Academy/Society Individual Disability Table Work Group (IDTWG) Update

Health Actuarial Task Force (HATF)
Meeting

April 5, 2013
American Academy of Actuaries

The American Academy of Actuaries is a 17,000-member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, practice, and professionalism standards for actuaries in the United States.
Objectives

- Background of proposed work
- Project structure and timeline
- Progress update
- Disability income education
- Appendix
  - Work group members/Academy contact
The SOA Individual Disability Experience Committee (IDEC):

- Created an experience table for the 1990-2007 time period in December 2012 and exposed it to the industry for review until May 31, 2013
- Published an experience report for the 1990-2007 time period in March 2013
Proposed the following charge (which was accepted) from the NAIC Health Actuarial Task Force (HATF) to develop valuation tables:

- The Health Actuarial Task Force asks the American Academy of Actuaries to develop a Valuation Table to replace the 1985 Commissioners Individual Disability Table (CIDA) and CIDC. In developing this table, the Academy shall communicate monthly with HATF on this work. To the extent possible, a recommendation should be made to HATF at its December 2013 meeting.

- The Individual Disability Tables Work Group (IDTWG) was created in February 2013 to develop new valuation tables
The IDTWG is following the path set forth by the Group Long-Term Disability Work Group (GLTDWG)

- Like the GLTDWG, IDTWG will look at termination rates and disabled life reserves
- Unlike the GLTDWG, IDTWG also will look at incidence rates and active life reserves
- IDTWG is employing the same subgroup structure as the GLTDWG
Project Structure (cont.)

The IDTWG has created the following subgroups charged with the following:

- Tables – with the experience table as a starting point, develop and recommend a structure for the proposed valuation table
- Margins – develop and recommend the level of margins to be included in the valuation table
- Credibility – develop and recommend methodology for incorporating company experience into the valuation table
- Implementation logistics – map out the steps needed to deliver proposed valuation tables and NAIC model regulation
The work group is adhering to the following timeline:

- Feb./March 2013 – Communication of scope and approach to various audiences
- Apr. 2013 – Presentation of progress at HATF Spring Meeting
- June 2013 – Provide proposed valuation tables to margins and credibility subgroups
- Aug. 2013 – Provide update at HATF Summer Meeting
- Dec. 2013 – Deliver recommendations to HATF
- Post-Dec. 2013 – Industry exposure period
- Jan. 2015 – Possible effective date
Communication

- Combined IDTWG/IDEC meetings:
  - Subgroup calls held weekly and/or bi-weekly
  - Subgroup chairs having weekly calls
  - Full IDTWG (including interested parties) monthly calls

- Prior to HATF meetings:
  - Academy review of final presentations/work products
  - Call with Academy State Health Committee
  - HATF conference call (if requested)
Progress Update – Table Structure

- **1985 CIDA**
  - Incidence and termination rates both vary by gender, age, occupation class, elimination period, accident vs. sickness
  - Termination rates also vary by claim duration

- **1985 CIDC**
  - Modifications to CIDA termination rates by claim duration for first five years of claim for disabled life reserves only

- **Significant change in experience over past 25-30 years**
  - Significant statutory losses in the early 1990s, particularly driven by medical market experience, led to retrenching in industry through consolidation and tighter risk management
  - Since the mid-1990s incidence has improved gradually, while termination rates have deteriorated slightly
Progress Update – Table Structure (cont.)

- Preliminary experience table – same variables as CIDA plus
  - Addition of medical occupation class
  - More elimination periods available
  - Expanding monthly durations of disabled from 4-24 months to 4-60 months
  - May drop weekly durations for 1-13 weeks for months 1-3
  - Additional adjustments reflecting a more refined view of experience – e.g., benefit period, market, issue year grouping, policy year, smoker status, issue state, contract type, presence of cost-of-living benefits
Additional considerations for subgroup:

- Expectation that valuation tables won’t use all of the above, but also may consider new variables – e.g., diagnosis, death vs. recovery

- Expectation that new valuation table will be more complex than CIDA, but added variability will lead to a more robust statutory reserve calculation

- Can terminations be split between death and recovery? If so, should mortality improvement be considered?
Progress Update – Table Structure (cont.)

- Occupation class combinations – e.g., should Occupation class 1 be split out further? Should occupation classes 2/3/4 be combined?

