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**INTEROFFICE MEMO**

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**DATE:** 2/14/2014

**TO:** VALOREE CELONA

**CC:** ETHAN ALLEN, ROBERT COLE, TINA COSTANTINO, RICHARD D'ALFONSO, WILLIAM HARRIS, STEVEN LEERET, DANA OBRENTZ, MICHAEL TRANFAGLIA, EMILY TUREK

**FROM:** OLIVERIO HERNANDEZ

**RE:** CERTIFIED NURSE MIDWIVES PROFESSIONAL LIABILITY-2013 PROFITABILITY STUDY

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Attached please find the profitability analysis of the Certified Nurse Midwives (CNM) Professional Liability book of business, using gross machine data evaluated as of 9/30/13. The results are shown below and on the summary exhibits attached. The professional liability business is priced on a non-admitted basis, using independent rates and rating factors that are unique in each state.

The premium and loss experience used to project the ultimate loss and lae ratios is on a policy year (PY) basis. The PY 2014 Ultimate Loss & LAE reflects a 3.5% underlying trend assumption, along with the PY 2014 rate level needed to achieve either a credibility weighted underwriting breakeven (0% risk load) or RAP Neutral (2.5% risk load) ILAE ratio.

Summary of Profitability Results:

LOB	PY 2013 GWP	After 2013 Rate Change PY 2014 Ultimate ILAE Ratio	RAP Neutral		UW Breakeven	
			Target Ratio	After 2013 Rate Change PY 2014 Rate Need	Target Ratio	After 2013 Rate Change PY 2014 Rate Need
Certified Nurse Midwives	4,793	76.3%	70.7%	7.5%	73.2%	4.0%

**Headlines:**

- PY 2014 Ultimate Loss & LAE ratios above indicate that the overall rate levels of this book are somewhat deficient, with the indicated rate need ranging from 4% - 7.5%.
- The overall results of this analysis are more favorable than those indicated in the previous profitability study for the same book of business, which was based on data as of 12/31/11 (updated as of 3/31/12). This is driven by the better than expected loss emergence and additional premium achieved through rate change, resulting in an indicated rate need of 4% - 7.5% (the previous study indicated a rate need of 5% - 31%).

## Methodology:

The ultimate loss & LAE ratios for PY 2013 are selected based on the weighted averages of the indexed loss ratios for the preceding years, then credibility weighting the loss ratio, applying the complement of credibility to the overall Healthcare book of business loss ratio (72.3%). An amount for ULE expenses is added to the PY 2013 loss & LAE ratio, to arrive at the loss & lae ratios selected. An additional year of trend and rate change is applied to the PY 2013 selected loss & lae ratios, in order to estimate the PY 2014 loss & lae ratios. The rate need is calculated by comparing the selected ultimate loss & lae ratio to the target loss & lae ratio.

Historical rate change information for CNM is the same as that included in the previous profitability study and incorporates the most recent comparison of renewal to expiring premium information (calculated via the established rate monitoring process).

Several methodologies have been used to project reported loss & LAE to ultimate. This includes the following: paid and incurred loss development, paid and incurred Bornhuetter-Ferguson (B-F) method, and a frequency/severity method.

The target loss & lae ratios are calculated as the complement of the program's underwriting expenses and two different risk (profit) assumptions. The commission amount is specific to each program, while the average underwriting expenses of Division 66 are used for the remaining amounts. Since this business is written on non-admitted company paper, the premium taxes have been assumed to be 0%. The underwriting breakeven ratio is calculated based on a 0% risk load, while the RAP neutral ratio contemplates a risk load of 2.5%.

### Table of Contents:

- 1. Exhibit 1: Summary of Indicated Rate Needs**-PY 2013 and 2014 Ultimate loss & lae ratios are shown using varying underlying trend assumptions by line. Also shown are the underwriting expense ratio, target loss & LAE ratio and rate needs for underwriting breakeven and RAP neutral results. The rate need is calculated by comparing the PY loss & LAE ratio to the target loss & LAE ratio.
- 2. Exhibit 2: Reported Paid and Incurred Loss & LAE Ratios**-policy year reported paid loss & LAE and incurred loss & LAE ratios to written premium are shown as of 9/30/13 for each line of business. There does not appear to be any consistent increase or decrease in the reported loss & LAE ratios by accident year or development point.
- 3. Exhibit 3: Indexing-PY 2013 Ultimate Loss and LAE Ratio**-policy year ultimate loss & LAE ratios (from exhibit 5) at various capping levels are shown indexed to the 2013 trend and rate level. The PY loss & LAE is projected at total limits, as well as claims capped at different loss levels and brought to ultimate using the implied Increased Limit Factor (calculated in exhibit 7). The selected ultimate loss & LAE ratio is based on the weighted average of the previous years' loss & LAE ratios and the Frequency/Severity loss ratio indication (calculated in exhibit 4). This selected ultimate loss & LAE ratio is then credibility weighted, applying the program credibility to the selected ultimate and the complement to the Healthcare book of business loss ratio. An amount for ULE expenses is added to reflect all LAE.
- 4. Exhibit 4: Frequency/Severity Method**-this exhibit summarizes the indicated on-level Frequency (calculated as number of claims/on-level WP), and the average severity

brought to the 2013 trend level (calculated as selected ultimate ILAE/ultimate CWP claims). A selection is made for both, based on the indicated weighted averages and multiplied together to arrive at an indicated loss & LAE ratio for PY 2013.

5. **Exhibit 5: Selection of Ultimate Loss & LAE Ratios**-policy year ultimate loss & LAE ratios are selected based upon indicated ultimates derived from the incurred development (exhibits 8a-8c), paid development (exhibits 8d-8f), paid and incurred B-F (exhibit 6) methods. The selected ultimates are generally based on an average of the indications from the paid methods (the more recent accident year averages only give weight to the B-F methods).
6. **Exhibit 6: Bornhuetter-Ferguson (B-F) Method**-policy year ultimate loss & LAE has been projected by estimating the expected IBNR for each year, relying on expected loss and LAE ratios (apriori ILAE ratio) and the reporting pattern implied by the selected loss development factors (exhibit 8). The apriori ILAE ratios are selected based on the average of the paid and incurred developed ultimates for the older policy years, and a selected ILAE ratios based on the weighted averages of the trended, on-level ILAE ratios for the more recent policy years (exhibit 6b).
7. **Exhibit 7: Increased Limit Factor Selection**-a comparison of the ultimate loss & LAE, at different capping levels, to the uncapped ultimate loss & LAE is used to develop an implied increased limit factor for each capping limit. The implied ILF is credibility weighted against the program's filed ILFs. The credibility weighted ILF is used to bring the capped ultimates to total limits for each method.
8. **Exhibit 8: Incurred and Paid Loss Development**-policy year loss & LAE, at various capping levels, has been projected to ultimate by applying the selected age to ultimate loss development factors for the actual loss & LAE for each year. While the volume of losses is somewhat low, the program specific indicated age to age factors, along with those based on Healthcare Professional Liability Claims Made programs combined, have been used to select indicated age to age factors to develop the experience to ultimate.
9. **Exhibit 9: Written Premium Development**-policy year written premium has been projected to ultimate based on the indicated age to ultimate factors applied to the actual written premium. This is done to estimate any additional development on the PY written premium that may occur. The projected written premium for the most recent PY has been selected as the budgeted written premium amount for the program.
10. **Exhibits 10-12: Claim Diagnostic Exhibit**-reported paid severity, average outstanding, paid to incurred ratios and claim disposal rates are shown to assist in supporting some of the underlying loss development assumptions. As previously noted there is no clear indication of changes in case reserve adequacy based on the indications of the average outstanding loss and paid to incurred ratios. There is also no clear indication of an increase in claim disposal rates or claims handling practices. It should be noted that these diagnostics are not fully credible due to the low volume and volatility of the indicated losses and ratios.
11. **Exhibit 13: Large Loss Exhibit**: incurred loss & LAE for claims with reported losses (paid plus outstanding) greater than \$100,000 are shown on this exhibit, provided for informational purposes.

