

May 2011

State of Montana
Health Care and Benefits Division

Reinsurance Options Report

Prepared by:

Actuaries Northwest
4570 167th Ave SE
Issaquah, WA 98027
425.643.8050



REINSURANCE OPTIONS

Table of Contents

I.	INTRODUCTION	1
II.	SUMMARY OF PPACA CHANGES	2
III.	HISTORICAL CLAIMS ANALYSIS	3
	Annual Claim Analysis	3
	Cumulative Claim Analysis.....	4
IV.	COVERAGE OPTIONS AND THRESHOLDS	5
	Specific Stop Loss Insurance	5
	Aggregate Stop Loss Insurance	6
	Lifetime Maximum Insurance	6
V.	FINDINGS AND RECOMMENDATIONS	7

I. INTRODUCTION

The enactment of the Patient Protection and Affordable Care Act (PPACA) by the federal government has widespread implications on employer-sponsored health insurance programs. Provisions of this Act, along with the health care industry response to these changes, have increased the employer's risk for insured members with ongoing high health care costs.

The State of Montana's Health Care and Benefits Division requested that Actuaries Northwest evaluate potential reinsurance options for the State employee's health benefit plan. This report discusses the potential effects of PPACA provisions on high cost claimants, provides a brief history of large claims experience for the State plan, and examines reinsurance options available to address the risk. It concludes with some findings and recommendations.

II. SUMMARY OF PPACA CHANGES

The Patient Protection and Affordable Care Act (PPACA) interim final regulations issued on June 22, 2010, contained provisions that could significantly affect the risk to employers with respect to high cost members. Key provisions include the change in treatment of annual and lifetime benefit limits, coverage of preventive health services, and application of pre-existing condition exclusions:

- Public Health Service Act (PHSA) 2711 now prohibits all plans from establishing or maintaining lifetime or unreasonable annual limits on the dollar value of benefits.
- PHSA 2713 now requires all plans to cover preventive services and immunizations recommended by the U.S. Preventive Services Task Force and the CDC, and certain child preventive services recommended by the Health Resources and Services Administration, without any cost-sharing.
- PHSA 2704 now prohibits pre-existing condition exclusions or other discrimination based on health status.

These changes are effective on the plan year following September 23, 2010, which is the 2011 plan year for the State of Montana employee benefit plan.

The elimination of lifetime maximums has a twofold effect on employers. First, lifetime maximums have served as a limit to the risk to an employer for a single insured member. Even though lifetime maximums are usually large, exceeding \$1 million, they still offered protection in the event of a catastrophic or ongoing high cost illness. This risk is slightly higher for the State because of the longer tenure of employees. We estimate the long-term cost of eliminating the lifetime maximum to be 0.4% of premium.

The second, more indirect, effect of eliminating lifetime limits is the loss of employer (and insurer) leverage when negotiating allowed charges with providers. Hospitals and other providers are often open to reducing charges when the full allowed amount would cause the member to exceed their lifetime maximum. This helps the provider avoid balance billing the member for amounts in excess, which can be significant. This effect is more difficult to quantify, but is a cause of concern.

Requiring full coverage for prescribed preventive services will also have an indirect effect on catastrophic claims. Most employers expect to incur greater costs through increased utilization of preventive care services. The benefit of preventive services, however, is that some major health issues will be identified before they reach a catastrophic state. This may cause an increase in the number of large claims, but should reduce catastrophic claims and result in lower treatment cost overall. This is also difficult to quantify, but we have seen evidence of it in other clients.

Lastly, the prohibition of pre-existing condition exclusions potentially increases the amount of unhealthy lives in the plan, as employers are required to accept children (and eventually all members) regardless of current health issues. The long-term effect on cost to the State plan is negligible, but short-term cost can be affected by one unhealthy member joining the plan.

III. HISTORICAL CLAIMS ANALYSIS

Annual Claim Analysis

To better understand the benefits of purchasing reinsurance, it is important to review the State's historical experience of large and catastrophic claims. For the purposes of this report large claims are considered members incurring annual plan costs greater than \$100,000. Catastrophic claims will be members incurring plan costs greater than \$500,000. The following table shows the count of large and catastrophic claims for each of the past five years.

Year	Total Claimants	Over \$100,000	Over \$250,000	Over \$500,000	Over \$750,000	Over \$1,000,000
2006	35,228	67	4	2	-	-
2007	35,037	54	5	-	-	-
2008	36,207	68	16	2	-	-
2009	35,634	92	15	2	-	-
2010	35,787	86	9	4	2	1
Total	177,893	367	49	10	2	1

- Over the five-year period, there were 367 claimants exceeding \$100,000 in annual claims, or 0.2% of claimants. Of those, only 10 (0.006% of all claimants) were considered catastrophic and only one claimant exceeded \$1 million. These are below our benchmark levels of claims.
- We expect the number of claimants exceeding these thresholds to increase over time because we are comparing rising claims costs to a constant threshold.
- Even for groups the size of the State plan, there are still significant fluctuations in the number of large and catastrophic claims by year. 2010 had the most catastrophic claims.

