118,421	8,398	\$318.62	\$368.93	0.864	1.123	0.831
Southeast	69,165	4,799	\$326.01	\$348.35	0.936	1.140	0.835
West	42,480	3,583	\$339.02	\$417.27	0.812	1.191	0.835
Worcester	57,242	4,215	\$306.32	\$325.53	0.941	1.175	0.831
Unknown	15,722	2,768	\$378.19	\$319.73	1.183	0.884	0.831
<b>TOTAL</b>	<b>597,399</b>	<b>45,724</b>	<b>\$338.87</b>	<b>\$382.68</b>	<b>0.886</b>	<b>1.114</b>	<b>0.830</b>

**Table 81 – CY 2004 Non-Group Region**

<b>AGE FACTOR, WIDE BANDS</b>		<b>CY 2004 Non-Group</b>					
<b>Age Factor Wide Bands</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claim PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
0.10 - 0.38	32,667	5,099	\$201.49	\$310.15	0.650	0.358	0.813
0.38 - 0.72	176,669	13,315	\$268.72	\$272.59	0.986	0.581	0.832
0.72 - 0.90	77,943	4,274	\$247.74	\$302.86	0.818	0.809	0.832
0.90 - 1.10	70,361	4,149	\$286.78	\$349.65	0.820	0.948	0.829
1.10 - 1.44	67,749	4,473	\$384.31	\$425.61	0.903	1.242	0.828
> 1.44	170,162	14,414	\$480.02	\$544.42	0.882	1.972	0.832
N/A	1,848	-	\$637.34	\$347.25	1.835	-	0.888
<b>TOTAL</b>	<b>597,399</b>	<b>45,724</b>	<b>\$338.87</b>	<b>\$382.68</b>	<b>0.886</b>	<b>1.114</b>	<b>0.830</b>

**Table 82 – CY 2004 Non-Group Age Factor, Wide Bands**

<b>Age Factor Values:</b>	<b>Wide Bands</b>	<b>Age Range</b>
	<b>0.10 - 0.38</b>	<b>18 - 24</b>
	<b>0.38 - 0.72</b>	<b>25 - 39</b>
	<b>0.72 - 0.90</b>	<b>40 - 44</b>
	<b>0.90 - 1.10</b>	<b>45 - 49</b>
	<b>1.10 - 1.44</b>	<b>50 - 54</b>
	<b>&gt; 1.44</b>	<b>55+</b>

PLAN VALUE, WIDE BANDS		CY 2004 Non-Group					
Plan Value Wide Bands	Member Months	Total Subscribers	Claims PMPM	Premium PMPM	MLR	Age Factor	Plan Value
0.56 - 0.85	237,162	18,405	\$249.53	\$342.05	0.729	1.085	0.757
0.85 - 0.92	346,186	24,503	\$397.02	\$412.03	0.964	1.160	0.880
>0.92	334	56	\$140.75	\$446.64	0.315	0.763	0.950
N/A	13,717	2,760	\$420.65	\$316.82	1.328	0.906	-
<b>TOTAL</b>	<b>597,399</b>	<b>45,724</b>	<b>\$338.87</b>	<b>\$382.68</b>	<b>0.886</b>	<b>1.114</b>	<b>0.830</b>

Table 83 – CY 2004 Non-Group Plan Value, Wide Bands

Non-Group Plan Values	Wide Bands	Member Cost Share
L	0.56 - 0.85	High Deductible or No Prescription Drugs or \$25+ OV, High IP & OPD Copay
M	0.85 - 0.92	\$15-20 OV, IP & OPD Copay
H	>0.92	\$5-10 OV, no IP or OPD Copay

**12.12. Appendix 12 – Non-Group 2003 Tables**

<b>REGION CY 2003 Non-Group</b>							
<b>Region</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claims PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
Cape	40,538	2,752	\$357.43	\$407.36	0.877	1.330	0.827
MetroBoston	190,406	12,141	\$308.39	\$375.49	0.821	1.063	0.834
MetroWest	105,312	5,928	\$262.10	\$342.90	0.764	1.141	0.837
Northeast	126,856	7,968	\$265.95	\$338.99	0.785	1.124	0.837
Southeast	68,462	4,433	\$285.26	\$332.56	0.858	1.158	0.841
West	41,070	3,424	\$299.93	\$364.89	0.822	1.195	0.842
Worcester	56,503	3,838	\$283.00	\$302.25	0.936	1.206	0.839
Unknown	29,416	2,888	\$308.82	\$276.40	1.117	0.900	0.834
<b>TOTAL</b>	<b>658,563</b>	<b>43,372</b>	<b>\$290.74</b>	<b>\$349.37</b>	<b>0.832</b>	<b>1.124</b>	<b>0.836</b>

**Table 84 – CY 2003 Non-Group Region**

<b>AGE FACTOR, WIDE BANDS      CY 2003 Non-Group</b>							
<b>Age Factor Wide Bands</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claims PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
0.10 - 0.38	29,070	4,540	\$177.19	\$285.95	0.620	0.357	0.827
0.38 - 0.72	166,114	12,716	\$235.72	\$248.59	0.948	0.582	0.841
0.72 - 0.90	70,521	3,934	\$209.69	\$279.68	0.750	0.809	0.838
0.90 - 1.10	66,218	3,959	\$236.66	\$319.95	0.740	0.948	0.834
1.10 - 1.44	62,638	4,214	\$305.43	\$390.00	0.783	1.242	0.833
> 1.44	165,768	14,009	\$417.55	\$486.86	0.858	1.967	0.838
N/A	98,234	-	\$288.67	\$350.53	0.824	-	0.832
<b>TOTAL</b>	<b>658,563</b>	<b>43,372</b>	<b>\$290.74</b>	<b>\$349.37</b>	<b>0.832</b>	<b>1.124</b>	<b>0.836</b>

**Table 85 – CY 2003 Non-Group Age Factor, Wide Bands**

<b>Age Factor Values:</b>	<b>Wide Bands</b>	<b>Age Range</b>
	<b>0.10 - 0.38</b>	<b>18 - 24</b>
	<b>0.38 - 0.72</b>	<b>25 - 39</b>
	<b>0.72 - 0.90</b>	<b>40 - 44</b>
	<b>0.90 - 1.10</b>	<b>45 - 49</b>
	<b>1.10 - 1.44</b>	<b>50 - 54</b>
	<b>&gt; 1.44</b>	<b>55+</b>

<b>PLAN VALUE, WIDE BANDS</b>		<b>CY 2003 Non-Group</b>					
<b>Plan Value Wide Bands</b>	<b>Member Months</b>	<b>Total Subscribers</b>	<b>Claims PMPM</b>	<b>Premium PMPM</b>	<b>MLR</b>	<b>Age Factor</b>	<b>Plan Value</b>
0.56 - 0.85	233,306	15,603	\$203.59	\$315.44	0.645	1.098	0.762
0.85 - 0.92	397,351	24,722	\$339.39	\$374.29	0.907	1.165	0.880
>0.92	654	115	\$460.32	\$297.67	1.546	1.020	0.954
N/A	27,252	2,932	\$323.51	\$277.80	1.165	0.886	-
<b>TOTAL</b>	<b>658,563</b>	<b>43,372</b>	<b>\$290.74</b>	<b>\$349.37</b>	<b>0.832</b>	<b>1.124</b>	<b>0.836</b>

**Table 86 – CY 2003 Non-Group Plan Value, Wide Bands**

<b>Non-Group Plan Values</b>	<b>Wide Bands</b>	<b>Member Cost Share</b>
L	0.56 - 0.85	High Deductible or No Prescription Drugs or \$25+ OV, High IP & OPD Copay
M	0.85 - 0.92	\$15-20 OV, IP & OPD Copay
H	>0.92	\$5-10 OV, no IP or OPD Copay

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

## 12.13. Appendix 13 – Pre and Post Merger Projections

### 12.13.1. Projections Without Benefit Buy-down Assumptions

Projections Pre and Post Merger without Benefit Buy-Down Assumptions  
Premium, Claims and MLR

	2005	2006	2007	2008	2009	2010	2011	2012
<b>PRE MERGER</b>								
<b>Premium PMPM</b>								
Group	\$ 303.94	\$ 337.38	\$ 374.49	\$ 415.68	\$ 461.41	\$ 512.16	\$ 568.50	\$ 631.03
Non-Group	\$ 412.68	\$ 458.08	\$ 508.46	\$ 564.39	\$ 626.48	\$ 695.39	\$ 771.88	\$ 856.79
Combined	\$ 311.19	\$ 345.42	\$ 383.42	\$ 425.60	\$ 472.41	\$ 524.38	\$ 582.06	\$ 646.09
Annual Trends								
Group		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Non-Group		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Combined		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
<b>Claims PMPM</b>								
Group	\$ 262.13	\$ 290.96	\$ 322.97	\$ 358.50	\$ 397.93	\$ 441.70	\$ 490.29	\$ 544.22
Non-Group	\$ 375.44	\$ 416.73	\$ 462.57	\$ 513.46	\$ 569.94	\$ 632.63	\$ 702.22	\$ 779.47
Combined	\$ 269.68	\$ 299.35	\$ 332.28	\$ 368.83	\$ 409.40	\$ 454.43	\$ 504.42	\$ 559.91
Annual Trends								
Group		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Non-Group		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Combined		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
<b>Medical Loss Ratio</b>								
Group	86.2%	86.2%	86.2%	86.2%	86.2%	86.2%	86.2%	86.2%
Non-Group	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%
Combined	86.7%	86.7%	86.7%	86.7%	86.7%	86.7%	86.7%	86.7%
Annual Trends								
Group		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Non-Group		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Combined		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>POST MERGER</b>								
<b>Premium PMPM</b>								
Group	\$ 303.94	\$ 337.38	\$ 376.28	\$ 420.37	\$ 466.70	\$ 518.05	\$ 575.03	\$ 638.29
Non-Group	\$ 412.68	\$ 458.08	\$ 470.04	\$ 482.31	\$ 535.37	\$ 594.26	\$ 659.62	\$ 732.18
Combined	\$ 311.19	\$ 345.42	\$ 382.53	\$ 424.50	\$ 471.28	\$ 523.13	\$ 580.67	\$ 644.55
Annual Trends								
Group		11.0%	11.5%	11.7%	11.0%	11.0%	11.0%	11.0%
Non-Group		11.0%	2.6%	2.6%	11.0%	11.0%	11.0%	11.0%
Combined		11.0%	10.7%	11.0%	11.0%	11.0%	11.0%	11.0%
<b>Claims PMPM</b>								
Group	\$ 262.13	\$ 290.96	\$ 322.97	\$ 358.50	\$ 397.93	\$ 441.70	\$ 490.29	\$ 544.22
Non-Group	\$ 375.44	\$ 416.73	\$ 462.57	\$ 513.46	\$ 569.94	\$ 632.63	\$ 702.22	\$ 779.47
Combined	\$ 269.68	\$ 299.35	\$ 332.28	\$ 368.83	\$ 409.40	\$ 454.43	\$ 504.42	\$ 559.91
Annual Trends								
Group		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Non-Group		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Combined		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
<b>Medical Loss Ratio</b>								
Group	86.2%	86.2%	85.8%	85.3%	85.3%	85.3%	85.3%	85.3%
Non-Group	91.0%	91.0%	98.4%	106.5%	106.5%	106.5%	106.5%	106.5%
Combined	86.7%	86.7%	86.9%	86.9%	86.9%	86.9%	86.9%	86.9%
Annual Trends								
Group		0.0%	-0.5%	-0.6%	0.0%	0.0%	0.0%	0.0%
Non-Group		0.0%	8.2%	8.2%	0.0%	0.0%	0.0%	0.0%
Combined		0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>POST MERGER vs PRE MERGER</b>								
<b>Premium PMPM</b>								
Group	0.0%	0.0%	0.5%	1.1%	1.1%	1.1%	1.1%	1.1%
Non-Group	0.0%	0.0%	-7.6%	-14.5%	-14.5%	-14.5%	-14.5%	-14.5%
Combined	0.0%	0.0%	-0.2%	-0.3%	-0.2%	-0.2%	-0.2%	-0.2%
Annual Trends								
Group		0.0%	0.5%	0.6%	0.0%	0.0%	0.0%	0.0%
Non-Group		0.0%	-7.6%	-7.6%	0.0%	0.0%	0.0%	0.0%
Combined		0.0%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Claims PMPM</b>								
Group	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Non-Group	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Combined	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annual Trends								
Group		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Non-Group		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Combined		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

