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July 27, 2021

Ms. Katie Torres Santa Barbara County 1226 Anacapa St. Santa Barbara, CA 93101

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

### Dear Katie:

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:

	IBNR	% of Paid Claims
As of 6/30/21	\$158,120	6.9%

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 declined slightly compared to last year's IBNR estimate of \$167,509 and 7.5% of claims. Actual runout for the prior 12-month period through 6/30/20 was \$103,993.

## **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:

	Confidence Level						
Self-Funded Dental	70%	80%	90%	95%	Other		
Margin (% of claims)	6.0%	9.0%	12.0%	15.0%	20.0%		
Amount	\$138,198	\$207,297	\$276,396	\$345,495	\$460,659		

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.

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# **Program Financials**

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

	Confidence Level					
Self-Funded Dental	70%	80%	90%	95%	EIA CFM%	
Total Assets 6/30/21			\$2,166,637			
IBNR		\$158,120				
CFM	\$138,198	\$207,297	\$276,396	\$345,495	\$460,659	
Total IBNR/CFM	\$296,317	\$364,416	\$434,515	\$503,614	\$618,779	
Surplus/Deficit	\$1,870,320	\$1,801,221	\$1,732,122	\$1,663,023	\$1,547,858	

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

David E. Turner, FSA Manager TURNER CONSULTING AND ACTUARIAL, LLC

# COUNTY OF SANTA BARBARA Claim Lag and IBNR Projection

Avg./Mem	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	
Enrollmer	3.471 3.446 3.446 3.446 3.446 3.470 3.470 3.470 3.543	
Est. Total Adj. Total Inc. Claims EnrollmenAvg./Mem.	0 0 0 0 0 0 0 0 0 2,788 729 729 729 729 729 729 729 729 739 110,979 110,979 110,979 1179,481	2,336,205 103,993 136,900 32,908
Est. Total Inc. Claims	0 0 0 0 0 0 0 0 0 2,788 729 729 729 729 729 739 10,579 119,549 119,549 119,549 119,549 117,549	2,296,475 103,993 97,170 (6,822)
Percent	100.0% 10	tunout (-12 IBNR IBNR Chng
Complete	(1219,594 (1219,	
Incurred Total	0 0 0 0 0 0 0 0 0 0 2,788 729 729 729 729 729 739 110,979 110,949 117,	2,199,305 (Prior 12)
Jun-21	495 2,139 108 1,434 1,434 1,034 1,13	171,239 191,941 -6.0%
May-21	119 102 108 108 109 0 0 0 0 0 721 11,863 903 5,834 6,225 697,692	170,255 193,823 -5.1%
Apr-21	333 0 0 0 0 0 0 230 0 230 0 237 1,245 504 504 504 504 11,327 113,227	247,853 196,180 -3.9%
Mar-21	295 0 0 0 1.054 620 1.054 87.276 1.36,250	232,843 190,439 -6.8%
Feb-21	99 1,089 332 4,025 5,209 77,166	213,850 185,138 -9.4%
Jan-21	199 0 0 0 0 0 197 3329 101 44 44 44 44 44 44 44 44 44 44 44 44 44	183,554 181,037 -11.4%
Dec-20	336 99 0 0 0 0 0 0 0 0 231 1,270 3,280 68,855 114,268	189,751 180,617 -11.6%
Nov-20	160 343 0 0 0 0 2,979 3,752 3,238 2,283 89,372	156,413 178,790 -12.5%
Oct-20	5 221 376 5 5 121 0 0 274 395 3,461 5,731	212,351 184,385 -9.7%
Sep-20	370 0 5 219 302 302 333 3,627 6,973 71,574 80,274	163,876 175,063 -14.3%
Aug-20	27 0 447 0 288 600 0 0 0 0 0 0 1,784 56,708	157,070 180,656 -11.5%
Jul-20	272 0 0 1,260 750 1,997 200 1,722 80,981 117,061	204,243
Jun-20	104 0 0 0 227 1,449 1,535 1,535 36,462 88,002	129,151
May-20	73 101 1,025 831 1,215 1,215 6,747 24,189	36,838 unout)
Apr-20	103 0 0 1,789 457 2,100 6,501 2,403 13,301	age age NR (Prior Ra
Month Incurred	Jun-19 - 29 Feb-19 - 28 Mar-19 - 25 Apr-19 - 25 Jun-19 - 25 Jun-19 - 25 Jun-19 - 24 Jun-19 - 24 Jun-19 - 24 Jun-19 - 25 Sep-19 - 21 Sep-19 - 19 Dec-19 - 18 Jun-20 - 17 Feb-20 - 16 May-20 - 15 May-20 - 13 Jun-20 - 12 Jun-20 - 12 May-20 - 13 May-20 - 14 May-20 - 15 Feb-20 - 16 May-20 - 17	Paid Total Rolling 12 Month average Percent Change Beginning Medical IBNR (Prior Runout) Ending Medical IBNR Medical IBNR Reserve Change

0:0%	136,900	1.050	1.100	158,120	2,303,297	%6.9	
Adjustment for Large Claims	Adjusted Dental IBNR	Adjustment for Margin	Add Admin	Est. Dental IBNR	Paid Claims (prior 12 months)	% of Paid Claims	
	Other	20.0%	460,659	158,120	618,779		1,547,858
argin	%56	15.0%	345,495	158,120	503,614		1,663,023
Juctuation M	%06	12.0%	276,396	3,120 158,120 158,1	434,515	2,166,637	1,732,122
Claim F	%08	%0.6	207,297	158,120	365,416		1,801,221
	20%	%0.9	138,198	158,120	296,317		1,870,320
			CFM	IBNR	Total		- 55
						6/30/2021	Surpl