

A REPORT ON THE ACTUARIAL, MARKETING, AND LEGAL ANALYSES OF THE CLASS PROGRAM

APPENDIX P:

JUNE 22, 2011 TECHNICAL EXPERTS MEETING

Pa: AGENDA AND DISCUSSION ISSUES AND QUESTIONS

**Pb: PRESENTATION ENTITLED “CORE ASSUMPTIONS AND
MODEL OUTPUTS”**

**Pc: PRESENTATION ENTITLED “ACTUARIAL RESEARCH CORPORATION’S
LONG TERM CARE INSURANCE MODEL”**

**Pd: PRESENTATION ENTITLED “THE AVALERE LONG-TERM CARE
POLICY SIMULATOR MODEL”**

**Pe: PRESENTATION ENTITLED “ALTERNATIVE APPROACHES TO CLASS
BENEFIT DESIGN: THE CLASS PARTNERSHIP”**

APPENDIX Pa:

AGENDA AND DISCUSSION ISSUES AND QUESTIONS

Technical Expert Panel Meeting
on
Actuarial Modeling of the Community Living
Assistance Services and Supports (CLASS) Program
Agenda

June 22, 2011
9:00 am – 3:30 pm

Hubert H. Humphrey Building, Room 705A
200 Independence Avenue, SW
Washington, DC 20201

Contact: Marie Belt or Goldwyn Smith at (202) 690-6443

- | | |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:00 – 9:15 | Welcome and Introductions

Ruth Katz
Acting Deputy Assistant Secretary for Disability, Aging, and Long-Term Care Policy

Kathy Greenlee
Assistant Secretary for Aging |
| 9:15 – 9:45 | Overview of CLASS and Major Modeling Issues

William Marton
Director, Division of Disability and Aging Policy

Bob Yee
Actuary, CLASS Program Office |
| 9:45 – 10:15 | Actuarial Research Corporation (ARC) CLASS Model

John Wilkin
Senior Actuary, ARC |
| 10:15 – 10:45 | Questions and Comments on the ARC CLASS Model |
| 10:45 – 11:00 | Break |

11:00 – 11:30 **Avalere Long-Term Care Policy Simulator (LTC-PS)**

Anne Tumlinson

Senior Vice President, Avalere Health

Eric Hammelman

Director, Avalere Health

11:30 – 12:00 **Questions and Comments on the Avalere LTC-PS**

12:00 – 12:45 **Lunch**

12:45 – 2:00 **Review and Discussion of Core Assumptions and Model Output**

John Wilkin

Senior Actuary, ARC

Eric Hammelman

Director, Avalere Health

2:00 – 2:15 **Break**

2:15 – 3:30 **Presentation and Discussion of Alternative Approaches**

William Marton

Director, Division of Disability and Aging Policy

Bob Yee

Actuary, CLASS Program Office

3:30 **Adjourn**

Issues and Questions to Discuss at the June 22nd TEP Meeting

Thank you for your participation on the Technical Expert Panel on Actuarial Modeling of the Community Living Assistance Services and Supports (CLASS) Program. The agenda for the meeting is organized around addressing six major questions (below) and our efforts to develop estimates of premiums, participation and other important aspects of the CLASS program. Please review the questions and materials prior to the meeting. After the meeting, we would very much appreciate it if you could provide follow up comments or thoughts within a week so that we can incorporate them into our future modeling efforts.

1. Who is likely to enroll in the CLASS program?

- a. Do you think that the models' approach to adverse selection is reasonable?
- b. Can you suggest approaches to validate the models with regards to their treatment of adverse selection?
- c. What alternative approaches would you recommend?

2. What is the future long-term care utilization of enrollees likely to be?

- a. Do you think that the approach for estimating future claim costs is reasonable?
- b. What are the strengths and weaknesses of the survey data that are the basis for estimating future claim costs?
- c. What other data could be used to model future claims?

3. Are other key assumptions reasonable?

- a. Are the interest rate assumptions reasonable (e.g., 4.7%, 5.7%, 6.7% average annual rate of return)?
- b. Are the annual voluntary lapse assumptions reasonable (e.g., .5%, .75%, 1% per year)?
- c. How should the progression of disability among workers be modeled during their working years and beyond?
- d. Are the assumptions of morbidity improvement reasonable (.25%, .5%, .75% per year for 20 years; 0% thereafter)?
- e. Are the mortality improvement assumptions reasonable (e.g., 1.31%, .78%, .32% per year)?

4. What level of participation should we expect?

- a. What are reasonable lower and upper bounds to participation? What do you think is the best point estimate of participation?
- b. Do you think the models reasonably reflect the dynamic between participation and adverse selection?
- c. How should we model the interaction between program demand and premium levels?

- 5. What alternative designs would put the program on stronger financial footing?**
 - a. Other than underwriting and mandatory enrollment, what features would you suggest to mitigate adverse selection?
 - b. What aspects of the program should be changed to maximize participation?

- 6. Other than specific changes to the benefit plan, what strategies should we pursue to mitigate program risk?**

Summary of CLASS

Program Features	CLASS Benefit in Statute
Enrollment Requirements:	
- Age 18+	Yes
- Taxable Wages/Income	Yes
- Actively Employed	Yes
- Not in Institution	Yes
Coverage/Benefits:	
- Primary Benefit	Cash
- Daily Benefit Amount (DBA)	\$50 (Average)
- Unit of Payment	Daily or Weekly
- Minimum Duration in Years	NA - Lifetime
- Total Value	TBD
- Inflation Protection	CPI-U
- Advocacy Services	Yes
- Advice and Asst. Counseling	Yes
Eligibility for Benefits:	
- 5 Year Vesting Period	Yes
- Work Req. Over Vesting Period	At Least 3 Years
- Earnings Req. Over Vesting Period	\$1,120/Year
- 24 Months of Prior Prem. Payment	Yes
- Minimum Benefit Trigger	2 or 3 of 6 ADLs ¹
- Tiered Benefit	Yes
- Elimination Period in Days	0
- Presumptive Eligibility	Yes - if in Inst. ²
- Administrative Expenses	3%
Monthly Premium:	
- Underwritten (Other Than Age)	No
- Indexed to Inflation	No
- Low Income Premium	Yes
- Full Time Student Premium	Yes
- Waiver of Premium	TBD
- Level Premium	After Age 65 ³
- Return of Premium	TBD

CLASS: Issues for Discussion

1. Who is likely to enroll in the CLASS program?

- Modeling adverse selection/antiselection
- Data limitations

2. What is the future long-term care utilization of enrollees likely to be?

- Modeling future claim costs
- Data limitations

3. Are other key assumptions reasonable?

- Return on Investment (4.7%, 5.7%, 6.7% average annual rate of return)
- Lapsation (.5%, .75%, 1% per year)
- Morbidity Improvement (.25%, .5%, .75% per year for 20 years; 0% thereafter)
- Mortality Improvement (1.31%, .78%, .32% per year)

CLASS: Issues for Discussion

4. What level of participation should we expect?

- Range of 1% to 4%
- Premium-demand interaction

5. What alternative program designs would put the program on stronger financial footing?

- Minor changes (e.g., higher earnings requirements, indexed premiums, etc.)
- Major changes (e.g., “family of options”; phased enrollment)

6. What strategies should we pursue to mitigate program risk?

- Waiver of premium
- Cross-subsidization
- Other strategies?

Summary of CLASS Plans

Program Features	CLASS Benefit in Statute	Modified
Enrollment Requirements:		
- Age 18+	Yes	Yes
- Taxable Wages/Income	Yes	Yes
- Actively Employed	Yes	Yes
- Not in Institution	Yes	Yes
Coverage/Benefits:		
- Primary Benefit	Cash	Cash
- Daily Benefit Amount (DBA)	\$50 (Average)	\$50 (Average)
- Unit of Payment	Daily or Weekly	Daily or Weekly
- Minimum Duration in Years	NA - Lifetime	NA - Lifetime
- Total Value	TBD	TBD
- Inflation Protection	CPI-U	CPI (2.8%)
- Advocacy Services	Yes	Yes
- Advice and Asst. Counseling	Yes	Yes
Eligibility for Benefits:		
- 5 Year Vesting Period	Yes	Yes
- Work Req. Over Vesting Period	At Least 3 Years	5 Years (or 40 Qs) ¹
- Earnings Req. Over Vesting Period	\$1,120/Year	\$12,000/Year
- 24 Months of Prior Prem. Payment	Yes	Yes
- Minimum Benefit Trigger	2 or 3 of 6 ADLs ²	TBD
- Tiered Benefit	Yes	Yes
- Elimination Period in Days	0	0
- Presumptive Eligibility	Yes - if in Inst. ³	Yes - if in Inst. ³
- Administrative Expenses	3%	3%
Monthly Premium:		
- Underwritten (Other Than Age)	No	No
- Indexed to Inflation	No	Yes (2.8%)
- Low Income Premium	Yes	Yes
- Full Time Student Premium	Yes	Yes
- Waiver of Premium	TBD	TBD
- Level Premium	After Age 65 ⁴	After Age 65 ⁴
- Return of Premium	TBD	TBD

APPENDIX Pb:

**PRESENTATION ENTITLED “CORE ASSUMPTIONS
AND MODEL OUTPUTS”**

Core Assumptions and Model Outputs

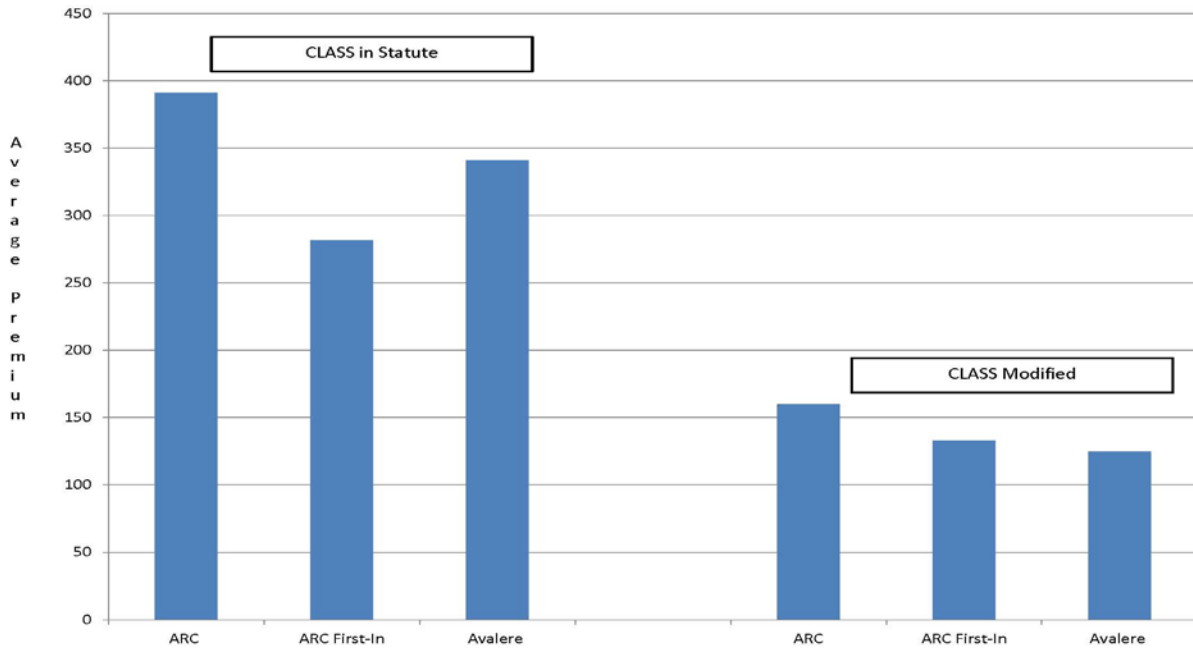
John Wilkin, ARC

Eric Hammelman, Avalere Health

	CLASS Benefit in Statute	Modified CLASS
Enrollment Requirements		
Age 18+	Yes	Yes
Taxable Wages/Income	Yes	Yes
Actively Employed	Yes	Yes
Not in Institution	Yes	Yes
Coverage/Benefits		
Primary Benefit	Cash	Cash
Daily Benefit Amount	\$50 (Average)	\$50 (Average)
Unit of Payment	Daily or Weekly	Daily or Weekly
Minimum Duration in Years	NA-Lifetime	NA-Lifetime
Total Value	TBD	TBD
Inflation Protection	CPI-U	CPI-U
Advocacy Services	Yes	Yes
Advice and Asst. Counseling	Yes	Yes
Eligibility for Benefits		
5 Year Vesting Period	Yes	Yes
Work Req. Over Vesting Period	At Least 3 Years	5 Years (or 40 Qs)
Earnings Req. Over Vesting Period	\$1,120/Year	\$12,000/Year
24 Months of Prior Prem. Payment	Yes	Yes
Minimum Benefit Trigger	2 or 3 of 6 ADLs	TBD
Tiered Benefit	Yes	Yes
Elimination Period in Days	0	0
Presumptive Eligibility	Yes - if in Inst.	Yes - if in Inst.
Administrative Expenses	3%	3%
Monthly Premium		
Underwritten (Other than Age)	No	No
Indexed to Inflation	No	Yes (2.8%)
Low Income Premium	Yes	Yes
Full Time Student Premium	Yes	Yes
Waiver of Premium	TBD	TBD
Level Premium	After Age 65	After Age 65
Return of Premium	TBD	TBD

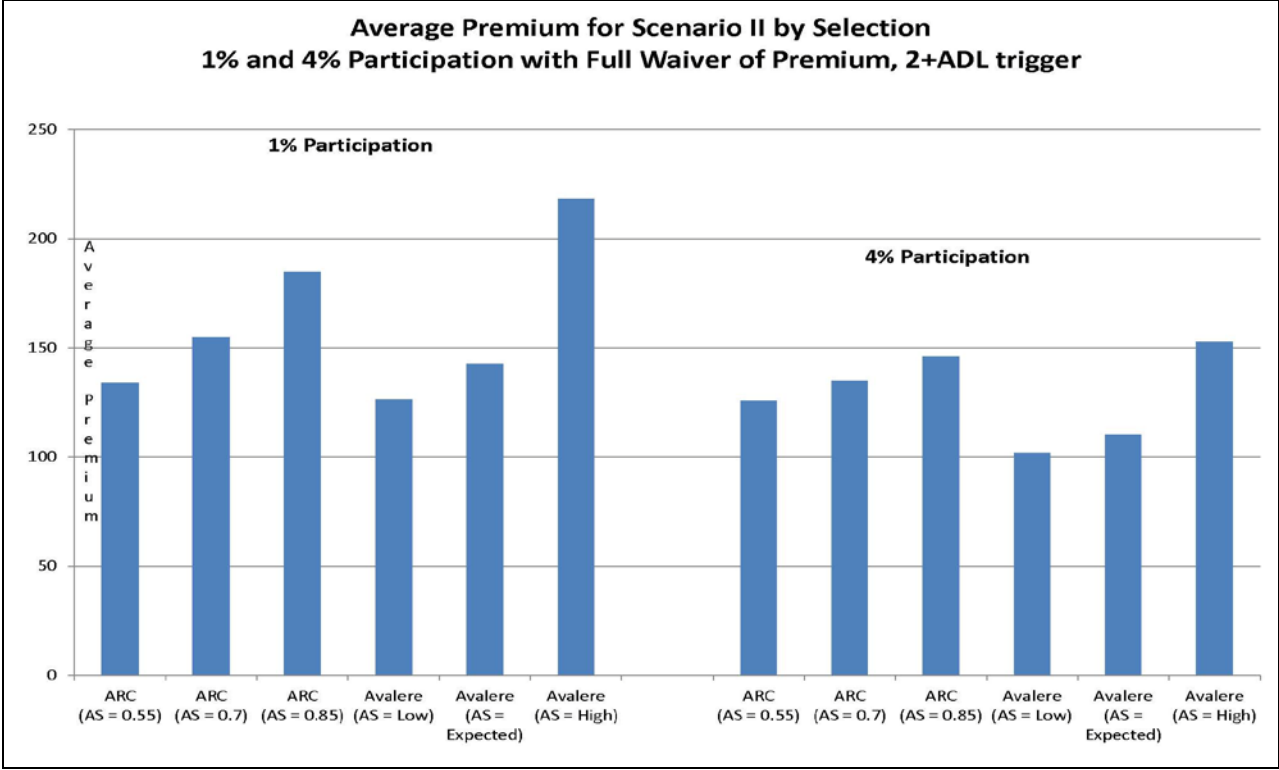
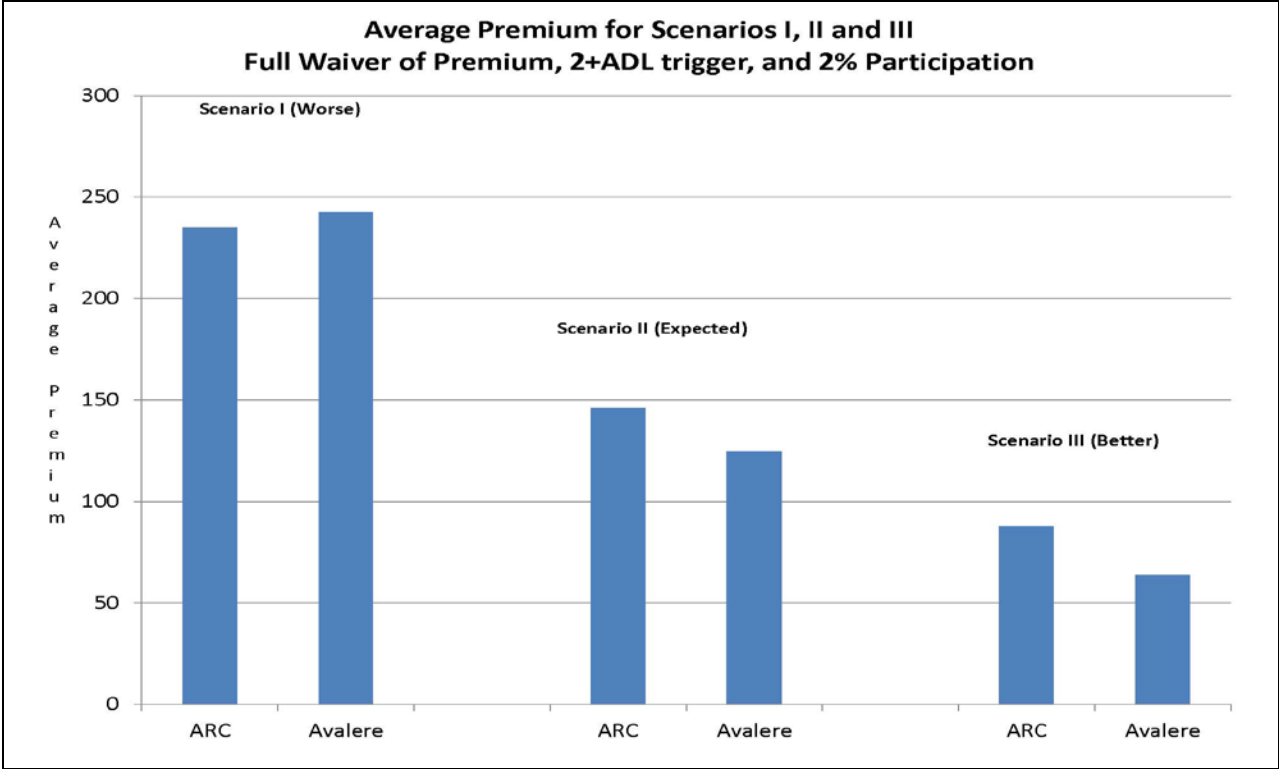
Modified CLASS changes these three options

