

National LTCi Producers Summit

November 15, 2009

“How Long do LTC Claims Really Last?”

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"Jason and I want to talk to you guys about assisted living."

LTC “facts” you may have used in sales

- “Half (or 60%) of all Americans will need long term care in their lifetimes.”
- “The average length of stay in a nursing home is 2.4 years.”
- “Only a small percentage of claims ever go beyond 3-4 years.”

LTC “facts” you may have used in sales:

- “Half (or 60%) of all Americans will need long term care in their lifetimes.”
 - Comment: based on population data. Insured utilization is somewhat less. Affects the *frequency* of claim and won’t be covered in this presentation.
- “The average length of stay in a nursing home is 2.4 years.”
 - Comment: stay tuned
- “Only a small percentage of claims ever go beyond 3-4 years.”
 - Comment: stay tuned on this one, too

Purpose of this session

- To update data presented at 2004 Summit, regarding the percentage of claimants whose benefits exceed 2 years, 3 years, etc.
- To expand on this data by key drivers (age, sex, care situs, etc.)



“... and look what I have for you. It's your short-term memory.”

Act. Sci. 101

Price at given age:

- Present value (including interest, lapse & mortality) of all future premiums and investment income
equals
- PV of all future claims, expenses, reserve changes and profits.

Claim cost at age $x =$

- Probability of going on claim at age x (i.e., frequency – including probability of using services),
times
- Length of claim (based on continuance curve & benefit period),
times
- Average cost of claim (cost per service times # of services/mo.)

Example of claim cost calculation for 67 year-old Female, home care only (0 day EP, 3 yr. BP, \$100/day, No Salvage)

Frequency = 0.41% (.0041) claims/person/year
(ignoring underwriting and selection)

Length of stay (LOS) = 12.2 months (aver. with 3yr. B.P.)
(371 days)

Benefit = \$100/day (equal to max) for 7 days/week

Annual Claim Cost = $.0041 \times 371 \times 100 = \152.11

Salvage

The savings achieved by a combination of daily charges being less than the daily maximum and fewer than 7 services/wk. being given

$$\text{Salvage} = \frac{(\text{aver. daily charge}) \times (\# \text{ of services/wk.})}{(\text{daily max.}) \times 7}$$

Example of salvage

Daily max = \$100

Actual Charges = \$70 day for 5 days/wk.

$$\text{Salvage} = \frac{70 \times 5}{100 \times 7} = \frac{350}{700} = 50\%$$

On pool of money product, benefit period will be doubled with 50% salvage.

Revised example, using 50% salvage:

Freq. = .0041 claims/person/year

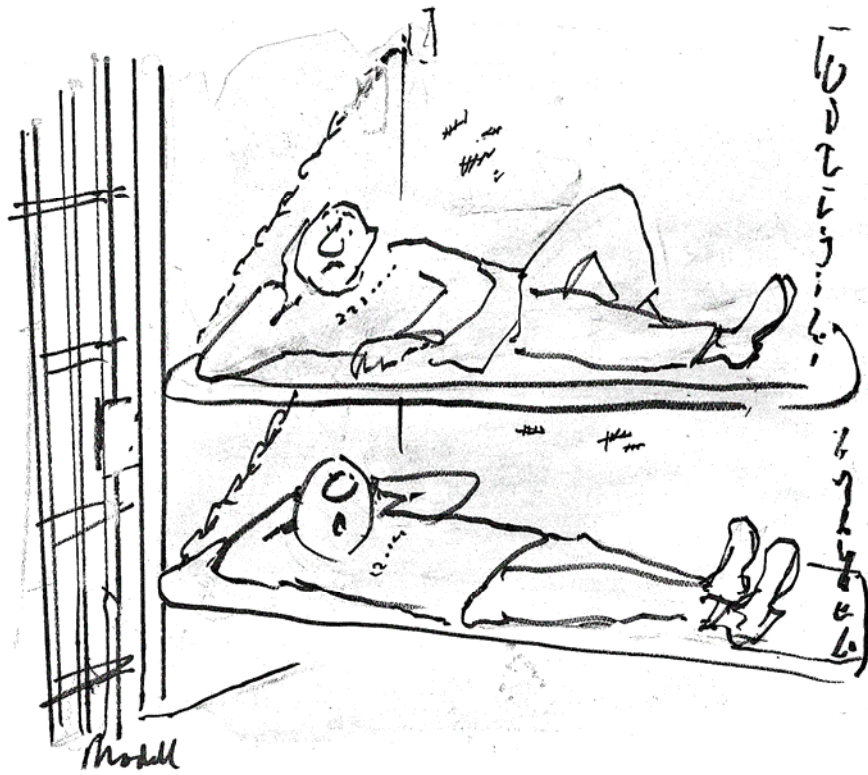
LOS = 16.5 months (aver. with 6 yr. B.P.)
(502 days)

