

# County of Mendocino

## Independent Actuarial Review of 2009 Employee Health Plan Renewal Report

*October 20, 2008*

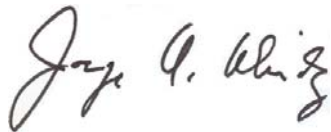
## Introduction and Purpose

The County of Mendocino requested that Aon Consulting conduct an independent actuarial review of the 2009 Employee Health Plan Renewal Report produced by Mercer, the County's benefits consultant. The purpose of this report is to outline the methodology we used in conducting our review and to document the results.

To the best of our knowledge, our review is complete and accurate and conforms to generally accepted actuarial principles and practices. Our projections are based on standard underwriting procedures and we have relied on actual County of Mendocino claims experience and data wherever possible. Our analysis of the plans described herein focuses primarily on the plan year beginning January 1, 2009 but does include certain projections for subsequent periods to the extent necessary to validate Mercer's report results. In conducting the analysis, we relied on plan information and data supplied by the County of Mendocino, Mercer and the County's third-party administrator (TPA) and service providers. On the basis of our review, we believe that the information we relied upon is sufficiently complete and appropriate for the purposes intended. We reviewed the data for reasonableness but have not audited it; as such, we are not certifying herein as to its accuracy.

Our analysis produces results generally similar to those produced by Mercer. Differences between our results and Mercer's are outlined and explained herein. This analysis may not be appropriate for any purpose other than that for which it is intended. Full documentation of the methods and assumptions used in the development of our results is provided in this report. Each assumption used is reasonable and has been applied on a consistent basis.

Our relationship with the County is strictly professional. There are no aspects of the relationship that may impair or appear to impair the objectivity of our work. I am a qualified actuary of Aon Consulting, a member of the American Academy of Actuaries and an Associate of the Society of Actuaries. I certify that I meet the qualification standards established by the Actuarial Standards Board. All of the sections of this report are considered an integral part of the actuarial opinion.



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Vice President, Aon Consulting  
American Academy of Actuaries Membership No. 14491

## **Results of the 2009 Employee Health Plan Renewal Projections**

The Mercer 2009 renewal report looks at two basic options. One option considers the increase needed to cover 2009 projected claims and administrative charges plus the projected 2008 deficit, 2009 yearend Incurred But Not Reported (IBNR) liability and a Stabilization Reserve equal to 3 months of plan costs. This projection is called the fully funded projection because the increase is projected to fully fund the 2009 expected costs and the “unfunded reserve” which is comprised of the liabilities described above, the projected 2008 deficit, 2009 yearend IBNR and the Stabilization Reserve. A second projection considers what can be funded assuming a flat 16% increase in the 2009 rates.

### ***Fully Funded Projection***

Our calculations show that a 38.7% increase will fully fund projected 2009 costs plus the unfunded reserve. This result compares with Mercer’s projected 40.3% increase for the fully funded scenario.

### ***16% Renewal Rate Increase***

For the second option, our calculations show that a 16% increase in the 2009 rates will fund 2009 projected costs plus the projected 2008 deficit, 2009 year-end IBNR liability and a contribution of \$286,184 to the Stabilization Reserve. For this scenario, our estimate of the unfunded reserve of \$3,066,893 compares to Mercer’s estimate of \$3,228,873.

## **Differences Between the Projections**

In general, the disparity between our projections and Mercer’s are attributable to several key areas: 1) trend assumptions, 2) enrollment data, 3) IBNR estimates and 4) the treatment of the “Claims Incurred But Not Cleared” liability.

### ***Differences in Trend Assumptions***

We noted that in Mercer’s letter dated September 3, 2008 describing their 2009 renewal methodology, Mercer indicated they had relied on the County’s experience data and a regression analysis to develop the County’s internal trend plus a margin requirement to have a confidence level at the 90<sup>th</sup> percentile. However, when we spoke to Mercer by telephone, they indicated they had relied on Mercer’s trend survey results to set trend for the actual calculations as there was not sufficient credibility in the regression analysis to rely on for trend setting purposes. We have relied on this verbal confirmation of their methodology by Mercer.

