



SOCIETY OF ACTUARIES

**Health Valuation Boot Camp  
August 12- 13, 2009**

**Session 5a: Reserves for Specialized Products**

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# Valuation Boot Camp

## Reserves for Specialized Products

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## Reserves for Specialized Products

Basic Health Reserving Principles are Unchanged

Active Life Reserves

Claim Reserves

Deficiency Reserves

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## Reserves for Specialized Products

- Unique Situations
  - Unique Product Design
  - Unusual Insured Population
  - Unique Risk Sharing
  - Unplanned Risk Exposure

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## Reserves for Specialized Products

### Unique Product Design

#### Critical Illness Insurance

- Lump Sum Benefit
- Specific Covered Conditions
  - Heart Attack, Stroke, Cancer, Major Organ Transplant, Renal Failure, etc.
- Cash Payment on Incurral (not reimbursement)
- Benefit from \$5,000 to \$250,000 (typically)



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## Reserves for Specialized Products

### Critical Illness Insurance

- Active Life Reserves
  - No defined morbidity basis
  - Use actuarial judgment
  - Often attained age rate basis
  
- Additional Considerations
  - Benefits often reduce at key ages (65, 70, etc.)
  - Does policy terminate on payment of claim?

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## Reserves for Specialized Products

### Critical Illness Insurance

- Claim Reserves
  - ICOS – typical methodology based on claims in process
  - PV Amounts Not Yet Due - \$0 (lump sum)
  - IBNR – loss ratio method (small blocks), triangle method (large blocks)
    - Low incidence / Large claims
    - Potentially volatile results



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## Reserves for Specialized Products

### Unusual Insured Population

#### Conversion Policies

- Reserve like any other medical policy
- Special Consideration #1:
  - Certainty of premium deficiency reserve
  - Grouping rules apply
- Special Consideration #2:
  - Greater # of large claims
  - Consider impact on reserve lags



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## Reserves for Specialized Products

### Unique Risk Sharing

#### Reinsurance

- Confirm appropriate credit for reinsurer reserves is available
- Special Consideration #1:
  - Maintain consistent reserve basis
  - Communication is crucial
  - Reinsurer should be holding what direct writer is taking credit for (or more)
- Special Consideration #2:
  - Bulk reporting – reinsurer's basis may be different than direct writers (e.g. negative seriatim reserve issue)



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## Reserves for Specialized Products

### Unplanned Risk Exposure

#### Potential Catastrophic Exposure

- Pandemic
  - SARS
  - Swine Flu
  - Other



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## Reserves for Specialized Products

#### Long Duration Products

- Come back tomorrow!!

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