(3 years is doubled, due to salvage but aver. LOS does not double)

Daily benefit = \$100/day x 50% salvage
(aver. charge = \$70/day, for 5 days/wk)

Annual CC = .0041 x 502 x 100 x .5 = \$102.91

(Note: less than \$152.11 claim cost without salvage)



"I don't think of it as prison. I think of it as long-term care."

Average length of stay (LOS)

affected by

Benefit period (BP)

affected by

Average length of stay (LOS)

I.e., each affects the other.

But average LOS does not tell the whole story...

We also need to know:

- How many policyholders will exhaust benefits with various benefit periods?
- Of those who do exhaust benefit period, how many months of remaining claim do they have?

Benefit exhaustion answered by looking at theoretical models called “continuance curves”

Duration from claim (months)	# of Claimants Remaining (out of 1000)
0	1,000
1	869
2	780
3	729
4	660
5	599
6	546
12	383
24	257
36	169
48	140
60	90
72	55
108	13
360	0

Question of benefit exhaustion also can be answered by looking at real company data.

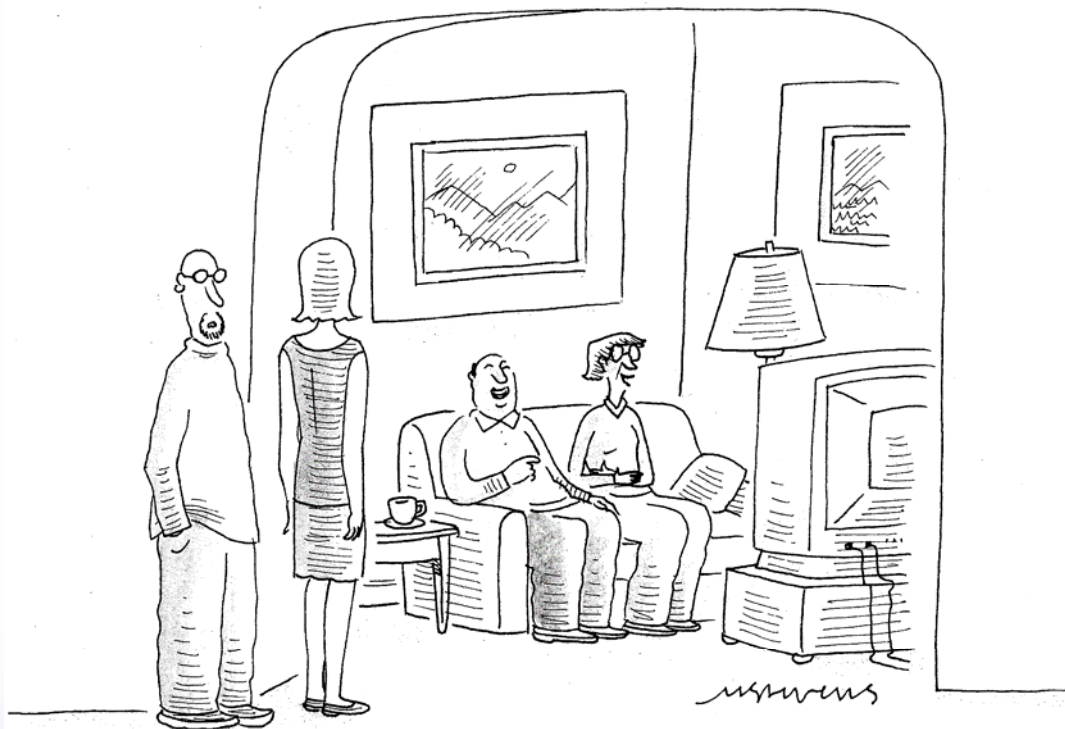
- Survey done for 2004 study, looked at number of claims that exceeded benefit period maximum
- Included 131,438 claimants (open and closed)