Aon’s methodology relies on our trend survey results to set trend for the projections. It is possible that the County’s internal trend is lower than these values but standard underwriting procedures call for the use of broader trend indicators when there is insufficient data or the size of the group is such that there is insufficient credibility in the experience to set trend assumptions. Given the size of the County’s workforce and the data we were provided, we did not rely on the County’s specific experience to set trend assumptions. As such, our estimates should be viewed as “best estimates” or 50<sup>th</sup> percentile estimates of expected costs.

### ***Differences in Enrollment Data***

We discussed the difference in enrollment data with Mercer but they indicated they received their data from Delta Health Systems, the same source Aon used for our enrollment data. This issue can be cleared by having Delta Health Systems confirm the correct enrollment data.

Some of the disparity in the per employee per month (PEPM) values is offset in the projected aggregate values as the higher enrollment that gives rise to lower PEPM values then self-corrects in the aggregate values when lower PEPMs get multiplied by higher enrollment.

### ***Differences in IBNR Estimates***

Although there are differences in the IBNR estimates between Aon and Mercer, these differences are in the 2-3% range for 2008 and 2009. Larger differences do appear in 2010 and 2011 but these are likely due to differences in trend assumptions which are compounded as you project further out into the future. It is not uncommon to see differences of this magnitude in IBNR estimates as trend assumptions also come into play in these calculations and there are differences in computational methodologies of the actuarial models used to produce these estimates.

### ***Difference in the Treatment of Claims Incurred But Not Cleared Liability***

We did not include Claims Incurred But Not Cleared in our cost projections as these claims are already included in the Projected Paid Claims amounts used in the calculations. We believe that including Claims Incurred But Not Cleared as a separate item would be double-counting of these claims. We discussed this issue with Mercer but they did not provide a reasonable explanation for why this amount should be included in the cost projections.

Other than the key areas described above, we do not believe our underwriting methodology differed materially from Mercer's. A more detailed explanation of the assumptions and cost factors used in the calculations is outlined in the following Exhibit A. Exhibits B-G show our calculation methodology and steps, including rates and employee contributions for the fully funded and the 16% increase scenarios. Exhibits H and I summarize the enrollment and claims data used in the calculations.

### **Source of Information**

In performing our renewal projections, we relied on data given to us by Delta Health Systems and Medco. Specifically, we received claim/lag data, census, and large claim information by month for the period August 1, 2007 through July 31, 2008 from Delta Health Systems. Delta Health Systems also provided 2009 administration fees of \$18.00 PEPM, Nurseline fees of \$0.95 PEPM, and Cost Containment/TeamCare fees of \$3.50 PEPM. We received pharmacy claim lag data from Medco.

Other cost data was taken directly from the Mercer 2009 renewal report based on conversations with the County and Mercer about this data. A more detailed explanation of these items is included in Exhibit A.

**County of Mendocino  
Independent Actuarial Review of 2009 Employee Health Plan Renewal Report  
Issues/Comments**

**1. Claims Evaluation**

- a. Trend assumptions were taken from the Spring 2008 Aon Trend Survey for corresponding plans.
- b. There is insufficient data to determine reliable County-specific trend assumptions.
- c. Mercer confirmed verbally there were no material benefit changes during the experience period.
- d. The monthly enrollment used by Mercer was slightly different from that provided by Delta Health Systems.
- e. Slight difference in stoploss reimbursement amount reported by CCHI compared to Mercer report.