Program Summary by LOB - PY 2013

LOB	PY 2013 GWP	RAP Neutral		UW Breakeven		PY 2013 Rate Achieved	After 2013 Rate Change PY 2013 Ultimate ILAE Ratio
		Target Ratio	Before 2013 Rate Change PY 2013 Rate Need	Target Ratio	Before 2013 Rate Change PY 2013 Rate Need		
Certified Nurse Midwives	4,793	75.6%	70.7%	73.2%	3.1%	2.6%	73.7%

Program Summary by LOB - PY 2014

	PY 2013 GWP	After 2013 Rate Change PY 2014 Ultimate ILAE Ratio
Certified Nurse Midwives	4,793	76.3%

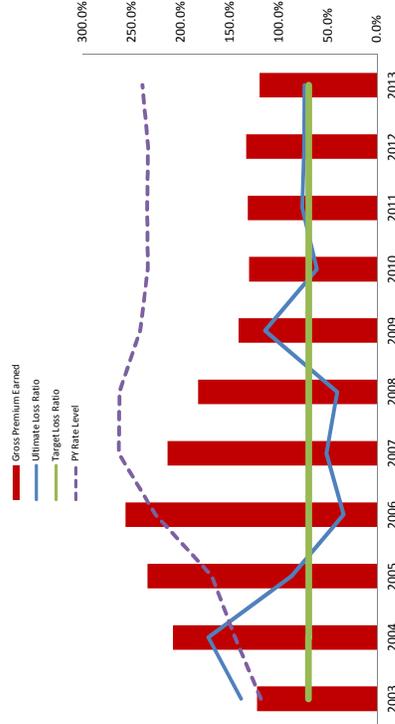
RAP Neutral		After 2013 Rate Change PY 2014 Rate Need
Target Ratio	70.7%	7.5%

UW Breakeven		After 2013 Rate Change PY 2014 Rate Need
Target Ratio	73.2%	4.0%

Division 66 - Programs  
 Certified Nurse Midwives Professional Liability - Profitability Study  
 PYG @ 2013/3 (000's omitted)

Program Summary by LOB - Casualty Lines

PY	Loss Ratio		Combined Ratio		Normalized RAP Dollars	Rt Chg	Rt Lvl
	Reported	Ultimate	Ultimate	BECR			
2003	4,902	136.4%	69.9%	168.9%	-2,334	18.5%	1.19
2004	8,332	169.0%	69.9%	202.3%	-5,823	22.3%	1.45
2005	9,366	86.5%	69.9%	117.1%	-1,222	16.3%	1.69
2006	10,258	32.3%	69.9%	64.4%	2,262	34.1%	2.26
2007	8,549	45.9%	69.9%	81.7%	899	16.5%	2.63
2008	7,303	31.3%	69.9%	70.9%	1,295	-0.3%	2.63
2009	5,650	89.8%	69.9%	144.3%	-1,764	-8.0%	2.42
2010	5,222	42.1%	69.9%	91.6%	205	-3.2%	2.34
2011	5,280	35.0%	69.9%	106.6%	-319	0.3%	2.34
2012	5,342	17.4%	69.9%	104.7%	-256	-0.5%	2.33
2013	4,793	0.3%	69.9%	104.4%	-219	2.6%	2.39
Total	74,997	64.6%	82.0%	104.4%	-7,278		





**Midwives**

Rate Need Indications

	Before 2013			After 2013		
	Target ILAE Ratio	Rate Change PY 2013 Ultimate ILAE Ratio	Rate Need PY 2013 Rate Achieved	Rate Change PY 2013 Ultimate ILAE Ratio	PY 2014 Ultimate ILAE Ratio	PY 2014 Rate Need
RAP Neutral:	70.7%	75.6%	2.6%	73.7%	76.3%	7.5%
UW Breakeven:	73.2%	75.6%	2.6%	73.7%	76.3%	4.0%
Combined Ratio	97.5%					
	100.0%					

Expense Ratio calculated as follows:

Commission:	20.0%
Prem Tax:	0.0%
Other Acquisition Fees:	0.8%
Direct Expense:	3.1%
Indirect Expense:	2.9%
	<u>26.8%</u>



Midwives

Indexing - PY 2013 Ultimate Loss & LAE Selection

PY	GWP	Annual PY Rate Chg	Cumulative PY Rate Chg	On-Level GWP
2003	4,902	18.5%	1.185	9,901
2004	8,332	22.3%	1.449	13,760
2005	9,366	16.3%	1.685	13,300
2006	10,258	34.1%	2.260	10,863
2007	8,549	16.5%	2.633	7,771
2008	7,303	-0.3%	2.625	6,658
2009	5,650	-8.0%	2.415	5,599
2010	5,222	-3.2%	2.338	5,346
2011	5,280	0.3%	2.345	5,389
2012	5,342	-0.5%	2.333	5,479
2013	4,793	2.6%	2.393	4,793
			All Yr Wtd ex 2013: Last 7 Wtd ex 2013: Last 5 Wtd ex 2013: Last 3 Wtd ex 2013:	
			Selected Ultimate: ILF:	
			Policy Limits Ultimate:	

Policy Limits			3.5%	On-Level Ultimate ILAE Ratio
Ultimate ILAE Ratio	Trend to PY 2013			
138.9%	1.411		97.0%	
172.3%	1.363		142.2%	
87.0%	1.317		80.7%	
34.4%	1.272		41.3%	
51.7%	1.229		69.9%	
40.9%	1.188		53.2%	
114.3%	1.148		132.3%	
61.6%	1.109		66.7%	
76.5%	1.071		80.3%	
74.6%	1.035		75.3%	
76.8%	1.000		76.8%	
			86.6%	
			69.8%	
			80.7%	
			74.1%	
			80.0%	
			1.00	
			80.0%	32%

Weight:

Capped @ 250k			3.3%	On-Level Ultimate ILAE Ratio
Ultimate ILAE Ratio	Trend to PY 2013			
105.3%	1.377		71.8%	
98.0%	1.334		79.2%	
57.9%	1.292		52.6%	
23.2%	1.251		27.4%	
26.4%	1.212		35.2%	
27.1%	1.173		34.9%	
52.0%	1.136		59.6%	
45.8%	1.101		49.3%	
55.2%	1.066		57.6%	
48.9%	1.033		49.2%	
47.9%	1.000		47.9%	
			53.3%	
			42.0%	
			49.5%	
			52.0%	
			52.0%	
			1.42	
			73.9%	34%

Capped @ 100k			3.0%	On-Level Ultimate ILAE Ratio
Ultimate ILAE Ratio	Trend to PY 2013			
74.0%	1.344		49.2%	
69.0%	1.305		54.5%	
44.4%	1.267		39.6%	
18.5%	1.230		21.4%	
19.3%	1.194		25.3%	
17.7%	1.159		22.5%	
34.4%	1.126		39.1%	
33.4%	1.093		35.7%	
39.6%	1.061		41.1%	
33.9%	1.030		34.0%	
32.8%	1.000		32.8%	
			37.6%	
			29.7%	
			34.0%	
			36.9%	
			36.9%	
			1.86	
			68.8%	34%

Frequency/Severity Indication: 74.5%  
 Weighted Average: 74.1%  
 PY 2013 Program Selected: 74.3%  
 Program Credibility: 29.2%  
 PY 2013 Credibility Weighted: 72.9%  
 ULE: 0.8%  
 Claims Fees: 0.0%  
 PY 2013 Ultimate ILAE Ratio: 73.7%

**Midwives**

Frequency/Severity Method

		Frequency				Severity				
PY	On-Level GWP	Reported excl CWNP Claim Ct.	Ultimate excl CWNP Claim Ct.	On-Level Frequency	Reported ILAE @ 2013/3	Selected Ultimate ILAE	Average Severity	3.5% Trend to PY 2013	Average Severity @ PY 2013	
2003	9,901	18	18	0.002	6,686	6,808	372	1.411	524.78	
2004	13,760	22	23	0.002	14,082	14,354	638	1.363	869.06	
2005	13,300	19	20	0.001	8,102	8,150	416	1.317	547.36	
2006	10,863	10	10	0.001	3,312	3,526	337	1.272	428.66	
2007	7,771	9	10	0.001	3,925	4,417	461	1.229	566.90	
2008	6,658	8	9	0.001	2,287	2,984	334	1.188	397.26	
2009	5,599	10	11	0.002	5,072	6,457	571	1.148	655.24	
2010	5,346	12	14	0.003	2,200	3,215	236	1.109	261.97	
2011	5,389	14	18	0.003	1,850	4,040	222	1.071	237.55	
2012	5,479	10	17	0.003	928	3,987	241	1.035	249.51	
2013	4,793	1			15					
All Yr Wtd:				0.002					521.70	
Last 7 Wtd:				0.002					412.34	
Last 5 Wtd:				0.002					363.93	
Last 3 Wtd:				0.003					249.64	
				PY 2013 Selected Frequency:					PY 2013 Selected Severity:	249.64

