

## NAIC and PBR Update

March 23, 2016  
Chicago Actuarial Association Annual Workshops

*Marianne Clifford, FSA, MAAA, CERA  
PolySystems, Inc.*



## NAIC Meeting Highlights – November 2015

### Highlights

- PBR is on schedule to begin 1/1/2017. There will be a pilot study in 2016 to assess the process.
- VM-22 for non-variable annuities is still in the beginning stages but is progressing.
- Simplified Issue, guaranteed issue and pre-need mortality tables are back on track.
- Indexed UL illustrations and Contingent Deferred Annuities (CDA's) are proceeding but there is some opposition from consumer representatives.
- Cancer claim cost tables are near completion. Individual Disability Income Table is being worked on. LTC, ACA and Medicare are also priorities.
- Life RBC is gearing up to review the initial AG48 filings in March, 2016.
- The use of captive reinsurance for variable annuities is under scrutiny by the NAIC.



## PBR Adoption Progress

---

- As of today, 39 states representing 71.8% of premium have adopted PBR.
- PBR becomes effective when at least 42 jurisdictions representing 75% of premiums adopt it. 8 states have legislation in progress to adopt early in 2016.
- It appears that PBR will become effective 1/1/2017.

## PBR- Valuation Manual Amendments

---

LATF acted on these proposals to the valuation manual.

- 1) 2017 CSO Table
  - a) Amendments were adopted permitting the use of 2017 CSO for nonforfeiture, non-term and non-ULSG reserves.
  - b) The 2017 CSO Preferred Class Structure was incorporated in the valuation manual.
  - c) An initial 3 year transition period was allowed to use 2017 CSO. So 2017 CSO must be used starting 1/1/2020.
- 2) ACLI Proposals exposed until 1/15/2016
  - a) Clarify that a secondary guarantee must be greater than 5 years and to clarify lapse rates on the Net Premium Reserve (NPR) for term including ROP Term.
  - b) Answer questions about the Deterministic Reserve Exclusion Test on term insurance.

## PBR – Pilot Project and Additional Training

### Pilot Project

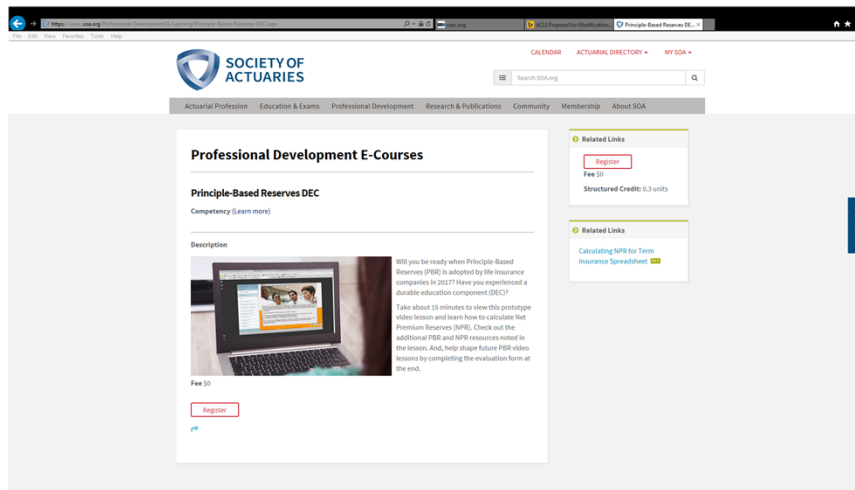
- The NAIC Pilot Project will focus on process improvement from a company and regulatory perspective.
- 10 companies and their domestic regulators will be included.
- Items to be tested are:
  - Net Premium Reserve, Deterministic Reserve and Stochastic Reserve for term and UL
  - VM-20 Reserve Supplement
  - VM-31 Actuarial Reporting

### Training

- A series of DEC's (Durable Educational Components) which will break down complex subjects into 15-20 minute online sessions is planned by the NAIC.
- The pilot DEC covers Net Premium Reserve calculations for term insurance and is on the SOA website.



## SOA Durable Educational Component Screen



## PBR Review Working Group

---

This Working Group addresses annual statement blanks and state insurance department reviewing issues needed for PBR.

- The Working Group exposed to 1/8/2016 changes to the Annual Statement blanks and instructions, many of which ACLI had recommended.
- The Working Group exposed a revised Financial Analysis Handbook to 1/8/2016.
- The Working Group is drafting changes to the Financial Condition Examiners Handbook.
- The Working Group has a draft timeline for the Pilot Project.
- NAIC expects to select a software vendor by the end of the year. NAIC contemplates using the software for validation, sampling, and providing assistance to individual states.

## PBR Implementation Task Force

---

This task force covered the following topics, none of which introduced any new considerations:

- A plan to evaluate whether states have adopted substantially similar elements of PBR, emphasizing effective date and small company exemptions.
- Experience reporting and potential areas of concern.
- Disclosure of RBC in the XXX/AXXX Reinsurance Framework (i.e., AG 48).
- Status of charges sent to other NAIC groups on XXX/AXXX Reinsurance Framework, most of which are complete or nearing completion.

