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July 17, 2020

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 6/30/20	\$167,509	7.5%

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 remained stable compared to last year's IBNR estimate of \$168,788 and 7.4% of claims. Actual runout for the prior 12-month period through 3/31/20 was \$113,127.

Impact of COVID-19

Due to the impact of COVID-19 on dental office closures beginning mid-March 2020, we have calculated the IBNR using claim data through 3/31/20. We have also made a +4.2% adjustment to IBNR to reflect ½ month of reduced claims in March 2020. We believe using data through 3/31/20 plus this adjustment is a more accurate estimate of 6/30/20 IBNR reserves than using claims through June 2020.

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	\$133,386	\$200,080	\$266,773	\$333,466	\$444,621

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%
Total Assets 6/30/20	\$2,106,628				
IBNR	\$167,509				
CFM	\$133,386	\$200,080	\$266,773	\$333,466	\$444,621
Total IBNR/CFM	\$300,895	\$367,589	\$434,282	\$500,975	\$612,130
Surplus/Deficit	\$1,805,733	\$1,739,039	\$1,672,346	\$1,605,653	\$1,494,498

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

Dental

Month Incurred	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Incurred Total	Complete	Percent	Est. Total Inc. Claims	Adj. Total Inc. Claims	Enrollment	Avg./Mem.	
Oct-17 -29																0	1,140,860	100.0%	0	0	3,534	0.00	
Nov-17 -28																0	1,140,860	100.0%	0	0	3,541	0.00	
Dec-17 -27																0	1,140,860	100.0%	0	0	3,522	0.00	
Jan-18 -26	120							600								720	1,140,860	100.0%	720	720	3,534	0.20	
Feb-18 -25	213												(234)			(21)	1,140,860	100.0%	(21)	(21)	3,541	(0.01)	
Mar-18 -24	(461)	188	330										607			664	1,140,860	100.0%	664	664	3,522	0.19	
Apr-18 -23	56	1,017	0	74												1,147	1,140,860	100.0%	1,147	1,147	3,500	0.33	
May-18 -22	0	0	2,500	1,214			(1,250)									2,464	1,141,094	100.0%	2,464	2,464	3,489	0.71	
Jun-18 -21	262	0	0	389			1,147									1,798	1,140,487	100.0%	1,798	1,798	3,481	0.52	
Jul-18 -20	697	488	0	(60)			56									1,181	1,140,487	100.0%	1,181	1,181	3,467	0.34	
Aug-18 -19	574	0	598			300	1,303	102								2,877	1,140,487	100.0%	2,877	2,877	3,473	0.83	
Sep-18 -18	407	175	1,842	31	600			236								3,291	1,140,487	100.0%	3,291	3,291	3,466	0.95	
Oct-18 -17	4,276	1,394	1,163	1,201	169	128	130	147								8,608	1,140,487	100.0%	8,610	8,610	3,454	2.49	
Nov-18 -16	3,547	1,932	3,230	993	471	540	1,205									11,918	1,140,487	100.0%	11,922	11,922	3,455	3.45	
Dec-18 -15	41,104	4,012	1,259	1,393	1,319	332	381						511			50,311	1,140,487	100.0%	50,327	50,327	3,455	14.57	
Jan-19 -14	174,932	69,371	8,577	2,203	1,828	2,055	651	217		2,301	174	924	26			263,259	1,140,487	100.0%	263,345	263,345	3,471	75.87	
Feb-19 -13		125,255	65,436	727	2,898	1,995	106		157		143					196,717	1,140,487	100.0%	196,781	196,781	3,470	56.71	
Mar-19 -12			121,896	74,704	5,717	1,341	242	296	162			225				204,583	1,139,976	99.9%	204,742	204,742	3,461	59.16	
Apr-19 -11				110,937	82,750	5,108	2,166	1,157	573	323			844			203,858	1,139,950	99.9%	204,021	204,021	3,446	59.21	
May-19 -10					125,372	68,824	5,847	2,233	2,676	1,130	262	(25)	518			206,837	1,139,026	99.8%	207,170	207,170	3,444	60.15	
Jun-19 -9						88,081	59,784	2,520	1,923	1,266	334	217	378	240		154,743	1,138,852	99.8%	155,016	155,016	3,448	44.96	
Jul-19 -8							86,191	81,608	4,604	2,029	829	533	219	781	50	176,844	1,135,339	99.5%	177,704	177,704	3,465	51.29	
Aug-19 -7								108,570	50,400	3,323	2,265	1,399	236	99	653	166,945	1,134,531	99.4%	167,876	167,876	3,471	48.37	
Sep-19 -6									82,472	65,621	4,161	920	89	48	48	153,311	1,132,744	99.3%	154,409	154,409	3,472	44.47	
Oct-19 -5										128,097	41,785	3,013	3,246	245	186	176,572	1,131,576	99.2%	178,021	178,021	3,470	51.30	
Nov-19 -4											111,409	47,179	4,942	315	326	164,171	1,129,157	99.0%	165,873	165,873	3,471	47.79	
Dec-19 -3												97,162	63,524	2,545	1,550	164,781	1,125,003	98.6%	167,104	167,104	3,459	48.31	
Jan-20 -2													165,935	78,534	5,965	250,434	1,114,678	97.7%	256,316	256,316	3,525	72.71	
Feb-20 -1														113,582	87,141	200,723	1,090,729	95.6%	209,948	209,948	3,541	59.29	
Mar-20 0															90,760	90,760	706,945	62.0%	146,467	212,711	3,539	60.10	
Paid Total	225,727	203,832	206,832	193,806	221,124	168,704	157,959	197,686	142,967	204,090	161,362	151,547	240,841	196,341	186,679	2,109,979			2,189,925	2,256,169			
Rolling 12 Month average				193,806	207,465	194,545	185,398	187,856	180,374	183,762	180,962	177,694	184,009	185,130	185,259	(Prior 12)							
Percent Change					7.0%	0.4%	-4.3%	-3.1%	-6.9%	-5.2%	-6.6%	-8.3%	-5.1%	-4.5%	-4.4%								
Beginning Medical IBNR (Prior Runout)																			Runout (-12	113,127			
Ending Medical IBNR																			IBNR	79,946			113,127
Medical IBNR Reserve Change																			IBNR Chng	(33,181)			33,063

	Claim Fluctuation Margin					Adjustment for Large Claims	0.0%
	70%	80%	90%	95%	Other		
	6.0%	9.0%	12.0%	15.0%	20.0%	Adjusted Dental IBNR	146,190
CFM	133,386	200,080	266,773	333,466	444,621	Adjustment for COVID 19 (1/2 Mo)	1.042
IBNR	167,509	167,509	167,509	167,509	167,509	Add Admin	1.100
Total	300,895	367,589	434,282	500,975	612,130	Est. Dental IBNR	167,509
6/30/2020 Fund			2,106,628			Paid Claims (prior 12 months)	2,223,106
Surplus/Deficit	1,805,733	1,739,039	1,672,346	1,605,653	1,494,498	% of Paid Claims	7.5%