**2. Administrative Fees**

- a. Salaries & Benefits, Services & Supplies, Life Insurance – assumed the aggregate annual amounts from the Mercer report and adjusted PEPM amounts based on enrollment data supplied by Delta Health Systems.
- b. Reinsurance:
  - i. Specific Stop Loss – used the Mercer assumption; actual increases could exceed 15%. Keeping the \$175k pooling point produces a leveraging effect over time.
  - ii. Aggregate Stop Loss – we typically see increases but not knowing the history of adjustments we kept the Mercer assumption. Increases in this rate would have minimal impact on total costs.
- c. DHS Administration, DHS Cost Containment, DHS Nurseline:
  - i. Delta indicated the Administration fee went up to \$18.00 in 2009 from \$17.00 in 2008.
  - ii. According to Delta the Nurseline fee is \$0.95
  - iii. Assumed rates would remain fixed based on history cited by Mercer.
- d. Mercer General Consulting, Mercer Rx Accreditation – assumed aggregate amount given and computed PEPM amount based on enrollment data supplied by Delta Health Systems.
- e. Aon Actuarial Review aggregate amount adjusted to \$22,000 and computed PEPM amount based on enrollment data supplied by Delta Health Systems.
- f. PPO Access:
  - i. Blue Cross fees adjusted annually based on history cited by Mercer.
  - ii. Foundation fees were assumed fixed based on history cited by Mercer.
- g. Prescription Drug Rebates – based on the lack of rebate data we used the rebate assumption of 5.2% of total projected prescription drug claims cost cited by Mercer. This is in line with what we see on other groups.
- h. Wellness Program – assumed the same 3% increase in PEPM rate as cited by Mercer. This is in line with what we see on other groups.

**3. Cost Projection**

- a. Fully Funded with a rate increase of 38.7%
- b. Difference in methodology due to treatment of Claims Incurred But Not Cleared.

**4. Projected Reserve Requirement**

- a. Our estimate does not include an amount for Claims Incurred But Not Cleared.

**5. Rates**

- a. Rates were developed using enrollment by tier contained in Mercer report.

**County of Mendocino  
Claims Evaluation**

**Exhibit B**

<b>2009 AON Underwriting</b>	<b>Medical</b>	<b>Rx</b>	<b>Dental</b>	<b>Vision</b>	
Paid Claims (08/2007 - 07/2009)	\$8,204,590	\$1,788,402	\$819,650	\$50,630	
Large Claims	(\$516,086)	\$0	\$0	\$0	
Adjusted Paid Claims	\$7,688,504	\$1,788,402	\$819,650	\$50,630	
Enrollment	15,388	15,388	15,388	15,388	
Paid Claims PEPM	\$499.64	\$116.22	\$53.27	\$3.29	
Plan Design Adjustment	0%	0%	0%	0%	
Adjusted PEPM	\$499.64	\$116.22	\$53.27	\$3.29	
Trend	10.9%	9.2%	6.3%	3.1%	
Months of Trend	17	17	17	17	
Effective Trend	1.158	1.133	1.090	1.044	
2009 Projected Claims	\$578.51	\$131.65	\$58.08	\$3.44	
Projected Monthly Enrollment	1,268	1,268	1,268	1,268	
	<b>Medical</b>	<b>Rx</b>	<b>Dental</b>	<b>Vision</b>	<b>Total</b>
2008 Projected Claims	\$7,705,307	\$1,894,052	\$880,058	\$54,408	\$10,533,826
2009 Projected Claims	\$8,802,645	\$2,003,237	\$883,763	\$52,277	\$11,741,922
2010 Projected Claims	\$9,762,133	\$2,187,535	\$939,440	\$53,898	\$12,943,006
2011 Projected Claims	\$10,826,206	\$2,388,788	\$998,625	\$55,569	\$14,269,187