**Table 87 – Premium, Claims, MLR Without Benefit Buy-down Assumptions**

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

**Projections Pre and Post Merger without Benefit Buy-Down Assumptions  
Premium PMPM by Group Size**

	2005	2006	2007	2008	2009	2010	2011	2012
<b>PRE MERGER</b>								
<b>Premium PMPM</b>								
<i>Group</i>								
1	\$ 305.48	\$ 339.08	\$ 376.38	\$ 417.78	\$ 463.74	\$ 514.75	\$ 571.37	\$ 634.22
2-5	322.67	358.17	397.57	441.30	489.85	543.73	603.54	669.93
6-10	309.42	343.44	381.22	423.16	469.70	521.37	578.72	642.38
11-25	298.17	330.97	367.38	407.79	452.65	502.44	557.71	619.06
26-50	289.94	321.83	357.23	396.53	440.15	488.56	542.31	601.96
51+	260.90	289.60	321.46	356.82	396.06	439.63	487.99	541.67
Nul	288.50	320.23	355.46	394.56	437.96	486.14	539.61	598.97
Total	\$ 303.94	\$ 337.38	\$ 374.49	\$ 415.68	\$ 461.41	\$ 512.16	\$ 568.50	\$ 631.03
<i>Non-Group</i>								
1	\$ 413.96	\$ 459.50	\$ 510.04	\$ 566.14	\$ 628.42	\$ 697.55	\$ 774.28	\$ 859.45
Nul	383.42	425.60	472.42	524.38	582.06	646.09	717.16	796.05
Total	\$ 412.68	\$ 458.08	\$ 508.46	\$ 564.39	\$ 626.48	\$ 695.39	\$ 771.88	\$ 856.79
<i>Combined</i>								
1	\$ 339.14	\$ 376.45	\$ 417.86	\$ 463.83	\$ 514.85	\$ 571.48	\$ 634.34	\$ 704.12
2-5	322.67	358.17	397.57	441.30	489.85	543.73	603.54	669.93
6-10	309.42	343.44	381.22	423.16	469.70	521.37	578.72	642.38
11-25	298.17	330.97	367.38	407.79	452.65	502.44	557.71	619.06
26-50	289.94	321.83	357.23	396.53	440.15	488.56	542.31	601.96
51+	260.90	289.60	321.46	356.82	396.06	439.63	487.99	541.67
Nul	294.12	326.47	362.39	402.25	446.50	495.61	550.13	610.64
Total	\$ 311.19	\$ 345.42	\$ 383.42	\$ 425.60	\$ 472.41	\$ 524.38	\$ 582.06	\$ 646.09
<b>POST MERGER</b>								
<b>Premium PMPM</b>								
<i>Group</i>								
1	\$ 305.48	\$ 339.08	\$ 387.05	\$ 445.60	\$ 495.21	\$ 549.68	\$ 610.15	\$ 677.27
2-5	322.67	358.17	400.09	447.82	497.22	551.91	612.62	680.01
6-10	309.42	343.44	380.63	421.64	467.99	519.47	576.61	640.03
11-25	298.17	330.97	366.81	406.33	450.99	500.60	555.67	616.79
26-50	289.94	321.83	355.97	393.31	436.50	484.52	537.82	596.98
51+	260.90	289.60	320.77	355.06	394.08	437.43	485.54	538.95
Nul	288.50	320.23	357.27	399.22	443.14	491.99	546.11	606.18
Total	\$ 303.94	\$ 337.38	\$ 376.28	\$ 420.37	\$ 466.70	\$ 518.05	\$ 575.03	\$ 638.29
<i>Non-Group</i>								
1	\$ 413.96	\$ 459.50	\$ 471.49	\$ 483.81	\$ 537.03	\$ 596.10	\$ 661.67	\$ 734.45
Nul	383.42	425.60	436.71	448.12	497.41	552.13	612.86	680.27
Total	\$ 412.68	\$ 458.08	\$ 470.04	\$ 482.31	\$ 535.37	\$ 594.26	\$ 659.62	\$ 732.18
<i>Combined</i>								
1	\$ 339.14	\$ 376.45	\$ 413.26	\$ 457.46	\$ 508.19	\$ 564.09	\$ 626.14	\$ 695.01
2-5	322.67	358.17	400.09	447.82	497.22	551.91	612.62	680.01
6-10	309.42	343.44	380.63	421.64	467.99	519.47	576.61	640.03
11-25	298.17	330.97	366.81	406.33	450.99	500.60	555.67	616.79
26-50	289.94	321.83	355.97	393.31	436.50	484.52	537.82	596.98
51+	260.90	289.60	320.77	355.06	394.08	437.43	485.54	538.95
Nul	294.12	326.47	361.98	402.12	446.35	495.55	550.06	610.57
Total	\$ 311.19	\$ 345.42	\$ 382.53	\$ 424.50	\$ 471.28	\$ 523.13	\$ 580.67	\$ 644.55
<b>POST MERGER vs PRE MERGER</b>								
<b>Premium PMPM</b>								
<i>Group</i>								
1	0.0%	0.0%	2.8%	6.7%	6.8%	6.8%	6.8%	6.8%
2-5	0.0%	0.0%	0.6%	1.5%	1.5%	1.5%	1.5%	1.5%
6-10	0.0%	0.0%	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%
11-25	0.0%	0.0%	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%
26-50	0.0%	0.0%	-0.4%	-0.8%	-0.8%	-0.8%	-0.8%	-0.8%
51+	0.0%	0.0%	-0.2%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%
Nul	0.0%	0.0%	0.5%	1.2%	1.2%	1.2%	1.2%	1.2%
Total	0.0%	0.0%	0.5%	1.1%	1.1%	1.1%	1.1%	1.1%
<i>Non-Group</i>								
1	0.0%	0.0%	-7.6%	-14.5%	-14.5%	-14.5%	-14.5%	-14.5%
Nul	0.0%	0.0%	-7.6%	-14.5%	-14.5%	-14.5%	-14.5%	-14.5%
Total	0.0%	0.0%	-7.6%	-14.5%	-14.5%	-14.5%	-14.5%	-14.5%
<i>Combined</i>								
1	0.0%	0.0%	-1.1%	-1.4%	-1.3%	-1.3%	-1.3%	-1.3%
2-5	0.0%	0.0%	0.6%	1.5%	1.5%	1.5%	1.5%	1.5%
6-10	0.0%	0.0%	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%
11-25	0.0%	0.0%	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%
26-50	0.0%	0.0%	-0.4%	-0.8%	-0.8%	-0.8%	-0.8%	-0.8%
51+	0.0%	0.0%	-0.2%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%
Nul	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	0.0%	0.0%	-0.2%	-0.3%	-0.2%	-0.2%	-0.2%	-0.2%

**Table 88 – Premium PMPM by Group Size Without Benefit Buy-down Assumptions**

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

**12.13.2. Projections With Benefit Buy-down Assumptions**

**Premium, Claims and MLR  
With Benefit Buy-down Assumptions**

	2005	2006	2007	2008	2009	2010	2011	2012
<b>PRE MERGER</b>								
<b>Premium PMPM</b>								
Group	\$ 303.94	\$ 332.32	\$ 363.34	\$ 397.26	\$ 434.34	\$ 474.88	\$ 519.22	\$ 567.68
Non-Group	\$ 412.68	\$ 451.20	\$ 493.32	\$ 539.38	\$ 589.73	\$ 644.78	\$ 704.97	\$ 770.78
Combined	\$ 311.19	\$ 340.24	\$ 372.00	\$ 406.73	\$ 444.70	\$ 486.21	\$ 531.60	\$ 581.22
Annual Trends								
Group		9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
Non-Group		9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
Combined		9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
<b>Claims PMPM</b>								
Group	\$ 262.13	\$ 286.60	\$ 313.35	\$ 342.61	\$ 374.59	\$ 409.56	\$ 447.79	\$ 489.59
Non-Group	\$ 375.44	\$ 410.48	\$ 448.80	\$ 490.70	\$ 536.50	\$ 586.59	\$ 641.34	\$ 701.21
Combined	\$ 269.68	\$ 294.86	\$ 322.38	\$ 352.48	\$ 385.38	\$ 421.36	\$ 460.69	\$ 503.70
Annual Trends								
Group		9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
Non-Group		9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
Combined		9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
<b>Medical Loss Ratio</b>								
Group	86.2%	86.2%	86.2%	86.2%	86.2%	86.2%	86.2%	86.2%
Non-Group	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%
Combined	86.7%	86.7%	86.7%	86.7%	86.7%	86.7%	86.7%	86.7%
Annual Trends								
Group		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Non-Group		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Combined		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>POST MERGER</b>								
<b>Premium PMPM</b>								
Group	\$ 303.94	\$ 332.32	\$ 364.26	\$ 399.60	\$ 436.96	\$ 477.75	\$ 522.34	\$ 571.10
Non-Group	\$ 412.68	\$ 451.20	\$ 457.49	\$ 463.98	\$ 507.30	\$ 554.65	\$ 606.43	\$ 663.04
Combined	\$ 311.19	\$ 340.24	\$ 370.47	\$ 403.90	\$ 441.65	\$ 482.87	\$ 527.95	\$ 577.23
Annual Trends								
Group		9.3%	9.6%	9.7%	9.3%	9.3%	9.3%	9.3%
Non-Group		9.3%	1.4%	1.4%	9.3%	9.3%	9.3%	9.3%
Combined		9.3%	8.9%	9.0%	9.3%	9.3%	9.3%	9.3%
<b>Claims PMPM</b>								
Group	\$ 262.13	\$ 286.60	\$ 312.67	\$ 340.90	\$ 372.68	\$ 407.47	\$ 445.51	\$ 487.10
Non-Group	\$ 375.44	\$ 410.48	\$ 448.80	\$ 490.70	\$ 536.50	\$ 586.59	\$ 641.34	\$ 701.21
Combined	\$ 269.68	\$ 294.86	\$ 321.75	\$ 350.88	\$ 383.61	\$ 419.42	\$ 458.57	\$ 501.38
Annual Trends								
Group		9.3%	9.1%	9.0%	9.3%	9.3%	9.3%	9.3%
Non-Group		9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
Combined		9.3%	9.1%	9.1%	9.3%	9.3%	9.3%	9.3%
<b>Medical Loss Ratio</b>								
Group	86.2%	86.2%	85.8%	85.3%	85.3%	85.3%	85.3%	85.3%
Non-Group	91.0%	91.0%	98.1%	105.8%	105.8%	105.8%	105.8%	105.8%
Combined	86.7%	86.7%	86.8%	86.9%	86.9%	86.9%	86.9%	86.9%
Annual Trends								
Group		0.0%	-0.5%	-0.6%	0.0%	0.0%	0.0%	0.0%
Non-Group		0.0%	7.8%	7.8%	0.0%	0.0%	0.0%	0.0%
Combined		0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>POST MERGER vs PRE MERGER</b>								
<b>Premium PMPM</b>								
Group	0.0%	0.0%	0.3%	0.6%	0.6%	0.6%	0.6%	0.6%
Non-Group	0.0%	0.0%	-7.3%	-14.0%	-14.0%	-14.0%	-14.0%	-14.0%
Combined	0.0%	0.0%	-0.4%	-0.7%	-0.7%	-0.7%	-0.7%	-0.7%
Annual Trends								
Group		0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%
Non-Group		0.0%	-7.3%	-7.2%	0.0%	0.0%	0.0%	0.0%
Combined		0.0%	-0.4%	-0.3%	0.0%	0.0%	0.0%	0.0%
<b>Claims PMPM</b>								
Group	0.0%	0.0%	-0.2%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%
Non-Group	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Combined	0.0%	0.0%	-0.2%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%
Annual Trends								
Group		0.0%	-0.2%	-0.3%	0.0%	0.0%	0.0%	0.0%
Non-Group		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Combined		0.0%	-0.2%	-0.3%	0.0%	0.0%	0.0%	0.0%

