

Academy/SOA Long-Term Care Valuation  
Work Group Update to the NAIC LTC  
Actuarial Working Group

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Academy/SOA Long-Term Care Valuation  
Work Group

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AMERICAN ACADEMY *of* ACTUARIES

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# Progress

- Received Excel workbooks with policy and claim records of 13 companies from Medical Information Bureau
  - Enabled calculation of incidence and claim termination rates by company
- Reviewed summary data for each company
- Assessed data quality and limitation



# Data Summary

Study Period	1984 - 2007
Number of Companies	13*
Number of Exposures	29,000,000
Number of Policies	5,450,000
Number of Claims	217,000

\* Out of the original 18 companies that contributed in the 2007 study.



# Data Summary (cont.)

## Findings of 200 Random Claim Records from Each Company

Company	Earliest Issue Year	Latest Issue Year	Most Recent Study Year	% without Gender Code	% without Issue Date	% out of force but no Term Date	% without BIO Code	% without Term Cause	% Inforce but no Prem Pay	% without Martial Status	% without Benefit Type	% without EP Type	% without Benefit \$	% without Daily Benefit	% without EP	% without Coverage Type	% without Zip Code	Recommended to be Excluded*
C	1980	2001	2001	0%	13%	0%	13%	13%	40%	13%	19%	37%	40%	37%	37%	13%	75%	x
D	1984	2004	2007	0%	6%	0%	6%	6%	0%	6%	6%	6%	40%	6%	6%	6%	6%	
E	1985	2002	2004	0%	2%	0%	2%	5%	2%	2%	2%	2%	10%	2%	2%	2%	2%	
F	1991	2003	2003	0%	0%	0%	0%	0%	1%	0%	0%	0%	33%	4%	0%	0%	6%	
G	1997	2005	2007	0%	0%	0%	0%	0%	0%	0%	2%	1%	42%	1%	1%	0%	0%	
H	1988	2007	2007	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	0%	0%	0%	100%	
I	1985	2003	2007	0%	5%	0%	100%	5%	1%	5%	7%	5%	16%	5%	5%	5%	100%	
J	1988	2005	2007	0%	3%	0%	3%	3%	73%	99%	3%	3%	3%	3%	3%	3%	3%	
K	1987	1994	1995	0%	0%	0%	0%	1%	68%	0%	0%	0%	36%	0%	0%	0%	0%	x
M	1990	2005	2005	0%	6%	0%	6%	6%	12%	13%	6%	6%	18%	6%	6%	6%	100%	
O	1989	2003	2004	0%	1%	0%	1%	1%	70%	1%	1%	89%	1%	89%	0%	1%	100%	
S	1988	2002	2007	0%	0%	0%	18%	0%	27%	18%	0%	1%	13%	13%	1%	0%	17%	
T	1988	2000	2007	0%	0%	0%	8%	0%	20%	8%	0%	0%	5%	3%	0%	0%	9%	
U	1986	2005	2007	0%	25%	0%	100%	25%	30%	34%	67%	67%	67%	67%	67%	25%	99%	x
V	1986	1991	1991	0%	0%	0%	0%	0%	58%	0%	0%	0%	2%	100%	0%	0%	100%	x
Z	1990	2004	2007	0%	5%	5%	100%	5%	50%	5%	65%	65%	77%	65%	65%	5%	99%	x
zd	1988	2003	2007	0%	0%	0%	0%	0%	0%	0%	0%	0%	47%	0%	0%	0%	0%	
zf	1983	2004	2007	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%	0%	0%	100%	

\* The 5 excluded companies contributed 25 percent of total claim records.



# Data Summary (cont.)

## Distribution of Claims

Company *	Total	Compre- hensive	NH Only	HHC Only	Unknown
D			81		52,202
E		20,151	16,716	7,319	85
F		35	685	6,765	
G					1,451
H		16,354	2,985		3
I		6,740	2,462	1,200	520
J		4,055			
M			59	1,352	
O					1,645
S			8,017		1,016
T			3,644		139
zd		771	1,006		
zf			27,642	21,121	10,753
Total	216,974	48,106	63,297	37,757	67,814
# Selected Claims	148,985	48,071	63,157	37,757	
% Selected	69%				



# Data Summary (cont.)

## Average Length of Stay

Company *	Comprehensive				Nursing Home Only				Home Health Care Only			
	Nursing Home	ALF	Home Care	Others	Nursing Home	ALF	Home Care	Others	Nursing Home	ALF	Home Care	Others
1	847	913	821	382	536	536	358	493				
2												
3												
4	467	494	444	219	405	387		464				
5	693	1,272	911	136	215				722	975	236	
6				313	658	1,280	428	653				
7					1,615	597	324		974	1,312	1,114	278
8					431	583		594				
9					561	681	352	427	531	740	412	182
10	529	678	523	391	474	551	692	603	353	439	339	273
11	822		860	579	893	473	421	352	779	911	675	217
12					470	581	638					
13	858	-	934									
Composite	665	855	782	313	485	633	385	432	748	826	469	186

\* Company identifiers are different from that on the prior pages.



# Assessment

- Current data is inadequate to produce an industry-wide table
  - Insufficient number of companies represented
  - Data quality varies significantly among contributing companies
  - Significant amount of data has unidentified coverage





# Recommendation

- Not to pursue a valuation table based on current data
- Wait for the next intercompany data update provided by the SOA LTC Experience Committee
  - Additional information will be available (e.g., data on inflation protection options)
  - Encourage more companies to participate



# Next Steps

- Although the entire data set is not sufficient for an industry-wide table, there is some selected data that may be useful for comparative studies
  - Decision by the SOA LTC Experience Committee
  - Develop a tool for users (Excel pivot tables)
- Document the committee's work, the data quality criteria, and data specifications



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