Indicated PY 2013 Ult ILAE Ratio: 74.5%

**Midwives**

Selection of Ultimate Loss & LAE - Capped @ Policy Limits

PY	GWP	Reported ILAE @ 2013/3	Inc. Dev.		Paid Dev.		Inc. BF Method	Paid BF Method	Selected Ultimate ILAE	Expected		Actual		Selected Ultimate ILAE	Ultimate ILAE Ratio
			Method	Value	Method	Value				Adjuster	Load	Adjuster	Load		
2003	4,902	6,686	6,685	6,931	6,685	6,926	6,808	1,000	1,024	6,808	138.9%				
2004	8,332	14,082	14,096	14,612	14,096	14,599	14,354	1,000	1,014	14,354	172.3%				
2005	9,366	8,102	8,151	7,836	8,150	7,848	8,150	1,000	1,022	8,150	87.0%				
2006	10,258	3,312	3,365	3,686	3,368	3,667	3,526	1,000	1,028	3,526	34.4%				
2007	8,549	3,925	4,068	4,766	4,080	4,700	4,417	1,000	1,019	4,417	51.7%				
2008	7,303	2,287	2,465	3,153	2,650	3,667	2,984	1,000	1,021	2,984	40.9%				
2009	5,650	5,072	5,931	7,832	5,663	6,401	6,457	1,000	1,018	6,457	114.3%				
2010	5,222	2,200	2,912	2,580	3,157	3,273	3,215	1,000	1,026	3,215	61.6%				
2011	5,280	1,850	3,501	4,595	3,806	4,273	4,040	1,000	1,020	4,040	76.5%				
2012	5,342	928	3,106	1,432	3,925	4,049	3,987	1,000	1,005	3,987	74.6%				
2013	4,793	15	464	0	3,633	3,730	3,682	1,000	1,000	3,682	76.8%				

**Midwives**

Selection of Ultimate Loss & LAE - Capped @ 250k

PY	GWP	Reported ILAE @ 2013/3	Inc. Dev.		Paid Dev.		Inc. BF Method	Paid BF Method	Selected Ultimate ILAE	Expected		Actual		Selected Ultimate ILAE	Ultimate ILAE Ratio
			Method	313	Method	0				Adjuster Load	Adjuster Load	Adjuster Load	Adjuster Load		
2003	4,902	5,069	5,068	5,259	5,068	5,256	5,164	1,000	1,031	5,164	105.3%				
2004	8,332	8,045	8,053	8,285	8,053	8,279	8,169	1,000	1,024	8,169	98.0%				
2005	9,366	5,387	5,419	5,184	5,419	5,193	5,419	1,000	1,033	5,419	57.9%				
2006	10,258	2,260	2,296	2,455	2,298	2,447	2,376	1,000	1,042	2,376	23.2%				
2007	8,549	2,073	2,148	2,372	2,152	2,355	2,260	1,000	1,038	2,260	26.4%				
2008	7,303	1,614	1,739	2,052	1,840	2,283	1,978	1,000	1,032	1,978	27.1%				
2009	5,650	2,473	2,807	3,205	2,763	2,976	2,938	1,000	1,040	2,938	52.0%				
2010	5,222	2,100	2,630	2,105	2,574	2,211	2,393	1,000	1,036	2,393	45.8%				
2011	5,280	1,851	3,160	3,910	2,879	2,948	2,913	1,000	1,027	2,913	55.2%				
2012	5,342	928	2,766	1,145	2,703	2,520	2,612	1,000	1,007	2,612	48.9%				
2013	4,793	15	313	0	2,251	2,338	2,294	1,000	1,000	2,294	47.9%				

**Midwives**

Selection of Ultimate Loss & LAE - Capped @ 100k

PY	GWP	Reported ILAE @ 2013/3	Inc. Dev.		Paid Dev.		Inc. BF		Paid BF		Selected Ultimate ILAE		Expected Adjuster Load		Actual Adjuster Load		Selected Ultimate ILAE		Ultimate ILAE Ratio
			Method	Method	Method	Method	Method	Method	Method	Method	Method	Method	Method	Method	Method	Method	Method	Method	
2003	4,902	3,560	3,559	3,696	3,559	3,693	3,559	3,693	3,627	1,000	1,044	3,627	1,000	1,044	3,627	74.0%			
2004	8,332	5,645	5,651	5,847	5,651	5,842	5,651	5,842	5,749	1,000	1,034	5,749	1,000	1,034	5,749	69.0%			
2005	9,366	4,137	4,162	4,149	4,162	4,149	4,162	4,162	4,162	1,000	1,043	4,162	1,000	1,043	4,162	44.4%			
2006	10,258	1,810	1,839	1,949	1,840	1,943	1,840	1,840	1,894	1,000	1,052	1,894	1,000	1,052	1,894	18.5%			
2007	8,549	1,518	1,573	1,722	1,576	1,710	1,576	1,576	1,647	1,000	1,052	1,647	1,000	1,052	1,647	19.3%			
2008	7,303	1,027	1,106	1,299	1,208	1,557	1,208	1,557	1,292	1,000	1,050	1,292	1,000	1,050	1,292	17.7%			
2009	5,650	1,623	1,835	2,050	1,857	2,043	1,857	2,043	1,946	1,000	1,061	1,946	1,000	1,061	1,946	34.4%			
2010	5,222	1,450	1,805	1,653	1,795	1,696	1,795	1,696	1,745	1,000	1,049	1,745	1,000	1,049	1,745	33.4%			
2011	5,280	1,367	2,250	2,896	2,047	2,132	2,047	2,132	2,090	1,000	1,038	2,090	1,000	1,038	2,090	39.6%			
2012	5,342	618	1,780	1,050	1,839	1,781	1,839	1,781	1,810	1,000	1,010	1,810	1,000	1,010	1,810	33.9%			
2013	4,793	15	199	0	1,522	1,619	1,522	1,619	1,570	1,000	1,000	1,570	1,000	1,000	1,570	32.8%			

Midwives

Bornhuetter-Ferguson Method

PY	Capped @ Policy Limits				Incurred		Paid	
	GWP	Reported ILAE Ratio	Reported PLAE Ratio	Developed ILAE Ratio	Developed ILAE Ratio	Developed ILAE Ratio	Apriori ILAE Ratio	
2003	4,902	136.4%	136.4%	136.4%	141.4%	141.4%	138.9%	
2004	8,332	169.0%	166.4%	169.2%	175.4%	175.4%	172.3%	
2005	9,366	86.5%	77.2%	87.0%	83.7%	83.7%	85.3%	
2006	10,258	32.3%	31.6%	32.8%	35.9%	35.9%	34.4%	
2007	8,549	45.9%	45.2%	47.6%	55.8%	55.8%	51.7%	
2008	7,303	31.3%	31.3%	33.8%	43.2%	43.2%	68.8%	
2009	5,650	89.8%	85.8%	105.0%	138.6%	138.6%	72.2%	
2010	5,222	42.1%	23.8%	55.8%	49.4%	49.4%	75.0%	
2011	5,280	35.0%	24.2%	66.3%	87.0%	87.0%	78.6%	
2012	5,342	17.4%	2.1%	58.2%	26.8%	26.8%	80.0%	
2013	4,793	0.3%	0.0%	9.7%	0.0%	0.0%	78.0%	

PY	Incurred		Born-Ferg Ultimate ILAE Ratio	
	% Expected Unreported	Born-Ferg Ultimate ILAE	Born-Ferg Ultimate ILAE Ratio	Born-Ferg Ultimate ILAE
2003	0.0%	136.4%	136.4%	6,685
2004	0.1%	169.2%	169.2%	14,096
2005	0.6%	87.0%	87.0%	8,150
2006	1.6%	32.8%	32.8%	3,368
2007	3.5%	47.6%	47.7%	4,080
2008	7.2%	36.3%	36.3%	2,650
2009	14.5%	100.2%	100.2%	5,663
2010	24.4%	60.5%	60.5%	3,157
2011	47.2%	72.1%	72.1%	3,806
2012	70.1%	73.5%	73.5%	3,925
2013	96.8%	75.8%	75.8%	3,633

PY	Paid		Born-Ferg Ultimate ILAE Ratio	
	% Expected Unreported	Born-Ferg Ultimate ILAE	Born-Ferg Ultimate ILAE Ratio	Born-Ferg Ultimate ILAE
2003	3.5%	141.3%	141.3%	6,926
2004	5.1%	175.2%	175.2%	14,599
2005	7.8%	83.8%	83.8%	7,848
2006	12.2%	35.7%	35.7%	3,667
2007	19.0%	55.0%	55.0%	4,700
2008	27.5%	50.2%	50.2%	3,667
2009	38.1%	113.3%	113.3%	6,401
2010	51.9%	62.7%	62.7%	3,273
2011	72.2%	80.9%	80.9%	4,273
2012	92.1%	75.8%	75.8%	4,049
2013	99.8%	77.8%	77.8%	3,730

PY	Capped @ 250k				Incurred		Paid	
	GWP	Reported ILAE Ratio	Reported PLAE Ratio	Developed ILAE Ratio	Developed ILAE Ratio	Developed ILAE Ratio	Apriori ILAE Ratio	
2003	4,902	103.4%	103.4%	103.4%	107.3%	107.3%	105.3%	
2004	8,332	96.6%	94.0%	96.7%	99.4%	99.4%	98.0%	
2005	9,366	57.5%	50.8%	57.9%	55.3%	55.3%	56.6%	
2006	10,258	22.0%	21.3%	22.4%	23.2%	23.2%	23.2%	
2007	8,549	24.2%	23.5%	25.1%	27.9%	27.9%	26.4%	
2008	7,303	22.1%	22.1%	23.8%	28.1%	28.1%	42.9%	
2009	5,650	43.8%	39.8%	49.7%	56.7%	56.7%	43.2%	
2010	5,222	40.2%	22.8%	50.4%	40.3%	40.3%	45.0%	
2011	5,280	35.1%	24.2%	59.8%	74.1%	74.1%	47.0%	
2012	5,342	17.4%	2.1%	51.8%	21.4%	21.4%	50.0%	
2013	4,793	0.3%	0.0%	6.5%	0.0%	0.0%	49.0%	