**Table 89 – Premium, Claims, MLR With Benefit Buy-down Assumptions**

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

**Premium PMPM by Group Size**

	2005	2006	2007	2008	2009	2010	2011	2012
<b>PRE MERGER</b>								
<b>Premium PMPM</b>								
<i>Group</i>								
1	\$ 305.49	\$ 333.99	\$ 365.17	\$ 399.26	\$ 436.53	\$ 477.28	\$ 521.84	\$ 570.55
2-5	322.67	352.80	385.73	421.74	461.11	504.16	551.22	602.68
6-10	309.41	338.29	369.87	404.40	442.15	483.42	528.55	577.89
11-25	298.17	326.01	356.44	389.71	426.09	465.87	509.36	556.91
26-50	289.94	317.00	346.60	378.95	414.33	453.00	495.29	541.53
51+	260.90	285.26	311.88	341.00	372.83	407.63	445.69	487.29
Nul	288.50	315.43	344.88	377.07	412.27	450.75	492.83	538.84
Total	\$ 303.94	\$ 332.32	\$ 363.34	\$ 397.26	\$ 434.34	\$ 474.88	\$ 519.22	\$ 567.68
<i>Non-Group</i>								
1	\$ 413.96	\$ 452.60	\$ 494.85	\$ 541.05	\$ 591.55	\$ 646.78	\$ 707.15	\$ 773.17
Nul	383.42	419.22	458.35	501.14	547.92	599.07	654.99	716.13
Total	\$ 412.68	\$ 451.20	\$ 493.32	\$ 539.38	\$ 589.73	\$ 644.78	\$ 704.97	\$ 770.78
<i>Combined</i>								
1	\$ 339.15	\$ 370.80	\$ 405.42	\$ 443.26	\$ 484.64	\$ 529.88	\$ 579.35	\$ 633.43
2-5	322.67	352.80	385.73	421.74	461.11	504.16	551.22	602.68
6-10	309.41	338.29	369.87	404.40	442.15	483.42	528.55	577.89
11-25	298.17	326.01	356.44	389.71	426.09	465.87	509.36	556.91
26-50	289.94	317.00	346.60	378.95	414.33	453.00	495.29	541.53
51+	260.90	285.26	311.88	341.00	372.83	407.63	445.69	487.29
Nul	294.12	321.58	351.60	384.42	420.30	459.54	502.44	549.34
Total	\$ 311.19	\$ 340.24	\$ 372.00	\$ 406.73	\$ 444.70	\$ 486.21	\$ 531.60	\$ 581.22
<b>POST MERGER</b>								
<b>Premium PMPM</b>								
<i>Group</i>								
1	\$ 305.48	\$ 333.99	\$ 371.91	\$ 416.40	\$ 455.63	\$ 498.16	\$ 544.67	\$ 595.51
2-5	322.67	352.80	387.29	425.68	465.50	508.96	556.47	608.41
6-10	309.42	338.29	369.30	402.95	440.53	481.66	526.62	575.78
11-25	298.17	326.01	355.89	388.32	424.54	464.17	507.50	554.87
26-50	289.94	317.00	345.37	375.87	410.90	449.26	491.19	537.05
51+	260.90	285.26	311.22	339.32	370.96	405.59	443.45	484.85
Nul	288.50	315.43	344.88	377.07	412.27	450.75	492.83	538.84
Total	\$ 303.94	\$ 332.32	\$ 364.26	\$ 399.60	\$ 436.96	\$ 477.75	\$ 522.34	\$ 571.10
<i>Non-Group</i>								
1	\$ 413.96	\$ 452.60	\$ 457.46	\$ 462.36	\$ 505.52	\$ 552.71	\$ 604.31	\$ 660.72
Nul	383.42	419.22	458.35	501.14	547.92	599.07	654.99	716.13
Total	\$ 412.68	\$ 451.20	\$ 457.49	\$ 463.98	\$ 507.30	\$ 554.65	\$ 606.43	\$ 663.04
<i>Combined</i>								
1	\$ 339.14	\$ 370.80	\$ 398.46	\$ 430.66	\$ 471.11	\$ 515.09	\$ 563.18	\$ 615.75
2-5	322.67	352.80	387.29	425.68	465.50	508.96	556.47	608.41
6-10	309.42	338.29	369.30	402.95	440.53	481.66	526.62	575.78
11-25	298.17	326.01	355.89	388.32	424.54	464.17	507.50	554.87
26-50	289.94	317.00	345.37	375.87	410.90	449.26	491.19	537.05
51+	260.90	285.26	311.22	339.32	370.96	405.59	443.45	484.85
Nul	294.12	321.58	351.60	384.42	420.30	459.54	502.44	549.34
Total	\$ 311.19	\$ 340.24	\$ 370.47	\$ 403.90	\$ 441.65	\$ 482.87	\$ 527.95	\$ 577.23
<b>POST MERGER vs PRE MERGER</b>								
<b>Premium PMPM</b>								
<i>Group</i>								
1	0.0%	0.0%	1.8%	4.3%	4.4%	4.4%	4.4%	4.4%
2-5	0.0%	0.0%	0.4%	0.9%	1.0%	1.0%	1.0%	1.0%
6-10	0.0%	0.0%	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%
11-25	0.0%	0.0%	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%
26-50	0.0%	0.0%	-0.4%	-0.8%	-0.8%	-0.8%	-0.8%	-0.8%
51+	0.0%	0.0%	-0.2%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%
Nul	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	0.0%	0.0%	0.3%	0.6%	0.6%	0.6%	0.6%	0.6%
<i>Non-Group</i>								
1	0.0%	0.0%	-7.6%	-14.5%	-14.5%	-14.5%	-14.5%	-14.5%
Nul	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	0.0%	0.0%	-7.3%	-14.0%	-14.0%	-14.0%	-14.0%	-14.0%
<i>Combined</i>								
1	0.0%	0.0%	-1.7%	-2.8%	-2.8%	-2.8%	-2.8%	-2.8%
2-5	0.0%	0.0%	0.4%	0.9%	1.0%	1.0%	1.0%	1.0%
6-10	0.0%	0.0%	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%
11-25	0.0%	0.0%	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%
26-50	0.0%	0.0%	-0.4%	-0.8%	-0.8%	-0.8%	-0.8%	-0.8%
51+	0.0%	0.0%	-0.2%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%
Nul	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	0.0%	0.0%	-0.4%	-0.7%	-0.7%	-0.7%	-0.7%	-0.7%

**Table 90 – Premium PMPM by Group Size With Benefit Buy-down Assumptions**

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

**Member Cost Share**

		2005	2006	2007	2008	2009	2010	2011	2012
<b>PRE MERGER</b>	<b>Memb Cost Share PMPM</b>								
	Group	\$ 32.81	\$ 40.79	\$ 50.05	\$ 60.77	\$ 73.16	\$ 87.44	\$ 103.88	\$ 122.76
	Non-Group	\$ 80.94	\$ 95.77	\$ 112.78	\$ 132.25	\$ 154.50	\$ 179.92	\$ 208.89	\$ 241.89
	Combined	\$ 35.27	\$ 43.63	\$ 53.32	\$ 64.54	\$ 77.49	\$ 92.41	\$ 109.56	\$ 129.26
	Annual Trends								
	Group		24.3%	22.7%	21.4%	20.4%	19.5%	18.8%	18.2%
	Non-Group		18.3%	17.8%	17.3%	16.8%	16.4%	16.1%	15.8%
	Total		23.7%	22.2%	21.0%	20.1%	19.3%	18.6%	18.0%
	<b>Gross Claims PMPM</b>								
	Group	\$ 294.94	\$ 327.39	\$ 363.40	\$ 403.38	\$ 447.75	\$ 497.00	\$ 551.67	\$ 612.35
	Non-Group	\$ 456.38	\$ 506.25	\$ 561.58	\$ 622.94	\$ 691.01	\$ 766.50	\$ 850.23	\$ 943.10
	Combined	\$ 304.96	\$ 338.49	\$ 375.71	\$ 417.02	\$ 462.87	\$ 513.77	\$ 570.26	\$ 632.96
	Annual Trends								
	Group		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
	Non-Group		10.9%	10.9%	10.9%	10.9%	10.9%	10.9%	10.9%
Combined		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	
<b>POST MERGER</b>	<b>Memb Cost Share PMPM</b>								
	Group	\$ 32.81	\$ 40.79	\$ 50.64	\$ 62.25	\$ 74.81	\$ 89.24	\$ 105.84	\$ 124.90
	Non-Group	\$ 80.94	\$ 95.77	\$ 112.78	\$ 132.25	\$ 154.50	\$ 179.92	\$ 208.89	\$ 241.89
	Combined	\$ 35.27	\$ 43.63	\$ 53.90	\$ 65.98	\$ 79.09	\$ 94.15	\$ 111.47	\$ 131.34
	Annual Trends								
	Group		24.3%	24.2%	22.9%	20.2%	19.3%	18.6%	18.0%
	Non-Group		18.3%	17.8%	17.3%	16.8%	16.4%	16.1%	15.8%
	Combined		23.7%	23.5%	22.4%	19.9%	19.0%	18.4%	17.8%
	<b>Gross Claims PMPM</b>								
	Group	\$ 294.94	\$ 327.39	\$ 363.31	\$ 403.15	\$ 447.49	\$ 496.72	\$ 551.35	\$ 612.00
	Non-Group	\$ 456.38	\$ 506.25	\$ 561.58	\$ 622.94	\$ 691.01	\$ 766.50	\$ 850.23	\$ 943.10
	Combined	\$ 304.96	\$ 338.49	\$ 375.65	\$ 416.86	\$ 462.70	\$ 513.57	\$ 570.04	\$ 632.72
	Annual Trends								
	Group		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
	Non-Group		10.9%	10.9%	10.9%	10.9%	10.9%	10.9%	10.9%
Combined		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	
<b>POST MERGER vs PRE MERGER</b>	<b>Memb Cost Share PMPM</b>								
	Group	0.0%	0.0%	1.2%	2.4%	2.3%	2.1%	1.9%	1.7%
	Non-Group	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Combined	0.0%	0.0%	1.1%	2.2%	2.1%	1.9%	1.7%	1.6%
	Annual Trends								
	Group		0.0%	1.2%	1.2%	-0.2%	-0.2%	-0.2%	-0.1%
	Non-Group		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Combined		0.0%	1.1%	1.1%	-0.2%	-0.2%	-0.1%	-0.1%
	<b>Gross Claims PMPM</b>								
	Group	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
	Non-Group	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Combined	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Annual Trends								
	Group		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Non-Group		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Combined		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