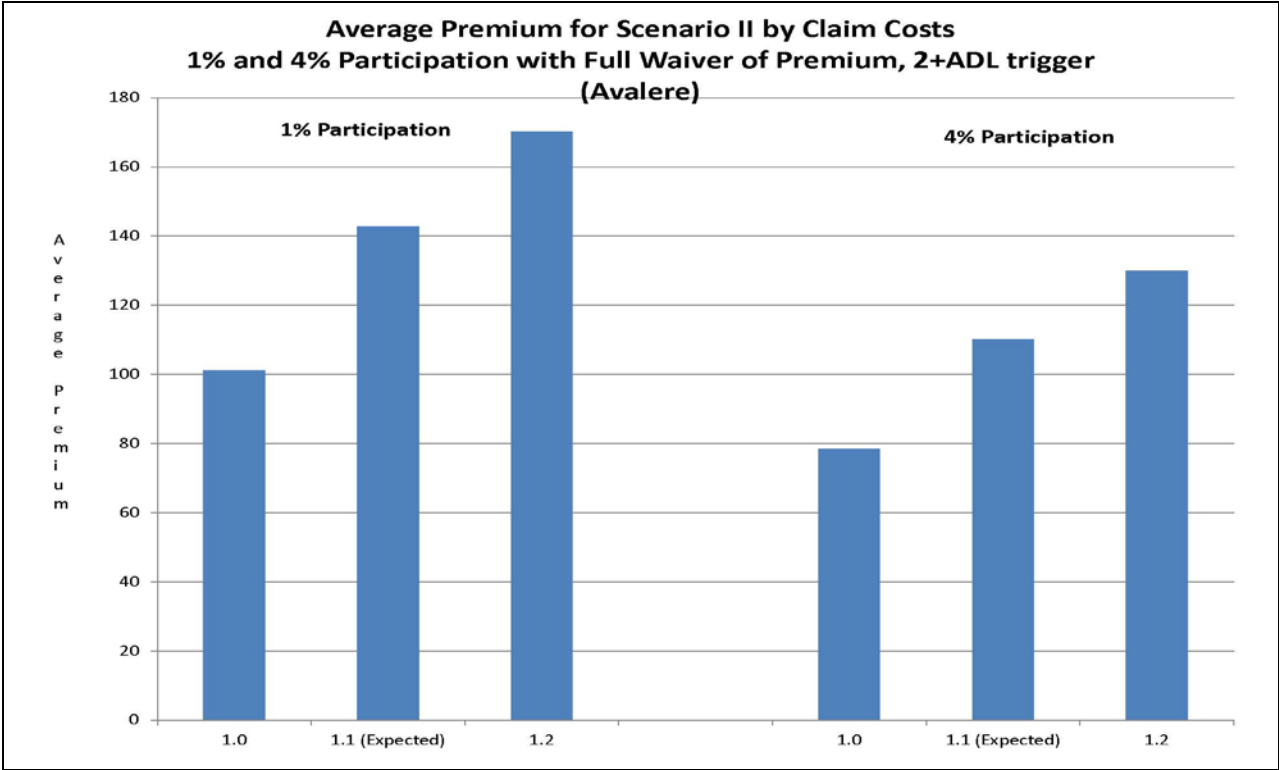
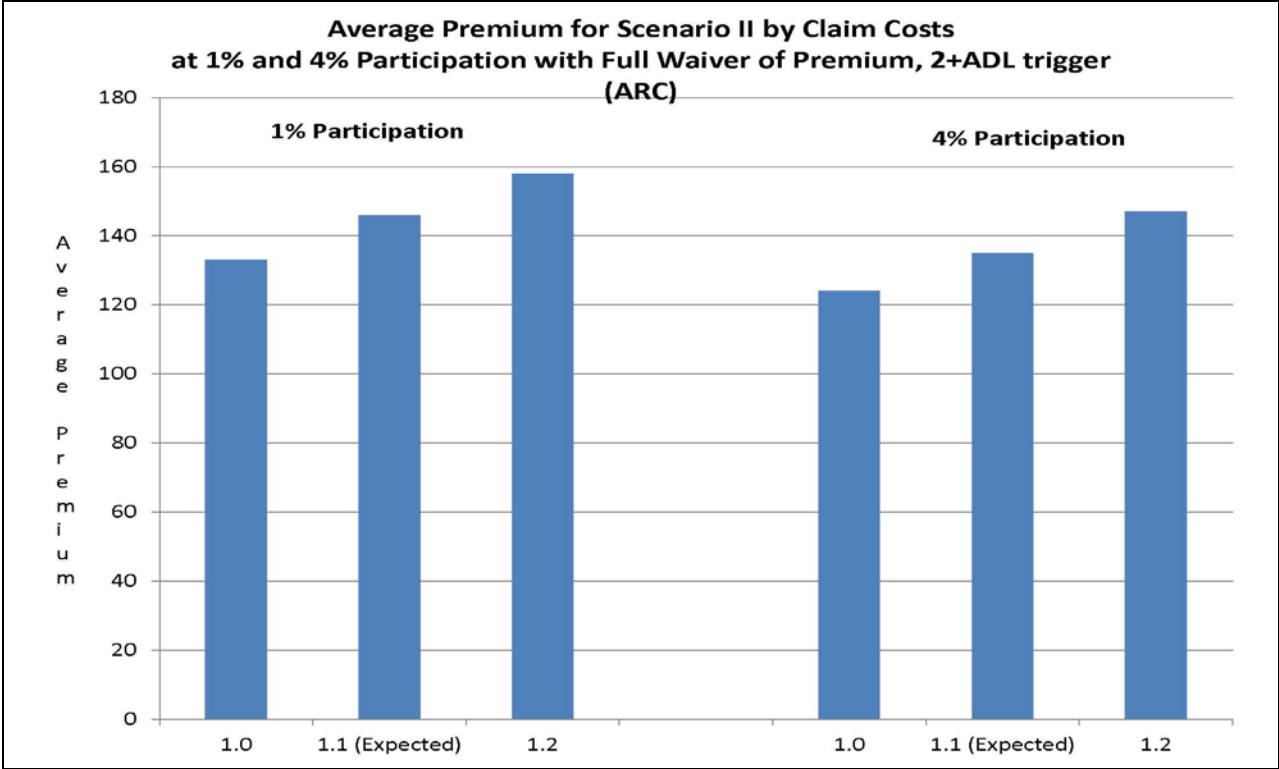
**Average Premium for CLASS in Statute vs. CLASS Modified
with Full Waiver of Premium, 2+ADL trigger, and 2% Participation**

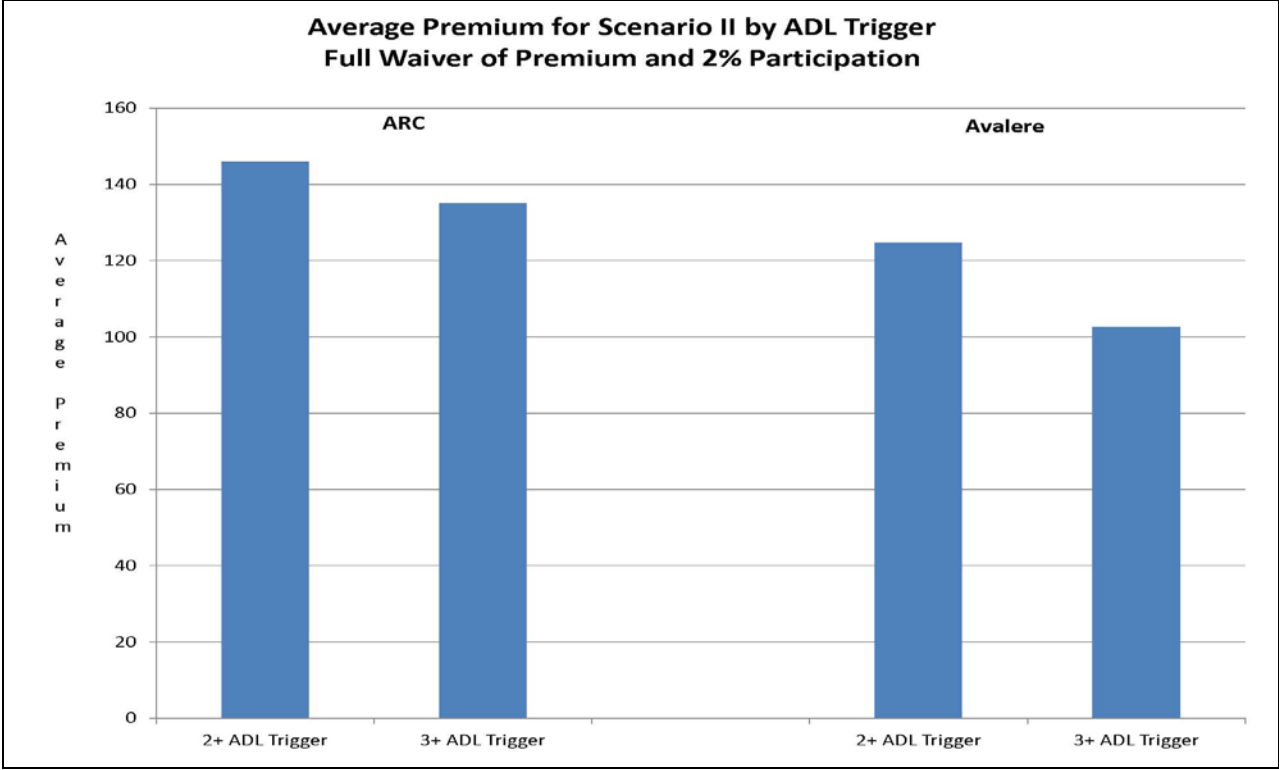
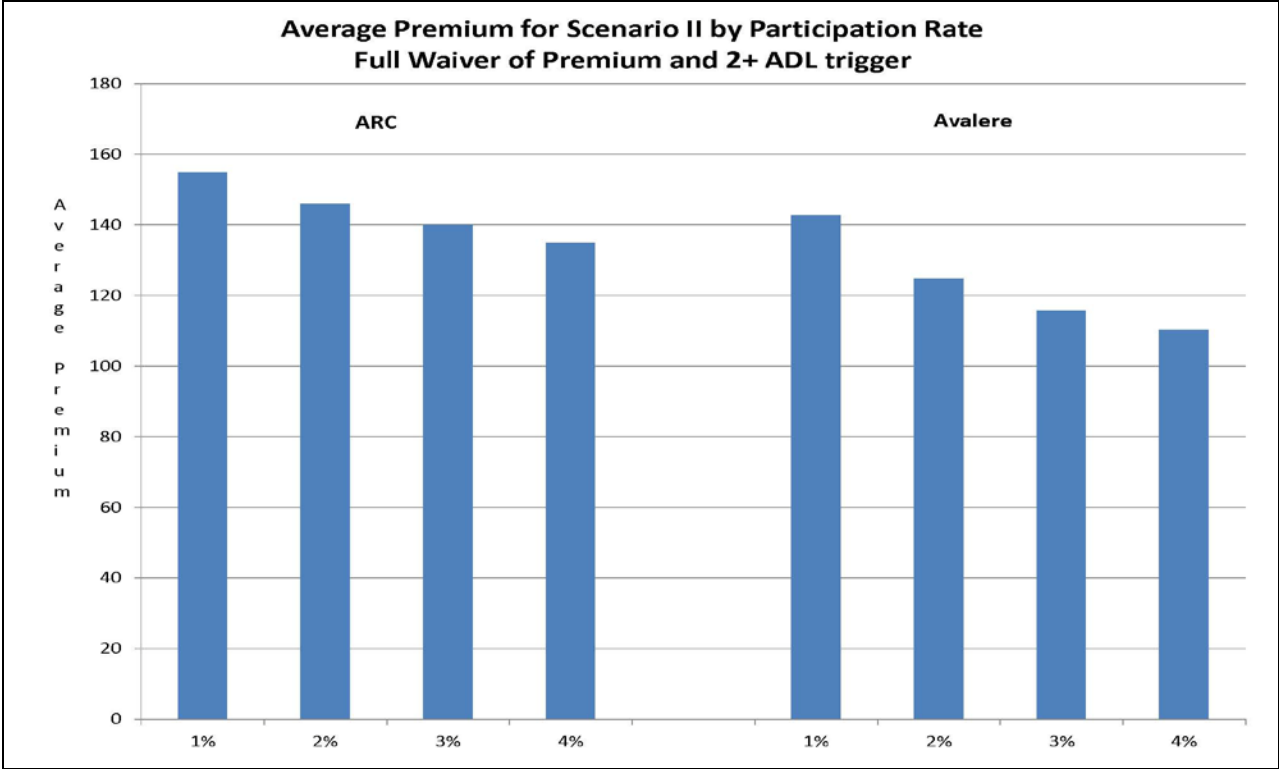