**County of Mendocino  
Administrative Fees**

**Exhibit C**

	2008		2009		2010		2011	
	Annual	PEPM	Annual	PEPM	Annual	PEPM	Annual	PEPM
<b>Per Employee / Per Month</b>								
Salaries & Benefits	\$141,748	\$9.32	\$146,000	\$9.60	\$150,380	\$9.88	\$154,892	\$10.18
Services & Supplies	\$8,816	\$0.58	\$9,080	\$0.60	\$9,353	\$0.61	\$9,633	\$0.63
Life Insurance	\$70,000	\$4.60	\$70,000	\$4.60	\$70,000	\$4.60	\$70,000	\$4.60
Reinsurance								
Specific Stop Loss	\$588,811	\$38.56	\$660,070	\$43.38	\$742,579	\$48.80	\$835,401	\$54.90
Aggregate Stop Loss	\$55,125	\$3.61	\$54,930	\$3.61	\$54,930	\$3.61	\$54,930	\$3.61
Plan Administration & Cost Containment								
DHS Administration	\$259,590	\$17.00	\$273,888	\$18.00	\$273,888	\$18.00	\$273,888	\$18.00
DHS Cost Containment/ TeamCare	\$53,445	\$3.50	\$53,256	\$3.50	\$53,256	\$3.50	\$53,256	\$3.50
DHS Nurseline	\$14,507	\$0.95	\$14,455	\$0.95	\$14,455	\$0.95	\$14,455	\$0.95
PPO Network								
PPO Access - Blue Cross	\$195,609	\$12.81	\$203,742	\$13.39	\$212,872	\$13.99	\$222,458	\$14.62
PPO Access - Foundation	\$22,905	\$1.50	\$22,824	\$1.50	\$22,824	\$1.50	\$22,824	\$1.50
Health Plan Consulting								
Mercer General Consulting	\$80,000	\$5.26	\$80,000	\$5.26	\$80,000	\$5.26	\$80,000	\$5.26
Mercer Rx Accreditation	\$5,000	\$0.33	\$5,000	\$0.33	\$5,000	\$0.33	\$5,000	\$0.33
Aon Actuarial Review	\$22,000	\$1.45	\$22,000	\$1.45	\$22,000	\$1.45	\$22,000	\$1.45
Prescription Drug Rebates	(\$98,491)	(\$6.45)	(\$104,168)	(\$6.85)	(\$113,752)	(\$7.48)	(\$124,217)	(\$8.16)
<u>Wellness Program</u>	<u>\$155,143</u>	<u>\$10.16</u>	<u>\$159,312</u>	<u>\$10.47</u>	<u>\$164,028</u>	<u>\$10.78</u>	<u>\$168,898</u>	<u>\$11.10</u>
<b>Total</b>	<b>\$1,574,208</b>	<b>\$103.17</b>	<b>\$1,670,388</b>	<b>\$109.78</b>	<b>\$1,761,813</b>	<b>\$115.79</b>	<b>\$1,863,418</b>	<b>\$122.46</b>
Project Employees		1,268		1,268		1,268		1,268

**County of Mendocino  
Cost Projection**

**Exhibit D**

	2008		2009 Fully Funded		2009 - @ 16.0%	
	Annual	PEPM	Annual	PEPM	Annual	PEPM
Paid Claims	\$ 10,533,826	\$ 692.29	\$ 11,741,922	\$ 771.68	\$ 11,741,922	\$ 771.68
<u>Administration Fees</u>	\$ 1,574,208	\$ 103.46	\$ 1,670,388	\$ 109.78	\$ 1,670,388	\$ 109.78
Total	\$ 12,108,033	\$ 795.74	\$ 13,412,310	\$ 881.46	\$ 13,412,310	\$ 881.46
<b>Projected Rate Increase</b>				<b>38.7%</b>		<b>16.0%</b>
<u>Projected Plan Revenue</u>	\$ 13,560,339	\$ 888.04	\$ 18,741,678	\$ 1,231.71	\$ 15,674,367	\$ 1,030.12
Projected Surplus / (Deficit)	\$ 1,452,306	\$ 95.45	\$ 5,329,368	\$ 350.25	\$ 2,262,056	\$ 148.66
Beginning Plan Surplus / (Deficit) <b>(2008 Per Mercer Report)</b>	\$ (1,501,616)	\$ (98.69)	\$ (49,310)	\$ (3.24)	\$ (49,310)	\$ (3.24)
Ending Plan Surplus / (Deficit)	\$ (49,310)	\$ (3.24)	\$ 5,280,058	\$ 347.01	\$ 2,212,746	\$ 145.42
Reserve Requirements IBNR Total	\$ (1,748,722)	\$ (114.93)	\$ (1,926,562)	\$ (126.61)	\$ (1,926,562)	\$ (126.61)
Stabilization Reserve - 3 Months	\$ (3,027,008)	\$ (198.94)	\$ (3,353,078)	\$ (220.37)	\$ (3,353,078)	\$ (220.37)
Total Reserve Requirement	\$ (4,775,730)	\$ (313.86)	\$ (5,279,640)	\$ (346.98)	\$ (5,279,640)	\$ (346.98)
<u>Ending Plan Surplus/ (Deficit)</u>	\$ (49,310)	\$ (3.24)	\$ 5,280,058	\$ 347.01	\$ 2,212,746	\$ 145.42
Total Surplus / (Deficit) Position	\$ (4,825,040)	\$ (317.10)	\$ 418	\$ 0.03	\$ (3,066,893)	\$ (201.56)
Projected Employees		1,268		1,268		1,268

