

***The Life Care Annuity:
An Integrated Product Insuring Long-
Term Care Needs and Financing
Lifetime Retirement Income***

**By Mark J. Warshawsky
Director of Retirement Research
Watson Wyatt Worldwide**

Thursday, October 26, 2006



Introduction

The Narrow Problems

- Adverse selection by groups with differential mortality expectations unknown to the annuity issuer increases the price of immediate life annuities.
- Underwriting excludes a significant percentage of the retired population (those with pre-existing health conditions and adverse lifestyles) from access to private long-term care insurance (LTCI) coverage.

A Factual Insight

- Mortality and poor health and lifestyle are positively correlated.

A Possible Solution

- Combine the immediate life annuity with LTCI benefits.

Introduction (continued)

The Broader Problems

- Automatic annuitization in retirement plans is less common now.
- Yet the risk arising from uncertainty about the length of life and the need for guaranteed income flows in retirement are still present. Both adverse selection and moral hazard are the costs of voluntary choice in distribution modes.
- Concerned about current and future budget problems, Congress recently tightened eligibility for payments by Medicaid for nursing home and home health care. But underwriting prevents many from getting private insurance.
- The current preferred solutions of the insurance industry – purchase of individual LTCI policies at younger ages or through a group employer plan – are legitimate, but also suffer from certain disadvantages.

A Possible Solution

- The life care annuity may solve these public policy problems, and may function well in a variety of venues and for many socio-economic groups (excluding, however, those with limited means – without government subsidies).

Maintained Hypotheses

- The life expectancy of voluntary purchasers of a combined product will be less than that of voluntary purchasers of life annuities.
- With minimal medical underwriting, the cost of the combined product will be less than the sum of cost of the two products sold separately.
- The population eligible for, and likely attracted to, the combined product will be larger than to the two products issued separately.