PY	Incurred		Born-Ferg Ultimate ILAE Ratio	
	% Expected Unreported	Born-Ferg Ultimate ILAE	Born-Ferg Ultimate ILAE Ratio	Born-Ferg Ultimate ILAE
2003	0.0%	103.4%	103.4%	5,068
2004	0.1%	96.7%	96.7%	8,053
2005	0.6%	57.9%	57.9%	5,419
2006	1.6%	22.4%	22.4%	2,298
2007	3.5%	25.2%	25.2%	2,152
2008	7.2%	25.2%	25.2%	1,840
2009	11.9%	48.9%	48.9%	2,763
2010	20.2%	49.3%	49.3%	2,574
2011	41.4%	54.5%	54.5%	2,879
2012	66.5%	50.6%	50.6%	2,703
2013	95.2%	47.0%	47.0%	2,251

PY	Paid		Born-Ferg Ultimate ILAE Ratio	
	% Expected Unreported	Born-Ferg Ultimate ILAE	Born-Ferg Ultimate ILAE Ratio	Born-Ferg Ultimate ILAE
2003	3.6%	107.2%	107.2%	5,256
2004	5.5%	99.4%	99.4%	8,279
2005	8.1%	55.4%	55.4%	5,193
2006	11.0%	23.9%	23.9%	2,447
2007	15.3%	27.5%	27.5%	2,355
2008	21.3%	31.3%	31.3%	2,283
2009	29.9%	52.7%	52.7%	2,976
2010	43.4%	42.3%	42.3%	2,211
2011	67.4%	55.8%	55.8%	2,948
2012	90.1%	47.2%	47.2%	2,520
2013	99.5%	48.8%	48.8%	2,338

PY	Capped @ 100k				Incurred		Paid	
	GWP	Reported ILAE Ratio	Reported PLAE Ratio	Developed ILAE Ratio	Developed ILAE Ratio	Developed ILAE Ratio	Apriori ILAE Ratio	
2003	4,902	72.6%	72.6%	72.6%	75.4%	75.4%	74.0%	
2004	8,332	67.8%	66.4%	67.8%	70.2%	70.2%	69.0%	
2005	9,366	44.2%	40.7%	44.4%	44.3%	44.3%	44.4%	
2006	10,258	17.6%	16.9%	17.9%	19.0%	19.0%	18.5%	
2007	8,549	17.8%	17.0%	18.4%	20.1%	20.1%	19.3%	
2008	7,303	14.1%	14.1%	15.1%	17.8%	17.8%	35.8%	
2009	5,650	28.7%	25.6%	32.5%	36.3%	36.3%	35.8%	
2010	5,222	27.8%	18.0%	34.6%	31.6%	31.6%	33.6%	
2011	5,280	25.9%	18.8%	42.6%	54.9%	54.9%	32.8%	
2012	5,342	11.6%	2.1%	33.3%	19.7%	19.7%	35.0%	
2013	4,793	0.3%	0.0%	4.2%	0.0%	0.0%	34.0%	

PY	Incurred		Born-Ferg Ultimate ILAE Ratio	
	% Expected Unreported	Born-Ferg Ultimate ILAE	Born-Ferg Ultimate ILAE Ratio	Born-Ferg Ultimate ILAE
2003	0.0%	72.6%	72.6%	3,559
2004	0.1%	67.8%	67.8%	5,651
2005	0.6%	44.4%	44.4%	4,162
2006	1.6%	17.9%	17.9%	1,840
2007	3.5%	18.4%	18.4%	1,576
2008	7.1%	16.5%	16.5%	1,208
2009	11.6%	32.9%	32.9%	1,857
2010	19.7%	34.4%	34.4%	1,795
2011	39.2%	38.8%	38.8%	2,047
2012	65.3%	34.4%	34.4%	1,839
2013	92.5%	31.8%	31.8%	1,522

PY	Paid		Born-Ferg Ultimate ILAE Ratio	
	% Expected Unreported	Born-Ferg Ultimate ILAE	Born-Ferg Ultimate ILAE Ratio	Born-Ferg Ultimate ILAE
2003	3.7%	75.3%	75.3%	3,693
2004	5.4%	70.1%	70.1%	5,842
2005	8.1%	44.3%	44.3%	4,149
2006	11.0%	18.9%	18.9%	1,943
2007	15.6%	20.0%	20.0%	1,710
2008	20.9%	21.3%	21.3%	1,557
2009	29.4%	36.2%	36.2%	2,043
2010	43.0%	32.5%	32.5%	1,696
2011	65.7%	40.4%	40.4%	2,132
2012	89.2%	33.3%	33.3%	1,781
2013	99.3%	33.8%	33.8%	1,619

Midwives  
 Bornhuetter-Ferguson Method - Apriori Selection

Capped @ Policy Limits		Ultimate ILAE Ratio Indexed to Policy Year									
PY	GWP	Annual PY Rate Chg	Selected Ult. ILAE	Ultimate ILAE Ratio	2008	2009	2010	2011	2012	2013	
2003	4,902	18.5%	6,808	138.9%	74.5%	83.8%	89.6%	92.4%	96.1%	97.0%	
2004	8,332	22.3%	14,354	172.3%	109.1%	122.8%	131.3%	135.5%	140.9%	142.2%	
2005	9,366	16.3%	8,150	87.0%	61.9%	69.7%	74.5%	76.9%	80.0%	80.7%	
2006	10,258	34.1%	3,526	34.4%	31.7%	35.7%	38.1%	39.3%	40.9%	41.3%	
2007	8,549	16.5%	4,417	51.7%	53.6%	60.3%	64.5%	66.6%	69.2%	69.9%	
2008	7,303	-0.3%	2,984	40.9%	49.1%	46.0%	49.1%	50.7%	52.7%	53.2%	
2009	5,620	-8.0%	6,457	114.3%	114.3%	114.3%	126.1%	126.1%	131.1%	132.3%	
2010	5,222	-3.2%	3,215	61.6%	61.6%	61.6%	63.5%	63.5%	66.1%	66.7%	
2011	5,280	0.3%	4,040	76.5%	74.6%	74.6%	76.8%	76.8%	79.6%	80.3%	
2012	5,342	-0.5%	3,987	74.6%	74.6%	74.6%	76.8%	76.8%	79.6%	80.3%	
2013	4,793	2.6%	3,682	76.8%	76.8%	76.8%	78.8%	78.8%	81.3%	81.3%	
All Yr Wtd :					68.8%	74.0%	82.7%	83.7%	86.6%	86.6%	86.6%
Last 7 Wtd :					-	-	82.7%	82.4%	71.3%	69.8%	69.8%
Last 5 Wtd :					68.8%	72.2%	66.0%	64.2%	78.2%	80.7%	80.7%
Last 3 Wtd :					49.6%	46.0%	75.5%	78.6%	92.8%	74.1%	74.1%
ILF Implied :					60.9%	61.3%	63.9%	66.7%	71.0%	69.6%	69.6%
Credibility - Weighted:					66.9%	69.3%	65.0%	64.5%	69.4%	71.2%	71.2%
Selected BF Apriori:					68.8%	72.2%	75.0%	78.6%	80.0%	80.0%	78.0%

Capped @ 250k		Ultimate ILAE Ratio Indexed to Policy Year									
PY	GWP	Annual PY Rate Chg	Selected Ult. ILAE	Ultimate ILAE Ratio	2008	2009	2010	2011	2012	2013	
2003	4,902	18.5%	5,164	105.3%	55.8%	62.6%	66.8%	68.8%	71.3%	71.8%	
2004	8,332	22.3%	8,169	98.0%	61.5%	69.0%	73.6%	75.8%	78.6%	79.2%	
2005	9,366	16.3%	5,419	57.9%	40.9%	45.9%	48.9%	50.4%	52.3%	52.6%	
2006	10,258	34.1%	2,376	23.2%	21.3%	23.9%	25.4%	26.2%	27.2%	27.4%	
2007	8,549	16.5%	2,260	26.4%	27.4%	30.7%	33.7%	35.0%	35.2%	35.2%	
2008	7,303	-0.3%	1,978	27.1%	30.4%	32.4%	33.4%	34.6%	34.9%	34.9%	
2009	5,650	-8.0%	2,938	52.0%	52.0%	52.0%	55.5%	57.1%	59.2%	59.6%	
2010	5,222	-3.2%	2,393	45.8%	45.8%	45.8%	48.9%	47.2%	48.9%	49.3%	
2011	5,280	0.3%	2,913	55.2%	55.2%	55.2%	58.9%	57.1%	57.2%	57.2%	
2012	5,342	-0.5%	2,612	48.9%	48.9%	48.9%	51.0%	51.0%	53.2%	53.3%	
2013	4,793	2.6%	2,294	47.9%	47.9%	47.9%	49.9%	48.2%	43.6%	42.0%	
All Yr Wtd :					42.9%	46.3%	49.9%	51.0%	53.2%	53.3%	53.3%
Last 7 Wtd :					-	-	49.9%	48.2%	43.6%	42.0%	42.0%
Last 5 Wtd :					42.9%	43.2%	38.7%	37.0%	45.7%	49.5%	49.5%
Last 3 Wtd :					30.9%	27.7%	39.0%	45.1%	55.2%	52.0%	52.0%
ILF Implied :					45.5%	47.0%	44.0%	43.1%	45.9%	44.6%	44.6%
Credibility - Weighted:					45.4%	46.7%	43.6%	43.0%	46.0%	48.1%	48.1%
Selected BF Apriori:					42.9%	43.2%	45.0%	47.0%	50.0%	49.0%	49.0%