\*\* Member Cost sharing assumes that Carriers will be modifying products to maintain constant plan value from year to year.

**Table 91 – Member Cost Share Pre-Merger vs. Post-Merger**

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

**Enrollment & Factors**

		Pre Merger & Post Merger							
	Group	Member	Member	Subscriber	Industry				
	Count	Months	Count	Count	Age Factor	Factor	Plan Value	MLR (2005)	
<b>Group</b>	112,748	8,436,318	726,133	364,252	1.000	1.003	0.889	86.2%	
<b>Non-Group</b>	43,588	602,643	64,860	43,588	1.131	1.000	0.823	91.0%	
<b>Combined</b>	156,336	9,038,961	790,993	407,840	1.014	1.003	0.884	86.7%	

**Table 92 – Enrollment and Factors Pre-Merger vs. Post-Merger**

## 12.14. Appendix 14 – Key Informant Survey Instrument

### MA Merger Project - Small Group and Non-Group

#### Key Informant Survey re: Insurance Coverage Changes

Thank you for taking the time to talk with me. As I mentioned when we scheduled this interview, I'm part of the team modeling the merger of the non-group and small group health insurance markets called for in the Mass. health reform legislation. Part of our modeling involves building in assumptions about the behavior of various individuals and employers as health reform is implemented across the state. In order to test our preliminary assumptions, we are speaking to a number of key individuals to obtain their thoughts on selected elements of the reform legislation.

I want to assure you that responses to our questions will be released in the aggregate only. No individual will be identified as having provided a specific response.

Do you have any questions before we begin?

**First**, we'd like to ask a few questions about the currently uninsured:

1. I'd like you to rank a number of factors which might impact how quickly a person will purchase health insurance coverage now that health reform has passed. What do you see as **the three most important** factors influencing how quickly the uninsured will purchase coverage?

Issue	RANK
Employer offers it	
Price of coverage	
The person's or family's health status	
Product Design	
The individual mandate	
The person's income level	
Immediate need for care	
Other (please specify)	

Which of these, or one we haven't mentioned, do you think will most impact how quickly a person will purchase coverage? The next most important? And next? ...

(Note – continue until you have the top three.)

2. For purposes of our analysis, we have separated the uninsured into four categories:

The first group: Those working where the employer offers coverage and the person is eligible for that coverage;

The second group: People working where the employer offers coverage but the person is not eligible for that coverage;

The third group: People working where the employer does not offer coverage even after reform; and

The fourth group: People who are not working.

We'd like to obtain your feedback on our assumptions re: the percent of the currently uninsured who will move into coverage from each of these categories, as these assumptions are a major component of our study.

By income category, we have estimated the percent of individuals over the next six years joining Commonwealth Care, purchasing coverage on the open market, purchasing a "seal of approval" product from the Connector, joining their employer's plan, or remaining uninsured. Our assumptions, in terms of the uptake of coverage, and our rationale for those assumptions are attached. In addition to these assumptions, we will be further segmenting the uninsured and adjusting expected claims based on health status, age, employer size, product selection, and pent-up demand.

We'd like to discuss your reactions to both the speed with which currently uninsured individuals enroll in coverage, the category of coverage they choose (i.e., Commonwealth Care, the open market, etc.) and the number of uninsured after six years.

(Discuss and note comments )

3. How dependent do you think the estimates are on the comprehensiveness of the outreach campaign?

\_\_\_\_\_ Totally  
\_\_\_\_\_ Somewhat  
\_\_\_\_\_ Not at all

4. The newly allowed young adult product will be designed to have less comprehensive benefits than most other products. Of the currently uninsured young adults, what percent who purchase coverage either themselves or through their employer do you think will purchase this Young Adult product?

*(Note: after the start of our surveys, the Connector determined that the young adult plan could not be sold to employers. Thus, this question was revised during the final interviews.)*

\_\_\_\_\_ % year one  
 \_\_\_\_\_ % year two  
 \_\_\_\_\_ % year three  
 \_\_\_\_\_ by 2012?

(Note: If unable to give percentages, ask about patterns or trends over time.)

5. Looking at the currently uninsured with incomes above 300% of poverty, what factors do you think will most influence the product choice of people newly purchasing health insurance? We're looking for the top three:

Issue	RANK
Employer offers it	
Price of coverage	
The person's or family's health status	
Product Design	
The person's income level	
Immediate need for care	
Other (please specify)	

6. With respect to employer behavior, we've assumed that the number of employers that start to offer coverage due to Chapter 58 will be offset by the number of employers that drop coverage. What do you think the net change in the number of employers offering coverage will be?

- a. How if at all do you think that change will vary depending on employer size?

Thank you. Now we'd like to ask some questions about the impact of health reform on small employers and individuals who are **currently insured**.

7. What percent of currently insured young adults at small employers do you think will purchase the new young adult product, which presumably will have less comprehensive benefits than other products?

\_\_\_\_\_ % year one  
\_\_\_\_\_ % year two  
\_\_\_\_\_ % year three

\_\_\_\_\_ by 2012?

*(Note: after the start of our surveys, the Connector determined that the young adult plan could not be sold to employers. Thus, this question was eliminated during the final interviews.)*

8. At many employers with a large number of low income employees, a high percentage of employees do not currently purchase family coverage. With the implementation of the individual mandate, however, there will be more reason for employees to look at purchasing family coverage through their employer. Employers may therefore see an increase in their cost of providing health insurance as the balance between individual and family coverage changes. What do you see as the most probable employer reaction: (I'll read you a list of potential reactions) (Circle appropriate bullet or write in "other")

- Maintain the existing employer contribution levels
- Drop the employer contribution for families down to the minimum required by the Regulations for a "fair and reasonable contribution" – 33%
- Drop the employer contribution for families altogether, under the presumption that 25% of all eligible employees will still be covered (the standard under the "fair and reasonable" regulations)
- Drop health insurance coverage and put more money into wages, under the theory that most low wage workers will do better with subsidized coverage through the Connector.
- Other?

9. What percent of uninsured individuals with incomes above 300% of poverty do you expect to apply for an affordability waiver from the Connector? We're looking at two income categories – 300-400% of poverty and over 400% of poverty?

300-400% of poverty   Over 400% FPL

\_\_\_\_\_ % year one   \_\_\_\_\_ % year one  
\_\_\_\_\_ % year two   \_\_\_\_\_ % year two  
\_\_\_\_\_ % year three   \_\_\_\_\_ % year three

\_\_\_\_\_ by 2012? \_\_\_\_\_ by 2012?

10. What percent of the affordability waivers requested do you expect to be granted by the Connector each year?

300-400% of poverty Over 400% FPL

\_\_\_\_\_ % year one \_\_\_\_\_ % year one

\_\_\_\_\_ % year two \_\_\_\_\_ % year two

\_\_\_\_\_ % year three \_\_\_\_\_ % year three

\_\_\_\_\_ by 2012? \_\_\_\_\_ by 2012?

11. The health reform law also allows the Connector to grant waivers to enable people to purchase subsidized Commonwealth Care coverage rather than coverage through their employer, even though the employer does indeed offer coverage. (Chapter 118H Section 3 (a) (4) – (Section (5)(b) allows waivers of the “eligibility for group coverage” issue).

(Note if need be: employer contribution gets funneled to the Connector to cover premium payment and/or state subsidy.

- it is not yet known what criteria – affordability, product design, etc. -- will be used to grant such waivers.
- Requirement on employer contribution is 20% contribution for a family plan or 33% contribution for an individual plan, potentially leaving a large employee contribution requirement.)

What percent of individuals working at small employers which offer coverage do you think will apply for this type of waiver?

\_\_\_\_\_ % year one

\_\_\_\_\_ % year two

\_\_\_\_\_ % year three

\_\_\_\_\_ by 2012?

Of those who apply, what percent do you think will be granted?

\_\_\_\_\_ % year one

\_\_\_\_\_ % year two

\_\_\_\_\_ % year three

\_\_\_\_\_ by 2012?

**Thank you very much for your time and your thoughts.**

**Are there any issues I haven't mentioned that you think we should consider as we develop the assumptions to build into the modeling of the merger of the non-group and small group markets?**

**Thank you again.**

### **Attachment 1: Rationale for Uptake Assumptions:**

#### **Employed and Health Plan Eligible**

- Less than 100% FPL – many will request a waiver to join CC<sup>1</sup>. Enrollees with FPL under 100% FPL will not have to pay a premium. Enrollment in CC will require a waiver for those eligible for ESI. Have assumed that the Connector will be generous in granting waivers. A limited number of individuals will be able to afford the employer health plan.
- 100%-300% FPL – A lower percentage than those with less than 100% FPL will be granted waivers and participate in CC and more can afford the employer contributions and will participate in the employer plan. CC premiums will be subsidized. Not all individuals will be insured at year 6.
- 300%-400% FPL – These individuals have an option of buying direct or participating in the employer plan. Assuming a reasonable employer contribution (i.e. at least 75% of the single rate), it is likely that most individuals would select the employer plan to meet the requirements of the individual mandate. It is expected that some will remain uninsured.
- 400% FPL and above – A greater portion of individuals than that indicated for the 100-300% FPL group will purchase the employer coverage in order to meet the requirements of the mandate. It is expected that some individuals will remain uninsured.

