

# Actuarial Cost Projections for the Proposed Montana K12 Statewide Health Insurance Program

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# MONTANA K12 STATEWIDE HEALTH INSURANCE PROGRAM

## Actuarial Cost Projections

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## I. EXECUTIVE SUMMARY

### A. PURPOSE

The Strategic Health Care Consulting division of eBenX, a SHPS Company, prepared this report to provide updated actuarial projection of the claim costs for the proposed Montana K12 Statewide Health Insurance Program (K12-SHIP). The proposal aims to ensure Montana's public school workforce access to affordable and quality healthcare by establishing one statewide risk pool that will replace more than 230 independent school system plan sponsors. The projected claim costs will be used to set appropriate premium budgets for the period July 1, 2006 through June 30, 2007 or fiscal year 2007 (FY07), for presentation to the 2005 legislature.

This report contains the following items:

- A best estimate of projected claim costs and premiums per employee per month (PEPM) for medical, including prescription drugs;
- A discussion of the data sources, assumptions and methodology used to calculate the projected costs;
- Projected premium rates by tier for three alternate plan designs; and
- Discussion of related issues that may be of concern regarding the structure of the K12-SHIP pool.

### B. HIGHLIGHTS

- The best estimate FY07 projected premiums per employee per month (PEPM), assuming plan administration expenses can be reduced to 7% of premiums are:
  - ✓ \$533 for the Standard Medical Benefit Plan Design;
  - ✓ \$610 for the Preferred Medical Benefit Plan Design;
  - ✓ \$332 for the Basic Medical Benefit Plan Design;
- Based on 18,000 insured employees and 2,100 retirees, and initial K12-SHIP participation assumptions, the projected annual cost of the program for the plan year beginning July 1, 2006 is \$124 million.
- Based on 19,000 employees qualifying for the proposed K12-SHIP \$200 "per eligible active employee per month" state credit, the required credit is \$45.6 million in FY07. The credit is expected to grow based on US BLS medical cost inflation.

## II. DEVELOPMENT OF PROJECTED MEDICAL COSTS

### A. DATA SOURCES

With the assistance of MEA-MFT, eBenX received demographic, premium and claims experience, and plan design information for the Montana Unified School Trust, Blue Cross Blue Shield of Montana, and many of the local self-funded school plans. The data included in this report represents approximately 86% of the estimated 19,000 eligible K12-SHIP school employees. The table below summarizes the data used in the analysis to date.

Funding Type	Data Used in Analysis	
	Number of Participants	% of Total Eligible
Self-Funded Plans	7,079	37%
MUST	6,212	33%
BCBS – MSHWP Pool	1,512	8%
BCBS – Other	1,570	8%
Total	16,373	86%

\* Source: "Establishing a Statewide Health Benefit Plan for K-12 Public School Employees – Needed Reform that Montana Can Accomplish in 2005", Tome Bilodeau (updated September 2004)

In addition, data was provided by MEA-MFT for approximately 11,800 employees under the Traditional plan of the State of Montana employees benefit plan, with similar characteristics as Montana's school plan sponsors. However, because the high proportion of school districts providing data resulted in a fully credible sample, the State plan data was used as a reasonableness check only.

## **B. ASSUMPTIONS AND METHODOLOGY**

The assumptions and methodology incorporated in developing these cost projections mirror those of our reports published in December 2002 and May 2004. Most recent historical claim and premium information was converted to a per employee per month (PEPM) incurred claim cost for each plan sponsor. The PEPM cost was then adjusted for demographic and benefit differences, as well as medical trend.

The demographic composition of each plan sponsor was analyzed to determine the average demographic factor. Demographic factors for this analysis include the effects of age and gender on expected medical claims costs, with values below 1.00 reflecting below average expected costs and values above 1.00 reflecting higher than average costs, relative to a standard population. Geographic factors were not included, as the intention is to provide a single set of rates applicable to the entire state.

The claims data were then adjusted (or normalized) for this factor to place the claims on a comparable basis. For this report, we also assumed the number of members covered per employee will not change under the proposed K12-SHIP program.

