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# **Evaluation of HRSA Coverage Options**

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**MERCER**

Government Human Services Consulting

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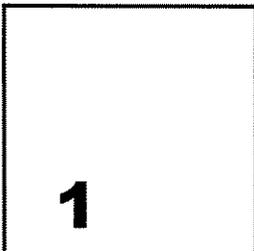
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## **Executive Summary**

Growth in the number of Americans without health insurance coverage has become a significant policy issue across the country. North Carolina is no exception, where the uninsured population has increased from 16 percent of the non-elderly population in 1999-2000 to 18 percent of the non-elderly population in 2003-2004.<sup>1</sup>

To support a Health Resources and Services Administration (HRSA) State Planning Grant to study policy options for expanding health insurance coverage in the state, the Cecil G. Sheps Center for Health Services Research at the University of North Carolina–Chapel Hill hired Mercer Government Human Resources (Mercer) to assist in option design and pricing. With direction from the Cecil G. Sheps Center for Health Services Research (at the University North Carolina-Chapel Hill) and the Task Force for Covering the Uninsured, Mercer evaluated both public sector- and private sector- sponsored options for expanding coverage. All cost projections are based on coverage for calendar year 2006.

## **Public Sector Options**

Mercer evaluated three publicly sponsored expansion options; all were Medicaid expansions. The first option is an expansion of the current set of Medicaid covered benefits, and the remaining two are variations on a limited benefit expansion. Children in North Carolina from families with incomes up to 200 percent of FPG are currently eligible either for Medicaid or Health Choice for Children, depending on income level and age. All three expansion options were evaluated for expansion to children from 200 to 300 percent of FPG.

Medicaid currently covers non-pregnant adults with incomes up to 37 percent of the Federal Poverty Guidelines (FPG) and pregnant women with incomes up to 185 percent

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<sup>1</sup> Holmes M. Data from the U.S. Census, Current Population Survey: 2004, 2005 (reflecting 2003, 2004 coverage). Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. 2005. The analyses are based on two-year average of 2004, 2005 CPS data weighted more heavily to the most recent year.

of FPG. All three expansions were evaluated for parents of children enrolled in Health Choice in the following income bands: 37 to 100 percent, 100 to 150 percent, 150 to 200 percent, and 200 to 300 percent.

Providing full Medicaid benefits to individuals is expensive; the benefits are comprehensive and the member cost sharing is very low. Per person monthly cost projections for adults ranged from \$490 to \$530, depending on FPG level. Children are less expensive, projected at \$257 monthly. The full Medicaid expansion to 300 percent FPG could be expected to cover 174,000 people at a total annual cost of \$1 billion. That cost would be shared between the federal government, the State, Counties, and enrollees in the form of a premium contribution.

A limited benefit expansion could provide a less expensive alternative and still provide coverage of key services to some individuals currently without health care coverage. The limited benefit options evaluated do not include all the benefits in the regular Medicaid program, and they require significantly more cost sharing on the part of the enrollee.

Mercer evaluated two versions of a limited benefit plan, with the difference between the two being the treatment of hospital inpatient services. In the first alternative, there is a \$5,000 hospital inpatient deductible that must be borne out of pocket before the benefit begins. In the second alternative, there is a \$100 inpatient hospital deductible, and then 80 percent of costs are covered until the plan has paid out \$10,000 in inpatient expenses.

Mercer's analysis showed that the projected costs for the two limited benefit options do not differ much from one another, but are much lower than for the full benefit expansion. Per person monthly cost projections for adults ranged from \$270 to \$290 for the \$5,000 Inpatient Deductible option and from \$275 to \$300 for the \$10,000 Inpatient Limit alternative.

However, this type of plan is likely to attract fewer enrollees than a full expansion. Although the premium charged is lower, many persons are likely to consider the covered benefits and the high cost sharing levels and choose not to enroll. Projections for each of these products were that they might cover approximately 104,000 individuals at a total annual cost of \$334 to 344 million. Again, these costs would be shared by the federal, state, and county governments, and by the enrollees through the payment of a monthly premium contribution.

## Private Sector Options

Focus groups conducted in Spring 2005 as part of the HRSA project revealed interest in tiered benefits offered to small employers, particularly in the form of limited benefit plans. This model includes a base plan of benefits and the opportunity to "buy up" to higher levels of benefits. Small employer coverage is regulated by the State, and this option might require statutory and/or regulatory changes. While this type of product would be designed and priced by the private market in North Carolina, the Task Force

asked Mercer to produce cost estimates for a sample product, to provide a sense of whether this type of option might provide an attractive cost/benefit alternative that could encourage higher levels of coverage among employees of small employers.

The sample product evaluated covers a core set of services considered to be the most critical: inpatient hospital care (including professional services while admitted), physician office visits, diagnostic testing, emergency room, and prescription drugs. The base plan (Tier 1) covers a low level of these benefits (for example, up to 4 office visits annually), while employees could choose to buy one of two richer versions of the plan (Tier 2 or Tier 3). All three tiers have member cost sharing requirements that are similar to those in standard commercial health insurance products.

These very limited products are projected to be significantly less expensive than comprehensive health insurance products currently available. For instance, the sample product estimated monthly premium cost per adult ranged from \$150 (Tier 1) to \$270 (Tier 3). However, despite the interest in this type of product expressed in HRSA focus groups, limited benefit plans have not historically been popular in the private health insurance market. For this reason, cost estimates were developed assuming that 40 percent or fewer eligible individuals would purchase this product.

Other private sector coverage options were considered by the Task Force but were not priced by Mercer.

## Methodology

Mercer used an actuarial pricing approach to project costs for each of the policy options evaluated. This type of approach starts with base data that represents the closest possible match to the target population, covered services, and service delivery method of the option to be priced. That base data is then adjusted for expected differences between the base and the option, including differences in population, covered services, cost sharing elements, and time period.

For the public sector options evaluated, Mercer used North Carolina Medicaid data as the most reasonable available base data source. For the private sector options, North Carolina detail from a large commercial claims data set was used. The adjustments made to those data sources were based on data analysis, other internal and external research, and the judgment of Mercer's actuaries. The adjustments are appropriate for the type of analysis performed; they do, however, rely on assumptions that are selections from ranges of reasonable assumptions. The cost projections that result, and are shared above, are best interpreted as a point estimate within a range of reasonable results.

# 2

## Introduction

Access to health care and financing health care coverage has become a critical policy discussion in states across the country. The number of individuals without health insurance has increased in almost every state over the past three years. An estimated 1.3 million North Carolinians (18 percent of the state's non-elderly population) lack health insurance coverage, based on information from the U.S. Bureau of the Census. The level of the uninsured has increased since 1999-2000, from 16 percent to 18 percent.<sup>2</sup>

In 2004 the North Carolina Department of Health and Human Services (NC DHHS) was awarded a State Planning Grant from the HRSA to study policy options to expand coverage to the uninsured. The NC DHHS partnered with several other organizations for the HRSA project: the North Carolina Institute of Medicine (NC IOM), the Cecil G. Sheps Center for Health Services Research (at the University North Carolina-Chapel Hill), and the North Carolina Department of Insurance (NC DOI). The NC IOM convened a blue ribbon Task Force to consider various policy options for covering the uninsured.

The Cecil G. Sheps Center for Health Services Research (at the University North Carolina-Chapel Hill) hired Mercer to consult on option design strategies and to develop cost estimates of different policy options. As part of this process, Mercer met regularly with the Cecil G. Sheps Center for Health Services Research (at the University North Carolina-Chapel Hill) and NC IOM staff and attended Task Force meetings, both to assess the interests and concerns of the Task Force and to present information on interim and final results. The nature of health coverage policy option design and pricing is an iterative one; initial concepts are tested and refined as trade-offs between design features and costs become clear. While a number of interim results were provided to the Cecil G. Sheps Center for Health Services Research (at the University North Carolina-Chapel Hill) and the Task Force, both informally as workgroup results and formally through

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<sup>2</sup> Holmes M. Data from the U.S. Census, Current Population Survey: 2004, 2005 (reflecting 2003, 2004 coverage). Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. 2005. The analyses are based on two-year average of 2004, 2005 CPS data weighted more heavily to the most recent year.

presentations at Task Force meetings, this report focuses on the final designs and the resulting cost estimates.