% of Claims Lasting X or More Months by Benefit Period

Claims Duration in Months				
Benefit Period	24+	36+	48+	60+
<2	1.4%	1.4%	0.2%	0.1%
2	14.0%	1.4%	0.4%	0.1%
3	25.0%	10.9%	1.4%	0.3%
4	23.9%	12.1%	6.0%	1.0%
5	15.9%	10.2%	6.1%	2.9%
6	30.0%	17.1%	8.3%	4.5%
7-20	30.5%	19.1%	10.9%	6.3%
Lifetime	23.3%	13.9%	7.9%	4.3%
Total	18.7%	8.0%	3.4%	1.4%
Average of Shaded	23.5%	13.1%	7.6%	4.5%

% of Claims Closed Due to Benefit Exhaustion by Benefit Period

BP	Company				
	Co. A	Co. B	Co. C	Co. D	Total
2	33.8%	21.0%	12.5%	7.9%	9.7%
3	12.6%	15.0%	5.5%	7.4%	8.0%
4	5.0%	13.8%	5.3%	4.1%	5.1%
5	-	-	5.7%	1.1%	1.5%
6	1.0%	9.2%	2.3%	0.6%	5.2%
7-20	-	2.6%	-	-	1.9%
Lifetime	0.0	0.0%	0.0%	0.0%	0.0%



"Every night they watch reruns of old 'Seinfeld' shows. Soon it may be time to take them away to the old boomers' home."

Theoretical Modeling

Source: Milliman 2009 LTC Cost Guidelines

Based on \$6 billion of industry claims data, with different claim costs by key pricing demographics

Same four sample policy holders

Male, age 55

Female, age 55

Male, age 82

Female, age 82

Modeled Probability of Person Exhausting Benefit Period (assuming integrated policy, POM & 50% HHC salvage)

BP	M, 55	F, 55	M, 82	F, 82
1	45.6%	37.6%	37.5%	47.3%
2	34.7	28.3	21.1	33.5
3	24.8	18.8	12.4	23.5
4	16.9	13.2	7.4	16.3
5	10.2	9.6	4.3	10.5
6	7.1	8.0	2.7	6.9
8	3.9	6.1	1.2	3.3
10	2.2	4.7	0.5	1.6
Lifetime Ave. LOS	2.0 Years	2.1 Years	1.3 Years	2.0 Years

LOS (in years) Remaining at end of Benefit Period (no salvage)

BP	M, 55	F, 55	M, 82	F, 82
1	3.9 Years	4.6 Years	2.1 Years	3.0 Years
2	4.0	5.2	2.0	3.0
3	3.7	5.3	1.9	2.9
4	3.6	5.6	1.9	2.8
5	3.9	6.0	2.1	2.9
6	3.9	6.4	2.2	3.0
8	3.9	6.5	2.3	3.1
Lifetime Ave. LOS	2.0	2.1	1.3	1.7

Claim 1: Policy with NH and HHC benefits, not integrated, \$120/day original daily benefit amount, 5% Compound Inf. for 20 Yrs. Issued in 1991 at age 63