## VM-22 Subgroup on Non-Variable Annuities

- VM-22 is the Valuation Manual section that will address non-variable annuities. It is currently being developed.
- It will not be included when the Valuation Manual becomes effective 1/1/2017, but will be added at some point in the future if and when it is passed by the NAIC.
- As it currently stands, the basic VM-22 framework for non-variable annuities includes these items:
  - Minimum VM-22 reserve = max (floor reserve, modeled reserve)
  - Floor reserve = max (Alpha: Beta; cash value)
  - Alpha = CARVM GPV reserve excluding “listed benefits” and corresponding charges.
  - Beta = PV of contract independent benefit streams (IBS) for each “listed benefit”.
  - Modeled reserve is not needed if product passes an exclusion test.
  - Possible simplified method for optional benefits.

## Underwriting Criteria Scoring Tool (NAIC Call 12/17/2017)

The SOA updated the Underwriting Criteria Scoring Tool (available now on the SOA website).

- ACLI observed that it would be difficult for most companies to incorporate the updated tool for use with AG 48 at 12/31/2015, so the old tool will be used this year.
- PBR is expected to be introduced in 2017. The main feature of PBR is to allow reserves to be experience-based with appropriate margins.
- Preferred risk programs – premium varies by underwriting criteria
- The UCS calculator is used to determine the RRR scores, which can be used to determine the appropriate 2015 VBT RR tables for setting reserves for each risk classes.
- RRR – average industry estimate of relative mortality for each risk class.
- RRR’s are more significant when a company doesn’t have enough credible experience to determine risk from its own experience.

## Underwriting Criteria Score Tool (SOA Website)

<https://www.soa.org/Research/Experience-Study/Ind-Life/Valuation/2015-underwriting-criteria-calculator.aspx>

**SOCIETY OF ACTUARIES**

Actuarial Profession   Education & Exams   Professional Development   Research & Publications   Community

### Underwriting Criteria Score Calculator

The Underwriting Criteria Team of the Joint AAA / SOA Preferred Mortality POG has developed a new Excel spreadsheet to assist companies in calculating recommended RR tables consistent with their underwriting criteria for a particular set of preferred products. The spreadsheet combines both knock-out and debit/credit underwriting methodologies.

This spreadsheet reflects the feedback received on prior versions. Feedback on this version is also requested. Please note changes made since the prior release can be found in the "Corrections" tab.

- Underwriting Criteria Score Documentation PDF
- Underwriting Criteria Score Calculator 3.1 PDF (Released 12/2015)
- Underwriting Criteria Score Calculator 3.0 PDF (Released 06/2015)
- Underwriting Criteria Score Calculator – User Instructions PDF
- July 16, 2015 Presentation to LATF PDF

**PolySystems, Inc.**  
Actuarial Software & Data Solutions

11

## Simplified/Guaranteed Issue and Pre-Need Mortality Tables

- For Guaranteed Issue the SOA/AAA joint task force has developed an experience table with a 5-year select period that reflects anti-selection.
- A draft valuation table using the 2017 loading formula was developed also for Guaranteed Issue.
- For Simplified Issue the task force plans to develop a select and ultimate table and loading.
- For Pre-Need the task force expects to include a 10-year select period in the tables.
- Gender-specific tables and a loading formula will also be developed for Pre-Need products.

12

## IUL Illustration Subgroup

The Subgroup considered a number of issues to the AG49 Proposal – IUL Illustrations:

- For policies with dual accounts, one with a zero charge and low cap and the other with a non-zero charge and high cap, companies must currently illustrate using the non-zero charge and the low cap. One regulator observed that the proposed solution does not reflect that markets can go down.
- ACLI enumerated additional issues that the subgroup should consider: account charges that vary by duration, and the presence of multiple accounts.
- Another regulator added the treatment of products with bonuses to the list. This affects other products in addition to IUL.
- On a recent call credited interest to use in the Alternate Scale was discussed (nonguaranteed elements being illustrated)

## Contingent Deferred Annuity (CDA) Subgroup

### LATF CDA Subgroup

- The LATF subgroup recommended no changes to AG 43 as it applies to CDAs and no changes to the financial statement blanks for CDA reporting.
- It was observed that it is highly likely that CDA lapse rates will differ significantly from variable annuities, and thus the first recommendation needs to be changed.
- The NY regulator expressed reservations about the effectiveness of AG 43 as it pertains to VAs.
- LATF decided to move forward with the recommendations to the CDA Working Group (note that the CDA Working Group is an NAIC working group and is not the same as the LATF CDA Subgroup).

### CDA Working Group (NAIC)

- The Working Group revised and adopted *Guidance for the Financial Solvency and Market Conduct Regulation of Insurers Who Offer Contingent Deferred Annuities*. This document will help states either to apply their current laws to CDAs or to adapt their laws to regulate CDA's.