## Background

As part of the HRSA project, the Cecil G. Sheps Center for Health Services Research (at the University North Carolina-Chapel Hill) has conducted extensive research into the characteristics of the uninsured population in North Carolina. This work has supported the design of the policy options presented to the Task Force, and Mercer has relied upon it to develop some of the assumptions used in the development of option cost estimates. Rather than recap the detailed results the Cecil G. Sheps Center for Health Services Research (at the University North Carolina-Chapel Hill) produced, this report highlights key elements that will aid in the interpretation of the results presented here, and directs the reader to the Task Force report<sup>3</sup> for more complete coverage of the topic.

## Employment Status and Employer Coverage

Employer-sponsored health insurance (ESI) is the primary source of health care coverage for North Carolinians under age 65, providing coverage to 59 percent of this population.<sup>4</sup> Despite this fact, many employed individuals and their families are not covered by ESI, either because their employers do not offer it as a benefit or the coverage is offered but not purchased by the employee. Cecil G. Sheps Center for Health Services Research (at the University North Carolina-Chapel Hill) analysis of Current Population Survey data indicates that over 70 percent of uninsured individuals in the State are in families where someone works full time. In general, the smaller the size of the employer, the less likely the employee is covered through ESI. More than half of uninsured workers are employed by companies with fewer than 25 employees and another 13 percent are employed by companies with between 25 and 99 employees.

## Income/Poverty Level

Lack of health insurance tends to be more predominant at lower income levels, as shown in the table below. The State does currently provide health care coverage to certain low-income individuals and families, but many low income individuals are not eligible for these public programs. In general, children in families with incomes below 200 percent of the FPG<sup>5</sup> can obtain coverage through Medicaid (at lower income thresholds) or the state's SCHIP program, Health Choice. Pregnant women with incomes up to 185 percent of FPG and other adults with incomes up to 37 percent of FPG are also eligible for Medicaid coverage.

<sup>3</sup> The full Task Force Report is available online at [www.nciom.org](http://www.nciom.org).

<sup>4</sup> Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2004 and 2005 Current Population Survey (CPS: Annual Social and Economic Supplements).

<sup>5</sup> The 2005 annual Federal Poverty Guideline for a family of four was \$19,350.

**Health Care Coverage by FPG**

<b>Insurance Type</b>	<b>&lt; 100% FPG</b>	<b>100-200% FPG</b>	<b>200-300% FPG</b>	<b>300%+ FPG</b>	<b>Total</b>
Employer	13.2%	32.3%	61.7%	80.1%	58.3%
Medicaid	35.3%	19.7%	5.8%	2.8%	11.3%
Medicare	5.8%	5.6%	3.8%	1.3%	3.2%
Private Coverage	10.4%	13.1%	10.4%	7.2%	9.3%
Uninsured	35.4%	29.4%	18.3%	8.5%	18.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Homes, M. Weighted average for CPS 2004-2005 (Calendar years 2003-2004). Cecil G. Sheps Center for Health Services Research. University of North Carolina-Chapel Hill.

**Conclusion**

Members of the uninsured population in the State are a diverse group. Uninsured North Carolinians include both employed and unemployed individuals, urban and rural inhabitants, adults and children, and US citizens and non-citizens. As a result, the policy options considered by the Task Force focus on potential solutions for particular sub-populations, realizing that no single solution short of universal coverage can solve the entire problem. In particular, there is significant interest in programs and policies that will encourage small employers who do not currently offer ESI to sponsor coverage for their employees, as well as ensuring that they have products available that can be both attractive and affordable to employees. A second broad area of interest was options for expanding publicly-sponsored health care coverage.

The remainder of this report is organized according to the nature of the policy options evaluated. First, Section 3 provides results on three policy options for expanding coverage through the public sector: a full-benefit Medicaid expansion and two versions of a limited Medicaid expansion. Section 4 provides results on an option for expanding coverage through the private sector with a tiered limited benefit plan targeted toward small employers. Finally, Section 5 provides the results of relative pricing of product features and delivery systems that were used with Focus Groups early in the HRSA project.

# 3

## Public Sector Options

### Design

Mercer evaluated three public sector options for the Task Force to consider; all were expansions of Medicaid to populations not currently eligible. Mercer had various meetings and conference calls with Cecil G. Sheps Center for Health Services Research (at the University North Carolina-Chapel Hill) and NC IOM staff and the Task Force regarding the public sector product design. These meetings served as a basis for the various cost estimates developed by Mercer. The following sections give a brief description of the expansion parameters.

North Carolina Medicaid currently covers adults up to 37 percent FPG and pregnant women up to 185 percent FPG. Children in families with income up to 200 percent FPG are eligible for coverage under Medicaid or under the NC Health Choice for Children, depending on age and income level. The Task Force asked Mercer to determine cost estimates for the following expansion groups:

- Parents with incomes between 37 and 100 percent FPG;
- Parents with incomes between 100 and 150 percent FPG;
- Parents with incomes between 150 and 200 percent FPG;
- Parents with incomes between 200 and 300 percent FPG; and
- Children with incomes between 200 and 300 percent FPG.

Mercer developed cost estimates under three expansion scenarios. The first scenario assumes a full Medicaid expansion using the same comprehensive benefits currently provided under Medicaid. As is typical in most Medicaid programs, the only cost sharing is in the form of very nominal copayments.

The second and third expansion scenarios are both limited benefit packages. The two versions differ only in their treatment of inpatient coverage. The first limited benefit version has a \$5,000 annual inpatient hospital deductible and the second has a \$10,000 annual inpatient hospital limit. The inpatient hospital deductible option has no inpatient

hospital benefit until the member has paid the first \$5,000 of inpatient expenses out-of-pocket. Once this requirement is met, the member pays 20 percent coinsurance until he or she has paid out \$2,500 in total coinsurance payments, after which the plan absorbs all remaining costs. The inpatient hospital limit option has an inpatient hospital benefit in which after a \$100 deductible is met, the plan pays 80 percent of inpatient expenses until it has paid out \$10,000. Once this dollar threshold is met, there is no remaining hospital benefit.

In addition to a limited hospital benefit for the limited benefit plans, many of the other services are limited compared to Medicaid benefits. The benefit package details by category of service for each of the expansion options, including cost sharing requirements, can be found in Appendix A.1.

Since the expansion program will cover people with higher income than those currently covered in Medicaid, members will be required to pay a portion of the premium. This will help to reduce the cost to the State, allowing for coverage of more members.

Under this design, the premium contribution is set as a percentage of the member’s income. Additionally, the premium required varies depending on individual or family status. The following tables detail the premium contribution from the member for the full Medicaid expansion as well as the limited benefit expansion.

**Premium Contribution as a Percent of Income: Full Medicaid Expansion Option**

<b>Family Status</b>	<b>37-100% FPG</b>	<b>100-150% FPG</b>	<b>150-200% FPG</b>	<b>200-250% FPG</b>	<b>250-300% FPG</b>
Individual	0%	1%	2%	3%	4%
Family	0%	2%	4%	6%	8%

**Premium Contribution as a Percent of Income: Limited Benefit Expansion Options**

<b>Family Status</b>	<b>37-100% FPG</b>	<b>100-150% FPG</b>	<b>150-200% FPG</b>	<b>200-250% FPG</b>	<b>250-300% FPG</b>
Individual	0%	0.5%	1%	1.5%	2%
Family	0%	1%	2%	3%	4%

As shown in the above tables, the member contributes a higher portion of the premium as income increases. Also, a higher premium contribution is required for the full Medicaid expansion due to the richer benefit.