Since benefits vary by plan sponsor, the claims data were also normalized for the value of current benefits. The value of current benefits was calculated relative to a benchmark eBenX indemnity benefit plan with a \$200 deductible, 80% coinsurance, and a \$1,000 out-of-pocket maximum. Relative values below 1.00 reflect a plan design less rich than the eBenX standard, and those above 1.00 reflect a richer benefit plan. Refer to the Summary of Benefit Provisions in Appendix B for detailed differences by plan sponsor that were taken into account. Note that the benefit provisions shown by plan sponsor reflect provisions in place during the experience period.

The table below summarizes each plan sponsor's available claims experience, value of current benefits and demographic factors:

Plan Sponsor	Employees Enrolled	Estimated Incurred Claims PEPM	Relative Value of Current Benefits	Average Demographic Factor	Normalized Claims PEPM
Billings	2,021	\$398.05	0.901	1.412	\$312.81
Bozeman	639	\$316.69	0.849	1.440	\$259.00
FrenchTown	122	\$350.19	0.875	1.282	\$312.10
Great Falls (Blue Choice)	1,510	\$381.78	0.897	1.361	\$312.84
Helena	1,032	\$328.61	0.969	1.395	\$243.06
Kalispell(BCBS)	541	\$388.77	0.811	1.361	\$352.57
Missoula	1,213	\$419.19	0.943	1.397	\$318.27
MUST	6,212	\$439.22	0.942	1.418	\$328.80
BCBS - MSHWP	1,512	\$369.64	0.985	1.323	\$283.56
BCBS - Other	1,570	\$439.62	0.926	1.399	\$339.40
Total MT Schools	16,373	\$390.50	0.929	1.396	\$313.64

Please note that the results for each district are based on their specific experience period, as medical trend will be incorporated during the cost projection step. In addition, the results do not account for any network discount differences implicit in the claims data received.

In comparing the results above to those published in the May 2004 report, there was a 10% increase in normalized claims PEPM. This increase reflects the inclusion of new district data, as well as medical trend implicit in the updated claims experience.

**C. COST PROJECTIONS PER EMPLOYEE PER MONTH**

To determine the projected claims cost for the Montana K12 Statewide Health Insurance Program, the normalized claim costs must be adjusted for medical trend, the demographics of the total population, benefit adjustments for the proposed plan designs, and any expected additional network savings. The following table displays the projected claim calculation for the Standard Benefit Plan:

Plan Sponsor	Employees Enrolled	Normalized Claims PEPM	Trend*	Projected Claims PEPM
Billings	2,021	\$312.81	1.362	\$425.95
Bozeman	639	\$259.00	1.362	\$352.67
FrenchTown	122	\$312.10	1.401	\$437.19
Great Falls	1,510	\$312.84	1.448	\$452.96
Helena	1,032	\$243.06	1.401	\$340.48
Kalispell	541	\$352.57	1.448	\$510.47
Missoula	1,213	\$318.27	1.361	\$433.24
MUST	6,212	\$328.80	1.362	\$447.72
BCBS – MSHWP	1,512	\$283.56	1.447	\$410.17
BCBS – Other	1,570	\$339.40	1.447	\$491.25
<b>Total</b>	<b>16,373</b>	<b>\$313.64</b>	<b>1.390</b>	<b>\$435.98</b>
Combined Average Demographic Factor				1.396
Plan Adjustment for Standard Plan				0.857
Adjustment for Additional Network Savings				0.950
<b>Projected Claims Cost PEPM (July 1, 2006 to June 30, 2007)</b>				<b>\$495.65</b>

*\*12% annual trend from midpoint of experience period to midpoint of FY05 (January 1, 2005), then 10% for FY06 and 9% for FY07. The reasons for lower trends are as follows: provider contracting activity has stabilized, the improved financial position of insurance companies, and the larger premium base due to high increases over the last 5 years.*

The medical trend factor varies by district depending on the experience period of historical claims data. The plan adjustment for the Standard Plan design is lower than the overall factor for the current district plans due to benefit changes such as increases to the deductible and out-of-pocket maximum. The adjustment for additional network savings is the same percentage level as the December 2002 report, and reflects additional leverage in provider contracting.