No.	Description	Period Begin	Period End	Claims Paid
1	HHC	3/1994	12/1995	47,552.30
2	NH	12/1995	2/1996	9,334.40
3	HHC	2/1996	10/1996	14,166.21
4	NH	11/1996	5/1998	78,574.14
5	HHC	5/1998	6/1998	1,688.25
6	Break in Care	6/1998	10/1998	-
7	NH	10/1998	4/2002	236,169.72
8	HHC	4/2002	10/2002	15,860.00
9	NH	11/2002	6/2003	48,323.09
10	Break in Care	6/2003	10/2003	-
11	Nursing Home	11/2003	11/2004	56,141.50
12	HHC, 8 hrs/day 7 days/week	11/2004	11/2005	29,353.00
13	HHC, 15 hrs/day 7 days/week	7/2005	11/2005	74,557.24
14	HHC, 15 hrs/day 7 days/week	12/2006	12/2007	63,948.00
15	HHC, 17-24 hrs/day 7 days/week	1/2008	12/2008	86,686.23
16	HHC, 24 hrs/day 7 days/week	1/2009	Open Claim	56,388.60
			TOTAL	818,742.68

Claim 2: Policy with NH and HHC benefits, integrated, \$150/day original daily benefit amount, 5% Compound Inf. for 20 Years, Issued in 1993 at age 70

No.	Description	Period Begin	Period End	Claims Paid
1	Care Received Prior to 7/18/2001	7/1995	7/2000	209,021.56
2	HHC, 10 hrs/day, 7 days/wk	7/2000	1/2001	19,318.56
3	HHC, 10 hrs/day, 7 days/wk	1/2001	7/2001	22,500.92
4	HHC, 10 hrs/day, 7 days/wk	7/2001	1/2002	24,815.40
5	No plan of care on file during this period	1/2002	7/2002	27,480.55
6	HHC, 10 hrs/day, 7 days/wk	7/2002	1/2003	25,515.00
7	HHC, 10 hrs/day, 7 days/wk	1/2003	11/2005	178,590.59
8	HHC, 24 hrs/day, 7 days/wk	11/2005	7/2006	54,796.00
9	HHC, 24 hrs/day, 7 days/wk	7/2006	9/2007	82,665.77
10	HHC, 24 hrs/day, 7 days/wk	9/2007	9/2008	72,883.08
11	HHC, 24 hrs/day, 7 days/wk	9/2008	3/2009	30,026.10
12	HHC, 24 hrs/day, 7 days/wk	3/2009	Open Claim	35,490.00
			TOTAL	783,103.53

Claim 3: SA NH Policy,

\$80/day original daily benefit amount, 5% Compound Inf. for 20 Years,
Issued in 1993 at age 72

No.	Description	Period Begin	Period End	Claims Paid
1	NH	11/1995	10/2009	638,866.69
2	NH	10/5/2009	Open Claim	-
			TOTAL	638,866.69

