

**APPENDIX Nd:**

**PRESENTATION ENTITLED  
“COMMENTS ON ‘THE LONG-TERM CARE POLICY  
SIMULATOR MODEL’”**

*Comments on*

**“The Long-Term Care  
Policy Simulator Model”**

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**CLASS Act Models Meeting  
September 22, 2010**

# What Does Avalere LTC Policy Simulator Model Say About CLASS?

- Plan parameters
  - only workers may participate
  - 5-year vesting
  - \$50/day lifetime cash benefit
  - No elimination period
  - those in poverty pay zero premiums
  - premiums cover all costs
- Model output
  - participation rate = 15% (approx)
  - avg monthly premiums = \$116 (in 2010)

# Generic Model Structure

- Establish pool of eligible participants
- Set benefits and premium schedule
- Identify those who choose to enroll
- Model their receipt of benefits
- Check that premiums cover costs
- Iterate

# Avalere Developed a Cell-Based Model

- Start with SSA population forecasts
- Use 2007 ACS data to compute number of workers by age
- Assign enrollment rate based on benefits that plan provides
  - more generous plan reduces participation (because it raises premiums)
- Estimate benefits received by enrollees
  - attempt to account for adverse selection
- Set premiums to cover benefit payments

# Participation Rates Seem Somewhat Arbitrary

- Assign points based on plan parameters
- Assume participation rates increase with number of points
- More generous plans get fewer points, because they charge higher premiums
  - exception: low-income subsidy
- Participation rates range from 5% to 35%
  - where do these rates come from?
- Implicit assumption is that enrollees minimize cost, not maximize utility

# Participation Rates Increase with Age

- Increase participation rates by 2% per year above age 50 (not pct. points)
- Decrease participation rates by 1% for each year below age 50
- Example
  - age 30: 16%
  - age 65: 26%
  - age 50: 20%
  - age 90: 36%
- Should participation rates in CLASS increase in retirement?

## Examples of Participation Rates at Age 50

	(1)	(2)	(3)
Cash benefit	\$100	\$75	\$50
Length of benefit	lifetime	3 yrs	1 year
Vesting	none	5 yrs	5 yrs
Waiting period	none	none	90 days
Eligibility	all	all	workers
Subsidy level	none	100% pl	150% pl
Funded by govt	0%	25%	50%
<b>Participation rate</b>	<b>5%</b>	<b>20%</b>	<b>35%</b>



# Adverse Selection

- Economists assume that people who will use more services will be more likely to purchase coverage
  - assumes policyholders have private knowledge of their disability risk
  - problem is likely to be especially severe in program that does not underwrite risk
- Model assumes that those with “perfect knowledge” that they will need LTC risk enroll
  - in the long-run (10 years after program inception) assume that 25% of population has perfect knowledge
  - in short-run, assume 75% has perfect knowledge






# Model Limitations

- No role for income in the enrollment decision
- Does not account for heterogeneity in the population
  - income and disability are correlated
- Does not account for population changes over time (other than age)
  - i.e., income growth
- How will automatic enrollment affect enrollment?

# Dynamic Microsimulation Modeling Is an Alternative to the Cell-Based Approach

- Start with a nationally representative sample of the population
- Age population year by year
- Estimate equations of disability onset and duration
- Estimate equations of program enrollment
- Feedback to check that premiums cover benefit payouts

# Relative Merits of Cell-Based vs. Dynamic Microsimulation Approaches

	Cell-Based	Dynamic Microsim
tractability		
transparency		
development cost		
projecting chars. of future population		
capturing heterogen. of population		

# Summary

- The Avalere LTC model carefully simulates plan participation and costs
  - may be best option currently available to model CLASS
- But it relies heavily on assumptions that have not been thoroughly tested
- Alternative approaches would be expensive to develop

# **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](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](mailto:webmaster.DALTCP@hhs.gov).*

## Files Available for This Report

[HTML versions of Appendices will be added as they are formatted]

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

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

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

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<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.pdf>