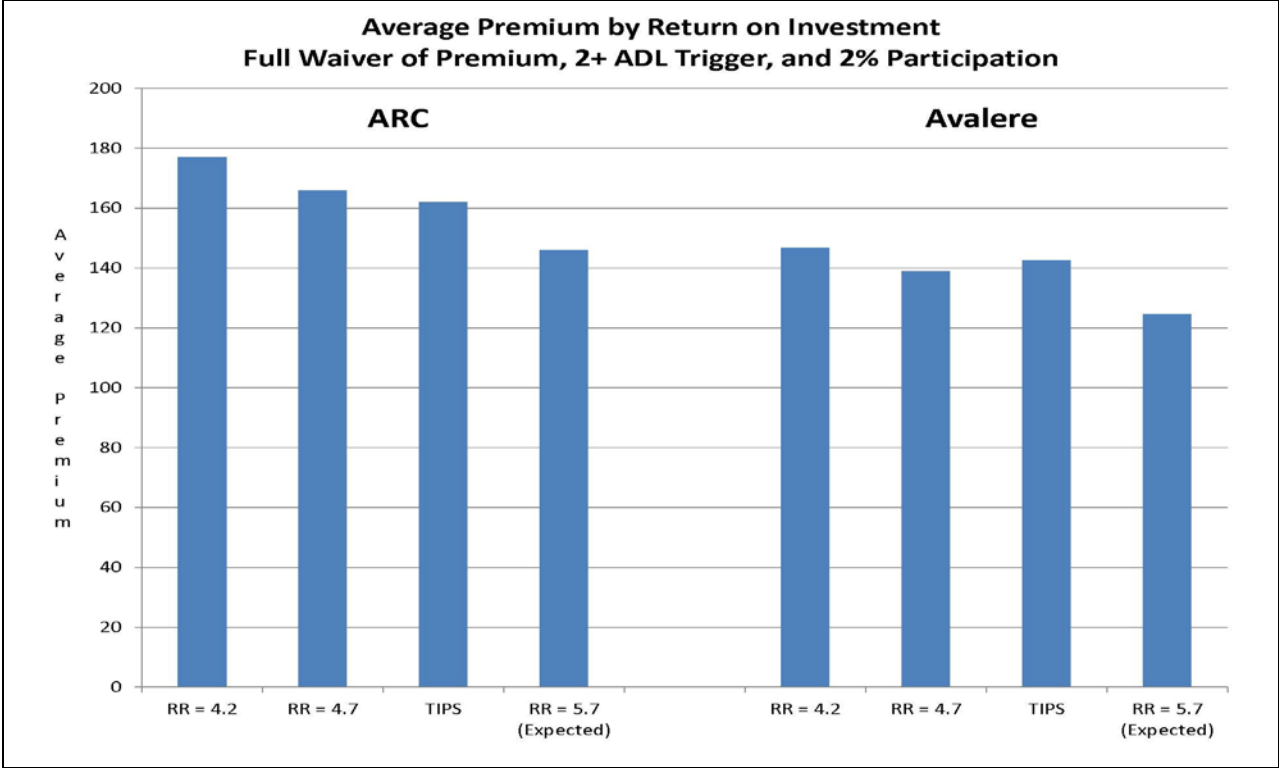
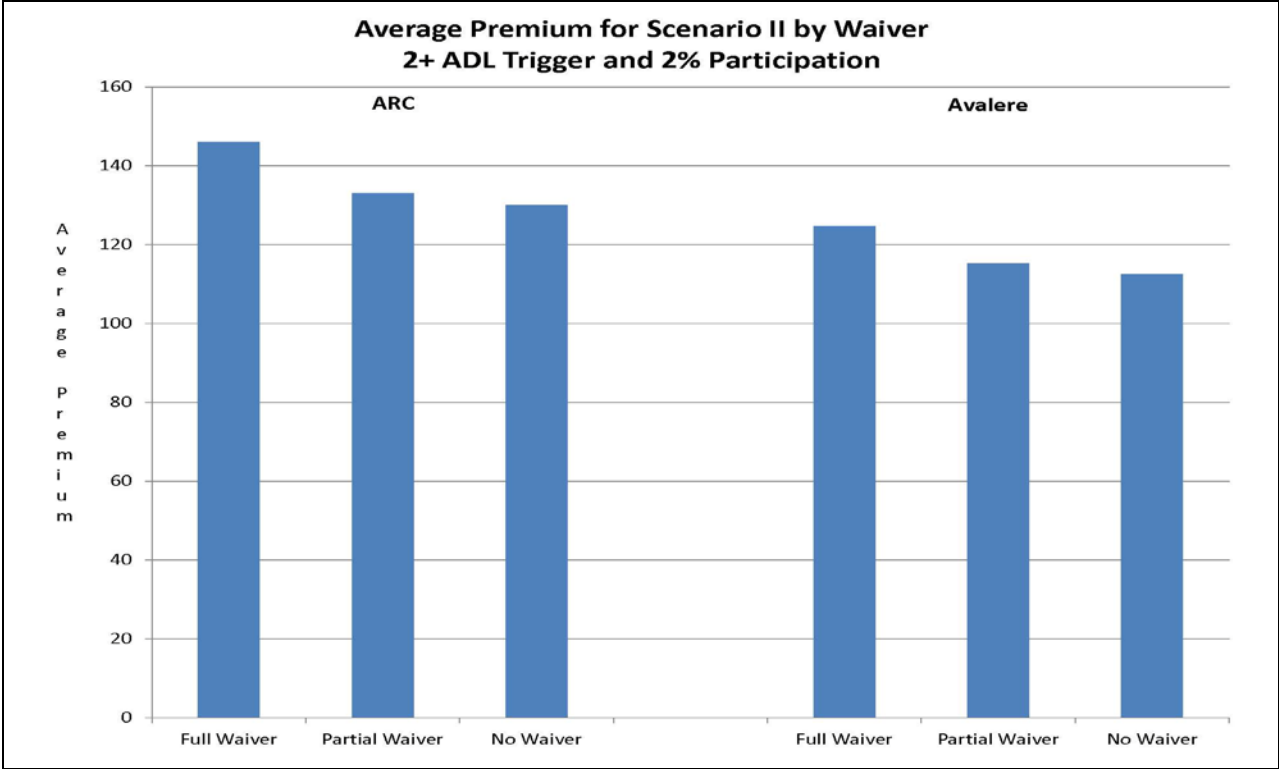
CLASS Modeling Assumptions: 3 Scenarios

Scenario	I Worse than Expected	II Expected	III Better than Expected	Description
Antiselection: ARC	0.85	0.70	0.55	Dampening factor: 1=perfect antiselection
Antiselection: Avalere	0.85	0.70	0.60	
Relative Claim Costs	1.2	1.1	1.0	Increased incidence from survey data
Return on Investment	4.70%	5.70%	6.70%	Average annual rate of return
Lapsation	0.50%	0.75%	1.00%	Percentage lapse per year
Morbidity Improvement	0.25%	0.50%	0.75%	Annual percentage improvement for first 20 years; 0% thereafter
Mortality Improvement	1.31%	0.78%	0.32%	Annual percentage improvement over the 75 year period
Participation	1%	2%	4%	









APPENDIX Pc:

**PRESENTATION ENTITLED “ACTUARIAL RESEARCH
CORPORATION’S LONG TERM CARE
INSURANCE MODEL”**

Actuarial Research Corporation's Long Term Care Insurance Model

June 22, 2011

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Caveats

- No one can foresee how this program will operate, therefore premiums cannot be guaranteed to be adequate.
 - Unknowns include level of participation, level of antiselection, and the effectiveness of procedures to determine earnings, "actively at work," and qualifications for benefits, and the effect of providing advocacy services
- Level premiums cannot be determined for benefits linked to an index (CPI), because future benefits are unknown at the time that premiums are calculated.
- Adequacy of premium cannot be guaranteed when premium levels are unknown such as would be the case if premiums bounce up and down with income.

Actuarial Basis For Premium Formula

- For each issue age, projections of benefits, expenses, and premium income are made until age 100 (presumed to be the end of life for all individuals in the cohort).
- The Premium for each issue age is set so that the present value of benefits and expenses is equal to the present value of premium income.

Assumptions

- Premiums are calculated such that there is no subsidy across years of issue or age at issue, as is typical of social insurance.
- Premiums are based on a set of assumptions:
 - Interest Rates
 - Mortality Rates
 - Lapse Rates
 - Expense Levels
 - Utilization Rates

Source for Assumptions

- All assumptions may be modified by the user.
- Interest rates and mortality rates are taken from the 2011 OASDI Trustees Reports.
- Lapse Rates are assumed to be 0.75% per year.
- Premium load for expenses is assumed to be 3%.
- Utilization comes from survey data with several adjustments.

Mortality Assumptions

- 2011 Trustees Report
- Mortality rates decline by roughly 0.8% per year
- Compared to 1994 GAM:
 - Male GAM rates are about 99% of TR rates in 2011
 - Male TR rates go below 1994 GAM in 2012
 - Female GAM rates are about 83% of TR rates in 2011
 - Female TR rates go below 1994 GAM in 2033

Utilization Assumptions: Data Sources for Nursing Home Rates

- For NH prevalence rates, incidence rates, average length of stay, and continuance table: 1985 National Nursing Home Surveys (NNHS), trended to 2004 NNHS (generally about 20% to 40% reduction depending on age and sex).

Utilization Assumptions: Data Sources for Home Care Rates

- For HC ages 65+, incidence rates, average length of episode, and continuance table: 1982-1989 National Long-Term Care Surveys (NLTCs) as analyzed by Eric Stallard and Bob Yee, trended to 2004 by change in prevalence rates from the 1989 to 2004 NLTCs (generally about 20% to 50% increase depending on age and sex).
- For HC ages <65, home care prevalence rates from the 2009 National Health Interview Survey (NHIS). Average length of episode is extrapolated from the over 65 (increased by 1% for each age, which is from about 3 1/2 years at age 65 to about 5 3/4 years at age 18). Continuance table is from the over 65. Incidence rates are derived from the formula:
 - $PR = IR * ALOS$, which is equivalent to $IR = PR / ALOS$

Utilization Assumptions: Comparison of ARC Model Incidence Rates to SOA Data for 2+ ADLs

Age	ARC Model (before adjustments)*	SOA 2004 Intercompany Data	Ratio
45	.155%	.13%	1.2
55	.235%	.14%	1.7
67	2.20%	.47%	4.7
77	7.54%	2.81%	2.7
87	21.90%	9.62%	2.3

* Excluded adjustments are for selection, antiselection, trend, and ADL creep. Incidence rates are the sum of NH + HC incidence rates average of male and female.

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Utilization Assumptions: Adjustments

- Utilization data are tabulated by age, gender, and ADL.
- Utilization of the under 65 are also tabulated by income level and definition of cognitive impairment.
- We assume that 25% of those with one ADL less than the requirement will receive benefits.
- We calculate the number of new beneficiaries in the first year of benefit payments (2017) by using prevalence rates rather than incidence rates.

Utilization Assumptions: Selection and Antiselection

- **Selection:** Provisions that result in participants being healthier than average (average is based on survey data for the whole population).
 - The 3-year work requirement
 - NHIS data shows that ADL level of those that work (\$1+ per year \$1) have significantly lower utilization than the total population
- **Antiselection:** Those in need of services are the most likely to participate in an unsubsidized / voluntary program.

