### New Group Long-Term Disability Valuation Table and Actuarial Guideline

#### **Presenters**

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# New Group Long-Term Disability Valuation Table and Actuarial Guideline

### Agenda

- Background and timing
- Description of the new table
- Use of the new table
  - Issuers can make own; actual versus expected terminations, credibility, and margin
  - Special considerations



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## **Background and Timing**

- 2008 SOA Experience study: 21 carriers > 1 million claims, 680,000 terminations
  - Experience period: 1997-2006
  - Result = GLTD2008 experience table
- 2011: NAIC charges Academy with developing new valuation standard
  - Joint Academy/SOA work group formed
  - Results = valuation table: GLTD2012
- April 1, 2014: NAIC approves changes to the model regulation governing minimum standards for GLTD reserves, which references the GLTD2012 valuation table and actuarial guideline



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## Background and Timing (cont.)

- The NAIC has adopted the amended model regulation, The Health Insurance Reserves Model Regulation
  - Final decision on adoption of the model regulation resides with each state commissioner
  - Valuation actuaries would need to refer to the appropriate states' regulations for implementing statutory valuation changes



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### Background and Timing (cont.)

### Amendment to model regulation states:

- "For group long-term disability income claims incurred on or after October 1, 2014, and before the date specified in Paragraph (2), the minimum standards with respect to morbidity may be based on the 2012 GLTD termination table, or subsequent table..."
- "Subject to the conditions in this section, the 2012 GLTD or subsequent table with considerations outlined in Paragraph (1) shall be used in determining minimum standards with respect to morbidity for group long term disability claims incurred on or after October 1, 2016."

Source: NAIC Executive Plenary Meeting Minutes (attachment seven, pages 29-33) http://www.naic.org/meetings1403/committees\_ex\_plenary\_2014\_spring\_nm\_materials.pdf?1398808534328



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## Background and Timing (cont.)

#### • What about older claims?

- There is separate language for claims disabled pre-and post-2005. Intent is to allow consistency with prior regulation. Key points:
  - No explicit requirement that the standard be changed for older claims
  - The new standard can also apply to older claims
  - No explicit timing restriction for when such change can take place
- Amendment to model regulation: "Once an insurer elects to calculate reserves for all open claims on a more recent standard, then all future valuations must be on that basis."
- Amendment introduces the expression "long-term disability." The new standard strictly applies to long-term disability claims.
  - Previous standards did not distinguish short- and long-term claims
  - New standard does not alter short-term disability reserve bases

Source: GLTD Disability Valuation Standard Report-NAIC Model Regulation for Health Insurance Reserves http://actuary.org/files/Final\_GLTDWG\_Table\_Report\_Final\_Version\_Oct3\_0.pdf



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### Description of the New Table (GLTD2012)

- Separate expectations for recovery and death rates vary by age, gender, duration, diagnosis, elimination period, gross monthly benefit
- Recovery rates also vary by the definition of disability, with a recovery "bump" at the change in definition, as well as differences in recovery rates after the transition
- Recovery and death rates are each determined starting from base tables that vary by age, gender, duration, and diagnosis. Additional factor adjustment tables are subsequently applied to each.
- Diagnoses are grouped into 13 buckets
- Separate logic is used for maternity claims with duration less than 36 months

Source: GLTD Disability Valuation Standard Report http://actuary.org/files/Final\_GLTDWG\_Table\_Report\_Final\_Version\_Oct3\_0.pdf



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## Use of GLTD2012 Table

- Use of table is described in the actuarial guideline that is referenced in the new model regulation
- The guideline has language that governs explicit adjustments to the new table based on each carrier's own experience
- Key components of the table:
  - Calculates actual-to-expected terminations for five duration groups
  - Specifies credibility and own experience margin
  - Other considerations

Source: GLTD Disability Valuation Standard Report http://actuary.org/files/Final\_GLTDWG\_Table\_Report\_Final\_Version\_Oct3\_0.pdf



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- Minimum reserves use GLTD2012 table multiplied by an experience adjustment factor determined from each carrier's own termination experience, modified by a credibility factor and an application of margin
- Factors are determined for each of five duration groups:

Group 1: 1-3 months	Group 4: 61-120 months
Group 2: 4-24 months	Group 5: 121+ months
Group 3: 25-60 months	

- Carriers have option to segment results into "any major subgroups that may produce significantly different results."
- Carriers should "combined affiliated statutory entities and assumed reinsurance, where claim management is under a common structure."

