

**American Academy of Actuaries  
State LTC Task Force Principles-based  
Valuation Subgroup**

**June 2006  
Presentation to  
the  
NAIC Life and Health Actuarial Task Force**



# Current Valuation & Accounting Bases

## *Current Valuation Bases*

- ❖ Standard Valuation Law
- ❖ Health Insurance Reserve Model Regulation
- ❖ Health Reserve Guidance Manual

## *Current Statutory Accounting Bases*

- ❖ AP&P Manual, SSAP #54 & SSAP #55
- ❖ AP&P Manual, Appendix A-010

***LTC Statutory Reserves Must Meet:***  
Minimum Statutory Reserve Standards  
Gross Premium Valuation  
Asset Adequacy Test



# Current Valuation of LTC Policies

## *Before Claim (Active Life Reserves)*

- ❖ One-Year Preliminary Term Method (Generally)
- ❖ Defined Mortality Tables
- ❖ Limitations on Lapses and Interest Rates
- ❖ No Prescribed Morbidity Table

## *After Claim (Claim Reserves)*

- ❖ PV Future Payments
- ❖ Include Incurred But Not Reported Claims
- ❖ Interest Rates by Incurred Year



# Potential Sources for Changes to Valuation of LTC Policies

## ❖ ***NAIC Principles-based Approach (PBA) Rules being Developed for Life and Annuity Products***

- Examples Most Developed for UL and 20 Year Term
- Fast-Track for Life Using AAA Input
- Limitations on Lapses and Interest Rates

## ❖ ***IAIS Principles-based Approach Using General Purpose Rules (With Adjustments) for All Types of Insurance***

- Coordinating with IASB/FASB
- Using IAA Input



# AAA Five PBA Principles

- ❖ Captures All Material Financial Risks, Benefits and Guarantees
- ❖ Utilizes Risk Analysis and Risk Management Techniques to Quantify the Risks
- ❖ Incorporates Assumptions and Methods That are Consistent with those Utilized Within the Company's Overall Risk Assessment Process
- ❖ Permits the Use of Company Experience (Available, Relevant, Credible) to Establish Assumptions (Subject to Company Influence)
- ❖ Provides for the Use of Prudent Best Estimate Assumptions that Contain an Aggregate, Appropriate Level of Conservatism



# Changes to LTC Valuation Based on AAA PBA Principles

- ❖ Reserves Based on Discounted Cash Flow under Various Scenarios for CTE % Values
  - Use Same Approach Later On for RBC (with Different CTE Value)
- ❖ Coordinates Valuation Model (Using Prudent Best Estimate) with Other Management Models
- ❖ Anticipates the Use of Company Experience and Recent Industry Experience for Key Assumptions
- ❖ Anticipates Investment Income Assumptions Based on Current Market Rates (by Duration) Graded to an Ultimate Static Yield Curve



# Key Concerns for LTC

## 1. *How to Reflect Rate Increase Potential in Future Cash Flows under Varying Scenarios?*

- ❖ Scenarios will Likely Include Testing Impact of Assumptions Beyond “Moderately Adverse Experience” Under Rate Regulations
- ❖ Consistency of “Rate Increase Strategy” Built into Valuation Model versus Management Model
- ❖ Requirement for Consistency with Other Management Models (e.g. Claims Case Management)



# Key Concerns for LTC

## 2. *On-Going Changes to LTC Products and Marketplace*

- ❖ Relatively New Products for an Immature Marketplace
  - Underwriting and Benefit Variations
  - Product and Market Changes (e.g. Average Issue Age, Partnership)
  - Changes in Claims Practice Due to Contract Language Changes
- ❖ Valuation Models may Apply to All Business
  - Not Anticipated in Original Pricing of In-Force Business
- ❖ Consistency between Valuation Model and Other Management Models





# Key Concerns for LTC

3. ***Differences between Margins in Rates (Moderately Adverse Experience) and Margins in Reserves (Prudent Best Estimate)***
  - ❖ Impact of Testing When Margins Have Been Eroded But not Extinguished
4. ***Ability to Develop Probability Distributions for Morbidity and Persistency Assumptions***



# Key Concerns for LTC

## 5. *Anticipated Use of Company and Industry Experience*

- ❖ LRWG's Plan is to Continuously Collect Industry Mortality Data by Risk Class
- ❖ Similar Plan for LTC Morbidity may be Problematic
  - Significantly Greater Variation in Claims Benefits and Claim Practices Among LTC Insurers
  - Significantly Greater Variation in LTC "Claim Triggers" over Time
  - Need to Address Impact of Closed Blocks and Upgrade Options
- ❖ Persistency & High Age Mortality are Also Critical for LTC
- ❖ Basis for Credibility of Company Experience may Exclude All But a Few Insurers



# Key Concerns for LTC

## 6. *Anticipated Limits on Interest Rate Assumptions*

- ❖ Pricing is Similar to 20 Year Term But Interest Rate Income Assumptions are Much More Important for LTC
- ❖ Pricing Margins are Not Related to Current Market in the Manner Proposed by LRWG
- ❖ LTC Prices Don't Change Based on Current Market at Some Future Time
- ❖ The Use of Hedging Strategies for Interest Rate Risk
- ❖ In the Event of Specifying Rate Increase Limits, Need to Coordinate Reserve Interest Rates with Discount Rates



# Changes to LTC Valuation Based on IAIS PBA

## ❖ *May Need to Develop GAAP Reserves from FASB/IASB Rules for Insurance*

- Best Estimate Plus Market-Based Margins
- Potential Impact of Assumptions for Future Changes (e.g. Morbidity)
- Similar Problems with Limits on Interest Rates

## ❖ *May Need to Reflect Undefined Regulatory Adjustments*

- To Expenses That Vary by Duration
- To Reflect Additional Margins (in Reserves or Capital Requirements)



# AAA LTC Principles-based Approach Subgroup

## *Issue Group*

- Identify and Address PbA Issues for LTC
- Presentation to NAIC
- Monitor and Support PbA Development in Life Products
- Monitor International Development

## *Modeling Group*

- Specify Model Requirements
- Design, Develop and Test Model
- Monitor & Support LRWG and LRWG Modeling Subgroup
- Coordinate with SVL2 Economic Scenario Group
- Analyze Results