**Question:** Will the Connector auto-enroll those less than 100% FPL who do not enroll in the employer plan?

#### **Employed and not eligible for the Employer plan**

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<sup>1</sup> CC = Commonwealth Care plan of benefits. For the initial three years this offering is only available from the MMCOs. In subsequent years other commercial carriers may elect to offer this plan on a subsidized basis.

- Less than 100% FPL – The Connector will auto-enroll all individuals under 100% FPL who are not eligible for ESI.
- 100-300% FPL – We anticipate that all who elect to obtain health insurance will enroll in CC in order to benefit from the subsidy.
- 300% or greater FPL – Individuals over 400% FPL are more likely to purchase a health plan because they have a greater amount of discretionary income. Connector marketing will be focused on uninsured individuals who do not have access to ESI and therefore the Connector will attract a slightly greater percentage of this segment of the uninsured.
- Comparing the remaining uninsured of this group to those of the “Employed and Eligible” group, slightly fewer in this group remain uninsured by year 6 because those eligible for coverage have made past decisions to refuse ESI.

### **Employed and no Employer Health Plan**

- Identical to the assumptions of the “Employed and not Eligible for the Employer Plan”, except for the 400% and above FPL group. The “Not Eligible” group includes employees in the waiting period and we believe certain of these employees will choose to wait till the end of the waiting period to enroll in a health plan. At any time there will be such employees. Given our “steady state” assumption, this will result in a lower enrollment for this grouping, which does not have the option of joining ESI.
- It is anticipated that some employer who do not currently have a health plan will choose to start offering a health plan. At the same time, employers with primarily low income employees may drop coverage because of the availability of CC. We have assumed that these two trends will offset each other.

### **Not Working**

- Less than 100% FPL – The Connector will auto-enroll all individuals under 100% FPL who are not eligible for ESI.
- 100-300% FPL – All who elect to obtain health insurance will go to the CC in order to benefit from the subsidy. The portion electing to enroll is slightly lower than for those who are employed due to the greater probable knowledge the health insurance mandate by those employed.
- 400% or more FPL – It is assumed that the employed group is generally at a higher income level than the unemployed group. For this reason it is assumed that fewer of the unemployed group will choose to buy a health plan, in comparison to those with 400% or more FPL and who are employed

Impact of Merging the Massachusetts Non-Group  
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**Uptake Assumption – Initial Estimate**  
To Commonwealth Care

**Employed  
Employer  
Health Plan  
and Eligible**

Year	LT 100	100 - 300	301 - 400	GT 400
1	40%	20%	0%	0%
2	45%	25%	0%	0%
3	50%	30%	0%	0%
4	55%	30%	0%	0%
5	60%	30%	0%	0%
6	65%	30%	0%	0%

To Open Market

Year	LT 100	100 - 300	301 - 400	GT 400
1	0%	0%	0%	0%
2	0%	0%	0%	0%
3	0%	0%	0%	0%
4	0%	0%	0%	0%
5	0%	0%	0%	0%
6	0%	0%	0%	0%

To Connector

Year	LT 100	100 - 300	301 - 400	GT 400
1	0%	0%	0%	0%
2	0%	0%	0%	0%
3	0%	0%	0%	0%
4	0%	0%	0%	0%
5	0%	0%	0%	0%
6	0%	0%	0%	0%

To Employer Plan

Year	LT 100	100 - 300	301 - 400	GT 400
1	30%	50%	60%	70%
2	35%	55%	65%	75%
3	35%	55%	65%	80%
4	35%	55%	65%	85%
5	35%	55%	65%	85%
6	35%	55%	65%	85%

Remaining Uninsured

Year	LT 100	100 - 300	301 - 400	GT 400
1	30%	30%	40%	30%
2	20%	20%	35%	25%
3	15%	15%	35%	20%
4	10%	15%	35%	15%
5	5%	15%	35%	15%
6	0%	15%	35%	15%

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

<b>Employed - employer health plan not eligible</b>	<b>Uptake Assumption – Initial Estimate</b>				
	<b>Year</b>	<b>LT 100</b>	<b>100 - 300</b>	<b>301 - 400</b>	<b>GT 400</b>
		<b>To Commonwealth Care</b>			
	1	100%	60%	0%	0%
	2	100%	65%	0%	0%
	3	100%	70%	0%	0%
	4	100%	75%	0%	0%
	5	100%	80%	0%	0%
	6	100%	85%	0%	0%
		<b>To Open Market</b>			
	<b>Year</b>	<b>LT 100</b>	<b>100 - 300</b>	<b>301 - 400</b>	<b>GT 400</b>
	1	0%	0%	20%	25%
	2	0%	0%	25%	30%
	3	0%	0%	30%	35%
	4	0%	0%	30%	35%
	5	0%	0%	30%	35%
	6	0%	0%	30%	35%
		<b>To Connector</b>			
	<b>Year</b>	<b>LT 100</b>	<b>100 - 300</b>	<b>301 - 400</b>	<b>GT 400</b>
	1	0%	0%	25%	35%
	2	0%	0%	30%	40%
	3	0%	0%	35%	45%
	4	0%	0%	40%	50%
	5	0%	0%	40%	50%
	6	0%	0%	40%	50%
		<b>To Employer Plan</b>			
	<b>Year</b>	<b>LT 100</b>	<b>100 - 300</b>	<b>301 - 400</b>	<b>GT 400</b>
	1	0%	0%	0%	0%
	2	0%	0%	0%	0%
	3	0%	0%	0%	0%
	4	0%	0%	0%	0%
	5	0%	0%	0%	0%
	6	0%	0%	0%	0%
		<b>Remaining Uninsured</b>			
	<b>Year</b>	<b>LT 100</b>	<b>100 - 300</b>	<b>301 - 400</b>	<b>GT 400</b>
	1	0%	40%	55%	40%
	2	0%	35%	45%	30%
	3	0%	30%	35%	20%
	4	0%	25%	30%	15%
	5	0%	20%	30%	15%
	6	0%	15%	30%	15%

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

		<b>Uptake Assumption - Initial Estimate</b>			
		To Commonwealth Care			
<b>Employed</b>	<b>Year</b>	<b>LT 100</b>	<b>100 - 300</b>	<b>301 - 400</b>	<b>GT 400</b>
<b>Uninsured, Still No Health Plan</b>					
	1	100%	60%	0%	0%
	2	100%	65%	0%	0%
	3	100%	70%	0%	0%
	4	100%	75%	0%	0%
	5	100%	80%	0%	0%
	6	100%	85%	0%	0%
		To Open Market			
	<b>Year</b>	<b>LT 100</b>	<b>100 - 300</b>	<b>301 - 400</b>	<b>GT 400</b>
	1	0%	0%	20%	30%
	2	0%	0%	25%	35%
	3	0%	0%	30%	40%
	4	0%	0%	30%	40%
	5	0%	0%	30%	40%
	6	0%	0%	30%	40%
		To Connector			
	<b>Year</b>	<b>LT 100</b>	<b>100 - 300</b>	<b>301 - 400</b>	<b>GT 400</b>
	1	0%	0%	25%	40%
	2	0%	0%	30%	40%
	3	0%	0%	35%	45%
	4	0%	0%	40%	50%
	5	0%	0%	40%	50%
	6	0%	0%	40%	50%
		To Employer Plan			
	<b>Year</b>	<b>LT 100</b>	<b>100 - 300</b>	<b>301 - 400</b>	<b>GT 400</b>
	1	0%	0%	0%	0%
	2	0%	0%	0%	0%
	3	0%	0%	0%	0%
	4	0%	0%	0%	0%
	5	0%	0%	0%	0%
	6	0%	0%	0%	0%
		Remaining Uninsured			
	<b>Year</b>	<b>LT 100</b>	<b>100 - 300</b>	<b>301 - 400</b>	<b>GT 400</b>
	1	0%	40%	55%	30%
	2	0%	35%	45%	25%
	3	0%	30%	35%	15%
	4	0%	25%	30%	10%
	5	0%	20%	30%	10%
	6	0%	15%	30%	10%

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

**Not Employed  
Uninsured**

**Uptake Assumption – Initial Estimate**

To Commonwealth Care					
Year	LT 100	100 - 300	301 - 400	GT 400	
1	100%	50%	0%	0%	
2	100%	55%	0%	0%	
3	100%	65%	0%	0%	
4	100%	70%	0%	0%	
5	100%	75%	0%	0%	
6	100%	80%	0%	0%	

To Open Market					
Year	LT 100	100 - 300	301 - 400	GT 400	
1	0%	0%	20%	25%	
2	0%	0%	25%	30%	
3	0%	0%	30%	35%	
4	0%	0%	30%	35%	
5	0%	0%	30%	35%	
6	0%	0%	30%	35%	

To Connector					
Year	LT 100	100 - 300	301 - 400	GT 400	
1	0%	0%	25%	35%	
2	0%	0%	30%	40%	
3	0%	0%	35%	45%	
4	0%	0%	40%	50%	
5	0%	0%	40%	50%	
6	0%	0%	40%	50%	

To Employer Plan					
Year	LT 100	100 - 300	301 - 400	GT 400	
1	0%	0%	0%	0%	
2	0%	0%	0%	0%	
3	0%	0%	0%	0%	
4	0%	0%	0%	0%	
5	0%	0%	0%	0%	
6	0%	0%	0%	0%	

Remaining Uninsured					
Year	LT 100	100 - 300	301 - 400	GT 400	
1	0%	50%	55%	40%	
2	0%	45%	45%	30%	
3	0%	35%	35%	20%	
4	0%	30%	30%	15%	
5	0%	25%	30%	15%	
6	0%	20%	30%	15%	