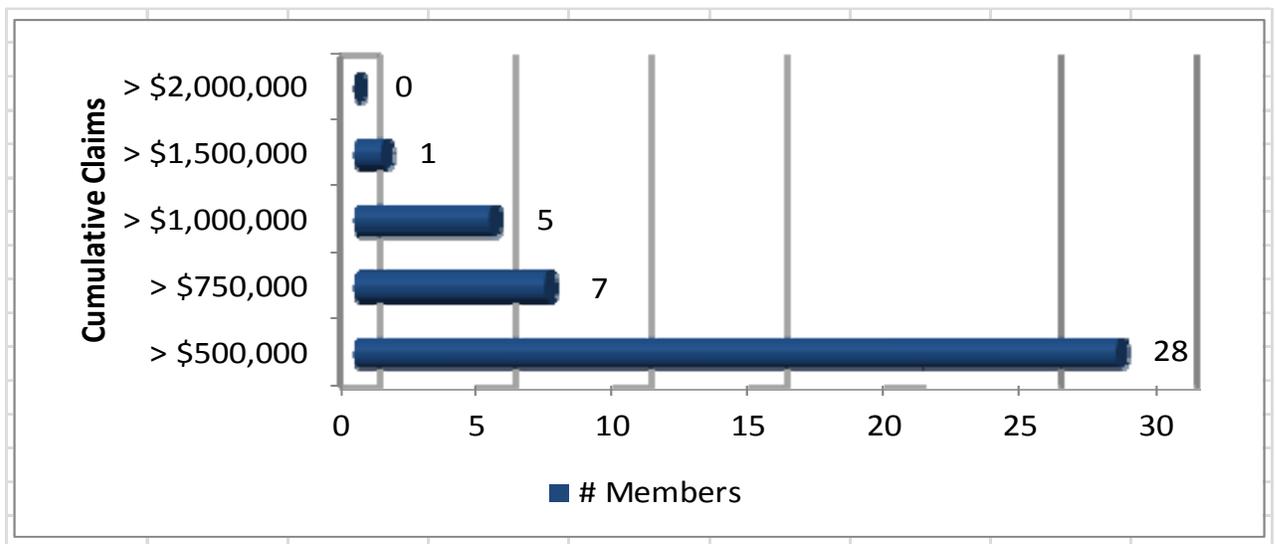
It is also helpful to identify the total amount of claim dollars exceeding these thresholds, especially when comparing to specific stop loss premiums:

Year	Over \$100,000	Over \$250,000	Over \$500,000	Over \$750,000	Over \$1,000,000
2006	\$3,854,000	\$579,000	\$62,000	-	-
2007	\$3,316,000	\$355,000	-	-	-
2008	\$7,034,000	\$1,961,000	\$25,000	-	-
2009	\$7,272,000	\$1,618,000	\$262,000	-	-
2010	\$7,339,000	\$2,575,000	\$1,237,000	\$516,000	\$241,000

- Paid claims over \$100,000 were consistent for the past three years at around \$7 million. There was a significant increase in 2008 for the State and many other plans, attributed to earlier diagnosis, advances in treatment options and increases in provider costs.
- Paid claims over \$500,000 were minimal except for the 2010 plan year. There was only one claim over \$1 million over the five-year period, exceeding the threshold by \$241,000.

Cumulative Claim Analysis

To evaluate the effect of removing the lifetime benefit maximum, one should also look at cumulative plan cost incurred over the experience period. The chart below illustrates the number of members with high cumulative claims for the five years ending in 2010.



- Over the five-year period, there were 41 members with cumulative claims over \$500,000. Of those, five had more than \$1 million, and only one was over \$1.5 million.
- Almost all 41 members had one or two years of catastrophic claims, rather than ongoing high cost claims across multiple years.

While our experience period does not consider the entire working lifetime of members (or their experience as retirees), it is reasonable to assume that few, if any, members would reach even a \$3 million lifetime maximum.

IV. COVERAGE OPTIONS AND THRESHOLDS

There are two standard reinsurance products offered to self-funded employers: Specific Stop Loss and Aggregate Stop Loss. With the changes under PPACA, our analysis also investigated the possibility of reinsurance on lifetime maximums.

Specific Stop Loss Insurance

Purchasing specific stop loss protects a self-funded employer by shifting the cost of annual large and catastrophic claims above a certain threshold onto the reinsurer. As plan members meet the stop loss threshold, the reinsurer reimburses for claims beyond that point.

Most employers with more than 10,000 employees do not purchase specific stop loss insurance because their population base is large enough to handle the yearly fluctuations in large claims, and because it rarely makes financial sense. Those that do purchase reinsurance have specific thresholds of \$1 million or higher.