Projected claim cost estimates for two additional plans, the Preferred and Basic Plans, are presented below. These plans provide a higher and lower cost alternative to the Standard Plan. New detailed plan design information for all three proposed plans can be found in Appendix B.

Benefit Plan Name	Deductible	Coinsurance	Out-of-Pocket Maximum (including deductible)	Prescription Drugs Included?	Plan Adjustment Factor	Projected Claims PEPM
Preferred	\$300/600	80%	\$1,300/2,600	Yes	0.979	\$567
Standard	\$1,000/2,000	80%	\$2,000/4,000	Yes	0.857	\$496
Basic	\$2,000/4,000	70%	\$4,000/8,000	No	0.534	\$309

There have been adjustments to the plan designs for the Standard and Basic plans since the May 2004 report. Note that the projected claims by benefit plan adjust for plan design differences only, but do not reflect potential differences in demographics between the populations enrolling in each plan.

Below is a summary of the monthly premium and total annual budget projections assuming 70% of the population will be enrolled under the Standard Benefit Plan and the remaining 30% will be split between the Basic and Preferred Benefit Plans. Administrative expenses are now assumed to be 7% of the total premium for each benefit plan, instead of the 5% assumed in previous reports. All projected claims cost and expenses were rounded to the nearest whole dollar.

	Preferred Plan	Standard Plan	Basic Plan
July 1, 2006 Projected Claim Cost PEPM	\$567	\$496	\$309
Plan Administration Expenses	\$43	\$37	\$23
July 1, 2006 Total Premium PEPM	\$610	\$533	\$332
Annual Premium per Employee	\$7,320	\$6,396	\$3,984
Estimated Insured (20,100)	3,015	14,070	3,015
Projected Annual Program Cost	\$22,070,000	\$89,992,000	\$12,012,000
<b>Total Projected Annual Cost (All Plans)</b>			<b>\$124,074,000</b>

The estimated annual program cost of just over \$124 million is applicable for the period July 1, 2006 through June 30, 2007, and covers all benefit and administrative costs associated with the medical plan. The amount is higher than the projection contained in the May 2004 report due to the increase in assumed covered population.

Estimated administrative costs were increased from 5% to 7% of total premiums to account for an additional 1% for the Montana Comprehensive Health Association, plus an additional 1% for the regulation and financial oversight by the Department of Insurance "health services corporation", as well as a potential nominal cost for stop loss insurance.

**D. PROJECTED PREMIUM RATES BY TIER**

The following table displays the projected premium rates by tier for the K12-SHIP program using a standard tier rating structure. The assumed distribution of contracts is based on data from all districts, and the rate relativities reflect those currently used as standard for the MUST book of business.

	<b>Assumed % Distribution of Contracts</b>	<b>Rate Relativity</b>	<b>Preferred Benefit Plan (July 2006)</b>	<b>Standard Benefit Plan (July 2006)</b>	<b>Basic Benefit Plan (July 2006)</b>
Single	35.6%	1.00	\$367	\$321	\$200
Two Party	17.6%	2.00	\$734	\$642	\$400
Parent/Children	8.1%	1.90	\$697	\$610	\$380
Family	25.5%	2.50	\$918	\$803	\$500
Single Retiree	3.7%	1.00	\$367	\$321	\$200
Two Party Retiree	3.7%	2.00	\$734	\$642	\$400
Family Retiree	0.3%	2.50	\$918	\$803	\$500
Medicare Single	3.2%	0.55	\$202	\$177	\$110
Two Party Medicare	1.9%	1.10	\$404	\$353	\$220
1+/1- 65	0.3%	1.55	\$569	\$498	\$310
<b>Composite</b>	<b>100.00%</b>	<b>1.66</b>	<b>\$610</b>	<b>\$533</b>	<b>\$332</b>

Note that this rating structure provides implicit subsidies to both families and non-Medicare retirees; however, many districts currently offer these implicit subsidies in their programs today. Also, the rates for Medicare eligible retirees do not include the addition of the Medicare prescription drug benefit due to the recently passed Medicare Modernization Act.