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

**12.15. Appendix 15 – Household and Adjusted Census Survey**

Household Survey - Adults (000s)						Adjusted Census Data- Adults (000s)					
<b>Employed with health plan &amp; eligible</b>											
Age	LT 100	100 - 300	301 - 400	GT 400	Total	LT 100	101 - 200	201 - 300	301 - 500	GT 500	Total
19-26	3	4	1	4	12	3	6	5	3	3	21
27-44	4	5	2	5	17	5	10	7	5	6	33
45-64	4	5	2	5	15	3	5	4	3	3	18
Total	11	13	5	13	43	11	22	16	12	12	72
<b>Employed with health plan &amp; not eligible</b>											
Age	LT 100	100 - 300	301 - 400	GT 400	Total	LT 100	101 - 200	201 - 300	301 - 500	GT 500	Total
19-26	3	3	2	5	12	3	5	4	4	4	20
27-44	4	4	3	7	17	4	8	6	7	7	33
45-64	3	4	2	6	15	2	5	3	4	4	17
Total	10	11	7	17	45	9	18	13	15	15	71
<b>Employed No Health Plan</b>											
Age	LT 100	100 - 300	301 - 400	GT 400	Total	LT 100	101 - 200	201 - 300	301 - 500	GT 500	Total
19-26	12	14	4	11	42	12	24	18	11	11	75
27-44	17	20	6	16	60	19	39	28	17	17	120
45-64	15	18	5	14	52	10	21	15	9	9	64
Total	44	52	16	42	153	41	83	61	36	37	259
<b>Not Working Uninsured</b>											
Age	LT 100	100 - 300	301 - 400	GT 400	Total	LT 100	101 - 200	201 - 300	301 - 500	GT 500	Total
19-26	8	8	2	7	24	27	8	5	3	3	47
27-44	12	11	3	10	35	34	3	2	1	1	41
45-64	10	9	2	8	31	21	5	3	2	2	33
Total	31	28	7	25	90	83	15	10	6	6	121
<b>Total Adults</b>											
Age	LT 100	100 - 300	301 - 400	GT 400	Total	LT 100	101 - 200	201 - 300	301 - 500	GT 500	Total
19-26	26	28	9	26	90	45	43	31	21	22	163
27-44	37	40	14	38	129	63	60	43	30	31	227
45-64	33	35	12	33	113	37	35	25	17	18	132
Total	96	104	35	97	332	144	139	100	69	70	522
<b>Total Children</b>											
Age	LT 100	100 - 300	301 - 400	GT 400	Total	LT 100	101 - 200	201 - 300	301 - 500	GT 500	Total
0-18	-	27	11	3	40	11	6	10	9	13	49
<b>Total Uninsured</b>											
0-64	96	131	45	99	372	155	144	110	78	83	570

**Table 93 – Household and Adjusted Census Survey**

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

**12.16. Appendix 16 – Uninsured Uptake Percentages**

	Medium Estimate To Commonwealth Care				High Estimate To Commonwealth Care				Low Estimate To Commonwealth Care				Elasticity of Demand To Commonwealth Care			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	35%	20%	0%	0%	40%	23%	0%	0%	30%	17%	0%	0%	35%	20%	0%	0%
CY 08	40%	25%	0%	0%	46%	29%	0%	0%	34%	21%	0%	0%	40%	25%	0%	0%
CY 09	45%	25%	0%	0%	52%	29%	0%	0%	38%	21%	0%	0%	45%	25%	0%	0%
CY 10	50%	25%	0%	0%	55%	29%	0%	0%	43%	21%	0%	0%	50%	25%	0%	0%
CY 11	50%	25%	0%	0%	55%	29%	0%	0%	43%	21%	0%	0%	50%	25%	0%	0%
CY 12	50%	25%	0%	0%	55%	29%	0%	0%	43%	21%	0%	0%	50%	25%	0%	0%

	To Open Market				To Open Market				To Open Market				To Open Market			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 08	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 09	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

	To Connector				To Connector				To Connector				To Connector			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 08	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 09	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

	To Employer Plan				To Employer Plan				To Employer Plan				To Employer Plan			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	30%	50%	60%	80%	35%	58%	69%	85%	26%	43%	51%	68%	0%	0%	0%	0%
CY 08	35%	55%	65%	85%	40%	63%	75%	88%	30%	47%	55%	72%	0%	14%	35%	40%
CY 09	35%	55%	65%	90%	40%	63%	75%	90%	30%	47%	55%	77%	0%	15%	37%	42%
CY 10	35%	55%	65%	90%	40%	63%	75%	93%	30%	47%	55%	77%	0%	16%	40%	44%
CY 11	35%	55%	65%	90%	40%	63%	75%	93%	30%	47%	55%	77%	0%	17%	42%	47%
CY 12	35%	55%	65%	90%	40%	63%	75%	93%	30%	47%	55%	77%	0%	18%	45%	50%

	Remaining Uninsured				Remaining Uninsured				Remaining Uninsured				Remaining Uninsured			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	35%	30%	40%	20%	25%	19%	31%	15%	44%	40%	49%	32%	35%	30%	40%	20%
CY 08	25%	20%	35%	15%	14%	8%	25%	12%	36%	32%	45%	28%	35%	30%	40%	20%
CY 09	20%	20%	35%	10%	8%	8%	25%	10%	32%	32%	45%	23%	35%	30%	40%	20%
CY 10	15%	20%	35%	10%	5%	8%	25%	7%	27%	32%	45%	23%	35%	30%	40%	20%
CY 11	15%	20%	35%	10%	5%	8%	25%	7%	27%	32%	45%	23%	35%	30%	40%	20%
CY 12	15%	20%	35%	10%	5%	8%	25%	7%	27%	32%	45%	23%	35%	30%	40%	20%

**Table 94 – Employed with Employer Health Plan & Eligible Uptake Percentages**

Note: For Elasticity of Demand, Percentages reduced by a factor of .60 for the 45-64 year olds in year 2 to reflect waivers

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

	Medium Estimate				High Estimate				Low Estimate				Elasticity of Demand			
	To Commonwealth Care				To Commonwealth Care				To Commonwealth Care				To Commonwealth Care			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	70%	50%	0%	0%	81%	58%	0%	0%	60%	43%	0%	0%	70%	50%	0%	0%
CY 08	75%	55%	0%	0%	86%	63%	0%	0%	64%	47%	0%	0%	75%	55%	0%	0%
CY 09	80%	60%	0%	0%	92%	69%	0%	0%	68%	51%	0%	0%	80%	60%	0%	0%
CY 10	85%	65%	0%	0%	95%	75%	0%	0%	72%	55%	0%	0%	85%	65%	0%	0%
CY 11	85%	70%	0%	0%	95%	81%	0%	0%	72%	60%	0%	0%	85%	70%	0%	0%
CY 12	85%	75%	0%	0%	95%	86%	0%	0%	72%	64%	0%	0%	85%	75%	0%	0%

	To Open Market				To Open Market				To Open Market				To Open Market			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
	CY 07	0%	0%	15%	25%	0%	0%	17%	29%	0%	0%	13%	21%	0%	0%	14%
CY 08	0%	0%	20%	30%	0%	0%	23%	35%	0%	0%	17%	26%	0%	0%	20%	30%
CY 09	0%	0%	25%	35%	0%	0%	29%	38%	0%	0%	21%	30%	0%	0%	25%	32%
CY 10	0%	0%	25%	35%	0%	0%	29%	38%	0%	0%	21%	30%	0%	0%	25%	32%
CY 11	0%	0%	25%	35%	0%	0%	29%	38%	0%	0%	21%	30%	0%	0%	25%	32%
CY 12	0%	0%	25%	35%	0%	0%	29%	38%	0%	0%	21%	30%	0%	0%	25%	32%

	To Connector				To Connector				To Connector				To Connector			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
	CY 07	0%	0%	20%	35%	0%	0%	23%	40%	0%	0%	17%	30%	0%	4%	15%
CY 08	0%	0%	25%	40%	0%	0%	29%	46%	0%	0%	21%	34%	0%	10%	35%	42%
CY 09	0%	0%	30%	45%	0%	0%	35%	52%	0%	0%	26%	38%	0%	10%	35%	45%
CY 10	0%	0%	35%	50%	0%	0%	40%	55%	0%	0%	30%	43%	0%	10%	40%	45%
CY 11	0%	0%	35%	50%	0%	0%	40%	55%	0%	0%	30%	43%	0%	10%	40%	50%
CY 12	0%	0%	35%	50%	0%	0%	40%	55%	0%	0%	30%	43%	0%	10%	40%	50%

	To Employer Plan				To Employer Plan				To Employer Plan				To Employer Plan			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
	CY 07	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 08	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 09	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

	Remaining Uninsured				Remaining Uninsured				Remaining Uninsured			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
	CY 07	30%	50%	65%	40%	19%	42%	60%	31%	40%	57%	70%
CY 08	25%	45%	55%	30%	14%	37%	48%	19%	36%	53%	62%	40%
CY 09	20%	40%	45%	20%	8%	31%	36%	10%	32%	49%	53%	32%
CY 10	15%	35%	40%	15%	5%	25%	31%	7%	28%	45%	49%	27%
CY 11	15%	30%	40%	15%	5%	19%	31%	7%	28%	40%	49%	27%
CY 12	15%	25%	40%	15%	5%	14%	31%	7%	28%	36%	49%	27%

**Table 95 – Employed with Employer Health Plan & Not Eligible Uptake Percentages**

Note: For Elasticity of Demand, Percentages reduced by a factor of .60 for the 45-64 year olds in year 2 to reflect waivers

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

	Medium Estimate To Commonwealth Care				High Estimate To Commonwealth Care				Low Estimate To Commonwealth Care				Elasticity of Demand To Commonwealth Care			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	75%	60%	0%	0%	86%	66%	0%	0%	64%	51%	0%	0%	75%	60%	0%	0%
CY 08	80%	65%	0%	0%	92%	72%	0%	0%	68%	55%	0%	0%	80%	65%	0%	0%
CY 09	85%	70%	0%	0%	95%	77%	0%	0%	72%	60%	0%	0%	85%	70%	0%	0%
CY 10	90%	75%	0%	0%	95%	83%	0%	0%	77%	64%	0%	0%	90%	75%	0%	0%
CY 11	90%	80%	0%	0%	95%	88%	0%	0%	77%	68%	0%	0%	90%	80%	0%	0%
CY 12	90%	85%	0%	0%	95%	94%	0%	0%	77%	72%	0%	0%	90%	85%	0%	0%

	To Open Market				To Open Market				To Open Market				To Open Market			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	0%	0%	15%	30%	0%	0%	17%	33%	0%	0%	13%	26%	0%	0%	14%	28%
CY 08	0%	0%	20%	35%	0%	0%	23%	39%	0%	0%	17%	30%	0%	0%	20%	33%
CY 09	0%	0%	25%	35%	0%	0%	29%	39%	0%	0%	21%	30%	0%	0%	25%	33%
CY 10	0%	0%	25%	35%	0%	0%	29%	39%	0%	0%	21%	30%	0%	0%	25%	33%
CY 11	0%	0%	25%	35%	0%	0%	29%	39%	0%	0%	21%	30%	0%	0%	25%	33%
CY 12	0%	0%	25%	35%	0%	0%	29%	39%	0%	0%	21%	30%	0%	0%	25%	33%

	To Connector				To Connector				To Connector				To Connector			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	0%	0%	30%	40%	0%	0%	35%	44%	0%	0%	26%	34%	0%	4%	15%	18%
CY 08	0%	0%	35%	40%	0%	0%	40%	44%	0%	0%	30%	34%	0%	10%	35%	42%
CY 09	0%	0%	40%	45%	0%	0%	46%	50%	0%	0%	34%	38%	0%	10%	35%	45%
CY 10	0%	0%	45%	50%	0%	0%	52%	55%	0%	0%	38%	43%	0%	10%	40%	45%
CY 11	0%	0%	45%	50%	0%	0%	52%	55%	0%	0%	38%	43%	0%	10%	40%	50%
CY 12	0%	0%	45%	50%	0%	0%	52%	55%	0%	0%	38%	43%	0%	10%	40%	50%

	To Employer Plan				To Employer Plan				To Employer Plan				To Employer Plan			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 08	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 09	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