Capped @ 100k		Ultimate ILAE Ratio Indexed to Policy Year									
PY	GWP	Annual PY Rate Chg	Selected Ult. ILAE	Ultimate ILAE Ratio	2008	2009	2010	2011	2012	2013	
2003	4,902	18.5%	3,627	74.0%	38.7%	43.4%	46.1%	47.4%	49.0%	49.2%	
2004	8,332	22.3%	5,749	69.0%	42.9%	48.0%	51.1%	52.4%	54.3%	54.5%	
2005	9,366	16.3%	4,162	44.4%	31.2%	34.9%	37.1%	38.1%	39.5%	39.6%	
2006	10,258	34.1%	1,894	18.5%	16.9%	18.9%	20.6%	20.6%	21.4%	21.4%	
2007	8,549	16.5%	1,647	19.3%	19.9%	22.3%	24.4%	24.4%	25.2%	25.3%	
2008	7,303	-0.3%	1,292	17.7%	19.8%	19.8%	21.1%	21.7%	22.4%	22.5%	
2009	5,650	-8.0%	1,946	34.4%	34.4%	34.4%	36.7%	37.6%	39.0%	39.1%	
2010	5,222	-3.2%	1,745	33.4%	33.4%	33.4%	34.3%	34.3%	35.5%	35.7%	
2011	5,280	0.3%	2,090	39.6%	39.6%	39.6%	41.0%	41.0%	41.0%	41.1%	
2012	5,342	-0.5%	1,810	33.9%	33.9%	33.9%	35.5%	35.5%	37.7%	37.7%	
2013	4,793	2.6%	1,570	32.8%	32.8%	32.8%	35.4%	36.2%	37.7%	37.6%	
All Yr Wtd :					31.0%	33.2%	35.4%	36.2%	37.7%	37.6%	37.6%
Last 7 Wtd :					-	-	35.4%	34.5%	31.5%	29.7%	29.7%
Last 5 Wtd :					31.0%	31.2%	28.1%	26.3%	31.7%	34.0%	34.0%
Last 3 Wtd :					23.6%	20.2%	26.5%	30.6%	38.5%	36.9%	36.9%
Credibility - Weighted:					34.7%	35.8%	33.6%	32.8%	34.6%	36.1%	36.1%
Selected BF Apriori:					34.7%	35.8%	33.6%	32.8%	35.0%	34.0%	34.0%



Division 66 - Programs  
 Certified Nurse Midwives Professional Liability - Profitability Study  
 PYG @ 2013/3 (000's omitted)

Section I  
 Exhibit 8a

Midwives

Incurred & LAE - Policy Limits

PY	GWP	9	21	33	45	57	69	81	93	105	117	129	ILAE @ 2013/3	LDF	Ultimate ILAE
2003	4,902	15	1,326	2,573	8,026	8,010	7,146	6,936	6,708	6,742	6,776	6,686	6,686	1.000	6,685
2004	8,332	257	3,870	11,601	11,281	13,066	13,506	13,980	13,705	13,999	14,082	14,082	14,082	1.001	14,096
2005	9,366	154	1,752	1,942	5,621	5,956	6,434	7,010	8,542	8,102	8,102	8,102	8,102	1.006	8,151
2006	10,258	122	886	2,346	3,472	3,471	3,486	3,309	3,312	3,312	3,312	3,312	3,312	1.016	3,365
2007	8,549	0	422	1,654	2,029	2,880	2,884	3,925	3,925	3,925	3,925	3,925	3,925	1.036	4,068
2008	7,303	156	968	1,122	2,349	2,285	2,287						2,287	1.078	2,465
2009	5,650	181	2,390	3,901	4,952	5,072							5,072	1.169	5,931
2010	5,222	177	573	1,469	2,200								2,200	1.323	2,912
2011	5,280	75	1,298	1,850									1,850	1.892	3,501
2012	5,342	77	928										928	3.347	3,106
2013	4,793	15											15	30.946	464

PY	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129
2003	88.400	1.940	3.119	0.998	0.892	0.971	0.967	1.005	1.005	0.987
2004	15.058	2.998	0.972	1.158	1.034	1.035	0.980	1.021	1.006	
2005	11.377	1.108	2.894	1.060	1.080	1.090	1.219	0.948		
2006	7.262	2.648	1.480	1.000	1.004	0.949	1.001			
2007	-	3.919	1.227	1.419	1.001	1.361				
2008	6.205	1.159	2.094	0.973	1.001					
2009	13.204	1.632	1.269	1.024						
2010	3.237	2.564	1.498							
2011	17.307	1.425								
2012	12.052									
2013										

	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141
All Yr Wtd:	11.872	2.110	1.501	1.080	1.002	1.051	1.033	0.996	1.006	0.987	
Last 7 Wtd:	9.473	1.723	1.327	1.080							
Last 5 Wtd:	9.245	1.769	1.430	1.067	1.034	1.051					
Last 3 Wtd:	8.508	1.694	1.463	1.097	1.002	1.112	1.052	0.996			
HC CM Age to Age:	7.781	1.765	1.343	1.132	1.085	1.040	1.020	1.010	1.005	1.001	1.000
HC CM Age to Ult:	24.401	3.136	1.777	1.323	1.169	1.078	1.036	1.016	1.006	1.001	1.000
Selected Age to Age:	9.245	1.769	1.430	1.132	1.085	1.040	1.020	1.010	1.005	1.001	
Age to Ult:	30.946	3.347	1.892	1.323	1.169	1.078	1.036	1.016	1.006	1.001	1.000

Division 66 - Programs  
 Certified Nurse Midwives Professional Liability - Profitability Study  
 PYG @ 2013/3 (000's omitted)

Section I  
 Exhibit 8b

Midwives

Incurred & LAE - Capped @ \$250k

PY	GWP	9	21	33	45	57	69	81	93	105	117	129	250k Cap @ 2013/3 ILAE	LDF	250k Cap Ultimate ILAE
2003	4,902	15	1,326	2,473	4,864	5,349	5,530	5,319	5,091	5,125	5,159	5,069	5,069	1.000	5,068
2004	8,332	257	2,920	5,601	6,466	7,251	7,691	7,818	7,643	7,987	8,045	8,045	8,045	1.001	8,053
2005	9,366	154	1,652	1,942	3,356	3,691	4,169	4,645	5,177	5,387	5,387	5,387	5,387	1.006	5,419
2006	10,258	122	887	1,596	2,072	2,238	2,253	2,257	2,260	2,260	2,260	2,260	2,260	1.016	2,296
2007	8,549	0	422	954	1,329	1,697	1,732	2,073	2,073	2,073	2,073	2,073	2,073	1.036	2,148
2008	7,303	156	967	1,122	1,676	1,612	1,614	1,614	1,614	1,614	1,614	1,614	1,614	1.078	1,739
2009	5,650	181	890	1,901	2,352	2,473	2,473	2,473	2,473	2,473	2,473	2,473	2,473	1.135	2,807
2010	5,222	177	573	1,419	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	1.252	2,630
2011	5,280	75	1,298	1,851	1,851	1,851	1,851	1,851	1,851	1,851	1,851	1,851	1,851	1.707	3,160
2012	5,342	77	928	928	928	928	928	928	928	928	928	928	928	2.981	2,766
2013	4,793	15											15	20.839	313

PY	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141
2003	88.400	1.865	1.967	1.100	1.034	0.962	0.957	1.007	1.007	0.983	
2004	11.362	1.918	1.154	1.121	1.061	1.017	0.978	1.045	1.007		
2005	10.727	1.176	1.728	1.100	1.130	1.114	1.115	1.041	1.007		
2006	7.270	1.799	1.298	1.080	1.007	1.002	1.001				
2007	-	2.261	1.393	1.277	1.021	1.197					
2008	6.199	1.160	1.494	0.962	1.001						
2009	4.917	2.136	1.237	1.051							
2010	3.237	2.476	1.480								
2011	17.307	1.426									
2012	12.052										
2013											