Also note that there was a goal of providing the Basic Plan at a single rate of approximately \$200. Based on updated financial information and adjustments to the Basic plan design, the calculated single rate of \$200 achieves this goal.

### III. OTHER CONSIDERATIONS

During our data collection and analysis, some additional topics were discussed regarding the structure of the program and its effect on projected costs. Following are brief discussions of the key topics.

#### A. MANDATORY VS. VOLUNTARY ENROLLMENT

The first topic revolves around the option to enroll in the K12-SHIP program, and whether districts should be allowed to opt out of the program and secure coverage through the private sector.

Our preliminary recommendation in the May 2004 report was to mandate participation in the program under the condition that there is a benefit plan option that does not cost the school district any additional funds. For example, providing additional state funding for school districts to cover the cost of the single employee rate for the Basic plan of \$200 per month will ensure availability to all employees at no cost to the district.

Our recommendation for the K12-SHIP is for local employers to voluntarily elect participation in the K12-SHIP premised upon the \$200 per enrolled active employee per month credit. From a risk management perspective, the requirement that school districts must enroll in the K12-SHIP program to be eligible for the \$200 per employee per month state credit provides the same protection, and creates a consistent, manageable risk pool that does not suffer from adverse selection and the resulting increase in program costs. Adverse selection occurs when lower health risk districts leave the pool to pursue better alternatives, leaving the higher health risk districts in the pool. Over time, the average health of the districts remaining in the pool deteriorates, leading to rate increases well above medical trend levels, which further exacerbates the issue.

From an affordability and access perspective, avoiding the pitfalls of adverse selection will help ensure future rate increases are in line with medical trends, thus keeping it a viable, affordable program over time. The inclusion of a no cost option ensures access to some level of coverage for all school district employees, including county superintendents and others who currently do not have group health insurance available to them.

School districts that do not join the pool immediately due to current contractual arrangements, including collective bargaining or voluntary election not to participate, are expected to join during FY08 and FY09. "Late entry" districts will be expected to pay a catch-up surcharge to cover a fair share of previously K12-SHIP Board of Investments loan offset and reserve building.

## **B. EMPLOYEE ELECTIONS**

The next topic addresses the options an employee should receive when deciding on health care coverage. This topic has two components: how many options the employee can choose from, and the employee's freedom to opt out of the pool.

With respect to the number of options available to an employee, the decision on plan offerings can be made either by the school district or the employee. Our recommendation is to offer all three available plans to all employees, rather than give school districts the option to limit the plan offerings. This provides the maximum level of choice for employees, as well as reducing the administrative burden of monitoring and deciding which plans to offer.

Regarding an employee's ability to opt out of the pool, our recommendation is to allow this only if the employee can provide proof of other insurance coverage. Requiring proof ensures all school district employees have health insurance coverage, plus reduces the impact of adverse selection since employees without coverage elsewhere that opt out are usually lower health risks. However, this also creates an additional administrative burden to enforce this rule.

In all cases, employees who waive coverage must provide their choice to waive coverage in writing, and acknowledge they will be restricted with respect to future year re-entry enrollment rights.

## **C. OTHER PLAN DESIGN OPTIONS**

This refers to the addition of alternate plan design options, such as HMO plans. Other plans can provide additional employee choice without affecting the pricing of the pool, whether they are offered within the pool or by external third parties.

However, appropriate measures must be taken if those plans are offered by external third parties to safeguard against adverse selection. Combining private sector HMO plans with the three proposed plans may cause private sector plans to target the best health risk individuals, thus leaving the less healthy individuals in the pool. Safeguards may include prescribed rating practices and methodologies to ensure consistency, and risk assessment and adjustment mechanisms to account for potential differences in the underlying health of the populations in each plan. Offering third party HMO plans without these safeguards will likely cause adverse selection against the pool, resulting in higher than expected costs and higher annual increases.