**Claim 4: SA NH Policy,
\$70/day original daily benefit amount,
Issued in 1993 at age 77**

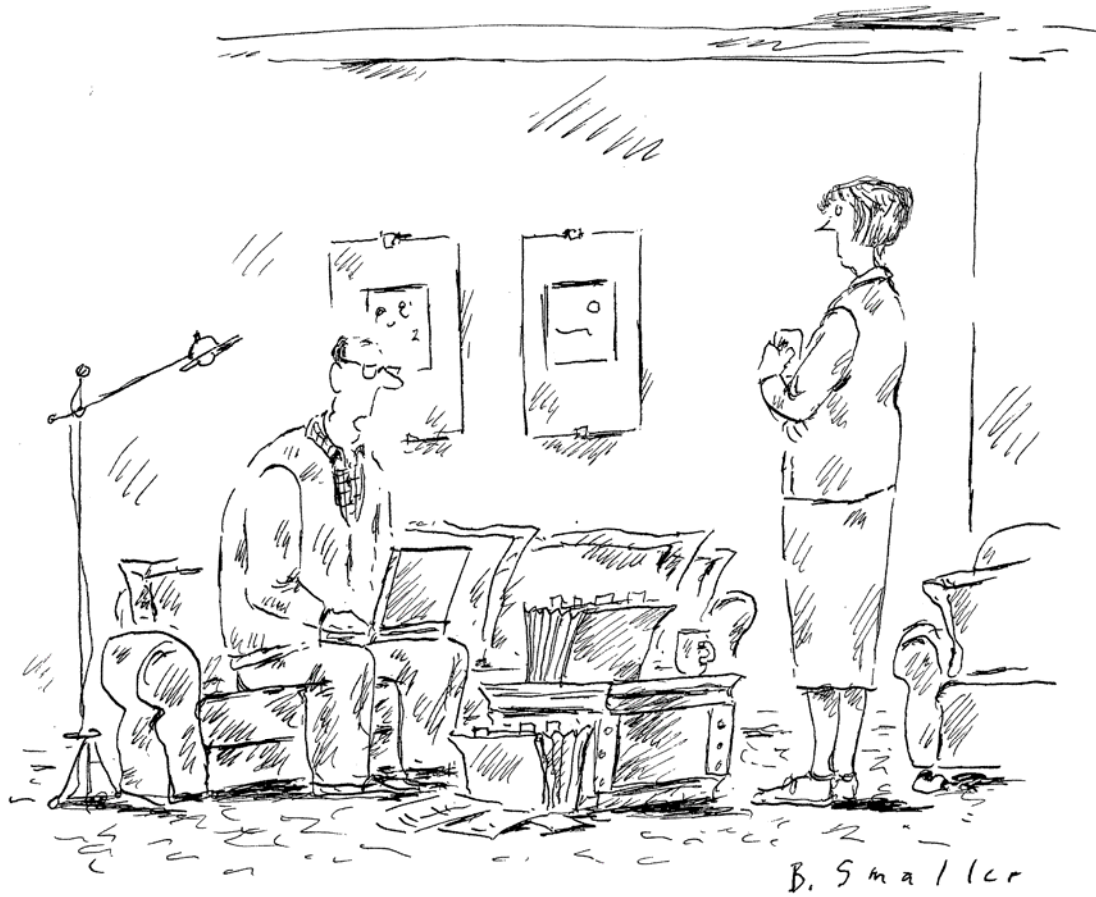
No.	Description	Period Begin	Period End	Claims Paid
1	NH	2/1994	5/1994	6,860.00
2	NH	5/1994	12/2007	332,160.00
3	NH	1/2008	7/2008	14,910.00
4	NH	7/2008	Open Claim	25,550.00
			TOTAL	379,480.00

**Claim 5: Policy with NH and HHC benefits, integrated,
\$120/day original daily benefit amount,
Issued in 1993 at age 75**

No.	Description	Period Begin	Period End	Claims Paid
1	NH	2/1994	10/2000	293,520.00
2	Break in Care	10/2000	11/2000	-
3	NH	11/2000	12/2007	306,840.00
4	NH	1/2008	9/2008	32,880.00
5	NH	10/2008	Open Claim	40,200.00
			TOTAL	673,440.00

Claim 6: SA HHC Policy, \$75/day original daily benefit amount, Issued in 1994 at age 64

No.	Description	Period Begin	Period End	Claims Paid
1	HHC	9/1995	6/2001	149,695.15
2	HHC	7/2001	12/2001	11,016.00
3	HHC	1/2002	6/2002	10,893.00
4	HHC	7/2002	11/2005	90,164.00
5	break in care	12/2005	12/2005	-
6	HHC	1/2006	7/2006	15,264.00
7	HHC	8/2006	12/2006	9,264.00
8	HHC	1/2007	3/2008	19,791.23
9	HHC	4/2008	6/2008	6,642.00
10	HHC	7/2008	6/2009	24,589.99
11	HHC	6/2009	Open Claim	4,650.00
			TOTAL	341,969.37



"If we take a late retirement and an early death, we'll just squeak by."