## Results

Using the methodology outlined in the next section, Mercer developed cost estimates for each of the populations outlined on page 4 for both the full Medicaid expansion and the limited benefit expansions. For the full Medicaid expansion, the total cost estimate for

children and parents up to 300 percent FPG is \$1 billion and would cover 174,000 people. The State and County share is \$354 million. The table below shows the overall monthly cost (including value of enrollee premium contribution) under each of the expansion options:

**Projected Monthly Costs for Calendar Year 2006**

Expansion Option	Adults				Children
	37-100% FPG	100-150% FPG	150-200% FPG	200-300% FPG	200-300% FPG
Full Medicaid	\$528	\$515	\$505	\$494	\$257
\$5,000 IP Deductible	\$292	\$285	\$275	\$269	\$141
\$10,000 Limited IP	\$301	\$294	\$283	\$277	\$145

For the \$5,000 deductible inpatient hospital limited benefit expansion, the total cost estimate for children and parents up to 300 percent FPG is \$334 million, assuming that 104,000 people would participate. The State and County share is \$118 million.

For the \$10,000 inpatient hospital limited benefit expansion, the total cost estimate for children and parents up to 300 percent FPG is \$344 million and cover 104,000 people. The State and County share is \$121 million.

In determining the cost estimates, Mercer made several assumptions that are worth noting:

- New programs for which enrollment starts low and ramps up are likely to experience significant cost variability until the pool is large enough to produce more predictable results. Often a contingency load is added to account for this variability. Our estimates do not include any such load.
- The cost estimates for these options do not include administrative expenses.
- These estimates are based on an assumption that eligibility will be extended only to parents of covered children; expansion to other adults could change the results.
- The cost estimates for the limited benefit option assume that the enrollees' cost sharing responsibility is enforceable; that is, providers may deny service if the enrollee share is not paid or may pursue collection of the copayment. They also assume that cost sharing amounts are due for services received by children.
- Cost estimates for both options assume that services are provided through the State's existing primary care case management system, Community Care of North Carolina (CCNC).

The full details on cost estimates, including breakdowns by FPG category and the Federal, State, and County portions of the cost estimates can be found in Appendices A.2-A.4.

## Methodology

Once the populations and benefit packages were determined, the next step in determining the cost estimates was to select a base data set from a comparable population and make appropriate adjustments to the dataset to account for product and population differences.

Cost estimates generated by this type of approach are best interpreted as a point estimate within a reasonable range of results. Actual results experienced would be certain to differ to the extent that assumptions are not precisely realized in fact.

The following items were necessary to arrive at the final cost estimates:

- base data and adjustments;
- trend;
- cost sharing;
- benefit package;
- population health;
- demographic risk variances;
- selection effects; and
- non-medical expenses.

Each of these elements is discussed below, and a summary of adjustments and their impacts for the population with incomes between 200 to 300 percent FPG is provided in Appendices A.5 – A.7. Adjustments made to other income categories were similar.

## Base Data and Adjustments

Mercer utilized North Carolina Medicaid fee-for-service (FFS) data covering the period July 1, 2001 through June 30, 2004 (SFY02 through SFY04), focusing on the family and children population. Mercer reviewed the data for reasonableness and suitability, but did not audit it. Material error or omission in the source data could produce results with material error or omission.

The base data were adjusted to more accurately predict costs for the expansion populations. In working with Sheps, NC IOM, and the North Carolina Department of Human Services (DHS), it was determined that the adult male PMPMs in the dataset were unusually high, relative to expected male costs in the option's target population. Mercer utilized additional State information as well as information from other state Medicaid FFS programs in determining a 3.5 percent reduction to the PMPM was appropriate to adjust for this difference. Additionally, since the FFS data did not reflect pharmacy rebates, a downward adjustment of 18 percent was applied to pharmacy expenses to reflect the State's actual pharmacy cost.

## Trend

The historical base data (SFY02 through SFY04) needed to be adjusted (or trended) to reflect the costs anticipated for the contract period, calendar year 2006 (CY06). Trend is

an estimate of the change in the overall cost of providing health care benefits over a finite period of time. A trend factor is necessary to estimate the expenses of health care services in a defined contract period. As part of the cost estimate development, Mercer developed trend rates on an annual PMPM basis for each major category of service (COS) (inpatient, outpatient, physician, pharmacy, and other services). Typical components of a trend factor include changes in population, technology, plan design, service delivery, service costs, and utilization.

One of the trend data sources was the base data, which contains three years of historical FFS claims data (SFY02 through SFY04). Using this data, a linear regression model was used to analyze trend by COS and for various combinations of these COS.

Mercer also gathered and reviewed trends from other national and regional sources. These sources include other states' commercial programs, Global Insight (formerly DRI), and internal commercial trend surveys. All of the data sources mentioned above were utilized in the final development of the annual PMPM trend factors.

The derived trend factors were applied from the midpoint of the base data period to the midpoint of the contract period. The base data reflect the 36-month period (SFY02 through SFY04) where the midpoint of the base data time period is January 1, 2003. The contract period is January 1, 2006 to December 31, 2006, where the midpoint is July 1, 2006. The difference between the data midpoint and the contract midpoint represents 42 months. Therefore, the annual trend factors were applied for 42 months.

The aggregate annual PMPM trend rate, across all categories of service, used to project the historical base data to the contract period was 7.0 percent.

## Cost Sharing

Since the base data is Medicaid FFS data, an adjustment must be made for the higher cost sharing imposed under the expansion options. Examples include deductibles, coinsurance and copayments.

Cost sharing impacts both the cost of services, as well as the utilization of services. Cost sharing shifts a portion of the cost of providing services onto enrollees, encouraging them to reduce unnecessary health care use, thus impacting utilization. The cost is decreased by the impact of the cost sharing. Mercer included an adjustment to both the unit costs and utilization to reflect the expected reduction in the cost per service and utilization of services resulting from member cost sharing.

Only very minor cost sharing adjustments were necessary for the full Medicaid expansion, as cost sharing requirements under the expansion are the same as those in the base data. For the two versions of the limited benefit plan the cost sharing plays an important role, as shown in the tables in Appendices A.3 and A.4 (see the Member Out-of-Pocket figures). The differences in the value of the cost sharing between these two options is due to the different treatment of inpatient. The cost sharing utilization

adjustments and percentage cost impacts are detailed for the 200 to 300 percent FPG population in Appendices A.5 – A.7. Impacts on the other income categories are similar.

## Benefit Package

An adjustment is necessary for the limited benefit options since the benefits are leaner than those inherent in the Medicaid FFS base data. Utilization adjustments were applied on a service-specific basis to account for the benefit package differences. Wherever possible, adjustments were based on the service-specific utilization patterns observed in the Medicaid historical data. Where that detail was not readily available, Mercer relied on supporting research, results in other states' Medicaid programs, and actuarial judgment to determine appropriate adjustments. Since the benefit package for the full Medicaid expansion is the same as the base data, no adjustment was necessary.

The aggregate impact of the benefit package adjustment is shown for the 200 to 300 percent FPG population in Appendices A.5-A.7. Impacts on the other income categories are similar.

## Population Health

Population health factors are necessary since the health status of the targeted population will differ from that inherent in the Medicaid FFS base data. Mercer made three different population health factor adjustments: pent-up demand, FPG adjustment, and workforce effect.

Pent-up demand takes into account that individuals will typically delay non-emergent services if they do not have insurance. Once health care coverage is obtained, new enrollees will use those services that have previously been delayed. Since it is anticipated that many members enrolling in these options will be previously uninsured, an adjustment is necessary to capture the impact of delaying non-emergent services. Typically pent up demand is assumed to be a material factor during only the first few months of coverage. A factor was applied to adjust for the higher utilization due to pent-up demand.