All Yr Wtd:	9.772	1.725	1.424	1.099	1.053	1.034	1.007	1.033	1.007	0.983	
Last 7 Wtd:	7.570	1.612	1.331	1.099	1.059	1.034					
Last 5 Wtd:	6.991	1.746	1.363	1.086	1.059	1.034					
Last 3 Wtd:	8.508	1.873	1.380	1.079	1.009	1.101	1.024	1.033			
HC CM Age to Age:	7.388	1.662	1.298	1.104	1.053	1.040	1.020	1.010	1.005	1.001	
HC CM Age to Ult:	19.948	2.700	1.625	1.252	1.135	1.077	1.036	1.016	1.006	1.001	1.000

Selected Age to Age:	6.991	1.746	1.363	1.104	1.053	1.040	1.020	1.010	1.005	1.001	
Age to Ult:	20.839	2.981	1.707	1.252	1.135	1.078	1.036	1.016	1.006	1.001	1.000

Division 66 - Programs  
 Certified Nurse Midwives Professional Liability - Profitability Study  
 PYG @ 2013/3 (000's omitted)

Section I  
 Exhibit 8c

Midwives

Incurred & LAE - Capped @ \$100k

PY	GWP	9	21	33	45	57	69	81	93	105	117	129	100k Cap ILAE @ 2013/3	LDF	100k Cap Ultimate ILAE
2003	4,902	15	1,126	1,723	3,064	3,384	3,590	3,530	3,452	3,486	3,520	3,560	3,560	1.000	3,559
2004	8,332	207	2,170	3,551	4,516	5,001	5,266	5,368	5,343	5,587	5,645	5,645	5,645	1.001	5,651
2005	9,366	154	1,202	1,592	2,306	2,741	3,194	3,545	3,927	4,137	4,137	4,137	4,137	1.006	4,162
2006	10,258	122	887	1,246	1,597	1,788	1,803	1,807	1,810				1,810	1.016	1,839
2007	8,549	0	422	764	1,074	1,292	1,327	1,518					1,518	1.036	1,573
2008	7,303	156	602	834	1,089	1,025	1,027						1,027	1.077	1,106
2009	5,650	181	590	1,251	1,552	1,623							1,623	1.131	1,835
2010	5,222	177	373	1,019	1,450								1,450	1.245	1,805
2011	5,280	75	885	1,367									1,367	1.646	2,250
2012	5,342	77	618										618	2.880	1,780
2013	4,793	15											15	13.269	199

PY	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141
2003	75.067	1.530	1.778	1.104	1.061	0.983	0.978	1.010	1.010	1.011	
2004	10.483	1.636	1.272	1.107	1.053	1.019	0.995	1.046	1.010		
2005	7.805	1.324	1.448	1.189	1.165	1.110	1.108	1.053			
2006	7.270	1.405	1.282	1.120	1.008	1.002	1.002				
2007	-	1.810	1.406	1.203	1.027	1.144					
2008	3.859	1.385	1.306	0.941	1.002						
2009	3.260	2.120	1.241	1.046							
2010	2.107	2.732	1.423								
2011	11.800	1.545									
2012	8.026										
2013											

All Yr Wtd:	7.625	1.616	1.390	1.109	1.064	1.039	1.020	1.038	1.010	1.011	
Last 7 Wtd:	5.555	1.627	1.324	1.109							
Last 5 Wtd:	4.607	1.823	1.322	1.112	1.065	1.039					
Last 3 Wtd:	5.702	1.968	1.318	1.061	1.013	1.086	1.034	1.038			
HC CM Age to Age:	7.101	1.632	1.280	1.101	1.059	1.039	1.020	1.010	1.005	1.001	
HC CM Age to Ult:	18.628	2.623	1.607	1.255	1.140	1.077	1.036	1.016	1.006	1.001	1.000

Selected Age to Age:	4.607	1.750	1.322	1.101	1.050	1.039	1.020	1.010	1.005	1.001	
Age to Ult:	13.269	2.880	1.646	1.245	1.131	1.077	1.036	1.016	1.006	1.001	1.000

Division 66 - Programs  
 Certified Nurse Midwives Professional Liability - Profitability Study  
 PYG @ 2013/3 (000's omitted)

Section I  
 Exhibit 8d

Midwives

Paid & LAE - Policy Limits

PY	GWP	9	21	33	45	57	69	81	93	105	117	129	P+LAE @ 2013/3	LDF	Ultimate ILAE
2003	4,902	0	104	987	4,440	5,485	6,396	6,436	6,458	6,492	6,526	6,686	6,686	1.037	6,931
2004	8,332	7	370	6,291	9,556	10,275	11,481	11,905	11,980	12,824	13,867	6,686	13,867	1.054	14,612
2005	9,366	4	121	642	3,441	4,456	4,659	5,660	7,017	7,227			7,227	1.084	7,836
2006	10,258	2	141	770	1,397	2,346	2,411	3,234	3,237				3,237	1.139	3,686
2007	8,549	0	37	443	869	2,540	2,819	3,860					3,860	1.235	4,766
2008	7,303	6	322	812	2,244	2,285	2,287						2,287	1.379	3,153
2009	5,650	1	1,204	3,556	4,607	4,846							4,846	1.616	7,832
2010	5,222	2	63	394	1,242								1,242	2.077	2,580
2011	5,280	0	215	1,276									1,276	3.601	4,595
2012	5,342	47	113										113	12.676	1,432
2013	4,793	0											0	433.940	0

PY	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141
2003	-	9,490	4,498	1,235	1,166	1,006	1,003	1,005	1,005	1,005	1,025
2004	52,857	17,003	1,519	1,075	1,117	1,037	1,006	1,070	1,081		
2005	30,250	5,306	5,360	1,295	1,046	1,215	1,240	1,030			
2006	70,500	5,461	1,814	1,679	1,028	1,341	1,001				
2007	-	11,973	1,962	2,923	1,110	1,369					
2008	53,667	2,522	2,764	1,018	1,001						
2009	1,204,000	2,953	1,296	1,052							
2010	31,500	6,254	3,152								
2011	-	5,935									
2012	2,404										
2013											
<hr/>											
All Yr Wtd:	38,986	5,887	2,000	1,214	1,097	1,120	1,053	1,043	1,056	1,025	
Last 7 Wtd:	36,121	3,753	1,809	1,214							
Last 5 Wtd:	34,232	3,520	1,734	1,312	1,080	1,120					
Last 3 Wtd:	7,980	3,526	1,699	1,253	1,048	1,290	1,069	1,043			
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HC CM Age to Age:	24,523	3,493	1,745	1,285	1,172	1,117	1,084	1,050	1,040	1,017	1,037
HC CM Age to Ult:	313,712	12,793	3,662	2,099	1,633	1,393	1,248	1,151	1,096	1,054	
<hr/>											
Selected Age to Age:	34,232	3,520	1,734	1,285	1,172	1,117	1,084	1,050	1,029	1,017	
Age to Ult:	433,940	12,676	3,601	2,077	1,616	1,379	1,235	1,139	1,084	1,054	1,037

Division 66 - Programs  
 Certified Nurse Midwives Professional Liability - Profitability Study  
 PYG @ 2013/3 (000's omitted)

Section I  
 Exhibit 8e

Midwives

Paid & LAE - Capped @ \$250k

PY	GWP	9	21	33	45	57	69	81	93	105	117	129	250k Cap P+LAE @ 2013/3	LDF	250k Cap Ultimate ILAE
2003	4,902	0	104	887	3,003	4,049	4,780	4,819	4,841	4,875	4,909	5,069	5,069	1.038	5,259
2004	8,332	7	370	3,146	5,241	5,960	6,966	7,068	7,143	7,537	7,830	8,285	7,830	1.058	8,285
2005	9,366	4	121	642	2,326	3,091	3,294	3,945	4,552	4,762		5,184	4,762	1.089	5,184
2006	10,258	2	141	770	1,397	1,863	1,928	2,182	2,185			2,455	2,185	1.124	2,455
2007	8,549	0	37	443	869	1,647	1,667	2,008				2,372	2,008	1.181	2,372
2008	7,303	6	322	812	1,571	1,612	1,614					2,052	1,614	1.271	2,052
2009	5,650	1	454	1,556	2,007	2,247						3,205	2,247	1.427	3,205
2010	5,222	2	63	394	1,192							2,105	1,192	1.766	2,105
2011	5,280	0	215	1,276								3,910	1,276	3.064	3,910
2012	5,342	47	113									1,145	113	10.135	1,145
2013	4,793	0										0	0	211.203	0

PY	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129
2003	-	8,529	3,386	1,348	1,181	1,008	1,005	1,007	1,007	1,033
2004	52,857	8,503	1,666	1,137	1,169	1,015	1,011	1,055	1,039	
2005	30,250	5,306	3,623	1,329	1,066	1,198	1,154	1,046		
2006	70,500	5,461	1,814	1,334	1,035	1,132	1,001			
2007	-	11,973	1,962	1,895	1,012	1,205				
2008	53,667	2,522	1,935	1,026	1,001					
2009	454,000	3,427	1,290	1,120						
2010	31,500	6,254	3,025							
2011	-	5,935								
2012	2,404									
2013										