Utilization Assumptions: Selection

- **Selection Factor:** incidence rates in the last year of required work = 60% of ultimate
 - Work is required for 3 out of the 5-year vesting period
- Selection wears off over 10-year period

Utilization Assumptions:

Antiselection – Two Methods

- Antiselection Factor (AF) – We model two different methods (and other methods are possible):
 - Formula based on a comparison of participation rates and prevalence rates
 - Estimate of additional 1st-year claims
- Additional First Year Claims

Formula Method of Antiselection

- A function of the participation rates and prevalence rates, assumed to diminish over a 20-year period.
- Starts by first calculating a factor that represents the maximum amount of antiselection and then dampens this factor.
- Maximum factor = $1/\text{prevalence rate}$, if prevalence > participation.
- Maximum factor = $1/(\text{prevalence} / \text{participation})$, if participation > prevalence.
- Different factor at each age and sex

Utilization Assumptions: Antiselection - Examples

- Example 1 - Male age 35 2+ ADLs: participation = 0.81% & prevalence rates = 0.13%
 - $AF = 1/0.0081 = 124$ (perfect antiselection)
 - $AF = 100^{0.7} = 29.2$ (imperfect antiselection)
 - $AF(5) = 12.8$ (interpolated value at duration 5)
- Example 2 - Male age 55: participation = 3.43%, prevalence = 0.24%
 - $AF = 1/0.034 = 29.2$ (perfect antiselection)
 - $AF = 29.2^{0.7} = 10.6$ (imperfect antiselection)
 - $AF(5) = 6.0$ (interpolated value at duration 5)

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Additional First Year Claims Method of Antiselection

- Tabulate NHIS number of individuals that meet criteria for participation and benefit eligibility.
- Assume that they all receive benefits in 2017 possible.
- * All = Dementia, developmental disabilities, mental retardation, ADD, schizophrenia, bipolar.
- ** SRD = 1st 3 in list above

Income	All* Cognitive or 2+ ADLs (000)	All* Cognitive or 3+ ADLs (000)	SRD** Cognitive or 2+ ADLs (000)	SRD** Cognitive or 3+ ADLs (000)
\$0+	2,651	2,005	1,865	1,589
\$1+	623	571	480	428
\$10k+	412	374	315	277

Policy Options That Can Be Modeled

- Earnings requirement (parameter in law)
 - Years of work required (3)
 - Level for participation (quarter of coverage = \$1,090 in 2009)
 - Level for subsidy (poverty line = \$10,830 in 2009)
- Benefit trigger (ADL requirement)
- Dollars per day of benefit including indexing options
- Indexing of premium
- Waiver of premium while in claim status
 - While in nursing home
 - And / or while in home care
- Deductible period
- Lifetime maximum

Assumptions That Can Be Modified

- Strength of antiselection
- Level of utilization
- Trend in utilization
- Lapse
- Interest
- Expense load
- Level of mortality
- Trend in mortality

Premium Sensitivity

- Final set of assumptions for calculating premiums have not yet been determined.
- Premiums are very sensitive to some assumptions:
 - Low Income Subsidy / Income requirements
 - Participation rates (1% to 4% decreases premiums by 13% to 18%)
 - Indexing of premium (20+% reduction in initial premium)
 - Interest (14% increase in premium for 4.7% interest vs 5.7% interest with no change in CPI)
 - Lapse (8% increase in premium for 0% lapse from 0.75%)
 - Trends in mortality (4.3% decrease in premium by changing annual trend from 0.75% to 0.25%) and morbidity

APPENDIX Pd:

**PRESENTATION ENTITLED “THE AVALERE LONG-TERM
CARE POLICY SIMULATOR MODEL”**



The Avalere Long-Term Care Policy Simulator Model

June 22, 2011

Avalere Health LLC

Avalere Health LLC | The intersection of business strategy and public policy

Presentation Purpose and Agenda

- The purpose of this presentation is to describe Avalere's approach for estimating the premiums for the CLASS Act, as written and with modifications
- Agenda
 - » Provide brief project background
 - » Summarize overall modeling approach
 - » Highlight key issues/challenges
 - Adverse selection
 - Enrollment rates
 - » Questions/Discussion



Long-Term Policy Simulator (LTC-PS) Overview

Basic Overview

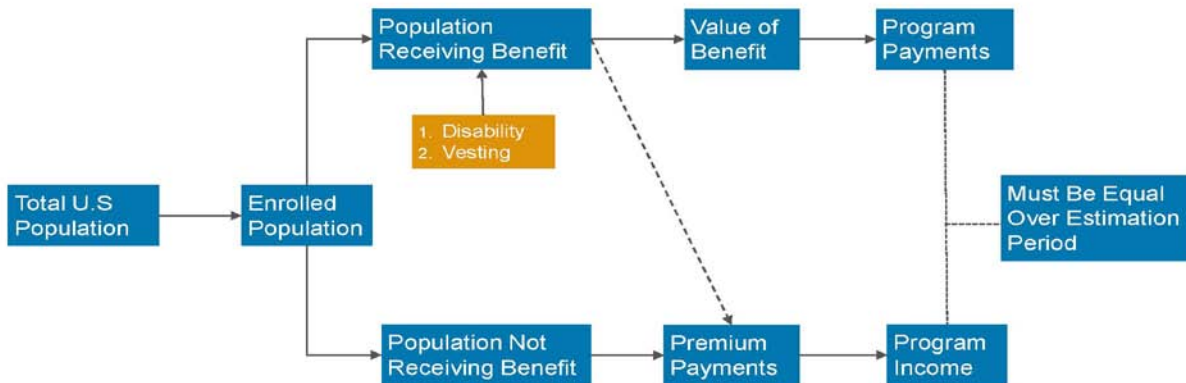
- The LTC-PS is an Excel-based spreadsheet model
- Originally built to allow policy makers to test a broad array of public insurance policy options and subsequently modified for ASPE to allow for testing CLASS-specific implementation policy options
- The LTC-PS is an incidence and continuance model
 - » Creates enrollment groups and calculates the age-specific costs and premiums over a 75 year window
 - » Models incidence and continuance of disability to determine when an individual becomes disabled and how long he or she remains disabled

LTC-PS Overview (cont.)

Data Sources

- Point-in-time surveys for prevalence of disability in the community (Survey of Income and Program Participation, American Community Survey, Current Population Survey) and in nursing homes (National Nursing Home Survey)
- Longitudinal survey for continuance rates among elderly aged 65+ (National Long Term Care Survey) and actuarial data for continuance rates among disabled aged 18 to 65
- Data Issues:
 - » No national, longitudinal data for disability across age spectrum
 - » Aggregation of data from multiple surveys
 - » No single accepted method to estimate adverse selection

Model Overview



Modeling Enrollment: Population and Program Eligibility

Overall Population

- We use Social Security estimates of the total population by age from 2010 through 2100 accounting for the agency's expectations for changes in nativity, mortality, immigration, and emigration

Estimating Attachment to Workforce

- **All workers:** using data from the American Community Survey (ACS), we calculate employment, unemployment, and the total labor force (includes people who are working, unemployed individuals, and individuals "looking for work")
- **Program eligible workforce:** the CLASS program is open to all individuals over 18 who have at least 3 years of working experience. We exclude people who are disabled at the outset of the program unless they are currently working (regardless of reported income)
 - » We estimate 5 to 7 percent of people with 2+ ADL disabilities in the community setting are currently working (approximately 400,000 people)

Modeling Enrollment: Vesting

- We estimate compliance with the 5 year vesting period
- We consider two factors that result in an individual not meeting the vesting requirements:
 - » Mortality: we use mortality estimates from the Social Security Trustees report
 - » Policy Lapse: we assume a 0.5 percent lapse rate each year for the first 20 years and after that we assume there are no additional policy cancellations

Modeling Enrollment: Participation

Overall Participation

- Experts believe enrollment in CLASS will be between one and six percent of eligible individuals
- We assume as a baseline that two percent of the working population will enroll in the first year
- In subsequent years, we assume enrollment will be a fraction of the baseline with declining enrollment rates for the next five years and finally reaching a steady enrollment rate of 0.1 percent of the eligible population
 - » These estimates lead to non-low income enrollment of 2.2 million in the first year; 145 thousand new enrollees in 2017; and total enrollment of 3.5 million in 2020
- We then apply age-adjusted participation rates using two separate methods: smooth enrollment and Federal Long-Term Care Insurance Participation

Modeling Enrollment: Participation

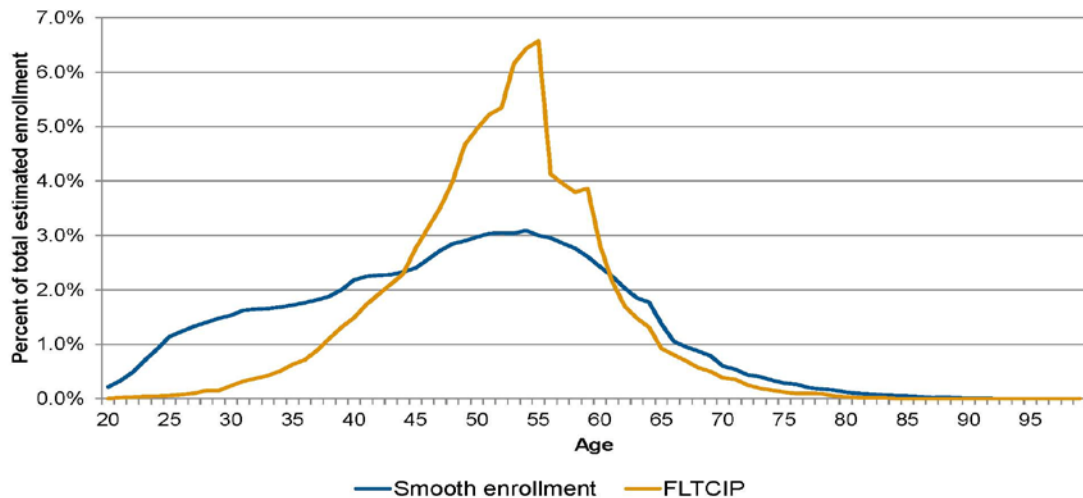
Smooth Enrollment

- We set an enrollment inflection point at age 50 in the assumption that the average participation would equal participation at age 50
- Increase participation at a rate of two percent for each age above 50 and decrease participation at a rate of one percent for each age below 50
- We use this method as our primary enrollment estimation

Federal Long-Term Care Insurance Participation

- We model a separate enrollment expectation rate based on the observed enrollment rates in the federal long-term care insurance program (FLTCIP)
- We use the actual enrollment rates by age for in-force policies

Enrollment Estimation Methods



Modeling Disability: Prevalence

Community Setting

- We estimate age-related prevalence from the 2004 Survey of Income and Program Participation (SIPP)
- We define severe disability as needing help with two or more ADLs; having Alzheimer's Disease or another serious problem with forgetfulness or confusion; having mental retardation or developmental disability (i.e. autism, cerebral palsy)
- We estimate that 3 percent of the over-15 population in the community has a severe disability

Nursing Home Setting

- We estimate age-related prevalence from the 2004 National Nursing Home Survey (NNHS)
- We define severe disability as needing limited, extensive, or total assistance with two or more ADLs; living in an Alzheimer's or dementia unit or having impaired decision making ability; was admitted to the nursing home directly from an intermediate care facility for the mentally retarded (ICF/MR)
- We estimate that 91 percent of the over-15 population residing in a nursing home has a severe disability

Modeling Disability: Prevalence (cont.)