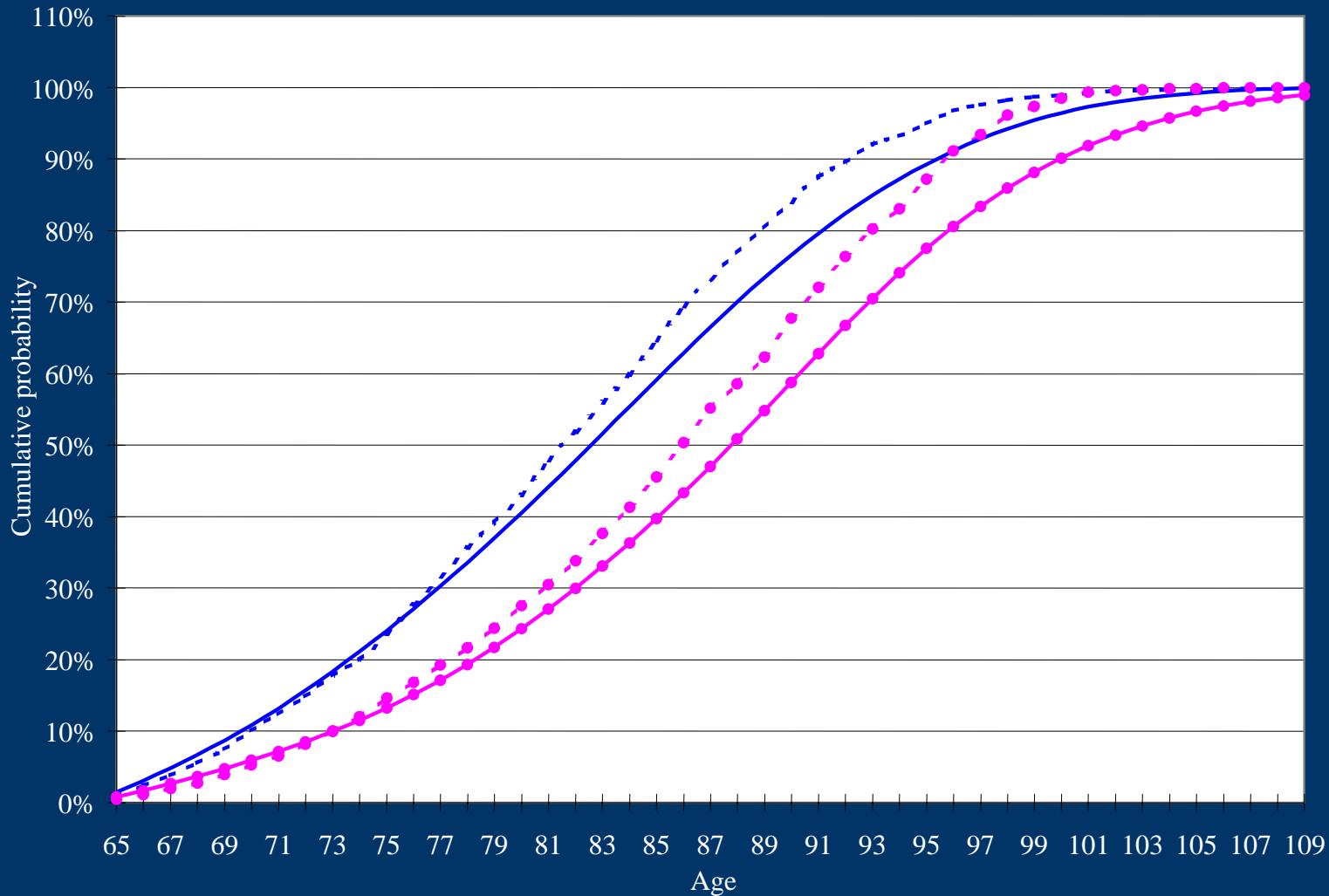
The Base Combined Product Examined

- Life Annuity paying \$1,000 per month for life and a 10-year guaranteed period.
- Disability Annuity Rider paying an additional \$2,000 per month if:
 - 30 days have passed after the insured has 2 ADLs or is cognitively impaired for at least 90 days, and
 - paying yet another \$1,000 additional per month if the insured has 4 ADLs.
- The full analysis included increasing benefits for inflation, and varying the age and gender of insured.
- Only singles were evaluated.
- For details, see Murtaugh, Spillman and Warshawsky, “In Sickness and In Health: An Annuity Approach to Financing Long-Term Care and Retirement Income,” Journal of Risk and Insurance, July 2001.

Construction of Risk Groups and Purchaser & Non-Purchaser Pools

- Based on 1995 study by Kemper, Murtaugh and Spillman of private LTCI underwriting.
- Six risk groups created:
 - (1) Limitation in Activities of Daily Living (ADLs)
 - (2) Cognitive impairment
 - (3) Major illness
 - (4) Heart attack
 - (5) Stroke
 - (6) Lifestyle

Mortality Comparison: Males and Females, Annuitants and Annuitant Proxies



—●— Female annuitants
 - - ● - - Female ann. proxies
 — Male annuitants
 - - - Male ann. Proxies

Mean Survival, Risk of Meeting Benefit Triggers, and Number of Years Receiving Benefits for Hypothesized Purchasers and Nonpurchasers of an Immediate Annuity and Disability Benefits at Age 65

	Percent in risk category	Mean survival (years)	Percent meeting 2+ ADL benefit trigger	Expected years of 2+ ADL disability	Percent meeting 4+ ADL benefit trigger	Expected years of 4+ ADL disability
All Persons	100.0	17.8	68.5	1.5	50.7	0.7
Purchasers						
Current annuitant proxies	77.1	19.5	69.0	1.5	51.6	0.7
Expanded purchase pool	98.0	18.0	67.9	1.4	50.2	0.6
Nonpurchasers						
Current LTC underwriting practice	22.9	11.7	66.8	1.5	47.7	0.6
Minimal underwriting only	2.0	5.9	100.0	5.8	74.2	2.0

Premiums at Age 65 for Income Annuity with Disability Benefits: Current LTC Underwriting Practice versus Minimal Underwriting