**County of Mendocino**  
**Projected Reserve Requirement**

Exhibit E

	2008		2009		2010		2011	
	Annual	PEPM	Annual	PEPM	Annual	PEPM	Annual	PEPM
Paid Claims	\$ 10,533,826	\$ 692.29	\$ 11,741,922	\$ 771.68	\$ 12,943,006	\$ 850.62	\$ 14,269,187	\$ 937.78
Administration Fees	\$ 1,574,208	\$ 103.46	\$ 1,670,388	\$ 109.78	\$ 1,761,813	\$ 115.79	\$ 1,863,418	\$ 122.46
Total	\$ 12,108,033	\$ 795.74	\$13,412,310	\$ 881.46	\$14,704,819	\$ 966.41	\$16,132,605	\$ 1,060.24
Reserve Requirements								
IBNR Total	\$ (1,748,722)	\$ (114.93)	(\$1,926,562)	\$ (126.61)	\$ (2,122,488)	\$ (139.49)	\$ (2,338,339)	\$ (153.68)
Stabilization Reserve - 3 Months	\$ (3,027,008)	\$ (198.94)	(\$3,353,078)	\$ (220.37)	(\$3,676,205)	\$ (241.60)	\$ (4,033,151)	\$ (265.06)
Total Reserve Requirement	\$ (4,775,730)	\$ (313.86)	(\$5,279,640)	\$ (346.98)	(\$5,798,693)	\$ (381.09)	\$ (6,371,491)	\$ (418.74)
Projected Employees		1,268		1,268		1,268		1,268

## County of Mendocino Rates and Contributions

Exhibit F

Bi-Weekly Rates	2008		2009 @ 38.7% Increase		2009 @ 16% Increase	
	Plan I	Plan II	Plan I	Plan II	Plan I	Plan II
Employee Only	\$361.62	\$228.45	\$501.57	\$316.86	\$419.48	\$265.00
Employee & Spouse	\$792.42	\$508.90	\$1,099.09	\$705.84	\$919.21	\$590.32
Employee & Child(ren)	\$630.40	\$407.09	\$874.36	\$564.63	\$731.26	\$472.22
Employee, Spouse & Child(ren)	\$1,078.40	\$699.30	\$1,495.74	\$969.93	\$1,250.94	\$811.19
<b>County Cost</b>						
Employee Only	\$271.22	\$171.34	\$376.18	\$237.65	\$314.61	\$198.75
Employee & Spouse	\$594.31	\$381.67	\$824.31	\$529.38	\$689.41	\$442.74
Employee & Child(ren)	\$472.80	\$305.32	\$655.77	\$423.48	\$548.45	\$354.17
Employee, Spouse & Child(ren)	\$808.80	\$524.47	\$1,121.81	\$727.45	\$938.21	\$608.39
<b>Employee Cost</b>						
Employee Only	\$90.40	\$57.11	\$125.39	\$79.22	\$104.87	\$66.25
Employee & Spouse	\$198.11	\$127.23	\$274.77	\$176.46	\$229.80	\$147.58
Employee & Child(ren)	\$157.60	\$101.77	\$218.59	\$141.16	\$182.82	\$118.06
Employee, Spouse & Child(ren)	\$269.60	\$174.83	\$373.94	\$242.48	\$312.74	\$202.80