Prevalence Over Time

- Given the uncertainty about declining disability rates, we include a decline of disability rates of 0.5 percent per year through 2025
- Overall disability prevalence is slightly above 3 percent from 2010 to 2025 and increases slightly after that to reach 4.6 percent by 2085

ADL creep

- In a CLASS program with a benefit trigger of 2 or more ADLs, we assume that:
 - » 50 percent of individuals with just one ADL will qualify: all nursing home residents and a portion of community residents
- In a CLASS program with a benefit trigger of 3 or more ADLs, we assume that:
 - » 50 percent of individuals with 2 or more ADLs will qualify: all nursing home residents with 2 ADLs and a portion of community residents

Modeling Disability: Continuance

- To estimate continuance, or how long someone remains severely disabled, we use two data sets
 - » Over age 65: transition matrices from National Long Term Care Survey¹
 - » Under age 65: continuance tables from IDEC survey ²
- Non-continuance can be caused by two factors: mortality or improvement in condition/recovery
 - » Tend to see improvement at younger ages: these individuals are returned to the population eligible to pay premiums
 - » Mortality is higher for all ages of disabled individuals compared to non-disabled individuals
 - » We required non-continuance to always be at least as high as age-specific mortality from SSA

¹Stallard, E and Yee, R.K.W. 1999. "Non-Insured Home- and Community- Based Long-Term Care Incidence and Continuance Tables." Society of Actuaries

²Society of Actuaries. 2005. "Experience Studies in Individual Disability."

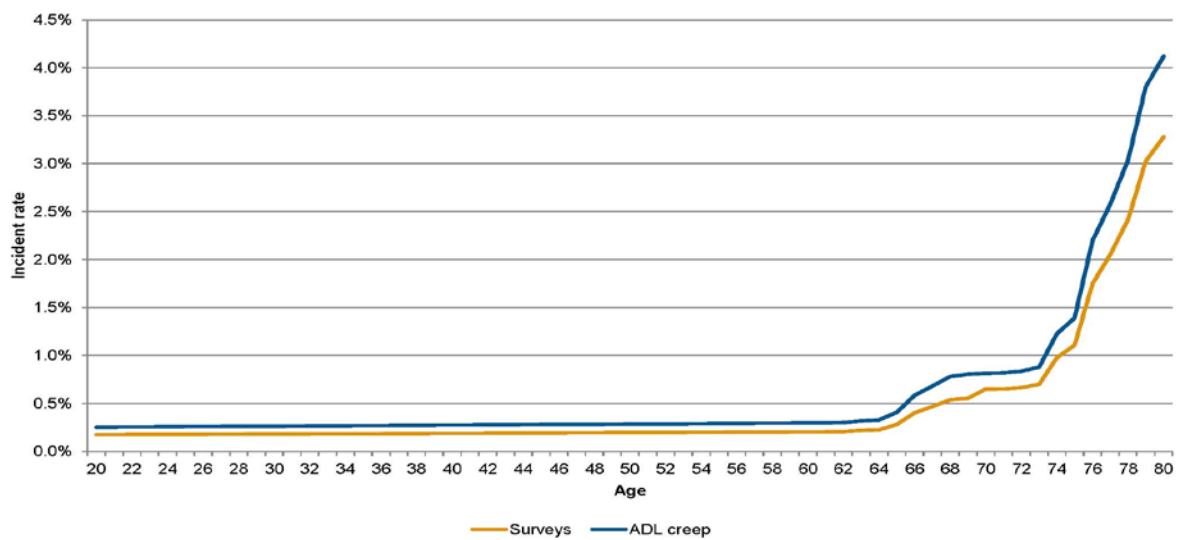


Modeling Disability: Incidence

- Incidence can be computed once we have estimated prevalence and continuance
- $Prevalence_{P2} = Prevalence_{P1} + Incidence_{I2} - Non\ Continuance_{NC2}$
- We apply incidence and continuance rates to individuals in each program by age



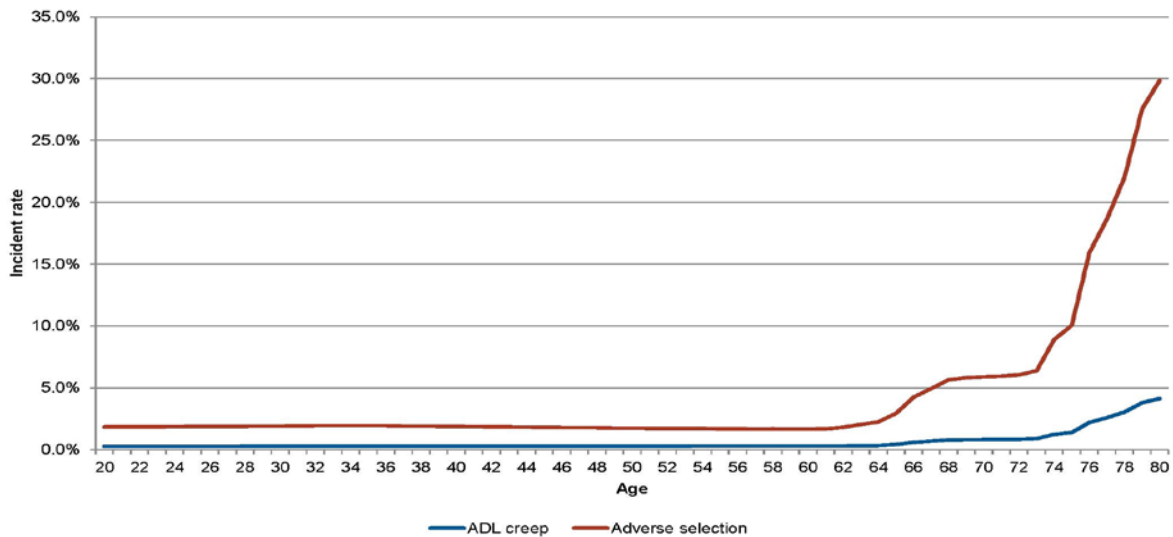
Incidence Comparisons, 2+ ADLs



Modeling Disability: Adverse Selection

- We increased incidence of participants in the LTC-PS to account for adverse selection
 - » Enrolled population in voluntary program has higher disability than general population
- Under the extreme scenario, every individual who would develop disability within 5 years would enroll – this is the “perfect knowledge” scenario
- For the LTC-PS, we include a dampening factor to address the unlikely nature of “perfect knowledge”:
 - » For the first enrollment group, we assume enrollment is weighted at 75% to perfect knowledge scenario in the first year of benefit eligibility
 - » We assume this ratio will decline over 20 years, reaching a final weight of around 10%
- The starting weights are lower at a higher earnings requirement and also dampened for estimates of future enrollment groups

Impact of Adverse Selection on Incidence, 2+ ADLs



Adverse selection assumes 2 percent participation



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Modeling Costs: Medicaid Interactions

- We model the impact on Medicaid based on an assumption about participation by people who would eventually become Medicaid enrollees and the low-income subsidy
- We model a Medicaid baseline using data from SIPP and NNHS, supplemented by information published by the Kaiser Commission on Medicaid and the Uninsured
- Even with a low-income subsidy, some future Medicaid beneficiaries would still be unlikely to enroll
 - » Not all future Medicaid beneficiaries are currently below the Federal Poverty Limit (FPL)
- The table below shows our estimated participation rates by people who would eventually become Medicaid beneficiaries by the different low-income subsidy levels
- We apply these participation rates to our Medicaid baseline to develop estimates of Medicaid savings

	None	100% FPL	150% FPL	
Premiums	<\$50	25%	50%	75%
	\$50-80	20%	45%	70%
	\$81-100	15%	40%	65%
	\$101-120	10%	35%	60%
	\$121-150	5%	30%	55%
	>\$150	0%	25%	50%



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Questions and Answers



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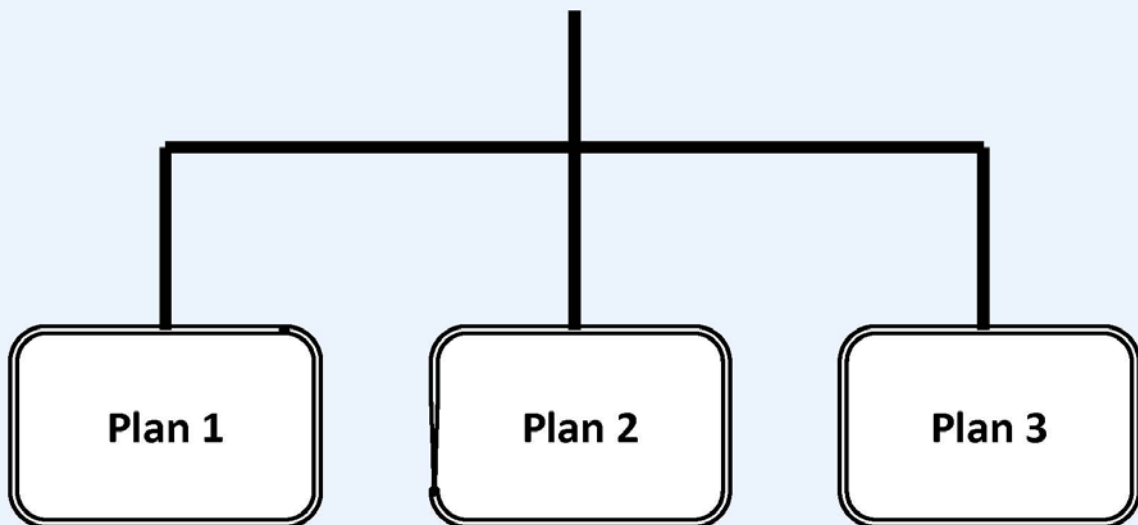
APPENDIX Pe:

**PRESENTATION ENTITLED “ALTERNATIVE
APPROACHES TO CLASS BENEFIT DESIGN:
THE CLASS PARTNERSHIP”**

Alternative Approaches to CLASS Benefit Design: The CLASS Partnership

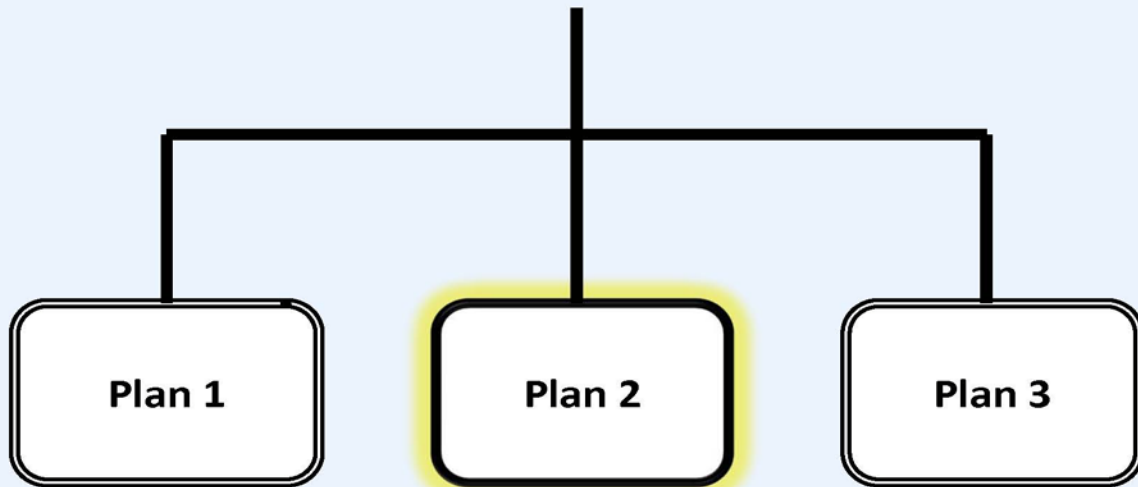
William Marton
Office of the Assistant Secretary for Planning
and Evaluation
June 22, 2011

CLASS Independence Benefit Plan

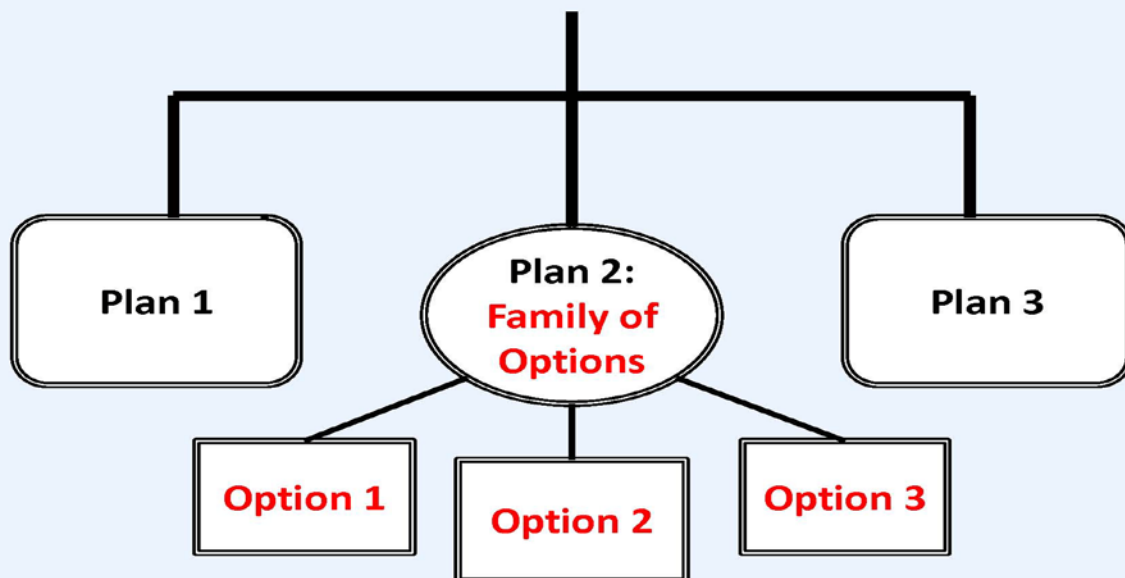


CLASS Independence Benefit Plan

October 1, 2012



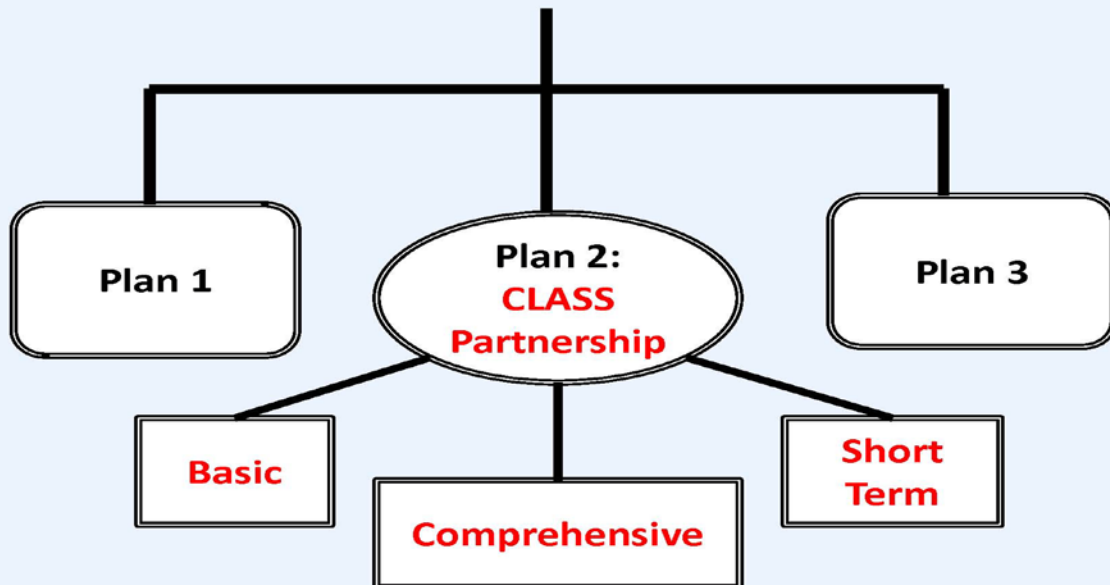
CLASS Independence Benefit Plan



Family of Options

- A set of benefit plans that are marketed as one plan with multiple options
- One of the options must follow the CLASS statute fairly closely (e.g., the Modified CLASS plan)
- The structure of the other options can vary more extensively, but still must maintain certain core features of the CLASS statute such as similar requirements for enrollment; a primary benefit that is cash; a five year vesting period; and no underwriting except for age
- The options are designed to appeal to different market segments of the population that (hopefully) vary by the risk of adverse selection
- The family of options has to be actuarially sound, either at the individual option level or in their entirety

CLASS Independence Benefit Plan



CLASS Partnership

Basic: Incorporates the major features of the CLASS statute (e.g., a primary benefit that is cash; no limit on duration; a vesting period; and no underwriting except for age), but changes key components to mitigate, although not likely eliminate, adverse selection.

Comprehensive: Provides much more comprehensive coverage (e.g., a three-year \$150 daily benefit) designed to appeal to people who want to insure against future risk of long-term care that they will likely face at very old ages. Structure of the benefit reduces the likelihood of adverse selection.

Short Term: Provides very short-term (e.g., one year), high dollar coverage to persons with high functional needs. The premiums for this product should be substantially lower than those for the Basic and Comprehensive options, with the goal of appealing to persons who want some level of coverage but cannot afford something more comprehensive. Similar benefit structure as for the Comprehensive Option

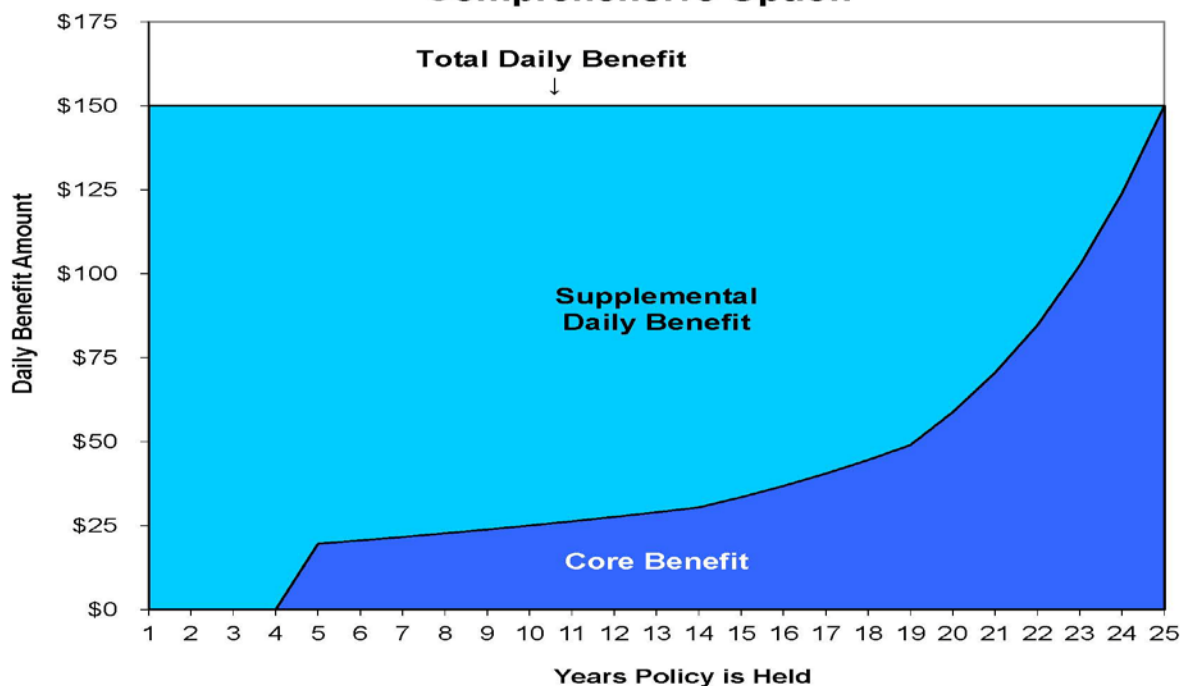
Why is this plan called the “CLASS Partnership”?

The structure of the benefit is designed to provide an opportunity for private insurers to develop products that would naturally “wrap around” and supplement the underlying core benefit. (Note: The supplement would be underwritten.)

Specifically, the daily benefit amount increases the longer the policy is held, rising from a nominal amount after the vesting period to an amount of coverage similar to what is commonly purchased from long-term care insurers.

However, unlike the CLASS Basic Plan, the duration of coverage for the Comprehensive and Short Term options is limited.

