Guaranteed Issue, Simplified Issue and Preneed Update

Joint American Academy of Actuaries Life Experience Committee and Society of Actuaries Preferred Mortality Oversight Group

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Guaranteed Issue (GI) - Background

- Data from calendar years 2005 - 2009
- 15 Contributing Companies
- Used aggregate smoking status data only
- Used data under 25 units ($25,000) only
- Data essentially all direct marketed
- Excluded data had very different characteristics
Relative to data used

- 4.8 million policies exposed
- 220,000 claims
- 31 million units exposed
- 1.3 million units in claims
  - 1 unit = $1000 of ultimate death benefit
Experience Basic Table created

- Five year select and ultimate pattern
- Actually an anti select pattern in first five years
- Graduated results for ages 50 to 85
- To review pattern at young ages – minimal experience
- To confirm pattern at older ages

Table validated against experience data

- Count: 98.9% select and ultimate, 102.3% ultimate only
- Units: 100.2% select and ultimate, 104.5% ultimate only
- Wide range of results by company
GI – Current Status, cont’ d

- Draft Valuation Table created
  - 2017 CSO loading formula
  - No mortality improvement

- Model Office calculations done
  - Used aggregate data submitted as model office basis
  - (Details available)
Based on mean reserves:

- The mean reserves on all tables developed using GI data are higher than those on 2001 CSO through year 9 then very similar
- The excess in the third year is about 20% of single year of issue annual premium
Comparison of projected mean reserves based on $1 million of gross premium and single year of issue

Years from issue year

0 200,000 400,000 600,000 800,000 1,000,000 1,200,000 1,400,000 1,600,000 1,800,000 2,000,000 2,200,000

- 2001 CSO Mortality
- Aggregate Experience Mortality
The net premiums are higher on the tables developed using GI experience data versus the 2001 CSO.

The mean reserve figures shown do not reflect the deferred premium offset to the mean reserve, which will be greater when net premium are higher.

To evaluate the impact of the higher net premiums, the model office was re-run using midterminal reserves and unearned premiums, assuming all contracts are on monthly mode.
With change to midterminal reserves and unearned premiums:

- Overall, reserve levels are lower (to be expected since only 1/24 of annual net premium is included, rather than ½)
- The mean reserves on all tables developed using GI data are higher than those on 2001 CSO through roughly year 6 then are lower for all years starting in about year 8
Comparison of projected midterminal reserves with modal unearned premium (all monthly mode) based on $1 million of gross premium and single year of issue.
GI – Next Steps

- Examine results by contributing company
- Address younger ages
- Consider older age values
- Consider mortality improvement
- Evaluate loading relative to higher mortality rates
Simplified Issue (SI) – Background

- Data from calendar years 2005 - 2009
- 30 companies overall
  - 26 companies by smoking status
  - 18 companies by aggregate smoking status
- 18 million policies exposed
- 270,000 claims
- 490 million units exposed
- 2.3 million units in claims
SI – Current Status

- Four data segments
  - Aggregate smoking status (smaller amounts)
  - Non smoker, all
  - Non smoker, $25,000 and over
    - Different mortality pattern at high ages
  - Smoker
SI – Current Status, cont’d

- High level graduations completed
  - Individual attained ages
  - Select in ten year age groups
  - Limited data at longer durations
  - Limited data at younger ages
SI – Next Steps

- High level expansion to full 25 year S&U table
- Backtest table against contributed data
- Examine areas where more granular graduation can be done
- Develop more detailed experience table
SI – Considerations

- Significant development in Simplified Issue products and processes since this data collected
- Need industry feedback on best approach to develop appropriate prospective valuation standard as requiring use of SI tables may not be appropriate for certain carriers business as of 1-1-2017
- These current tables could be a benchmark for use in future development
Preneed – Background

- Data from calendar years 2005 - 2009
- 11 contributing companies
- 8.0 million policies exposed
- 640,000 claims
- 35 million units exposed
- 3.0 million units in claims
- Single premium about 60% of exposure and 75% of deaths
Preneed – Current Status

- Three product segments
  - Single premium
  - Multi pay, modified benefit
  - Multi pay, level benefit

- Observe early duration anti selection in first two forms

- Bulk of experience in Single Premium form
High level graduations completed
- Individual attained ages
- Select in ten year age groups
- Data more limited for multi pay plans

Data available to highest ages, 100+
- Possible unreported deaths, however
Preneed – Current Status, cont’d

- Expansion of select data to all ages occurring
- Decision being made on anti select pattern and overall select period
- Current thinking is 7 and 15 years
- Processing of data against prior Preneed Table occurring, S&U and Ultimate only
Preneed – Next Steps

- Develop anti select table for single premium product
- Use that table for modified benefit product
- Modify traditional life insurance pattern for level benefit product
- Proceed with valuation suitable table as with Guaranteed Issue
For all tables

- Need to consider approach to loading
  - GI just used 2017 loading for now
  - Coverage level versus percentage load

- GI/SI products will likely meet the deterministic exclusion test; however, if not, and required to calculate a deterministic reserve
  - PBR margins may need to be reconsidered as designed specifically for the underlying VBT/fully underwritten business and alignment with CSO loading for lowest credibility

- Current NPR lapse rates may not be appropriate for the GI/SI business – preneed already excluded
Accelerated Underwriting

Emerging trend in underwriting is accelerated underwriting

- May look like expanded simplified issue or align more closely with fully underwritten business
- Often modeled using predictive modeling and complex algorithms
- May include Rx data checks, credit scoring, electronic lab data, electron health record information, financial underwriting information, etc.
- In some cases, may exclude fluids (blood/urine)
Accelerated Underwriting

- Experience mortality will not emerge for several years however:
  - Will vary depending on the sophistication of the algorithm(s) used but could get closer to fully underwritten mortality, even without fluids
  - Many companies view their algorithms as proprietary

- Current data collection requirements under VM-51 not supportive of this business – different data needs to be collected, including more understanding of algorithms

- Request charge be assigned to develop the data requirements now so that in place and companies know to capture in order to provide and amend VM-51 to include