It is anticipated that the members of the expansion will be healthier on average than the Medicaid FFS individuals in the base data. Medical costs typically decrease as income levels increase. This is generally a result of a higher standard of living, better nutrition, and improved basic health care. An FPG adjustment was applied to recognize the lower expected utilization due to higher anticipated health status.

Since the base data includes Medicaid FFS people and thus lower income individuals, a higher proportion of people in the base data are unemployed. The expansion members have higher incomes than those in the base data by definition. They may be paid on an hourly basis and therefore will use fewer services (missing work means translates into less income). A workforce effect adjustment was applied to recognize the lower utilization.

The impact of the above population health factors is shown for the 200 to 300 percent FPG population in Appendices A.5-A.7. Impacts on the other income categories are similar.

### Demographic Risk Variances

Since the base data is Medicaid FFS data, it includes a high number of women and children. Since the expansion population will be working for the most part, Mercer adjusted the population demographic impact to look more like commercial program demographics. This means a higher proportion of adults as well as more males than what is captured in the base data, leading to a higher average cost.

Cecil G. Sheps Center for Health Services Research (at the University North Carolina-Chapel Hill) research was able to estimate certain demographic information about the North Carolina uninsured population, and that information was used to develop certain assumptions and projections contained in this report. The demographic detail for parents is shown in the table below.

**Estimated Uninsured Parents; Adult Demographic Detail by FPG**

Demographic Cell	< 100% FPG	100-150% FPG	150-200% FPG	200-300% FPG	300%+ FPG	Total
Males; Age 21-44	41,755	36,551	24,229	16,117	22,409	141,062
Males; Age 45-64	6,882	4,136	7,169	3,011	3,432	24,631
Females; Age 21-44	72,776	31,976	25,005	25,760	14,450	169,965
Females; Age 45-64	4,206	2,055	2,955	3,093	3,992	16,303
Total	125,619	74,718	59,358	47,981	44,283	351,961

Source: Homes, M. Weighted average for CPS 2004-2005 (Calendar years 2003-2004). Cecil G. Sheps Center for Health Services Research. University of North Carolina-Chapel Hill.

Mercer used this data along with other sources of demographic distribution such as commercial coverage and actual enrollment for expansions to parents in other states to determine an appropriate demographic mix adjustment for the options.

Details about the impact of this adjustment on costs for the 200 to 300 percent FPG population are located in Appendices A.5 – A.7. Impacts on the other income categories are similar.

### Selection Effects

The term “selection effect” describes the cost impact that may be experienced if the individuals who enroll in a particular product are significantly different than the average eligible population. *Positive selection* refers to the effect of healthier than average individuals enrolling in a product, and *adverse selection*, or anti-selection, refers to the effect of sicker than average individuals enrolling in a product. In the pricing of a new

type of product targeted to the currently uninsured population, the concern is for the potential for adverse selection.

The potential for adverse selection is often evaluated as it is associated with program participation levels. If all eligible individuals choose to participate (100 percent participation level), no selection adjustment is necessary. However, very few programs, even with low out of pocket costs, will achieve 100 percent participation. For a new product targeting individuals with no coverage, those that choose to enroll and pay the associated premium will tend to be sicker individuals than those who choose not to enroll. Low participation levels would be expected to be associated with enrolled populations that are materially sicker than the average eligible population.

Research suggests that health insurance participation levels are closely related to the premium charged. Premium levels and associated participation levels used in this analysis are based on the research on the price-sensitivity of low income individuals to health insurance premiums.<sup>6</sup> For the cost estimates contained in this report, Mercer assumed that 50 percent of eligible individuals would choose to participate in the full Medicaid expansion option. Due to the lower benefit and higher cost sharing levels in the limited benefit options, Mercer assumed a 30 percent participation rate for these options. Even though the limited benefit options have lower premium levels, the substantially higher cost sharing is likely to deter many eligible individuals from participating.

Cost estimates for the full Medicaid expansion include a 24 percent upward utilization adjustment to account for adverse selection. For the limited benefit expansions, 29 percent utilization adjustment is used. The lower assumed participation rate suggests a higher selection adjustment is appropriate.

## Non-Medical Expenses

The options developed are assumed to be administered by the State Medicaid program. According to reports filed by the State with CMS, Medicaid administration costs are approximately 4% of expenses. The cost estimates provided in this report do not include a provision for administration or profit.

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<sup>6</sup> Kaiser Commission on Medicaid and the Uninsured: The Difference Different Approaches Make: Comparing Proposals to Expand Health Insurance. 1999.

# 4

## Private Sector Options

One of the options commonly expressed during Uninsured Focus Groups held early in the HRSA project was the desire for more options available to small employers through privately offered health insurance, especially with limited benefit plans.

As a result of this interest, the Task Force asked Mercer to develop estimates for the relative costs that could be expected for tiered limited benefit plans offered in the small employer market. Privately-offered products are priced primarily through market forces, and designs and prices would vary by offering carriers. However, the products designed and priced in this analysis provide an illustration of the general cost level and impact of tier differences that can be expected with this type of product.

### Design

The illustrative product priced is a three tiered product that can be thought of as a base plan (Tier 1), with the option to “buy up” to higher levels of coverage (Tiers 2 and 3). All three tiers can still be considered limited benefit plans, as they provide considerably less coverage than the comprehensive health insurance plans that currently dominate the small employer market. The services covered by the product are: inpatient hospital care, physician visits, diagnostic testing, emergency room, prescription drugs, and behavioral health. The three tiers have different limits and cost sharing requirements, as shown in the detailed grid provided as Appendix B.1.

Tiers 2 and 3 include disease management programs, and eligible enrollees who actively participate in those programs will not be subject to certain coverage limits that would otherwise apply (e.g., in number of physician office visits or prescriptions available).

### Results

The tables below show the expected cost associated with the tiered product in two ways. The first table below shows the expected average monthly cost for adults and children

separately, with a final column that shows the average per covered individual (PMPM). The second table shows how those average costs might translate into premium levels, and how those premiums might be shared between employers and their employees. The word “might” is used here because premium rates and contributions can be structured in a variety of ways from the same PMPM cost basis, depending on employer strategy. The premium relationships shown in this table are fairly common, and the split between employer and employee is based on the average level of employer contribution in the North Carolina small employer market.<sup>7</sup>

**Monthly Cost Estimates for Calendar Year 2006**

	<b>Adult</b>	<b>Child</b>	<b>Member</b>
Tier 1	\$150	\$ 92	\$130
Tier 2	\$232	\$ 99	\$186
Tier 3	\$270	\$107	\$213

**Illustrative Monthly Premium Rates and Contributions (CY 2006)**

	<b>Total</b>	<b>Employer</b>	<b>Employee</b>
<b>Tier 1</b>			
Single	\$156	\$132	\$ 24
Family	\$420	\$273	\$147
<b>Tier 2</b>			
Single	\$223	\$190	\$ 33
Family	\$602	\$392	\$210
<b>Tier 3</b>			
Single	\$255	\$217	\$ 38
Family	\$689	\$448	\$241

These results are based on the assumption that the product is offered in the small employer market on a guaranteed issue basis (that is, no groups can be turned down due to medical history). Other standard industry requirements, such as participation rate requirements, are assumed to apply. There are other key assumptions that have been used in the development of these results; please see the following section of this report for detail.

It is important to realize that the costs shown in these tables are for the covered benefits only. That is, they do not represent the costs associated with all health care that may be needed by the enrolled individuals. For example, even the richest of these tiers does not

<sup>7</sup> See, for example, results from MEPS-IC, Insurance Component Tables, Health Insurance Cost Study at [http://www.meps.ahrq.gov/Data\\_Pub/IC\\_Tables.htm](http://www.meps.ahrq.gov/Data_Pub/IC_Tables.htm) (as accessed January 2006).

cover such commonly used services as outpatient surgery or chiropractic care. Covered individuals may forgo these uncovered services or may bear the costs for those services as out-of-pocket costs.