	Remaining Uninsured				Remaining Uninsured				Remaining Uninsured				Remaining Uninsured			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	25%	40%	55%	30%	14%	34%	48%	23%	36%	49%	61%	40%	15%	30%	45%	25%
CY 08	20%	35%	45%	25%	8%	28%	37%	17%	32%	45%	53%	36%	10%	25%	35%	20%
CY 09	15%	30%	35%	20%	5%	23%	25%	11%	28%	40%	45%	32%	8%	20%	25%	15%
CY 10	10%	25%	30%	15%	5%	17%	19%	6%	23%	36%	41%	27%	5%	15%	19%	6%
CY 11	10%	20%	30%	15%	5%	12%	19%	6%	23%	32%	41%	27%	5%	15%	19%	6%
CY 12	10%	15%	30%	15%	5%	6%	19%	6%	23%	28%	41%	27%	5%	15%	19%	6%

**Table 96 – Employed with No Health Plan Offered Uptake Percentages**

Note: For Elasticity of Demand, Percentages reduced by a factor of .60 for the 45-64 year olds in year 2 to reflect waivers

Impact of Merging the Massachusetts Non-Group  
and Small Group Health Insurance Markets

	Medium Estimate				High Estimate				Low Estimate				Elasticity of Demand			
	To Commonwealth Care				To Commonwealth Care				To Commonwealth Care				To Commonwealth Care			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	60%	50%	0%	0%	69%	58%	0%	0%	51%	43%	0%	0%	60%	50%	0%	0%
CY 08	65%	55%	0%	0%	75%	63%	0%	0%	55%	47%	0%	0%	65%	55%	0%	0%
CY 09	70%	65%	0%	0%	81%	75%	0%	0%	60%	55%	0%	0%	70%	65%	0%	0%
CY 10	75%	70%	0%	0%	86%	81%	0%	0%	64%	60%	0%	0%	75%	70%	0%	0%
CY 11	80%	70%	0%	0%	92%	81%	0%	0%	68%	60%	0%	0%	80%	70%	0%	0%
CY 12	80%	70%	0%	0%	92%	81%	0%	0%	68%	60%	0%	0%	80%	70%	0%	0%

	To Open Market				To Open Market				To Open Market				To Open Market			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	0%	0%	20%	25%	0%	0%	23%	29%	0%	0%	17%	21%	0%	0%	20%	25%
CY 08	0%	0%	25%	30%	0%	0%	29%	35%	0%	0%	21%	26%	0%	0%	25%	30%
CY 09	0%	0%	30%	35%	0%	0%	35%	40%	0%	0%	26%	30%	0%	0%	30%	34%
CY 10	0%	0%	30%	35%	0%	0%	35%	40%	0%	0%	26%	30%	0%	0%	30%	34%
CY 11	0%	0%	30%	35%	0%	0%	35%	40%	0%	0%	26%	30%	0%	0%	30%	34%
CY 12	0%	0%	30%	35%	0%	0%	35%	40%	0%	0%	26%	30%	0%	0%	30%	34%

	To Connector				To Connector				To Connector				To Connector			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	0%	0%	25%	30%	0%	0%	29%	35%	0%	0%	21%	26%	0%	4%	15%	18%
CY 08	0%	0%	30%	35%	0%	0%	35%	40%	0%	0%	26%	30%	0%	10%	35%	42%
CY 09	0%	0%	35%	40%	0%	0%	40%	46%	0%	0%	30%	34%	0%	10%	35%	45%
CY 10	0%	0%	40%	45%	0%	0%	46%	52%	0%	0%	34%	38%	0%	10%	40%	45%
CY 11	0%	0%	40%	45%	0%	0%	46%	52%	0%	0%	34%	38%	0%	10%	40%	50%
CY 12	0%	0%	40%	45%	0%	0%	46%	52%	0%	0%	34%	38%	0%	10%	40%	50%

	To Employer Plan				To Employer Plan				To Employer Plan				To Employer Plan			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 08	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 09	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY 12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

	Remaining Uninsured				Remaining Uninsured				Remaining Uninsured				Remaining Uninsured			
	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400	LT 100	100 - 300	301 - 400	GT 400
CY 07	40%	50%	55%	45%	31%	42%	48%	36%	49%	57%	62%	53%	40%	50%	55%	45%
CY 08	35%	45%	45%	35%	25%	37%	36%	25%	45%	53%	53%	44%	35%	45%	45%	35%
CY 09	30%	35%	35%	25%	19%	25%	25%	14%	40%	45%	44%	36%	30%	35%	35%	25%
CY 10	25%	30%	30%	20%	14%	19%	19%	8%	36%	40%	40%	32%	25%	30%	30%	20%
CY 11	20%	30%	30%	20%	8%	19%	19%	8%	32%	40%	40%	32%	20%	30%	30%	20%
CY 12	20%	30%	30%	20%	8%	19%	19%	8%	32%	40%	40%	32%	20%	30%	30%	20%

**Table 97 – Not Working, Uninsured Uptake Percentages**

Note: For Elasticity of Demand, Percentages reduced by a factor of .60 for the 45-64 year olds in year 2 to reflect waivers

## 12.17. Appendix 17 – Uninsured Enrollment Projection

<b>Adjusted U.S. Census</b>						
<b>Previously Uninsured - Now Enrolled</b>	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
Elasticity of Demand	33,539	84,069	89,180	89,180	94,988	94,498
Informant Survey Low	96,231	109,114	125,547	125,547	125,547	125,547
Informant Survey Medium	112,331	127,807	147,191	147,191	147,191	147,191
Informant Survey High	127,521	144,709	166,069	166,069	166,069	166,069
<b>Commonwealth Care</b>						
Elasticity of Demand	227,728	248,185	268,855	287,449	300,911	309,679
Informant Survey Low	194,109	210,476	229,391	245,201	256,284	263,300
Informant Survey Medium	227,728	248,185	268,855	287,449	300,911	309,679
Informant Survey High	257,853	281,581	303,705	322,006	336,720	346,926
<b>Remaining Uninsured</b>						
Elasticity of Demand	309,152	238,165	212,384	193,790	174,520	166,242
Informant Survey Low	280,079	250,829	215,481	199,671	188,588	181,572
Informant Survey Medium	230,360	194,427	154,373	135,779	122,317	113,549
Informant Survey High	185,045	144,129	100,645	82,344	67,630	57,424

**Table 98 – Uninsured Enrollment Projection Based on Adjusted U.S. Census**

<b>Household Survey</b>						
<b>Previously Uninsured - Now Enrolled</b>	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
Elasticity of Demand	27,006	64,218	68,654	68,654	73,637	73,713
Informant Survey Low	81,822	92,599	107,550	107,550	107,550	107,550
Informant Survey Medium	95,684	108,376	125,868	125,868	125,868	125,868
Informant Survey High	106,652	120,970	140,636	140,636	140,636	140,636
<b>Commonwealth Care</b>						
Elasticity of Demand	129,225	140,596	154,039	164,740	169,432	172,585
Informant Survey Low	110,362	119,457	131,034	140,703	144,569	147,091
Informant Survey Medium	129,225	140,596	154,039	164,740	169,432	172,585
Informant Survey High	147,297	160,185	174,473	183,718	188,830	192,501
<b>Remaining Uninsured</b>						
Elasticity of Demand	215,779	167,197	149,318	138,617	128,941	125,712
Informant Survey Low	179,827	159,954	133,427	123,758	119,892	117,370
Informant Survey Medium	147,102	123,039	92,103	81,402	76,710	73,557
Informant Survey High	118,061	90,855	56,902	47,657	42,545	38,874

**Table 99 – Uninsured Enrollment Projection Based on Household Survey**

## 12.18. Appendix 18 – Uninsured Impact to Premium

<b>Scenario 1</b>						
<b>Adjusted U. S. Census Survey</b>						
<b>Assumes Non-Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is not used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 150% morbidity adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	0.4%	1.8%	2.1%	1.9%	2.0%	2.0%
Informant Survey Low	1.1%	3.4%	3.5%	3.6%	3.6%	3.5%
Informant Survey Medium	1.2%	3.9%	4.0%	4.1%	4.1%	4.0%
Informant Survey High	1.4%	4.3%	4.4%	4.5%	4.5%	4.4%

<b>Scenario 2</b>						
<b>Adjusted U. S. Census Survey</b>						
<b>Assumes Non-Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is not used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 200% adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	0.5%	2.3%	2.7%	2.5%	2.6%	2.6%
Informant Survey Low	1.2%	4.0%	4.2%	4.3%	4.3%	4.2%
Informant Survey Medium	1.4%	4.6%	4.8%	4.9%	4.9%	4.8%
Informant Survey High	1.6%	5.1%	5.3%	5.4%	5.4%	5.3%

<b>Scenario 3</b>						
<b>Household Survey</b>						
<b>Assumes Non-Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is not used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 150% morbidity adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	0.4%	1.9%	2.3%	2.1%	2.2%	2.2%
Informant Survey Low	1.2%	4.0%	4.1%	4.3%	4.3%	4.3%
Informant Survey Medium	1.4%	4.6%	4.8%	4.9%	4.9%	4.9%
Informant Survey High	1.6%	5.0%	5.2%	5.4%	5.4%	5.4%

<b>Scenario 4</b>						
<b>Household Survey</b>						
<b>Assumes Non-Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is not used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 200% adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	0.5%	2.3%	2.7%	2.5%	2.6%	2.7%
Informant Survey Low	1.3%	4.5%	4.8%	5.0%	5.0%	4.9%
Informant Survey Medium	1.5%	5.2%	5.5%	5.7%	5.7%	5.7%
Informant Survey High	1.7%	5.7%	6.0%	6.2%	6.2%	6.2%

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<b>Scenario 5</b>						
<b>Adjusted U. S. Census Survey</b>						
<b>Assumes Non-Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 150% morbidity adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	0.2%	0.9%	0.9%	0.7%	0.7%	0.7%
Informant Survey Low	0.6%	1.9%	1.8%	1.8%	1.8%	1.7%
Informant Survey Medium	0.7%	2.1%	2.1%	2.1%	2.0%	2.0%
Informant Survey High	0.8%	2.4%	2.3%	2.3%	2.2%	2.2%

<b>Scenario 6</b>						
<b>Adjusted U. S. Census Survey</b>						
<b>Assumes Non-Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 200% adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	0.3%	1.3%	1.4%	1.1%	1.2%	1.2%
Informant Survey Low	0.7%	2.4%	2.4%	2.4%	2.4%	2.4%
Informant Survey Medium	0.8%	2.7%	2.8%	2.8%	2.7%	2.7%
Informant Survey High	0.9%	3.0%	3.1%	3.1%	3.0%	3.0%

<b>Scenario 7</b>						
<b>Household Survey</b>						
<b>Assumes Non-Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 150% morbidity adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	0.3%	1.1%	1.2%	1.0%	1.1%	1.1%
Informant Survey Low	0.8%	2.5%	2.6%	2.6%	2.6%	2.6%
Informant Survey Medium	0.9%	2.9%	3.0%	3.0%	3.0%	3.0%
Informant Survey High	1.0%	3.2%	3.2%	3.3%	3.3%	3.3%

