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August 28, 2019

Ms. Maya Barraza  
 Santa Barbara County  
 1226 Anacapa St.  
 Santa Barbara, CA 93101

**RE: Actuarial Report - Dental IBNR and Claim Fluctuation Margin**

Dear Maya:

This letter will recommend appropriate levels of reserves for the Santa Barbara County self-funded dental program for both Incurred But Not Reported (IBNR) and claims fluctuation margin based on actuarial analysis.

**Background**

The County participates in a self-funded EIA-sponsored pool, with the County's claims, rates, and reserves established independently from the pool.

**Analysis of Reserves for IBNR Claims**

Reserves for IBNR claims reflect the liability for claims incurred but not yet paid due to normal billing, submission, and processing delays. In the event of self-funded plan termination, this IBNR liability would be funded by the plan and would be covered by funds set aside during pre-termination operations. Normally, this reserve is less than 1 month of average actual dental claims and administrative expenses, depending on the TPA's processing patterns. Estimated reserves for IBNR claims for the Santa Barbara County Dental Program are as follows:

	<b>IBNR</b>	<b>% of Paid Claims</b>
As of 6/30/19	\$168,788	7.4%

Our analysis uses completion factor methodology. This approach applies completion factors (the estimated percentage of claims incurred and paid after 1 month, 2 months, 3 months, etc.), developed over the most recent 6 months of data, to claim lag data to calculate estimated incurred claims for each month during the prior year. This is a standard actuarial methodology that is well known throughout the health and welfare industry.

The IBNR has increased from 5/5% of claims at 6/30/18 to 7.4% of claims at 6/30/19. This indicates either higher paid claims, slower payment patterns, or both. However, the 7.4% figure is still within the industry standard range of less than 1 month payment lag for dental plans.

### Claim Fluctuation Margin

Claim fluctuation margin is an optional but highly recommended reserve that enables self-funded plans to manage unfavorable claim years through the use of funds set aside for random claim fluctuation. The amount of this reserve is usually defined by a confidence level such as 70%, 80%, 90%, etc. that quantifies the probability that claims will not exceed premium plus the specified margin in any given year. Most groups strive to fund this reserve to a 95% confidence level within 3-5 years following the commencement of operations.

The methodology used for this analysis is normally the simulation of multiple years of random claim experience. The approach defines the estimated claim level that will produce the confidence levels described above. When a group is large enough to be fully credible, its historic claim volatility is a more reasonable predictor of its future results. This is especially important if the actual volatility is higher than the simulated results.

Claim Fluctuation Margin recommendations are as follows:

	<b>Confidence Level</b>				
<b>Self-Funded Dental</b>	<b>70%</b>	<b>80%</b>	<b>90%</b>	<b>95%</b>	<b>Other</b>
Margin (% of claims)	6.0%	9.0%	12.0%	15.0%	20.0%
Amount	\$137,068	\$205,602	\$274,136	\$342,670	\$456,894

The above chart shows confidence levels from 70%-95%. It also shows a slightly higher funding option that would help the plan to remain fully funded in the event of headcount growth, consecutive years of unfavorable claims, etc.

## Program Financials

The following table shows the funding status for the various different options:

Self-Funded Dental	Confidence Level				
	70%	80%	90%	95%	EIA CFM%
<b>Total Assets 6/30/19</b>	<b>\$1,426,449</b>				
IBNR	\$168,788				
CFM	\$137,068	\$205,602	\$274,136	\$342,670	\$456,894
<b>Total IBNR/CFM</b>	<b>\$305,857</b>	<b>\$374,391</b>	<b>\$442,925</b>	<b>\$511,459</b>	<b>\$625,682</b>
Surplus/Deficit	\$1,120,592	\$1,052,058	\$983,524	\$914,990	\$800,767

The County maintains cash and investments sufficient to fund both IBNR and Margin. A surplus position provides the maximum flexibility in rates setting, reserving, etc.

## Recommendations

Our recommendations are to:

- Establish and fund IBNR reserves as shown above
- Establish a fund a 95%+ Confidence Level Claim Fluctuation Margin Reserve as shown above.

We look forward to discussing this information with you.

Sincerely,

*David E. Turner*

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 Manager  
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