## Methodology

To develop cost estimates for this product, Mercer used a standard actuarial cost estimate approach: identify base data that is the most comparable available to the population and environment being considered, and then make adjustments to that data for product and population elements that are expected to differ from the base data. Finally, estimate the non-medical expense portion of the premium cost.

Cost estimates generated by this type of approach are best interpreted as a point estimate within a reasonable range of results. Actual results experienced would be certain to differ from projections to the extent that assumptions are not precisely realized in fact.

For the tiered product described above, Mercer used NC claims data from the private health insurance market, and made the following adjustments to it:

- trend,
- benefit package,
- population health, and
- selection effects.

Each of these elements is discussed below, and a summary of adjustments and their impacts on each Tier's price development is provided in Appendix B.2.

## Base Data

Mercer used the North Carolina subset of a large national claims dataset to which it subscribes as the base data for this analysis. The database includes claims level detail for claims processed by multiple health insurance carriers, predominantly for mid-to-large employer groups. The most recent calendar year for which detailed North Carolina-specific data was available was 2002. Trended data were compared to more recent sources of regional summary experience for reasonableness. Source data were reviewed for reasonableness and suitability, but were not audited. Material errors or omissions in the source data could produce results with material error or omission.

Mercer used this database as a source of enrollment demographics, service utilization, and cost levels. The cost levels in the claims data set represent an average discount from billed charges of approximately 35 percent (across all categories of service). This cost level is a key component of the cost estimates provided in this report. Some State carriers may be able to achieve more favorable arrangements with providers and some may have arrangements that are not this favorable, which would lead to pricing differences in an actual market setting.

## Trend

As the base data represents services provided in the past, those baseline costs and utilization are trended to reflect expected changes in technology, utilization, and reimbursement levels between the historical period (CY02) and the projection period (CY06). Mercer developed trend factors separately for utilization and unit cost for each of the covered services. Trend factors were based on proprietary analysis that Mercer conducts semi-annually on trends in employer-sponsored health insurance, other published trend analyses, and Global Insight (formerly DRI).

A particular consideration in the utilization trend factors used in this analysis is the impact of the product's coverage limits. The effects of underlying utilization trend are considerably dampened in the product pricing as a result of the tight benefit limits.

## Benefit Package

The base data reflect claims experienced for typical comprehensive PPO health insurance products. The proposed limited benefit tiers differ considerably from that structure in terms of what benefits are covered and the limits that apply to the covered benefits. First, Mercer adjusted the base data by removing all services that were not covered services under the tiered benefit plan. This included services like outpatient surgery and certain other treatments provided in outpatient settings. Second, covered services were adjusted to reflect the impact of benefit limits, such as the limit of 8 physician visits annually on Tier 2. These adjustments were made based on the patterns of service use shown in the base data.

A particular consideration in the development of limit adjustments for this product was the impact of waiving benefit limits for eligible individuals who actively participate in the disease management program. To incorporate the effects of this design feature, Mercer focused on two primary disease conditions for which disease management impact can be significant in an under-65 population: asthma and diabetes. Mercer researched the incidence of disease and the service utilization patterns of individuals with these conditions. Disease management participation levels were assumed to be high among eligible individuals due to the significant advantages associated with participation.

## Population Health

Population health adjustments are appropriate since the health status of the targeted population will differ from that inherent in the base data. Mercer made two population health adjustments: an income effect adjustment and a pent-up demand adjustment.

The income effect adjustment used here is similar to the FPG adjustment used for the public sector options discussed in Section 3, but it works in the opposite direction. As noted before, much research has documented that health status tends to be positively correlated with income levels. Given an underlying assumption that the buyers of this tiered limited benefit product would tend to be lower income than the purchasers of the

comprehensive products inherent in the base data, an upward morbidity adjustment is appropriate to reflect potentially higher cost associated with the target population.

Pent-up demand adjustments are discussed in Section 3. As these private sector options are targeted towards individuals who are currently uninsured, a pent-up demand adjustment is appropriate here as well. Typically pent up demand is assumed to be a material factor during only the first few months of a group's coverage.

As with all utilization adjustments described for this analysis, much care must be taken to ensure that the composite effect of the adjustments produces appropriate results given the benefit limits of the product. As a result of the benefit limits, adjustments for population health effects may appear considerably lower for this product than might be used elsewhere for comprehensive coverage.

## Selection Effects

Selection effects are defined and discussed in Section 3. Due to the significant out-of-pocket costs and the historical low participation rates when limited benefit products have been offered, Mercer assumed that a tiered limited benefit option would generate relatively low participation levels. The cost estimates provided above are based on assumed participation levels of no higher than 40 percent. As shown in Appendix B.2, the adverse selection impact is greatest for Tier 3 (the richest benefit), with decreasing effect on Tiers 2 and 1. This lesser effect is a result of the impact of the tighter benefit limits. For example, each Tier 1 enrollee can receive only 4 physician office visits annually, so the cost increase that can be caused by a highly utilizing population is mitigated by that benefit cap.

It is possible that participation levels could be significantly less than 40 percent. Due to the above-described dampening effect of the tight benefit limits, lower participation levels would likely not impact costs significantly on Tiers 1 and 2, although they could increase Tier 3 costs by a few percentage points.

## Non-Medical Expenses

Private sector health insurance products include significant non-medical expenses, and these must be incorporated into cost and premium estimates. Non-medical expenses include costs associated with carrier overhead, claims processing, utilization review/case management, commissions, return on capital, and risk/contingency allowances. The level of non-medical expenses is influenced by the targeted market segment and the method of product offering, among other things.

For the pricing of this illustrative tiered limited benefit product, Mercer used a non-medical expense load based on the assumption that the product is offered on a guaranteed issue basis in the small group market. Another key assumption used was that the product was offered by insurance companies or health plans that have other business in the state, including disease management programs, over which administrative and disease

management costs could be spread. As a result of the lower base associated with the limited nature of the benefit, the non-medical expense is assumed to comprise a higher percentage of premiums than the 20 to 25 percent typically seen in the small group market. The prices shown in this chapter assume non-medical expenses from 28 to 30 percent of premium (see Appendix B.2 for specifics by Tier.)

# 5

## Focus Group Sample Packages

The Cecil G. Sheps Center for Health Services Research (at the University North Carolina-Chapel Hill) requested that Mercer assist in developing some prototype benefit packages and relative prices that could be used as examples in the HRSA grant focus group meetings conducted in Spring 2005. The purpose of these prototypes was to serve as a starting point for discussions about which medical services are valued the most, what design features (including cost sharing levels) are the most appealing, and the cost tradeoffs associated with some of these priorities.

The Cecil G. Sheps Center for Health Services Research (at the University North Carolina-Chapel Hill) and Mercer decided upon five different styles of plans to use as prototypes in the focus group meetings. Those five designs and the estimated premium levels for each are summarized below. More detail is available in Appendix C.

***Traditional Preferred Provider Organization (PPO):*** This is a comprehensive benefit package with cost sharing levels that are typical for the commercial group health insurance market.

***HSA Compatible High Deductible Plan:*** This product represents the new “consumer-directed” initiative in the health insurance industry. It involves a comprehensive benefit package with a high deductible, which can be paired with a tax-advantaged Health Savings Account.

***Limited Benefit Plan:*** This product provides a limited set of benefits, focusing on preventive and routine physician care. Inpatient hospital, dental and vision benefits are not covered.

***Hospital Only Plan:*** Coverage is for inpatient hospitalization only, with no deductible or other cost sharing requirements.

**Limited Benefit Plan with High Deductible Hospital Coverage:** This product covers preventive and routine care, similar to the Limited Benefit Plan described above, but includes a catastrophic hospital coverage benefit. The first \$5,000 of annual hospital expenses must be covered out of pocket, but expenses after that are covered 100 percent by the plan.

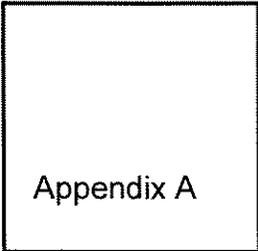
The table below shows illustrative premiums associated with each of the prototypes described above.