	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141
All Yr Wtd:	28,116	5,433	2,035	1,247	1,111	1,074	1,039	1,039	1,026	1,033	
Last 7 Wtd:	23,190	4,356	1,881	1,247							
Last 5 Wtd:	20,839	4,107	1,770	1,280	1,091	1,074					
Last 3 Wtd:	7,980	4,407	1,727	1,238	1,017	1,181	1,052	1,039			
HC CM Age to Age:	23,061	3,307	1,735	1,238	1,122	1,076	1,051	1,032	1,029	1,021	
HC CM Age to Ult:	233,926	10,144	3,067	1,768	1,428	1,272	1,182	1,125	1,089	1,059	1,038
Selected Age to Age:	20,839	3,307	1,735	1,238	1,122	1,076	1,051	1,032	1,029	1,021	
Age to Ult:	211,203	10,135	3,064	1,766	1,427	1,271	1,181	1,124	1,089	1,058	1,037

Division 66 - Programs  
 Certified Nurse Midwives Professional Liability - Profitability Study  
 PYG @ 2013/3 (000's omitted)

Section I  
 Exhibit 8f

Midwives

Paid & LAE - Capped @ \$100k

PY	GWP	9	21	33	45	57	69	81	93	105	117	129	100k Cap P+LAE @ 2013/3	100k Cap Ultimate ILAE
2003	4,902	0	104	587	1,953	2,834	3,290	3,330	3,352	3,386	3,420	3,560	3,560	3,696
2004	8,332	7	370	2,246	3,741	4,350	4,966	5,068	5,143	5,387	5,530	3,560	5,530	5,847
2005	9,366	4	121	492	1,826	2,441	2,644	3,145	3,602	3,812	3,812	3,812	3,812	4,149
2006	10,258	2	141	670	1,247	1,563	1,628	1,732	1,735				1,735	1,949
2007	8,549	0	37	403	764	1,242	1,262	1,453					1,453	1,722
2008	7,303	6	207	524	984	1,025	1,027						1,027	1,299
2009	5,650	1	304	956	1,257	1,447							1,447	2,050
2010	5,222	2	63	394	942								942	1,653
2011	5,280	0	215	993									993	2,896
2012	5,342	47	113										113	1,050
2013	4,793	0											0	149,713

PY	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129
2003	-	5,644	3,327	1,451	1,161	1,012	1,007	1,010	1,010	1,041
2004	52,857	6,070	1,666	1,163	1,142	1,021	1,015	1,047	1,027	
2005	30,250	4,066	3,711	1,337	1,083	1,189	1,145	1,058		
2006	70,500	4,752	1,861	1,253	1,042	1,064	1,002			
2007	-	10,892	1,896	1,626	1,016	1,151				
2008	34,500	2,531	1,878	1,042	1,002					
2009	304,000	3,145	1,315	1,151						
2010	31,500	6,254	2,391							
2011	-	4,619								
2012	2,404									
2013										

	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141
All Yr Wtd:	24,275	4,651	2,027	1,266	1,101	1,068	1,042	1,040	1,020	1,041	
Last 7 Wtd:	18,621	4,074	1,893	1,266							
Last 5 Wtd:	16,107	3,959	1,762	1,270	1,085	1,068					
Last 3 Wtd:	7,980	4,026	1,699	1,236	1,023	1,144	1,054	1,040			
HC CM Age to Age:	21,679	3,187	1,662	1,241	1,121	1,067	1,055	1,032	1,029	1,020	
HC CM Age to Ult:	202,306	9,332	2,928	1,761	1,419	1,266	1,187	1,125	1,090	1,059	1,038

Selected Age to Age:	16,107	3,187	1,662	1,238	1,121	1,067	1,055	1,032	1,029	1,020	
Age to Ult:	149,713	9,295	2,917	1,754	1,417	1,264	1,185	1,123	1,088	1,057	1,037



**Midwives**

Total Claim Count excluding CWNP

PY	GWP	9	21	33	45	57	69	81	93	105	117	129	Total ex-CWNP @ 2013/3	LDF	Ultimate ex-CWNP
2003	4,902	2	23	24	26	21	20	19	18	18	18	18	18	1.017	18
2004	8,332	3	28	24	26	24	21	21	20	21	22	22	22	1.023	23
2005	9,366	8	22	20	16	15	18	18	18	19	19	19	19	1.032	20
2006	10,258	3	18	13	11	11	10	10	10	10	10	10	10	1.046	10
2007	8,549	0	10	10	10	7	8	9	10	10	9	9	9	1.064	10
2008	7,303	3	10	10	8	7	8	9	8	8	7	8	8	1.115	9
2009	5,650	7	13	10	12	10	10	10	10	10	10	10	10	1.131	11
2010	5,222	4	8	12	12	10	10	10	10	10	10	10	12	1.134	14
2011	5,280	6	16	14	14	14	14	14	14	14	14	14	14	1.301	18
2012	5,342	3	10	10	10	10	10	10	10	10	10	10	10	1.654	17
2013	4,793	1											1	11.117	11

PY	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129
2003	11,500	1,043	1,083	0,808	0,952	0,950	0,947	1,000	1,000	1,000
2004	9,333	0,857	1,083	0,923	0,875	1,000	0,952	1,050	1,048	
2005	2,750	0,909	0,800	0,938	1,200	1,000	1,000	1,056		
2006	6,000	0,722	0,846	1,000	0,909	1,000	1,000			
2007	-	1,000	1,000	0,700	1,143	1,125				
2008	3,333	1,000	0,800	0,875	1,143					
2009	1,857	0,769	1,200	0,833						
2010	2,000	1,500	1,000							
2011	2,667	0,875								
2012	3,333									
2013										

	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141
All Yr Wtd:	4,051	0,926	0,984	0,872	1,000	1,000	0,971	1,036	1,026	1,000	
Last 7 Wtd:	3,269	0,918	0,960	0,872							
Last 5 Wtd:	2,478	0,982	0,964	0,877	1,016	1,000					
Last 3 Wtd:	2,615	0,973	1,000	0,800	1,040	1,028	0,980	1,036			

HC CM Age to Age:	6.722	1.271	1.148	1.003	1.014	1.048	1.017	1.014	1.009	1.006	
HC CM Age to Ult:	11.117	1.654	1.301	1.134	1.131	1.115	1.064	1.046	1.032	1.023	1.017

Selected Age to Age:	6.722	1.271	1.148	1.003	1.014	1.048	1.017	1.014	1.009	1.006	
Age to Ult:	11.117	1.654	1.301	1.134	1.131	1.115	1.064	1.046	1.032	1.023	1.017