## County of Mendocino Rates

Exhibit G

Current 2008			2009 Increase	16.0%			2009 Fully Funded Increase	38.7%			
<b>Plan 1</b>	<b>Employees</b>	<b>Rates</b>	<b>Plan 1</b>	<b>Employees</b>	<b>Rates</b>	<b>Plan 1</b>	<b>Employees</b>	<b>Rates</b>	<b>Plan 1</b>	<b>Employees</b>	<b>Rates</b>
EE	72	\$ 361.62	EE	72	\$ 419.48	EE	72	\$ 501.57	EE	72	\$ 501.57
EE+Spouse	42	\$ 792.42	EE+Spouse	42	\$ 919.21	EE+Spouse	42	\$ 1,099.09	EE+Spouse	42	\$ 1,099.09
EE+Child(ren)	18	\$ 630.40	EE+Child(ren)	18	\$ 731.26	EE+Child(ren)	18	\$ 874.36	EE+Child(ren)	18	\$ 874.36
Family	21	\$ 1,078.40	Family	21	\$ 1,250.94	Family	21	\$ 1,495.74	Family	21	\$ 1,495.74
<b>Total</b>	<b>153</b>	<b>\$ 2,426,109</b>	<b>Total</b>	<b>153</b>	<b>\$ 2,814,286</b>	<b>Total</b>	<b>153</b>	<b>\$ 3,365,013</b>	<b>Total</b>	<b>153</b>	<b>\$ 3,365,013</b>
<b>Plan 2</b>	<b>Employees</b>	<b>Rates</b>	<b>Plan 2</b>	<b>Employees</b>	<b>Rates</b>	<b>Plan 2</b>	<b>Employees</b>	<b>Rates</b>	<b>Plan 2</b>	<b>Employees</b>	<b>Rates</b>
EE	560	\$ 228.45	EE	560	\$ 265.00	EE	560	\$ 316.86	EE	560	\$ 316.86
EE+Spouse	224	\$ 508.90	EE+Spouse	224	\$ 590.32	EE+Spouse	224	\$ 705.84	EE+Spouse	224	\$ 705.84
EE+Child(ren)	144	\$ 407.09	EE+Child(ren)	144	\$ 472.22	EE+Child(ren)	144	\$ 564.63	EE+Child(ren)	144	\$ 564.63
Family	170	\$ 699.30	Family	170	\$ 811.19	Family	170	\$ 969.93	Family	170	\$ 969.93
<b>Total</b>	<b>1098</b>	<b>\$ 10,905,117</b>	<b>Total</b>	<b>1098</b>	<b>\$ 12,649,935</b>	<b>Total</b>	<b>1098</b>	<b>\$ 15,125,397</b>	<b>Total</b>	<b>1098</b>	<b>\$ 15,125,397</b>
<b>Total</b>	<b>1251</b>	<b>\$ 13,331,225</b>	<b>Total</b>	<b>1251</b>	<b>\$ 15,464,222</b>	<b>Total</b>	<b>1251</b>	<b>\$ 18,490,410</b>	<b>Total</b>	<b>1251</b>	<b>\$ 18,490,410</b>

## County of Mendocino Claims Data

**Exhibit H**

Date	Employees	Medical Claims	Pharmacy Claims	Dental Claims	Vision Claims
Aug-07	1,294	\$645,953	\$132,795	\$58,782	\$5,649
Sep-07	1,293	\$413,917	\$129,518	\$58,619	\$2,525
Oct-07	1,285	\$909,870	\$123,482	\$51,083	\$3,840
Nov-07	1,297	\$982,146	\$147,965	\$69,655	\$2,960
Dec-07	1,289	\$955,991	\$144,825	\$54,091	\$2,565
Jan-08	1,287	\$824,956	\$185,517	\$65,019	\$2,478
Feb-08	1,282	\$383,089	\$152,249	\$47,333	\$2,040
Mar-08	1,288	\$666,469	\$147,335	\$107,391	\$5,742
Apr-08	1,283	\$434,547	\$129,904	\$92,401	\$6,595
May-08	1,260	\$584,877	\$154,256	\$80,605	\$4,836
Jun-08	1,262	\$694,321	\$147,522	\$69,363	\$5,014
Jul-08	1,268	\$708,454	\$193,033	\$65,308	\$6,385
<b>Recent 12 Months</b>	<b>15,388</b>	<b>\$8,204,590</b>	<b>\$1,788,402</b>	<b>\$819,650</b>	<b>\$50,630</b>

County of Mendocino  
Large Claims

Exhibit I

Medical Claims	Pooling Point	Amount Over the Pooling Point
\$627,076	\$175,000	\$452,076
\$200,561	\$175,000	\$25,561
\$194,543	\$175,000	\$19,543
\$193,906	\$175,000	\$18,906
<b>\$1,216,086</b>		<b>\$516,086</b>