**Illustrative Premiums for Prototype Health Insurance Product Options**

<b>Product Type</b>	<b>Single Premium</b>	<b>Family Premium</b>
Traditional PPO	\$296	\$887
HSA – Compatible High Deductible Plan	\$239	\$718
Limited Benefit Plan	\$151	\$452
Hospital Only Plan	\$ 98	\$293
Limited Benefit with Hospital	\$192	\$576

Mercer estimated the relative premium levels of these products using a proprietary cost model designed to estimate costs associated with ESI. The costs are based on national averages and have not been adjusted for practice patterns or health care costs for North Carolina. They include actuarial assumptions that in Mercer’s experience are typical in product development and pricing in the commercial health insurance arena.

Mercer does not warrant that insurance companies or managed care organizations in North Carolina would be willing to offer these products at these prices. These rates are illustrative only.



Appendix A

## **Public Sector Options**

- A.1 — Public Sector Benefit Packages
- A.2 — Summary of Premiums and Cost Sharing for Full Medicaid Expansion
- A.3 — Summary of Premiums and Cost Sharing for \$10,000 IP Limited Benefit
- A.4 — Summary of Premiums and Cost Sharing for \$5,000 IP Deductible Limited Benefit
- A.5 — Full Benefit Expansion: Summary of Adjustments
- A.6 — Limited Benefit \$5,000 IP Deductible: Summary of Adjustments
- A.7 — Limited Benefit \$10,000 IP Limit: Summary of Adjustments

Public Sector Benefit Packages  
 Children between 200-300% FPG  
 Adults <100% FPG; Adults 100-200% FPG; Adults 200-300% FPG

Category of Service	Full Medicaid			Modified Paired Down Medicaid Light: \$5,000 deductible					Modified Paired Down Medicaid Light: \$10,000 IP Total				
	Covered Service	Copayment	Benefit Limit	Covered Services	Copayment	Coinsurance	Deductible	Benefit Limit	Covered Services	Copayment	Coinsurance	Deductible	Benefit Limit
Premium	1%-4% ind / 2%-8% family			0.5%-2% ind / 1%-4% family					0.5%-2% ind / 1%-4% family				
Inpatient Non-Maternity Physical Health	Yes			Yes		20%	\$5,000 Deductible Combined with Inpt. BH		Yes		20%	\$100 combined with IP BH	\$10,000 limit per calendar year for inpatient BH/physical health (total)
Skilled Nursing Facility	Yes			Not Covered					Not Covered				
Outpatient Physical Health	Yes					20%					20%		
Medical / Surgery	Yes					20%					20%		
PT, OT, & Speech Therapy	Yes			Yes, includes PT, OT, ST		20%		Limit 25 visits per CY	Yes, includes PT, OT, ST		20%		Limit 25 visits per CY
Emergency Room	Yes			Yes	\$100 (Waived if admitted)	20%			Yes	\$100 (Waived if admitted)	20%		
Primary Care Physician	Yes	\$3	24 visit limit/year for medical visits [1]	Yes	<150%: \$10 151-300%: \$20			5 physician visit/year (PCP and specialty total)(add'l wellness visit allowed, 1 for adults, acc'g to periodicity schedule children)(add'l visits allowed if actively participating in CCNC and approved by PCP)	Yes	<150%: \$10 151-300%: \$20			5 physician visit/year (PCP and specialty total)(add'l wellness visit allowed, 1 for adults, acc'g to periodicity schedule children)(add'l visits allowed if actively participating in CCNC and approved by PCP)
Specialist Physician	Yes	\$3	24 visit limit/year for medical visits [1]	Yes	<150%: \$20 151-300%: \$40				Yes	<150%: \$20 151-300%: \$40			
Inpatient Non-Maternity Behavioral Health	Yes		Excludes state psychiatric hospitals for individuals age 21-64	Yes		20%	\$5,000 deductible, combined with IP physical health.		Yes		20%	\$100 (combined with IP physical health)	\$10,000 limit per calendar year for inpatient BH/physical health (total)
Outpatient Behavioral Health	Yes	\$3 for private psychiatrists	PA required after 8th visits for adults, 26th visit for children	Yes	<150%: \$20 151-300%: \$40			20 visits per calendar year	Not Covered	<150%: \$20 151-300%: \$40			20 visits per calendar year
Behavioral Health Other	Yes			Not Covered					Not Covered				
Pharmacy (Tiered Copayment)	Yes		6 prescription/months limit [2]	Yes				6 Total Scripts per Month	Yes				6 Total Scripts per Month
Generic	Yes	\$1			\$5 (Tier 1)			See monthly limit		\$5 (Tier 1)			See monthly limit
Brand	Yes	\$3			\$30 (Tier 2)			See monthly limit		\$30 (Tier 2)			See monthly limit
Brand Non-Formula	Yes	\$3			\$60 (Tier 3)			See monthly limit		\$60 (Tier 3)			See monthly limit
Family Planning	Yes			Yes				Contraceptives covered (doctors visit under 5 visit limit or wellness visit), not included in 6 script limit/mo.	Yes				Contraceptives covered (doctors visit under 5 visit limit or wellness visit), not included in 6 script limit/mo.

Public Sector Benefit Packages  
 Children between 200-300% FPG  
 Adults <100% FPG; Adults 100-200% FPG; Adults 200-300% FPG

Category of Service	Full Medicaid				Modified Pared Down Medicaid Light: \$5,000 deductible				Modified Pared Down Medicaid Light: \$10,000 IP Total				
	Covered Service	Copayment	Benefit Limit	Covered Services	Copayment	Coinsurance	Deductible	Benefit Limit	Covered Services	Copayment	Coinsurance	Deductible	Benefit Limit
Case Management	Yes			Yes				By CCNC only	Yes				By CCNC only
Home Health	Yes			Not covered					Not Covered				
Personal Care	Yes		No more than 3.5 hours/day or 60 hours/month [3]	Not covered					Not Covered				
School Based Services	Yes			Yes, to extent school is provider of covered services					Yes, to extent school is provider of covered services				
Lab & Radiology	Yes			Yes		20%	Requires pre-authorization of MR/PET scans		Yes		20%	Requires pre-authorization of MR/PET scans	
Dental	Yes			Not covered					Not Covered				
DME / Supplies	Yes		Prosthetics/Orthotics only covered for children <21	Yes		20%	\$500 limit with prior approval (diabetic supplies unlimited)		Yes		20%	\$500 limit with prior approval (diabetic supplies unlimited)	
EPSDT	Yes		No cost sharing for children on any services	Well visits and immunizations only					Well visits and immunizations only				
Ambulance	Yes			Yes	\$150, waived if admitted	20%			Yes	\$150, waived if admitted	20%		
Maternity	Yes	No cost sharing for pregnant women on any services		Yes, limited		20%	Prenatal care only covered for women if income >185% FPG. Not covered for dependents (<18 years old, b/c already covered by Medicaid)		Yes, limited		20%	Prenatal care only covered for women if income >185% FPG. Not covered for dependents (<18 years old, b/c already covered by Medicaid)	
Podiatry	Yes		Included in 24 visit limit	Yes	<150%: \$20 151-300%: \$40		Subject to physician visit limit		Yes	<150%: \$20 151-300%: \$40		Subject to physician visit limit	
Optometry	Yes		Included in 24 visit limit	Yes	<150%: \$20 151-300%: \$40		Eye exam subject to physician visit limit		Yes	<150%: \$20 151-300%: \$40		Eye exam subject to physician visit limit	
Annual Benefit Limit	None						\$1 million annually						\$1 million
Out of pocket maximum	None			Yes			\$2,500/person out-of-pocket maximum on coinsurance						\$2,500/person out-of-pocket maximum on coinsurance