Figure 1. Changes in Daily Benefit Amount for the Comprehensive Option



Summary of CLASS Partnership Plan				
Program Features	CLASS Benefit in Statute	CLASS Partnership Plan		
		Basic (Modified)	Comprehensive	Short Term
Enrollment Requirements:				
- Age 18+	Yes	Yes	Yes	Yes
- Taxable Wages/Income	Yes	Yes	Yes	Yes
- Actively Employed	Yes	Yes	Yes	Yes
- Not in Institution	Yes	Yes	Yes	Yes
Coverage/Benefits:				
- Primary Benefit	Cash	Cash	Cash	Cash
- Daily Benefit Amount (DBA)	\$50 (Average)	\$50 (Average)	Varies - Up to \$150 ²	Varies - Up to \$200 ²
- Unit of Payment	Daily or Weekly	Daily or Weekly	TBD	TBD
- Minimum Duration in Years	NA - Lifetime	NA - Lifetime	3 Years	1 Year
- Total Value	TBD	TBD	\$164,250	\$73,000
- Inflation Protection	CPI-U	CPI (2.8%)	Variable ⁴	Variable ⁴
- Advocacy Services	Yes	Yes	TBD	TBD
- Advice and Asst. Counseling	Yes	Yes	TBD	TBD
Eligibility for Benefits:				
- 5 Year Vesting Period	Yes	Yes	Yes	Yes
- Work Req. Over Vesting Period	At Least 3 Years	5 Years (or 40 Qs) ⁵	5 Years (or 40 Qs) ⁵	5 Years (or 40 Qs) ⁵
- Earnings Req. Over Vesting Period	\$1,120/Year	\$12,000/Year	\$12,000/Year	\$12,000/Year
- 24 Months of Prior Prem. Payment	Yes	Yes	Yes	Yes
- Minimum Benefit Trigger	2 or 3 of 6 ADLs ⁶	TBD	HIPAA - 2+ ADLs ⁶	HIPAA - 3+ ADLs ⁶
- Tiered Benefit	Yes	Yes	No	No
- Elimination Period in Days	0	0	0	0
- Presumptive Eligibility	Yes - if in Inst. ⁷	Yes - if in Inst. ⁷	TBD	TBD
- Administrative Expenses	3%	3%	TBD	TBD
Monthly Premium:				
- Underwritten (Other Than Age)	No	No	No	No
- Indexed to Inflation	No	Yes (2.8%)	Yes (3%)	Yes (3%)
- Low Income Premium	Yes	Yes	No	No
- Full Time Student Premium	Yes	Yes	No	No
- Waiver of Premium	TBD	TBD	TBD	TBD
- Level Premium	After Age 65 ⁸	After Age 65 ⁸	After Age 75 ⁹	After Age 75 ⁹
- Return of Premium	TBD	TBD	Yes ¹⁰	Yes ¹⁰

**Indexed Monthly Premiums for CLASS Partnership:
Comprehensive Option (Scenario II - Expected)**

	Core¹ Supplement² Total		
35	\$109	\$23	\$132
40	\$121	\$32	\$153
45	\$138	\$44	\$182
Age 50	\$153	\$73	\$226
55	\$162	\$103	\$265
60	\$166	\$144	\$309
65	\$168	\$203	\$371
Average	\$148	\$99	

¹ Full waiver of premium, 2% participation

² 60% loss ratio, SOA experience data

Comparison of Comprehensive Level Premiums Against Private LTC Insurance Plans

	Comprehensive (Total)	MedAmer. Simplicity II¹	Prudential LTC3²	United of Omaha AS Gold³	NW QCare⁴	FLTCIP⁵
35	\$199	\$238	\$192	\$182	\$232	\$74
40	\$224	\$270	\$202	\$193	\$237	\$87
45	\$258	\$308	\$227	\$201	\$256	\$104
Age 50	\$308	\$356	\$256	\$214	\$276	\$125
55	\$351	\$415	\$290	\$234	\$303	\$153
60	\$398	\$498	\$330	\$280	\$349	\$187
65	\$464	\$621	\$421	\$402	\$433	\$238

¹ \$4,500/month, \$200,000 maximum (3.7 years), 30 day elimination period, 5% ACI, all cash

² \$150/day, three year, 30 day elimination period, 4% ACI, 40% HC in cash alternative

³ \$4,500/month, three year, 0 day elimination period, 4% ACI, 40% HC in cash alternative

⁴ \$4,500/month, three year, 6 week elimination period, 4% ACI, service reimbursement

⁵ \$150/day, three year, 90 day elimination period, 4% ACI, service reimbursement

**Indexed Monthly Premiums for CLASS Partnership:
Short Term Option (Scenario II - Expected)**

	Core¹	Supplement²	Total
35	\$72	\$11	\$83
40	\$81	\$15	\$96
45	\$92	\$22	\$114
Age 50	\$101	\$37	\$138
55	\$106	\$52	\$158
60	\$105	\$75	\$180
65	\$101	\$108	\$208
Average	\$96	\$51	

¹ Full waiver of premium, 2% participation

² 60% loss ratio, SOA experience data

A REPORT ON THE ACTUARIAL, MARKETING, AND LEGAL ANALYSES OF THE CLASS PROGRAM

For additional information, you may visit the DALTCP home page at http://aspe.hhs.gov/_/office_specific/daltcp.cfm or contact the office at HHS/ASPE/DALTCP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, SW, Washington, DC 20201. The e-mail address is: webmaster.DALTCP@hhs.gov.

Files Available for This Report

Main Report	[48 PDF pages]
	http://aspe.hhs.gov/daltcp/reports/2011/class/index.shtml http://aspe.hhs.gov/daltcp/reports/2011/class/index.pdf
APPENDIX A: Key Provisions of Title VIII of the ACA, Which Establishes the CLASS Program	[6 PDF pages]
	http://aspe.hhs.gov/daltcp/reports/2011/class/appA.htm http://aspe.hhs.gov/daltcp/reports/2011/class/appA.pdf
APPENDIX B: HHS Letters to Congress About Intent to Create Independent CLASS Office	[11 PDF pages]
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APPENDIX C: <u>Federal Register</u> Announcement Establishing CLASS Office	[2 PDF pages]
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APPENDIX D: CLASS Office Organizational Chart	[2 PDF pages]
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APPENDIX E: CLASS Process Flow Chart	[2 PDF pages]
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APPENDIX F: <u>Federal Register</u> Announcement for CLASS Independence Advisory Council	[3 PDF pages]
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APPENDIX G: Personal Care Attendants Workforce Advisory Panel and List of Members	[6 PDF pages]
Full Appendix	http://aspe.hhs.gov/daltcp/reports/2011/class/appG.htm http://aspe.hhs.gov/daltcp/reports/2011/class/appG.pdf
Ga: <u>Federal Register</u> Announcement for Personal Care Attendants Workforce Advisory Panel	http://aspe.hhs.gov/daltcp/reports/2011/class/appGa.pdf
Gb: Advisory Panel List of Members	http://aspe.hhs.gov/daltcp/reports/2011/class/appGb.pdf

APPENDIX H: Policy Papers Discussed by the LTC Work Group	[36 PDF pages]
	http://aspe.hhs.gov/daltcp/reports/2011/class/appH.htm
	http://aspe.hhs.gov/daltcp/reports/2011/class/appH.pdf
APPENDIX I: CLASS Administration Systems Analysis and RFI	[10 PDF pages]
	http://aspe.hhs.gov/daltcp/reports/2011/class/appI.htm
	http://aspe.hhs.gov/daltcp/reports/2011/class/appI.pdf
APPENDIX J: Additional Analyses for Early Policy Analysis	[150 PDF pages]
Full Appendix	http://aspe.hhs.gov/daltcp/reports/2011/class/appJ.htm
	http://aspe.hhs.gov/daltcp/reports/2011/class/appJ.pdf
Ja: A Profile of Declined Long-Term Care Insurance Applicants	http://aspe.hhs.gov/daltcp/reports/2011/class/appJa.pdf
Jb: CLASS Program Benefit Triggers and Cognitive Impairment	http://aspe.hhs.gov/daltcp/reports/2011/class/appJb.pdf
Jc: Strategic Analysis of HHS Entry into the Long-Term Care Insurance Market	http://aspe.hhs.gov/daltcp/reports/2011/class/appJc.pdf
Jd: Managing a Cash Benefit Design in Long-Term Care Insurance	http://aspe.hhs.gov/daltcp/reports/2011/class/appJd.pdf
APPENDIX K: Early Meetings with Stakeholders	[4 PDF pages]
	http://aspe.hhs.gov/daltcp/reports/2011/class/appK.htm
	http://aspe.hhs.gov/daltcp/reports/2011/class/appK.pdf
APPENDIX L: In-Depth Description of ARC Model	[62 PDF pages]
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	http://aspe.hhs.gov/daltcp/reports/2011/class/appL.pdf
APPENDIX M: In-Depth Description of Avalere Health Model	[23 PDF pages]
	http://aspe.hhs.gov/daltcp/reports/2011/class/appM.htm
	http://aspe.hhs.gov/daltcp/reports/2011/class/appM.pdf
APPENDIX N: September 22, 2010 Technical Experts Meeting	[37 PDF pages]
Full Appendix	http://aspe.hhs.gov/daltcp/reports/2011/class/appN.htm
	http://aspe.hhs.gov/daltcp/reports/2011/class/appN.pdf
Na: Agenda, List of Participants, and Speaker Bios	http://aspe.hhs.gov/daltcp/reports/2011/class/appNa.pdf
Nb: Presentation Entitled "Actuarial Research Corporation's Long Term Care Insurance Model"	http://aspe.hhs.gov/daltcp/reports/2011/class/appNb.pdf
Nc: Presentation Entitled "The Long-Term Care Policy Simulator Model"	http://aspe.hhs.gov/daltcp/reports/2011/class/appNc.pdf
Nd: Presentation Entitled "Comments on 'The Long-Term Care Policy Simulator Model'"	http://aspe.hhs.gov/daltcp/reports/2011/class/appNd.pdf
APPENDIX O: Actuarial Report on the Development of CLASS Benefit Plans	[47 PDF pages]
	http://aspe.hhs.gov/daltcp/reports/2011/class/appO.htm
	http://aspe.hhs.gov/daltcp/reports/2011/class/appO.pdf

APPENDIX P: June 22, 2011 Technical Experts Meeting
Full Appendix

[46 PDF pages]

<http://aspe.hhs.gov/daltcp/reports/2011/class/appP.htm>

<http://aspe.hhs.gov/daltcp/reports/2011/class/appP.pdf>

Pa: Agenda and Discussion Issues and
Questions

<http://aspe.hhs.gov/daltcp/reports/2011/class/appPa.pdf>

Pb: Presentation Entitled "Core Assumptions and
Model Outputs"

<http://aspe.hhs.gov/daltcp/reports/2011/class/appPb.pdf>

Pc: Presentation Entitled "Actuarial Research
Corporation's Long Term Care Insurance
Model"

<http://aspe.hhs.gov/daltcp/reports/2011/class/appPc.pdf>

Pd: Presentation Entitled "The Avalere Long-
Term Care Policy Simulator Model"

<http://aspe.hhs.gov/daltcp/reports/2011/class/appPd.pdf>

Pe: Presentation Entitled "Alternative Approaches
to CLASS Benefit Design: The CLASS
Partnership"

<http://aspe.hhs.gov/daltcp/reports/2011/class/appPe.pdf>

APPENDIX Q: Table 2: Actuarial and Demographic Assumptions

[2 PDF pages]

<http://aspe.hhs.gov/daltcp/reports/2011/class/appQ.htm>

<http://aspe.hhs.gov/daltcp/reports/2011/class/appQ.pdf>

APPENDIX R: Figure 1: Daily Benefit Amount for Increased Benefit

[2 PDF pages]

<http://aspe.hhs.gov/daltcp/reports/2011/class/appR.htm>

<http://aspe.hhs.gov/daltcp/reports/2011/class/appR.pdf>