Source: GLTD Actuarial Guideline http://actuary.org/files/Final\_GLTDWG\_Actuarial\_Guideline\_December\_4.pdf



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#### Actual-to-expected termination report:

- Use five-year experience period with "suitable lag"
- Segment results into the five duration groups
- Terminations exclude settlements, claims that reach the end of the benefit period, or claims that reach the end of a contractual limit, such as a mental and nervous limit. Claims termination due to a change in definition do count as terminations.
- Recognize, as appropriate, any flexibility built into the GLTD2012 valuation table
- Actual-to-expected terminations are weighted by count, unless another measure is deemed more appropriate



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#### **Credibility and Margin**

Adjustment Factor: T = (Z \* F \* (1 - M) + (1 - Z))

Z: Credibility F: A to E Ratio M: Margin

Credibility is based on the number of expected claims (N) by duration group

Credibility = 
$$\sqrt{N/K}$$
: capped at 100%

Credibility Factor K

Group 2:	3,300	Group 4:	2,100
Group 3:	2,500	Group 5:	1,700

Group 1 is left to the discretion of the valuation actuary

Source: GLTD Actuarial Guideline

http://actuary.org/files/Final\_GLTDWG\_Actuarial\_Guideline\_December\_4.pdf



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Margin

$$M = 3\% + 1.65 * \sqrt{A/c}$$
: bounded by 5% and 15%

C: Actual number of claims

Margin Fa	ctor A			
Group 2:	4.0	Group 4:	2.5	
Group 3:	3.0	Group 5:	2.0	

Source: GLTD Actuarial Guideline

http://actuary.org/files/Final\_GLTDWG\_Actuarial\_Guideline\_December\_4.pdf



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#### Special considerations

- Termination floor: Company shall not use termination rates that produce total reserves for claims disabled for more than two years that are less than the reserve produced by computing T as T = 1.30."
- Group 1, 2 (1-2 Yrs): No termination floor applied
- Group 3 (3-5 Yrs): May apply for exemption from floor (consistent with language in prior regulation for own experience)
- Group 4, 5 (6+ Yrs): Termination floor applies in all cases

Source: GLTD Actuarial Guideline http://actuary.org/files/Final\_GLTDWG\_Actuarial\_Guideline\_December\_4.pdf



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- Small carrier exemption: Use 100 percent of GLTD2012 if carrier has fewer than 50 open claims within two years of duration and fewer than 200 open claims with more than two years of duration
- Timing of calculation: An update should occur "at least once every five years. In addition, the valuation basis must be updated whenever the company's annual own experience study produces... a value *T* that changes by more than 10 percent from the one used in the current valuation basis for any of the five duration groups."
- Reserve basis is not locked in: All claims reserved under the new standards will share the same basis. Updates will trigger reserve changes (5A adjustments)

Source: GLTD Actuarial Guideline http://actuary.org/files/Final\_GLTDWG\_Actuarial\_Guideline\_December\_4.pdf



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#### Reserve adequacy

- Compliance with the actuarial guideline should not be considered an assurance of reserve adequacy, which needs to be separately evaluated. Items not considered include handling of estimated and actual offsets, handling of settlements, and handling of mental and nervous and other contractual limits.
- "Nothing in this guideline should be assumed to prohibit the actuary from building a case and requesting permission from the state insurance commissioner for other appropriate variations."

Source: GLTD Actuarial Guideline http://actuary.org/files/Final\_GLTDWG\_Actuarial\_Guideline\_December\_4.pdf



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# Appendix

Age Interpolation-SOA GLTD 2008 Experience Study-page 57

http://www.soa.org/files/research/exp-study/research-2008-ltd-gltd-table.pdf

Handling of M&N claims-SOA GLTD 2008 Experience Study-page 68

http://www.soa.org/files/research/exp-study/research-2008-ltd-gltd-table.pdf

 Valuation view versus pricing view of actual to expected-SOA GLTD 2008 Experience Study-page 54

http://www.soa.org/files/research/exp-study/research-2008-ltd-gltd-table.pdf

 Computation of claim duration-SOA GLTD 2008 Experience Study-appendix twopage 95

http://www.soa.org/files/research/exp-study/research-2008-ltd-gltd-table.pdf

Diagnosis mapping-SOA GLTD 2008 Experience Study-page 19, table 5.1

http://www.soa.org/files/research/exp-study/research-2008-ltd-gltd-table.pdf

Extending durations-SOA GLTD 2008 Experience Study-page 26, section 5.3.5

http://www.soa.org/files/research/exp-study/research-2008-ltd-gltd-table.pdf



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### **Question and Answer**



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