Notes

- [1] Medical visits counted in limit: physicians inpatient and outpatient, optometrists, chiropractors, podiatrists. Exceptions made for life threatening or certain other chronic conditions (uncontrolled diabetes, sickle cell, chemo, end stage renal or lung disease, hemophilia). Limits only apply to adults.
- [2] Exceptions to limit same as for ambulatory visits (e.g., life threatening, chronic conditions)
- [3] Add'l 20 hrs/mo. Personal services available with prior authorization

**Summary of Premiums and  
Cost Sharing for Full Medicaid Expansion**

**Appendix A.2**

	Adults				Children	
	37-100% FPG	100-150% FPG	150-200% FPG	200-300% FPG	200-300% FPG	200-300% FPG
<b>Enrollment</b>	62,810	37,359	29,679	23,991		19,728
<b>Member Months</b>	754,000	448,000	356,000	288,000		237,000
<b>PMPM</b>	\$ 527.53	\$ 515.09	\$ 504.86	\$ 494.27	\$	\$ 257.19
<b>Federal (63%)</b>	\$ 250,586,280	\$ 141,926,260	\$ 105,547,370	\$ 74,143,440	\$	\$ 31,303,200
<b>State (31.5%)</b>	\$ 125,293,140	\$ 70,963,130	\$ 52,773,690	\$ 37,071,720	\$	\$ 15,651,600
<b>County (5.5%)</b>	\$ 21,876,580	\$ 12,390,390	\$ 9,214,450	\$ 6,472,840	\$	\$ 2,732,820
<b>Member</b>	\$ -	\$ 5,480,220	\$ 12,193,490	\$ 24,661,000	\$	\$ 11,267,380
<b>Total</b>	\$ 397,756,000	\$ 230,760,000	\$ 179,729,000	\$ 142,349,000	\$	\$ 60,955,000

	Adults				Children	
	37-100% FPG	100-150% FPG	150-200% FPG	200-300% FPG	200-300% FPG	200-300% FPG
<b>PMPM</b>	\$ 527.53	\$ 502.86	\$ 470.61	\$ 408.64	\$	\$ 209.65
<b>Public</b>	\$ -	\$ 12.23	\$ 34.25	\$ 85.63	\$	\$ 47.54
<b>Member Premium</b>	\$ 4.13	\$ 4.03	\$ 3.95	\$ 3.87	\$	\$ 2.37
<b>Member Out of Pocket</b>						

**Summary of Premiums and  
Cost Sharing for \$10,000 IP Limited Benefit**

**Appendix A.3**

	Adults				Children	
	37-100% FPG	100-150% FPG	150-200% FPG	200-300% FPG	200-300% FPG	200-300% FPG
<b>Enrollment</b>	37,686	22,415	17,807	14,394	11,837	
<b>Member Months</b>	452,000	269,000	214,000	173,000	142,000	
<b>PMPM</b>	\$ 300.80	\$ 293.71	\$ 282.94	\$ 277.01	\$ 145.39	
<b>Federal (63%)</b>	\$ 85,656,060	\$ 48,737,880	\$ 35,837,610	\$ 25,525,170	\$ 10,880,440	
<b>State (31.5%)</b>	\$ 42,828,030	\$ 24,368,940	\$ 17,918,810	\$ 12,762,580	\$ 5,440,220	
<b>County (5.5%)</b>	\$ 7,477,910	\$ 4,254,890	\$ 3,128,680	\$ 2,228,390	\$ 949,880	
<b>Member</b>	\$ -	\$ 1,645,290	\$ 3,664,900	\$ 7,406,860	\$ 3,375,460	
<b>Total</b>	\$ 135,962,000	\$ 79,007,000	\$ 60,550,000	\$ 47,923,000	\$ 20,646,000	

	Adults				Children	
	37-100% FPG	100-150% FPG	150-200% FPG	200-300% FPG	200-300% FPG	200-300% FPG
<b>PMPM</b>	\$ 300.80	\$ 287.59	\$ 265.82	\$ 234.19	\$ 121.62	
<b>Public</b>	\$ -	\$ 6.12	\$ 17.13	\$ 42.81	\$ 23.77	
<b>Member Out of Pocket*</b>	\$ 92.85	\$ 90.66	\$ 93.79	\$ 91.82	\$ 50.09	

**Summary of Premiums and  
Cost Sharing for \$5,000 IP Deductible Limited Benefit**

**Appendix A.4**

	Adults			Children 200-300% FPG
	37-100% FPG	100-150% FPG	150-200% FPG	
Enrollment	37,686	22,415	17,807	14,394
Member Months	452,000	269,000	214,000	173,000
PMPM	\$ 292.00	\$ 285.12	\$ 274.53	\$ 268.77
Federal (63%)	\$ 83,151,180	\$ 47,282,580	\$ 34,702,980	\$ 24,626,790
State (31.5%)	\$ 41,575,590	\$ 23,641,290	\$ 17,351,490	\$ 12,313,390
County (5.5%)	\$ 7,259,230	\$ 4,127,840	\$ 3,029,630	\$ 2,149,960
Member	\$ -	\$ 1,645,290	\$ 3,664,900	\$ 7,406,860
Total	\$ 131,986,000	\$ 76,697,000	\$ 58,749,000	\$ 46,497,000

	Adults			Children 200-300% FPG
	37-100% FPG	100-150% FPG	150-200% FPG	
PMPM	\$ 292.00	\$ 279.00	\$ 257.40	\$ 225.95
Public	\$ -	\$ 6.12	\$ 17.13	\$ 42.81
Member Premium	\$ 112.06	\$ 109.42	\$ 112.18	\$ 109.82
Member Out of Pocket				
				\$ 116.83
				\$ 23.77
				\$ 69.17

A.5 — Full Benefit Expansion: Summary of Adjustments  
(200-300% FPG Provided for Illustration)

	<b>Adults</b>	<b>Children</b>
Base PMPM <sup>8</sup>	\$411.42	\$170.16
Rx Rebate	-3.29%	-2.46%
Trend – Annual	6.95%	6.60%
– Cumulative	26.51%	25.07%
Trended Base PMPM	\$503.36	\$207.58
Cost Sharing – Unit Cost	-0.78%	-0.91%
Cost Sharing – Utilization	0.00%	0.00%
Pent Up Demand <sup>9</sup>	4.36%	5.37%
Health Status (FPG)	-7.42%	-6.42%
Workforce Effect	-20.00%	0.00%
Adult Male Adjustment	-3.51%	0.00%
Demographic Mix	7.00%	2.28%
Anti-Selection	24.00%	24.00%
Final PMPM	\$494.27	\$257.19

<sup>8</sup> NC Medicaid FFS data for non-disabled families and children, services provided from July 1, 2001 through June 30, 2004.

<sup>9</sup> Adjustment is a first-year adjustment only.

### A.6 — Limited Benefit \$5,000 IP Deductible: Summary of Adjustments (200-300% FPG Provided for Illustration)

	<b>Adults</b>	<b>Children</b>
Base PMPM (cov services only) <sup>10</sup>	\$345.46	\$153.58
Rx Rebate	-4.64%	-3.32%
Trend – Annual	7.84%	7.29%
– Cumulative	30.22%	27.93%
Trended Base PMPM	\$428.97	\$189.96
Out-of-Pocket Maximum	2.54%	2.54%
Visit Limitations & Annual Max	-18.07%	-19.28%
Cost Sharing – Unit Cost	-25.23%	-26.00%
Cost Sharing – Utilization	-6.96%	-6.35%
Pent Up Demand <sup>11</sup>	4.36%	4.51%
Health Status (FPG)	-7.42%	-6.42%
Workforce Effect	-20.00%	0.00%
Adult Male Adjustment	-4.00%	0.00%
Demographic Mix	12.00%	2.28%
Anti-Selection	29.00%	29.00%
Final PMPM	\$268.77	\$140.60

<sup>10</sup> NC Medicaid FFS data for non-disabled families and children, services provided from July 1, 2001 through June 30, 2004.