There are other options to consider in addition to HMO-style plans, which are discussed in the Current Market Trends section.

#### **D. DISTRICT CONTRIBUTION LEVELS**

The level of contributions required by school districts will depend largely on the goals of the K12-SHIP program with respect to accessibility, competitiveness, and employee relations.

If a goal of the program is to provide accessibility to health insurance for all school district employees, then school districts must contribute enough to ensure all employees have access to coverage. The inclusion of the Basic Plan and the proposed State credit provides an option that is no cost to the district and the employee.

Regarding competitiveness and employee relations, school districts will need to determine how competitive they want their benefit program to be relative to other school districts and other local employers, plus assess the current relationship with employees and how changes to the benefit program can be beneficial. School district contribution levels should be determined with this in mind, and is already done in most cases.

The total cost of the program will likely increase with the level of school district contributions. As school district contributions increase, the required employee contributions for richer benefit plans become more affordable. Therefore, we will see some employees migrate to those higher cost plans, which will increase the cost of the program as a whole, but will not affect the viability. The creation of Health Savings Account (HSA), Health Reimbursement Arrangements (HRA), or Voluntary Employee Beneficiary Association (VEBA) plans will also provide alternate methods of funding health care costs.

#### **E. CURRENT MARKET TRENDS**

While the proposal covers many aspects of providing coverage to school district employees, there are other alternatives to consider when designing the program to ensure it can adapt to the changing marketplace. Below are a few market trends which may provide future flexibility and opportunities to control the future costs of the program.

The first issue is the impact of the recently passed Medicare Modernization Act (MMA), which may affect the K12-SHIP program in two key areas. First, the adoption of Medicare Part D for prescription drugs provides an additional benefit to Medicare eligible retirees, as well as an additional administrative requirement for plan sponsors beginning in 2006. In addition, the new regulations surrounding Health Savings Accounts (HSAs) will provide additional options for employees to control the spending of their health care dollars.

Another market trend involves the current movement towards consumerism. Even before the HSA legislation, many employers were turning to Consumer-Directed Health Plans (CDHP) as an alternative means of controlling health care costs while engaging employees in the purchasing process. These benefit plans provide each employee with a personal healthcare fund to spend as their own money on healthcare expenses, thus educating them on the cost of healthcare and engaging them to be more conscious about their choices. These plans have been gaining popularity across the country.

Another popular cost-saving alternative is the addition of medical management programs to help reduce costs for those highest cost employees. There are numerous programs and vendors to choose from, and all programs attempt to reduce costs through early disease identification, focused patient education, review of current treatment compliance, and assistance with proper treatment protocols. Results have been very positive for these programs.

Wellness awareness and programs have also become popular, incorporating Health Risk Assessments, exercise and diet programs, and education on healthy living. Early results indicate these programs have positive results on health care costs, absenteeism, and employee morale.

These are a few of the key alternatives that may be applicable to the K12-SHIP program, and should be considered either at inception or in the future by the K12-SHIP board.

## IV. APPENDIX

### A. GLOSSARY OF TERMS

#### 1. Administration Expenses

Administrative expenses include the cost of staffing and administration of the Public School Benefits Board, claims processing, eligibility and premium payment processing, actuarial analysis and utilization management efforts.

#### 2. Demographic Factors

Demographic factors provide a measure of the differences on health care claim costs and utilization due to age and gender.

#### 3. Relative Value of Current Benefits

The estimated cost of current benefit provisions compared to the cost of benefits under the proposed plan design. This also takes into consideration the cost savings available to the plan sponsor through participating provider network discounts.

#### 4. Trend

Trend is the change in claims from one period to another. Trend factors are used in the projection of health care claim costs. Trend is composed of pure price inflation, aging, deductible leveraging, changes in utilization, unmeasured technological advances, and cost shifting.