Pricing for specific stop loss reinsurance is based on a large volume of claims experience, often millions of lives, due to the high volatility in number and cost of large and catastrophic claims. Based on industry sources and experience with other large clients, we estimate stop loss premiums for a \$1 million threshold to be between \$3.50 and \$4.00 per employee per month. For the 16,222 State employees and retirees, this equates to annual premiums between \$584,000 and \$681,000.

While the State of Montana is not large enough to be statistically credible for specific stop loss purposes, it is helpful to compare anticipated stop loss premiums to historical claims over the past five years. Premiums at this level do not increase as much as medical trend, so we have assumed a 5% increase per year.

Assumed State of Montana Covered Employees / Retirees				16,222
Assumed 2012 Stop Loss Premium (PEPM) @ \$1 Million				\$3.75
Year	PEPM Premium	Annual Stop Loss Premium	Stop Loss Claim Reimbursements	Gain / (Loss)
2006	\$2.80	\$545,000	-	(\$545,000)
2007	\$2.94	\$572,000	-	(\$572,000)
2008	\$3.09	\$602,000	-	(\$602,000)
2009	\$3.24	\$631,000	-	(\$631,000)
2010	\$3.40	\$662,000	\$241,000	(\$421,000)
Total		\$3,012,000	\$241,000	(\$2,771,000)

- Over the five-year period, the State would have paid over \$3 million in stop loss premiums and received \$241,000 in reimbursements.

Aggregate Stop Loss Insurance

Aggregate stop loss protects the employer in the event total claims greatly exceed expected levels, typically with a threshold that is 120% or 125% of expected claims. In other words, the reinsurer will reimburse the plan for all amounts after exceeding estimates by 20% or 25%. Aggregate reinsurance is not dependent on individual claims and instead only considers the total annual cost.

Aggregate stop loss is usually prudent for new self-insured employers or health care trusts, and for small self-funded employers where a small number of catastrophic claims in a single year could jeopardize the financial health of the company. It is usually not cost-effective for large employers due to the high administrative component in the premiums.

For the State plan, if we assume total expected claims for 2012 will be \$140 million, then an aggregate stop loss policy at 120% would cover claims exceeding ($\$140 \times 120\% =$) \$168 million. This means the plan would need to incur and pay up to the first \$168 million in claims (or \$28 million more than anticipated), but nothing beyond that.

Based on internal estimates, we expect aggregate reinsurance premiums to be between \$0.50 and \$1.00 PEPM for a 120% threshold, or \$97,000 to \$195,000 per year. Given the low probability of the plan exceeding 120% of expected claims, it is unlikely that any reinsurer reimbursement would occur.

There is one other possible method of using aggregate reinsurance for the State plan. In our example above, the State would only need to hold \$28 million in general reserves if they purchase aggregate stop loss insurance, instead of the estimated \$40 million currently held. This option could allow the State to release some of its assets to meet short-term financial obligations, but does have some drawbacks. It would require a long-term commitment to purchasing aggregate reinsurance, it reduces the amount of investment income used to offset future premium increases, and it would still require contributions to the general reserves to keep pace with expected paid claims.

Lifetime Maximum Insurance

Another potential option explored in light of PPACA is lifetime maximum insurance. With the removal of lifetime maximums, employers no longer have protection against ongoing high cost illnesses spanning multiple years. It appears there is an opportunity for reinsurers to offer a product to meet this demand.

Unfortunately, our research could not find such a product. In our discussions with reinsurance companies and other experts, we discovered that this type of policy had either not been considered, or it was determined that the underwriting and regulatory filing requirements to offer a multi-year reinsurance policy were too great.

V. FINDINGS AND RECOMMENDATIONS

Based on the research and analysis presented above, we have the following findings and recommendations regarding stop loss insurance for the State of Montana employee benefit plan:

- Provisions of the Patient Protection and Affordable Care Act will affect the State's future health plan cost. It will be important to monitor the indirect effects of the legislation, especially the ability to negotiate with providers on high cost cases.
- Large and catastrophic claims experience for the past five years was better than industry benchmarks, likely due to a combination of successful case management and good fortune. Continued close monitoring of emerging and potential high cost cases is necessary to maintain some level of cost control.
- Cumulative claims experience indicates few members are incurring ongoing high claim expenses year-over-year, which supports the minor increase in premiums attributed to removing the lifetime maximum.
- Specific stop loss insurance would provide protection against high cost claimants, but will most likely fail any cost-benefit analysis due to favorable catastrophic claims experience and relatively high reinsurance premiums.
- Aggregate stop loss insurance could be a viable option to reduce the amount of recommended general reserves held by the State. It is worth pursuing initial discussions with reinsurance carriers on this topic to determine if a formal Request for Proposal is worthwhile.
- Lifetime maximum reinsurance is not yet available to large employers, and there is little evidence that it will be offered in the future.

These findings are specific to the current State of Montana employee benefit program, and should not be applied to other employer groups without careful consideration.