<b>Scenario 8</b>						
<b>Household Survey</b>						
<b>Assumes Non-Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 200% adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	0.3%	1.5%	1.6%	1.4%	1.5%	1.5%
Informant Survey Low	0.9%	3.0%	3.2%	3.2%	3.2%	3.2%
Informant Survey Medium	1.0%	3.5%	3.6%	3.7%	3.7%	3.7%
Informant Survey High	1.1%	3.8%	4.0%	4.1%	4.0%	4.0%

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<b>Scenario 9</b>						
<b>Adjusted U. S. Census Survey</b>						
<b>Assumes Small Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is not used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 150% morbidity adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	-0.1%	-0.7%	-1.2%	-1.4%	-1.5%	-1.5%
Informant Survey Low	-0.2%	-0.7%	-1.0%	-1.2%	-1.2%	-1.3%
Informant Survey Medium	-0.2%	-0.9%	-1.2%	-1.3%	-1.4%	-1.4%
Informant Survey High	-0.2%	-1.0%	-1.3%	-1.5%	-1.6%	-1.6%

<b>Scenario 10</b>						
<b>Adjusted U. S. Census Survey</b>						
<b>Assumes Small Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is not used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 200% adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	0.0%	-0.4%	-0.9%	-1.1%	-1.1%	-1.2%
Informant Survey Low	-0.1%	-0.3%	-0.5%	-0.7%	-0.7%	-0.8%
Informant Survey Medium	-0.1%	-0.4%	-0.6%	-0.7%	-0.8%	-0.9%
Informant Survey High	-0.1%	-0.4%	-0.7%	-0.8%	-0.9%	-1.0%

<b>Scenario 11</b>						
<b>Household Survey</b>						
<b>Assumes Small Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is not used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 150% morbidity adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	0.0%	-0.2%	-0.5%	-0.7%	-0.7%	-0.8%
Informant Survey Low	0.1%	0.1%	-0.1%	-0.1%	-0.2%	-0.2%
Informant Survey Medium	0.1%	0.1%	-0.1%	-0.2%	-0.2%	-0.2%
Informant Survey High	0.1%	0.1%	-0.1%	-0.2%	-0.3%	-0.3%

<b>Scenario 12</b>						
<b>Household Survey</b>						
<b>Assumes Small Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is not used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 200% adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	0.1%	0.1%	-0.2%	-0.4%	-0.4%	-0.5%
Informant Survey Low	0.2%	0.5%	0.4%	0.3%	0.3%	0.3%
Informant Survey Medium	0.2%	0.6%	0.5%	0.4%	0.3%	0.3%
Informant Survey High	0.2%	0.6%	0.5%	0.4%	0.3%	0.3%

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<b>Scenario 13</b>						
<b>Adjusted U. S. Census Survey</b>						
<b>Assumes Small Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 150% morbidity adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	-0.2%	-1.4%	-2.2%	-2.4%	-2.4%	-2.5%
Informant Survey Low	-0.5%	-1.9%	-2.3%	-2.5%	-2.5%	-2.6%
Informant Survey Medium	-0.6%	-2.2%	-2.6%	-2.8%	-2.9%	-2.9%
Informant Survey High	-0.7%	-2.4%	-2.9%	-3.1%	-3.2%	-3.2%

<b>Scenario 14</b>						
<b>Adjusted U. S. Census Survey</b>						
<b>Assumes Small Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 200% adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	-0.1%	-1.1%	-1.8%	-2.0%	-2.1%	-2.2%
Informant Survey Low	-0.4%	-1.5%	-1.8%	-2.0%	-2.1%	-2.1%
Informant Survey Medium	-0.5%	-1.7%	-2.1%	-2.3%	-2.4%	-2.4%
Informant Survey High	-0.6%	-1.9%	-2.3%	-2.5%	-2.7%	-2.7%

<b>Scenario 15</b>						
<b>Household Survey</b>						
<b>Assumes Small Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 150% morbidity adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	-0.1%	-0.8%	-1.3%	-1.5%	-1.5%	-1.6%
Informant Survey Low	-0.2%	-0.9%	-1.2%	-1.4%	-1.4%	-1.4%
Informant Survey Medium	-0.3%	-1.1%	-1.4%	-1.6%	-1.6%	-1.7%
Informant Survey High	-0.3%	-1.2%	-1.5%	-1.7%	-1.8%	-1.8%

<b>Scenario 16</b>						
<b>Household Survey</b>						
<b>Assumes Small Group Morbidity for Uninsured Population</b>						
<b>Assumes 10% Group Size Load is used to offset existing insured premium rates</b>						
<b>Assumes people that have perceived Health Status as Fair/Poor will have 200% adjustment</b>						
	<b>CY 07</b>	<b>CY 08</b>	<b>CY 09</b>	<b>CY 10</b>	<b>CY 11</b>	<b>CY 12</b>
	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>	<b>Premium</b>
	<b>Impact to</b>					
	<b>Overall Pool</b>					
Elasticity of Demand	0.0%	-0.6%	-1.0%	-1.2%	-1.2%	-1.3%
Informant Survey Low	-0.2%	-0.6%	-0.8%	-0.9%	-1.0%	-1.0%
Informant Survey Medium	-0.2%	-0.7%	-0.9%	-1.1%	-1.2%	-1.2%
Informant Survey High	-0.2%	-0.8%	-1.0%	-1.2%	-1.3%	-1.3%

**Table 100 – Range of Premium Impact to Insured Population**

## 12.19. Appendix 19 – Mapping of ZIP Code to Region

Seven geographic regions were used for the analyses. Subscribers were assigned to one of the seven regions based on their ZIP code. If they had no ZIP code or a ZIP code that was outside Massachusetts, they were assigned to the “UNK” region. The seven regions and the corresponding 3 digit ZIP Code prefix are provided in Table 101.

Region	3-Digit ZIP Code Prefix
WEST	010
	011
	012
	013
WORCESTER	014
	015
	016
METROWEST	017
	020
NORTHEAST	018
	019
METROBOS	021
	022
	024
SOUTHEAST	023
	027
CAPE	025
	026

**Table 101 – Region and ZIP Code Cross Reference**

## 12.20. Appendix 20 – Demographic Characteristics of Uninsured



### Demographic Characteristics of the Uninsured Health Status

#### Distribution of Self Perceived Health Status

#### Non - Elderly Adult Massachusetts Residents

	<u>Insured</u>		<u>Total</u>		<u>Uninsured</u>
	<u>Employer</u>	<u>Individual</u>	<u>Private Insurance</u>	<u>Medicaid &amp; Other</u>	
Excellent/Very Good	77.8%	74.8%	77.6%	37.9%	67.6%
Good	16.9%	18.3%	16.9%	25.6%	24.4%
Poor	5.4%	6.9%	5.5%	36.5%	8.0%
	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Urban Institute via BCBSMA Foundation

Unpublished analysis by the Urban Institute of the 2005 and 2006 Annual Social and Economic Supplement to the Current Population Survey



## Demographic Characteristics of the Uninsured Health Status

### Distribution of Self Perceived Health Status Non – Elderly Massachusetts Residents (Adults plus Children)

	<u>Insured</u>		<u>Total</u>		<u>Uninsured</u>
	<u>Employer</u>	<u>Individual</u>	<u>Private Insurance</u>	<u>Medicaid &amp; Other</u>	
Excellent/Very Good	82.0%	78.5%	81.8%	54.6%	69.1%
Good	14.0%	15.7%	14.1%	22.6%	23.5%
Fair/Poor	4.0%	5.8%	4.1%	22.8%	7.4%
	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Urban Institute via BCBSMA Foundation

Unpublished analysis by the Urban Institute of the 2005 and 2006  
Annual Social and Economic Supplement to the Current Population  
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## Demographic Characteristics

### Employment by Industry With Likelihood of ESI Non-Elderly Working Adults in Massachusetts

	<u>Insured</u>		<u>Total</u>		
	<u>Employer</u>	<u>Individual</u>	<u>Private Insurance</u>	<u>Medicaid &amp; Other</u>	<u>Uninsured</u>
Industry with High ESI	57.7%	36.1%	56.5%	29.4%	29.5%
Industry with Low ESI	42.3%	63.9%	43.5%	70.6%	70.5%
	100.0%	100.0%	100.0%	100.0%	100.0%

Note: (i) High ESI industry – 75% or more of employees have employer sponsored ESI

(ii) Low ESI industry- less than 75% of employees have employer sponsored ESI

Source: Urban Institute via BCBSMA Foundation

Unpublished analysis by the Urban Institute of the 2005 and 2006 Annual Social and Economic Supplement to the Current Population Survey



## Demographic Characteristics

### Distribution of the Population by Income Non-Elderly Adults in Massachusetts

Percent Federal Poverty Level	<u>Insured</u>		<u>Total</u>	<u>Medicaid &amp; Other</u>	<u>Uninsured</u>
	<u>Employer</u>	<u>Individual</u>	<u>Private Insurance</u>		
<100%	4.0%	24.4%	5.3%	46.6%	28.7%
101 - 200%	6.7%	17.6%	7.4%	35.2%	27.6%
201 - 300%	12.7%	17.4%	13.0%	9.3%	18.2%
301 - 500%	26.3%	18.6%	25.8%	6.7%	12.6%
501% +	50.3%	22.0%	48.5%	2.2%	12.9%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: Urban Institute via BCBSMA Foundation  
 Unpublished analysis by the Urban Institute of the 2005 and 2006  
 Annual Social and Economic Supplement to the Current Population  
 Survey



## Demographic Characteristics Family Work Status

### Non-Elderly Adults in Massachusetts

	<u>Employer</u>	<u>Individual</u>	<u>Private Insurance</u>	<u>Medicaid &amp; Other</u>	<u>Uninsured</u>
<b>2 Full-time Workers</b>	33.7%	9.3%	32.2%	2.4%	11.1%
<b>1 Full-time Worker</b>	56.7%	52.8%	56.5%	28.0%	55.1%
<b>Only Part-time</b>	6.5%	25.1%	7.7%	15.5%	15.9%
<b>Non-Workers</b>	3.0%	12.8%	3.6%	54.0%	18.0%
	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Urban Institute via BCBSMA Foundation  
Unpublished analysis by the Urban Institute of the 2005 and 2006  
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Survey



## Demographic Characteristics Industry Health RISK

### Non-Elderly Working Adults in Massachusetts

	<u>Insured</u>		<u>Total</u>		<u>Uninsured</u>
	<u>Employer</u>	<u>Individual</u>	<u>Private Insurance</u>	<u>Medicaid &amp; Other</u>	
High	21.5%	38.3%	22.4%	34.0%	37.4%
Medium/Low	78.5%	61.7%	77.6%	66.0%	62.6%
	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Urban Institute via BCBSMA Foundation  
Unpublished analysis by the Urban Institute of the 2005 and 2006  
Annual Social and Economic Supplement to the Current Population  
Survey