Factors that possibly affect lengths of stay

- Age
- Sex
- Salvage level assumed
- Duration since issue/degree of underwriting
- Situs of care (NH/ALF vs. HHC)
- Whether benefit period is separate by type of care or integrated
- Marital status (assumed to affect frequency only)
- Elimination and benefit period chosen
- Benefit triggers (medically necessary vs. ADL's , TQ vs. non-TQ)
- Reimbursement vs. indemnity vs. disability model
- Type of claim (cognitive vs. non-cognitive)

Effect of Age on LOS

(Both sexes and all care situses, reimbursement model)

	Modeled Probability of Person Exhausting Benefit Period				
	Claimant Age				
Benefit Period	55	62	72	82	92
1	42.3%	41.7%	37.6%	43.1%	43.5%
2	32.1	28.5	23.9	28.1	28.6
3	22.4	19.3	15.6	18.7	17.6
4	15.5	13.8	10.7	12.5	10.4
5	10.1	9.8	6.9	7.8	6.0
6	7.6	7.6	4.8	5.1	3.6
8	5.0	4.7	2.7	2.4	1.4
10	3.3	3.1	1.6	1.1	0.6
Lifetime Average LOS (Yrs)	2.8	2.7	2.1	2.0	1.8

Effect of Sex on LOS

(Age 82, all care situses, reimbursement model)

	Modeled Probability of Person Exhausting Benefit Period	
Benefit Period	Males	Females
1	37.5%	47.3%
2	21.1	33.5
3	12.4	23.5
4	7.4	16.3
5	4.3	10.5
6	2.7	6.9
8	1.2	3.3
10	0.5	1.6
Lifetime Average LOS (Yrs)	1.3 Years	2.0 Years

Effect of Situs of Care on LOS

(Age 82, both sexes, reimbursement model)

	Modeled Probability of Person Exhausting Benefit Period	
Benefit Period	NH/ALF	HHC
1	55.0%	18.6%
2	37.7	6.8
3	26.1	2.5
4	17.4	1.2
5	10.8	0.5
6	7.1	0.2
8	3.1	0.0
10	1.5	0.0

Effect of Benefit Model on LOS

(Age 82, both sexes and all care situses)

Benefit Period	Modeled Probability of Person Exhausting Benefit Period		
	Reimbursement	Indemnity	Disability
1	43.1%	47.3%	50.4%
2	28.1	31.3	34.1
3	18.7	20.9	23.8
4	12.5	13.8	16.0
5	7.8	8.8	10.4
6	5.1	5.8	6.9
8	2.4	2.7	3.3
10	1.1	1.3	1.6

Effect of tax qualification on LOS

(Age 82, both sexes and all care situses, reimbursement model)

	Modeled Probability of Person Exhausting Benefit Period	
Benefit Period	Tax Qualified	Non-Tax Qualified
1	43.1%	38.3%
2	28.1	25.0
3	18.7	16.5
4	12.5	11.0
5	7.8	6.9
6	5.1	4.5
8	2.4	2.1
10	1.1	1.0

Summary of Probability of Exceeding Benefit Maximum, by Age and Sex (all care situses, reimbursement model, TQ)

Modeled Probability of Person Exhausting Benefit Period										
Benefit Period	Male					Female				
	55	62	72	82	92	55	62	72	82	92
1	45.6%	43.5%	36.8%	37.5%	33.4%	37.6%	40.3%	38.4%	47.3%	50.9%
2	34.7%	29.4%	24.1%	21.1%	19.1%	28.3%	27.9%	23.8%	33.5%	35.4%
3	24.8%	20.5%	15.1%	12.4%	10.4%	18.8%	18.4%	16.2%	23.5%	22.9%
4	16.9%	14.2%	10.0%	7.4%	5.9%	13.2%	13.5%	11.6%	16.3%	13.7%
5	10.2%	9.6%	6.0%	4.3%	3.4%	9.6%	9.9%	7.9%	10.5%	8.0%
6	7.1%	7.2%	3.9%	2.7%	2.0%	8.0%	7.8%	5.8%	6.9%	4.8%
8	3.9%	4.4%	1.7%	1.2%	0.9%	6.1%	4.9%	3.8%	3.3%	1.8%
10	2.2%	2.7%	0.8%	0.5%	0.4%	4.7%	3.3%	2.5%	1.6%	0.7%

Conclusions:



Depends on each person's personal situation:

- risk tolerance
- support system
- perceived alternatives upon benefit exhaustion
- financial situation



Neuberg

"A great catch. He's a widower, still frisky, and has fully paid-up long-term-care insurance."