- Claim termination rates in the ultimate durations (11+) are significantly lower than CIDA and even IDEC’s 2005 (preliminary) table – this will have material impact on claims reserves for lifetime coverages.
Progress Update - Margins

- CIDA table has minimal explicit margin – 5 percent of termination rates grading to zero after 18 months of disability

- Statutory reserves typically would have margins from various sources, not only from incidence and terminations from which margins can be added explicitly to the experience table, but also from other sources such as lapses and interest rates

- Does HATF have guidance for the structure or amount of explicit margins for the valuation table? (e.g., should we expect claim reserves under the valuation tables to be X percent higher than under the experience tables?)
NAIC currently allows use of own experience for first two years of disability for disabled life reserves only
- May be too limiting as company experience and claims management differences may extend to most claim durations
- Need to develop a credibility-based approach
- Will consider GLTDWG approach and others
Progress Update – Credibility (cont.)

- Need to consider whether company experience should be used in active life reserves as well

- Investigating practical aspects of using company experience including:
  - Potential use of reserve floors-e.g., GLTDWG approach
  - How to develop company experience and how to apply credibility formula
Progress Update - Logistics

- Held IDTWG kickoff meeting Feb. 12-13
- Created target timeline
- Held calls with relevant interested parties on the IDTWG
- Continue to seek HATF representation on IDTWG
Disability Income Education

The purpose of this section is to provide some technical education on individual disability income (IDI)

- Industry Overview
- Measures
- Experience
- Reserves
- Other considerations
Disability Income Education (cont.)

- **Industry overview**
  - Most of the data backing the experience tables is based on noncancelable products
    - However, the tables are intended to cover all IDI products
  - **Size of industry**
    - Not many carriers – 13 contributors after consolidation – it may be hard to get a reasonable valuation table that produces sufficient reserves for 90 percent of the companies (i.e., only one can “fail” the test)
  - **Industry concentration**
    - Most of the current industry, in terms of volume of business, has focused and continues to focus on white-collar professionals and medical/dental occupations.
    - It appears new and existing carriers may be interested in serving the middle market for which there is not much industry data
Measures

- Incidence = probability of becoming disabled
  - Driven by many factors – e.g., occupation, gender, age, smoker status, elimination period, benefit period
- Claim termination = probability of becoming “un”-disabled due to recovery or death
  - Also driven by many of the same factors that affect incidence, as well as diagnosis of claim and duration of claim
- Claim cost = total cost of a claim = incidence rate x present value of future payments at assumed claim termination rates
Experience information

- High-level historical trends were covered in the November HATF presentation
- Incidence has been improving steadily since the mid-1990s as the result of tighter risk management as well as possibly general population improvement due to medical advances and habits
- Claim termination rates have been deteriorating slightly during this time
- Additional information can be found in the experience report recently published by IDEC on the SOA website
- There can be a fair amount of anti-selection and subjectivity
Reserves

Active life reserves (ALR) = present value of future claim costs on claims not yet incurred less present value of future net premiums

- Uses two-year preliminary term method
- Key assumptions – interest, incidence rates, claim termination rates, lapses (if not noncancelable), mortality
- Disability income doesn’t have the long select underwriting period that life insurance has – driven by contestable period
- Negative reserves can theoretically occur if claim costs are weighted toward earlier policy durations (regulations force negative ALR to zero at the policy level)
Reserves (cont.)

Disabled life reserves (DLR) = present value of future expected payments on claims incurred

- Key assumptions – interest, claim termination rates (recovery and mortality), claim expenses
- The longer one is on claim, the lower the probability of recovery
- Ultimate claim termination rates, after 10 years of disability, are driven more by mortality than recovery, as mortality improves, claim termination rates decrease, causing higher DLRs
Other considerations

Considerable risk management tightening since the mid-1990s:
- Removal of lifetime benefits, lower cost-of-living benefits
- Increase in financial underwriting
- Tightening of issue and participation limits, with a focus on the income replacement ratio

Expect new valuation tables to apply to:
- New issues – products today reflect tighter risk management environment
- New claims – reflecting all inforce products, including those with benefits in which the offering has since been discontinued
Work Group Members

- Bob Beal – co-chairperson
- Doug Taylor – co-chairperson

- Tables subgroup
  - Bob Beal – chairperson
  - David Andreae
  - Jay Barriss
  - Kathryn Campbell

- Margins subgroup
  - Carl Desrochers – chairperson
  - Greg Gurlik
  - Brian Holland
  - Jon Stinson

- Credibility subgroup
  - Bill Obert – chairperson
  - Rich Ferree
  - Todd Petersen
  - Mark Seliber
  - Nathan Worrell

- Logistics subgroup
  - Doug Taylor – chairperson
  - Tim Mahony
  - Jack Luff
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