	\$1,000 Monthly Life Annuity Only	\$2,000 Monthly 2+ ADL Disability Benefit	\$1,000 Monthly 4+ ADL Disability Benefit	Combined Premium
	Without inflation protection			
All Persons	\$139,098	\$ 15,950	\$ 3,155	\$158,203
Prospective purchasers				
Current LTC underwriting	\$145,041	\$ 13,900	\$ 2,843	\$161,784
Minimal underwriting only	\$139,827	\$ 13,723	\$ 2,777	\$156,326
Nonpurchasers				
Current LTC underwriting	\$119,051	\$ 22,866	\$ 4,207	\$146,124
Minimal underwriting only	\$104,147	\$122,764	\$ 21,293	\$248,203

Relative Premiums at Age 65 for Income Annuity with Disability Benefits

	Premium Ratio: Risk Group Relative to Expanded Purchase Pool			
	\$1,000 Monthly Immediate Annuity Only	\$2,000 Monthly 2+ ADL Disability Benefit	\$1,000 Monthly 4+ ADL Disability Benefit	Combined Premium
All Persons	0.995	1.162	1.136	1.012
Purchasers				
Current LTC underwriting	1.037	1.013	1.024	1.035
Minimal underwriting only	1.000	1.000	1.000	1.000
Nonpurchasers				
Current LTC underwriting	0.851	1.666	1.515	0.935
ADL Limitation	0.775	5.509	6.066	1.285
Cognitive impairment	0.741	8.532	3.655	1.477
Major illness	0.827	1.306	1.008	0.872
Heart Attack	0.789	0.688	0.793	0.781
Stroke	0.853	1.981	2.076	0.974
Lifestyle	0.865	1.219	1.181	0.902
Minimal underwriting only	0.745	8.946	7.669	1.588

**Sensitivity Analysis: Percentage Premium Increase Due to “ADL Creep,” Base Policy at Age 65
Ratio to Base Premium without Creep**

	\$2,000 Monthly 2+ ADL Disability Benefit	\$1,000 Monthly 4+ ADL Disability Benefit	Combined Premium, Immediate Annuity Plus Disability Benefits
	ADL Inflation ^a		
All Persons	1.47	1.46	1.06
Prospective purchasers			
Current annuitant proxies	1.40	1.40	1.04
Expanded purchase pool	1.56	1.41	1.06
Nonpurchasers			
Current LTC underwriting	1.62	1.59	1.11
Minimal underwriting only	1.00	1.73	1.06
	Earlier benefits ^b		
All Persons	1.09	1.15	1.01
Prospective purchasers			
Current annuitant proxies	1.10	1.15	1.01
Expanded purchase pool	1.11	1.16	1.01
Nonpurchasers			
Current LTC underwriting	1.07	1.13	1.01
Minimal underwriting only	1.00	1.04	1.00

a Assumes that all those with 1 ADLs would obtain certification for 2 ADLs and those with 3 ADLs would obtain certification as having 4 ADLs if disability benefits were available.

b Assumes that certification for chronic 2 -ADL and 4 ADL disability, respectively, would be obtained 3 months earlier if disability benefits were available.

Other Practical Issues

- Disability or indemnity approach to LTCI segment?
- Taxation of LTCI segment in combination products
 - In an after-tax annuity or life insurance, it is now, because of PPA, done on a favorable basis, but industry focus is apparently on deferred annuity products.
 - But, in a qualified retirement plan, a life care annuity would not be allowed, even on a tax-neutral basis, because of the current minimum distributions and incidental benefit regulations.
- Some have also expressed reservations about the life care annuity
 - Could there be adverse selection by some with expectations of long disabled lives?
 - Would insurance companies be willing to issue guaranteed prices for LTCI policy segments, with no right to re-price based on experience?
 - Do recent modest developments in “impaired lives” annuities and differential risk underwriting for LTCI obviate the need for an integrated product?

Next Steps in Research and Development

- Updated data for analysis
- Differences by socioeconomic and marital status
- Experimentation with different balancing of benefit segments/more recent underwriting practices
- Interest by retirement plan sponsors as an optional distribution form?