



HOLUA-2001

Underwriter's Odyssey

Underwriting for Profit in Long Long Term Care

Orlando, Florida

May 7, 2001

Dawn E. Helwig, FSA, MAAA

Consulting Actuary

Milliman & Robertson, Inc.

Chicago Office

(312) 726-0677



Underwriting Tools

- Medical Application
- Para-Medical Exam
- Phone Interview
- Attending Physician Records (APR's)
- Face-to-Face
- Cognitive Testing

“Loose” Underwriting

Age of Applicant

Tools	<u><50</u>	<u>51-71</u>	<u>72-79</u>	<u>80-84</u>
Medical Application	✳	✳	✳	✳
Para-Medical Exam				
Phone Interview		✳ maybe	✳ maybe	
APR				✳ maybe
Face-to-Face			✳ maybe	✳ limited

“Moderate” Underwriting

<u>Tools</u>	<u>Age of Applicant</u>			
	<u>< 55</u>	<u>56 - 71</u>	<u>72 - 75</u>	<u>76 - 84</u>
Medical Application	✱	✱	✱	✱
Para-Medical Exam	✱ if no medical records			
Phone Interview	✱	✱	✱	
A P R	maybe (50% of the time)	maybe (50% of the time)	maybe (50% of the time)	✱
Face-to-Face	maybe	maybe	maybe	✱

“Tight” Underwriting

Age of Applicant

<u>Tools</u>	<u><50</u>	<u>51-71</u>	<u>72-79</u>	<u>80-84</u>
Medical Application	*	*	*	*
Para-Medical Exam	* if no medical records	maybe		
Phone Interview				
APR's (medical records)	*	*	*	*
Face-to-Face	* (If they haven't seen doctor in two years)	* (If they haven't seen doctor in two years)	*	*



Good Health Insurance Company Prototype LTC Policy

■ Benefits

- Comprehensive Nursing Home and Home Health Care
- Includes respite, ADC and ALF's; excludes homemaker and meals
- “Pot of money” approach
- Elimination Period - 90 days
- Benefit Period - 5 years
- Average daily benefit = \$100
- 2 out of 6 ADL's or CI
- Tax-qualified
- No rate classes or spouse discounts



Good Health Insurance Company Prototype LTC Pricing Assumptions

■ Lapses

- 6% year 1
- 5% year 2
- 4% year 3
- 2% year 4+
- Plus U.S. Life Mortality (with select factors)



Good Health Insurance Company Prototype LTC Pricing Assumptions

■ Expenses

- \$150 underwriting
- 5% first year expense
- \$30/year maintenance (inflated 2.5% per year), plus 2% of premium
- 4% of claims
- 2.5% of premium taxes



Good Health Insurance Company Prototype LTC Pricing Assumptions

- Commissions
 - 70% first year
 - 15% years 2-10
 - 5% years 11+



Good Health Insurance Company Prototype LTC Pricing Assumptions

- Reserves

- Minimum required per NAIC Model LTC Valuation Law

- Age distribution typical of individual market (no sales >85)

- Investment Income: 6%

Good Health Insurance Company Prototype LTC Policy

Premiums Required to Produce 10% Profits			
Issue Age	Underwriting Style		
	Loose	Moderate	Tight
52			
62			
72			
82			

Good Health Insurance Company Prototype LTC Policy

Expected Loss Ratios by Policy Duration (All ages combined; using 10% profit premiums)			
Issue Age	Underwriting Style		
	Loose	Moderate	Tight
1			
2			
3			
4			
5			
10			
15			
20			

NAIC LTC Experience Exhibits

Cumulative Experience Through 1998

Duration	Earned Premium (Millions)	Loss Ratio	Actual to Expected Ratio
0	\$3,792	14.3%	89.6%
1	4,856	21.3	100.0
2	3,628	29.9	104.4
3	2,654	37.8	104.3
4	1,985	44.0	100.4
5-9	3,960	57.4	90.1
10+	<u>237</u>	<u>86.6</u>	<u>79.6</u>
Total	\$21,112	33.2%	96.3%

Durational Loss Ratios by Underwriting Style

Calendar Duration	“Loose”	“Moderate”	“Tight”	Total Group	Total
0	25.6%	11.0%	7.0%	8.6%	14.3%
1	43.2	18.3	11.6	15.1	21.3
2	56.7	27.3	17.9	22.1	29.9
3	63.7	37.4	25.6	24.1	37.8
4	67.5	44.0	33.9	25.4	44.0
5-9	77.3	62.2	49.4	31.3	57.4
10+	<u>87.6</u>	<u>94.3</u>	<u>102.7</u>	<u>57.6</u>	<u>86.6</u>
Total	53.3	31.5	23.2	22.7	33.2
Weight (By premium – in millions)	\$5,817.4	\$4,451.1	\$8,957.8	\$1,885.9	\$21,112.2