Midwives

Large Losses - Incurred + LAE > 100k

PY	DSP	Policy #	Case #	DOL	Insured	Ind Paid	Ind OS	LAE	ILAE	Acc State	Description
2003	97-2-8-777	7055286	1646 3/12/2004		Southwest Transp	1,000	0	95	1,095	New Mexico	Alleged Delay In C-Section, D/L 1/9/01
2003	97-2-8-777	7055617	3162 10/26/2004		DeKontee A. Loga	400	0	277	707	New York (NYC)	Failure To Perform/Property Evaluate G
2003	97-2-8-777	7055482	2066 5/6/2004		Deborah MacMilla	630	0	54	654	Georgia	Failure To DX Ectopic Pregnancy, Death
2003	97-2-8-777	7055305	663 11/6/2003		Kathleen S. Frie	375	0	243	558	Ohio	Negligent L&D Treatment
2003	97-2-8-777	2227371	2071 5/17/2004		Ceryl A. Schieb	225	0	183	468	New York (NYC)	Negligent TX R/I Death, D/L 10/24/03.
2003	97-2-8-777	7055474	2711 8/16/2004		Lynn C. Humig	337	0	55	392	New Mexico	Newborn Died @ 4 Days, D/L 10/31/03.
2003	97-2-8-777	7055137	343 2/1/2003		Patrice A. Davis	300	0	61	361	Florida	Itemo Rupture Death
2003	97-2-8-777	7055080	349 9/17/2003		Mary M. O'Neara	299	0	60	359	Florida	FL 766 - Ruptured Uterus, Death, D/L 7
2003	97-2-8-777	7055101	2515 7/1/2004		Rachel A. DeVane	275	0	68	343	Florida	FL 766 - Maternal & Fetal Death, D/L 1
2003	97-2-8-777	7055189	2334 6/11/2004		Marin Rands	120	0	203	323	Florida	Alleged Failure To Adequately Monitor
2003	97-2-8-777	7055315	4408 7/16/2004		Eileen Eludim-Pa	163	0	22	185	Maryland	Stillborn.
2003	97-2-8-777	7055558	4409 4/10/2005		Amy L. Leitzel	163	0	22	185	Maryland	Stillborn.
2003	97-2-8-777	7055554	1785 4/16/2004		Patricia R. Urba	63	0	88	151	New Mexico	Alleged Failure To Provide Proper Moni
2003	97-2-8-777	7055229	1072 1/1/2004		Deborah Logan	140	0	6	146	New Mexico	MOM Burned W/Heat Pack During Labor, D
2003	97-2-8-777	7055167	1060 1/20/2004		Jewell Allen-Wal	0	0	133	133	Georgia	Premature Infant W/Related Medical ISS
2003	97-2-8-777	7055474	1648 3/12/2004		Lynn C. Humig	50	0	78	128	New Mexico	Alleged Negligent Management Of Labor
2003	97-2-8-777	7055482	2836 8/30/2004		Deborah MacMilla	75	0	33	108	Georgia	Alleged Negligent Delivery Of Infant R
2004	97-2-8-777	7055188	4109 4/17/2005		Suzanne L. Avram	990	0	356	1,346	Arizona	Failure To Timely Perform C-Section, D
2004	97-2-8-777	7055034	1689 3/10/2004		Annie M. Hulme	1,000	0	345	1,345	Oregon	Alleged Negligent Delivery ON Infant.
2004	97-2-8-777	2227371	9245 12/16/2005		Margarita Holste	1,000	0	80	1,080	New York (NYC)	Mild Cerebral Palsy With Speech And AM
2004	97-2-8-777	7055027	4108 4/17/2005		Bethany Women's	1,000	0	75	1,075	Arizona	Failure To Timely Perform C-Section, D
2004	97-2-8-777	7055197	425 8/25/2005		Carol Rose-Trzas	700	0	341	1,041	New York (NYC)	Alleged Negligent Labor & Delivery R/I
2004	97-2-8-777	2227574	3725 1/25/2005		Julie Jones	1,000	0	38	1,038	Utah	Negligent Labor And Delivery Treatment
2004	97-2-8-777	2227643	3968 3/4/2005		Catherine K. Tan	975	0	47	1,022	New York (NYC)	Alleged Failure To Timely Respond To F
2004	97-2-8-777	7055022	4103 4/17/2005		Lylaine Gavette	500	0	245	745	Arizona	Failure To Timely Perform C-Section, D
2004	97-2-8-777	7055369	3808 2/19/2005		Maureen Sullivan	622	0	73	695	New York x NYC	Alleged Negligent Labor And Delivery M
2004	97-2-8-777	7055128	2809 8/27/2004		Rasmia Tebo	500	0	69	599	California	Shoulder Dystocia, Erb's Palsy, D/L 8
2004	97-2-8-777	7055197	4768 8/9/2005		Carol Rose-Trzas	350	0	104	454	New York (NYC)	Negligent Prenatal Treatment, Brachial
2004	97-2-8-777	7055478	4646 7/29/2005		Karen Bottom	250	0	195	445	California	Emergency C-Section DUE To Total Abrup
2004	97-2-8-777	7055024	7452 10/1/2005		Marianne Romans	300	0	116	416	Arizona	Fetal Demise, D/L 10/21/04.
2004	97-2-8-777	7055040	2878 9/14/2004		Beth S. Rodrigue	300	0	68	368	Florida	Medical Records Request.
2004	97-2-8-777	2227661	3296 11/15/2004		Nicole Augustin	300	0	31	331	Florida	FL 627 (Ins Info REQ.)
2004	97-2-8-777	7055465	2993 9/27/2004		Janis Blanchard	150	0	167	317	California	Lert Erb's Palsy In Infant, Allegedly D
2004	97-2-8-777	7055139	3231 8/9/2004		Best Start Birth	100	0	97	197	California	Erb's Palsy - Brain Damage, D/L 11/21
2004	97-2-8-777	7055004	3055 9/29/2004		Catherine Parisi	0	0	188	188	Connecticut	Alleged Negligent Care During Pregnanc
2004	97-2-8-777	7055023	4179 4/22/2005		Connie Ann Garci	50	0	123	173	Arizona	Negligent Management Of Labor And Deli
2004	97-2-8-777	7055027	7456 10/1/2005		Bethany Women's	0	0	135	135	Arizona	Fetal Demise, D/L 10/21/04.
2004	97-2-8-777	2227649	2995 10/5/2004		Amy L. Smith	50	0	81	131	Ohio	Negligent Prenatal & Labor And Deliver
2004	97-2-8-777	2227651	3386 12/6/2004		Karen Morin	0	0	125	125	Georgia	Failure To DX AP During Pregnancy, C-S
2004	97-2-8-777	2227532	2870 9/14/2004		Bonnie S. Fintel	75	0	44	119	Ohio	Negligent Labor And Delivery, D/L 6/6
2005	97-2-8-777	7055465	6629 8/24/2006		Janis Blanchard	1,000	0	336	1,336	California	Alleged Negligent Labor And Delivery M
2005	97-2-8-777	2227705	6078 3/20/2006		Andrea S. McLare	500	0	727	1,227	Pennsylvania	Alleged Negligent Delivery Resulting I
2005	97-2-8-777	7055481	5444 1/5/2006		Carrie Holtschuh	1,000	0	163	1,163	California	Brain-Damaged Baby, D/L 1/3/05.
2005	97-2-8-777	2227643	7381 5/27/2006		Catherine K. Tan	600	0	268	868	New York (NYC)	Right Erb's Palsy In Infant Allegedly
2005	97-2-8-777	7055400	5767 2/13/2006		Gail C. Consoi	615	0	117	732	Nebraska	Failure To Timely Diagnose And Treat E
2005	97-2-8-777	7055245	4743 8/16/2005		Lucia M. Jenkusk	0	400	228	628	New York x NYC	Infant Born W/Multiple Deformities & D
2005	97-2-8-777	2227474	8120 2/18/2006		Terrie S. Lemley	0	350	195	545	Ohio	Alleged Negligent Treatment During LAB
2005	97-2-8-777	2227460	4161 4/8/2005		Gretchen M. Deevy	250	0	26	276	Louisiana	Stillborn.
2005	97-2-8-777	2227434	5303 12/7/2005		Michael Weiss, M	125	0	119	244	Florida	FL 766 - Brain Damaged Baby.
2005	97-2-8-777	2227640	7351 5/27/2006		Lesley D. Cohen	85	0	87	172	New York (NYC)	Shoulder Dystocia Resulting In Brachia
2005	97-2-8-777	2227715	8660 7/20/2006		Katherine J. Rob	125	0	8	133	Oregon	Alleged Negligent Labor And Delivery M
2005	97-2-8-777	8247427	6178 4/17/2006		Laura McKenna	0	50	76	126	New York (NYC)	Failure To Diagnose Infection S/P Deli
2005	97-2-8-777	8247055	5975 3/16/2006		Miriam H. Caddel	60	0	58	118	Florida	Brain Damaged Baby
2005	97-2-8-777	2227641	8380 5/27/2006		Sabine M. Jeudy	0	75	34	109	New York (NYC)	Alleged Negligence.
2006	97-2-8-777	8247335	7996 1/11/2007		Jessica M. Goldm	819	0	191	1,010	New York (NYC)	Infant Brain Damage Allegedly DUE To I
2006	97-2-8-777	7055450	9253 7/24/2007		Catherine Halder	733	0	85	818	Illinois	Alleged Negligent Management Of. Secon
2006	97-2-8-777	7055366	5973 12/18/2006		Women First Nurs	150	0	214	364	Michigan	Birth Trauma - Hypoxic Ischemic Enceph
2006	97-2-8-777	2227434	5573 1/17/2007		Michael Weiss, M	200	0	112	312	Florida	Alleged Negligent L&D Management Resu
2006	97-2-8-777	8247403	6832 7/25/2006		Joan Smith	100	0	98	198	Texas	Umbilical Cord Prolapse Causing Anoxic
2006	97-2-8-777	7055094	7556 9/8/2006		California Obstet	0	0	104	104	California	Arbitration; Depo; Brain-Damaged Baby.
2006	97-2-8-777	7055434	9209 6/15/2007		Named Employees	27	0	73	100	Illinois	Alleged Retained Placenta.
2007	97-2-8-777	8247412	416 10/31/2007		Clementine Midwi	920	0	77	997	New York (NYC)	Post Labor MRI Of Baby's Brain Noted D
2007	97-2-8-777	8247299	1854 4/25/2008		Women's Health a	733	0	237	970	California	Complications During Birth Of A Baby B
2007	97-2-8-777	8247299	1428 3/10/2008		Women's Health a	950	0	2	952	California	Alleged Negligent Labor And Delivery R
2007	97-2-8-777	8255877	9152 7/11/2007		Birth & Women's	165	0	44	209	Texas	Infant Died @ Home 7 Hours After Deliv
2007	97-2-8-777	8256000	817 12/26/2007		Park Slope Midwi	0	50	136	186	New York (NYC)	Alleged Mismanagement Of Labor And DEL