<sup>11</sup> Adjustment is a first-year adjustment only.

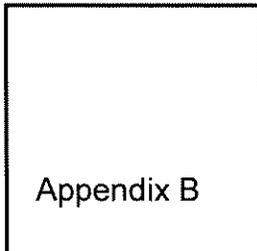
### A.7 — Limited Benefit \$10,000 IP Limit: Summary of Adjustments (200-300% FPG Provided for Illustration)

#### Medical Limited Benefit Expansion \$10K IP Limit — 2001 to 300 Percent FPG

	Adults	Children
Base PMPM (cov services only) <sup>12</sup>	\$345.46	\$153.58
Rx Rebate	-4.53%	-3.23%
Trend – Annual	7.69%	7.14%
– Cumulative	29.59%	27.32%
Trended Base PMPM	\$427.42	\$189.23
Out-of-Pocket Maximum	2.54%	2.54%
Visit Limitations & Annual Max	-15.47%	-16.46%
Cost Sharing – Unit Cost	-25.10%	-25.82%
Cost Sharing – Utilization	-6.76%	-6.16%
Pent Up Demand <sup>13</sup>	4.23%	4.36%
Health Status (FPG)	-7.42%	-6.42%
Workforce Effect	-20.00%	0.00%
Adult Male Adjustment	-4.00%	0.00%
Demographic Mix	12.00%	2.28%
Anti-Selection	29.00%	29.00%
Final PMPM	\$277.01	\$145.39

<sup>12</sup> NC Medicaid FFS data for non-disabled families and children, services provided from July 1, 2001 through June 30, 2004.

<sup>13</sup> Adjustment is a first-year adjustment only.



## **Private Sector Options**

B.1 — Tiered Benefit Packages: Illustrative Product

B.2 — Tiered Benefit Plan Cost Per Member Estimates: Summary of Adjustments

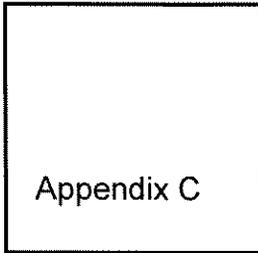
## B.1 — Tiered Benefit Packages: Illustrative Product

	<b>Tier 1 Plan</b>	<b>Tier 2 Plan</b>	<b>Tier 3 Plan</b>
Physician Visits	4 Office visits/year with \$25/visit copay. Maximum of \$500 per year	8 Office visits/year with \$25/visit copay. Maximum of \$1,000 per year	Unlimited office visits with \$25/visit copay. Maximum of \$2,000 per year
Inpatient Hospital Care	80% coverage, subject to \$500 deductible. \$10,000/year max	80% coverage, subject to \$500 deductible. \$25,000 max.	80% Coverage, subject to \$500 deductible, \$50,000 max.
Diagnostic Testing	80% coverage; subject to \$250/year max	80% coverage; subject to \$500/year max	80% coverage; subject to \$1000/year max
ER	\$150/year max, subject to \$75 copay. Waived if admitted	\$150/year max, subject to \$75 copay. Waived if admitted.	\$150/year max, subject to \$75 copay. Waived if admitted.
Prescription Drug Benefit	3 Tier Copay: \$15 generic; \$30 brand name when generic not available; \$50 brand name when generic available. Annual max \$1,000/year.	3 Tier Copay: \$15 generic; \$30 brand name when generic not available; \$50 brand name when generic available. Annual max \$2,000/year.	3 Tier Copay: \$15 generic; \$30 brand name when generic not available; \$50 brand name when generic available. Annual max \$4,000/year.
Mental/Behavioral Health Services	N/A	12 office visits/year with \$35/visit copay. Maximum of \$1,000 per year.	24 office visits/year with \$35/visit copay. Maximum of \$2,000 per year.
Other	N/A	Disease management services for select conditions.	Same as Tier 2.
Monthly Premium Estimates			
Adult	\$150	\$232	\$270
Child	\$92	\$99	\$107
Member	\$130	\$186	\$213

## B.2 — Tiered Benefit Plan Cost Per Member Estimates: Summary of Adjustments

	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>
Base PMPM (2002)	<b>\$176.71</b>	<b>\$176.71</b>	<b>\$176.71</b>
Trend – Annual	3.7%	3.7%	3.7%
– Cumulative	15.6%	15.6%	15.6%
Trended Base PMPM	<b>\$204.98</b>	<b>\$204.98</b>	<b>\$204.98</b>
Visit Limits	-40.91%	-23.57%	-14.18%
Cost Sharing	-29.14%	-28.80%	-28.49%
Pent Up Demand	.52%	1.58%	2.99%
Health Status (FPG)	.50%	1.60%	2.50%
Anti-Selection	5.00%	10.00%	14.00%
DM adjustment	n/a	5.04%	1.12%
Medical PMPM	<b>\$90.79</b>	<b>\$132.59</b>	<b>\$152.45</b>
Non-medical expense PMPM	\$38.94 (30% of premium)	\$53.54 (28.8% of premium)	\$60.46 (28.4% of premium)
Total PMPM	<b>\$129.73</b>	<b>\$186.13</b>	<b>\$212.91</b>

Note: Totals may not reproduce exactly due to rounding of the adjustment factors for display.



## **Focus Group Options**

Appendix C

Sample Focus Group Options  
Benefit Packages

<i>General Description</i>	PPO	HSA	LBP	Hospital Only Plan	LBP w/High Deduct Hosp
<p>Comprehensive benefit package with hospitalization coverage. Different out of pocket costs for IN network and OUT of network providers.</p>	<p>✓ ✓ ✓ ✓ ✓ ✓ ✗ ✓</p>	<p>High deductible comprehensive benefit package which can be paired with health savings account to defray out of pocket costs until deductible is met. HSA provides tax advantages for portion of contributions toward savings account.</p> <p>✓ ✓ ✓ ✓ ✓ ✓ ✗ ✓</p>	<p>Limited benefit package designed to cover preventive and routine care. Covered procedures limited to those conducted in primary care or specialist office setting. No hospitalization coverage.</p> <p>✓ ✗ ✓ ✓ if in physician office if in physician office ✗ ✓</p>	<p>Provides inpatient hospitalization coverage only. No preventive or routine care benefits.</p> <p>✗ ✓ ✗ ✗ ✗ ✗ ✗ ✗</p>	<p>Limited benefit package designed to cover preventive and routine care. Covered procedures limited to those conducted in primary care or specialist office setting. Hospitalization coverage subject to high deductible.</p> <p>✓ ✓ ✓ if in physician office if in physician office ✗ ✓</p>
<p><b>Covered Services</b> Primary Care Visits Inpatient Hospitalization Prescription Drugs Specialists Preventive Services (mammogram, papsmeat) Lab, x-ray, tests Dental or Vision Mental health and substance abuse services</p>	<p>\$350 IN / \$600 OUT 20% IN / 40% OUT \$15 physician Rx: \$10 generic / \$15 brand ER \$100 (waived if admitted) \$1,500 IN / \$3,000 OUT</p>	<p>\$3,000 20% n/a Rx: \$10 generic / \$15 brand \$1,500 IN / \$3,000 OUT</p>	<p>\$0 n/a \$15 physician Rx: \$10 generic / \$15 brand n/a</p>	<p>\$0 n/a n/a n/a</p>	<p>\$5,000 (hospital-only) n/a \$15 physician Rx: \$10 generic / \$15 brand n/a</p>
<p><b>Out of Pocket Costs</b> Deductible Coinsurance Copays Coinsurance Maximum</p>	<p>\$296 \$887</p>	<p>\$239 \$718</p>	<p>\$151 \$452</p>	<p>\$98 \$293</p>	<p>\$192 \$576</p>
<p><b>Monthly Premium</b> Individual Only Family Coverage</p>	<p>Note: The premium prices listed here do not include any contribution to the health savings account.</p>				

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