## Other Subgroups

---

- International Matters
  - LATF received a report covering these items:
    - Core developments related to capital and group capital standards.
    - The goal for ComFrame, a set of supervisory requirements focusing on internationally active insurance groups, is adoption in 2019.
- Professionalism
  - ASB members mentioned the status of key activities on life ASOPs:
    - ASOP 21 (Assisting Auditors and Examiners) comments were due by 12/31/15.
    - ASOP 23 (Data Quality) was released with comments due in the 2/29/16
    - ASOP on Pricing (life & annuity) is in development.
    - ASOP on Modeling Standards is in development.
    - ASOP on Assumption Development is in development.

## Health Actuarial Task Force

---

- Individual Disability Table Work Group
  - The Academy Working Group expanded incidence modifiers for active life reserve calculations for employer-sponsored disability income policies. They have also drafted a Model Regulation.
- SOA Health Research
  - The SOA is doing research on health topics, including Long Term Care Insurance (LTC), cancer insurance, Group Long Term Disability, and Affordable Care Act (ACA) issues.
- Academy Health Practice Council
  - The Council's key priorities for 2016 include LTC, Medicare, and ACA.
- Health Care Reform Working Group
  - The Working Group asked the Academy to study perceived adverse effects of the risk adjustment formula on small insurers.



## Health Actuarial Task Force Continued

---

- Professionalism
  - ASB members mentioned the status of key activities on health ASOPs:
    - ASOP 50 (Determining Minimum Value and Actuarial Value under the Affordable Care Act) was recently adopted.
    - ASOP 5 (Incurred Health and Disability Claims) was exposed until 2/4/16.
    - ASOP 21 (Assisting Auditors and Examiners) comments were due by 12/31/15.
- Cancer Claim Cost Table
  - The Academy/SOA Work Group developed graduated valuation tables and sample reserve calculations. Next steps are to extend the ages in the tables, develop factors for hospitalization limits, and then draft a final report for HATF.

## Health Actuarial Task Force Continued

---

- Medicare Supplement Refund Formula
  - LATF considered modifications to the Medicare supplement refund formula. The Academy Task Force plans to analyze refund data from states to determine the impact of making the changes.
- LTC Working Group
  - The Working Group intends to develop LTC rate review guidelines that will be more uniform among states.

## Life RBC (LRBC) Working Group

---

The Working Group has a number of projects in the formative stages:

- Stress testing will consider changes to RBC to reflect PBR.
- NY, FL, and CT have started to study the effects of unauthorized reinsurance.
- LRBC contemplates development of a charge for longevity risk. Other countries have such a charge but the US currently does not have one.
- LRBC is gearing up to analyze XXX/AXXX filings in March of 2016. Given that these will be the first filings since AG 48 became effective, the goal is to fix anomalies and improve the process.
- The NAIC Variable Annuities Issues Working Group has started to study VA issues as they relate to the use of captives. Consultant Oliver Wyman expects to develop recommendations and show results of a quantitative impact study involving 14 companies at the spring meeting. This could have repercussions on capital issues, so LRBC will monitor activities. VA Working Group indicated that the end of 2016 is an aggressive goal for completing and implementing recommendations.

## VM20

---

- Consists of 5 separate calculations
  - Net Premium Reserve
  - Stochastic Reserve Exclusion Test
  - Deterministic Reserve Exclusion Test
  - Deterministic Reserve
  - Stochastic Reserve

## Net Premium Reserve

- This is a **fully prescribed** reserve, similar to CRVM with a few key differences
  - Lapse rates are included in the Net Premium Reserve
  - Mortality and Lapse rates are not “locked in” at issue
  - There are no Deficiency reserves or Alt Min Reserves
- Net Premiums are calculated in a special way which involves several pieces
  - Adjusted Gross Premiums
  - 135% Ratio Test
  - Expense Allowance of \$2.50 per \$1000 of Face amount for the first year

## Stochastic Reserve Exclusion Test

- Perform a Gross Premium Valuation at the Net Asset Earned Rate under each of the 16 SET Scenarios for the model segment in question. The test is passed if the following condition is met:

$$\frac{\text{MAX DR(excluding scenario 9)} - \text{DR(Scenario 9)}}{\text{PV Benefits (Scenario 9)}} < 6\%$$

## Deterministic Reserve Exclusion Test

---

- Recalculate NPR Valuation Net Premiums assuming a 0% Lapse Rate in all durations.
- If the sum of the future Guaranteed Gross Premiums is larger than the sum of the future recalculated Net Premiums, the exclusion test is passed.
  - For policies subject to a shock lapse, the sums described above only consider the initial level period, however the Net Premiums are still calculated considering the whole life of the policy.

## Modeled Reserves

---

- The Deterministic and Stochastic Reserves are sometimes referred to as modeled reserves, and are the real “Principles Based Reserves.”
- Model Rules
  - Taxes and the payment of distributable earnings are not included in the model.
  - Companies must use prudent estimate mortality calculated according to company experience, industry experience, and credibility, with the appropriate margins applied.
  - For each reserve calculation, the starting assets must be within 2% of the greater of NPR or the reserve amount calculated. When calculating a modeled reserve, it may be necessary to iterate until this “collar” condition is met.
  - The asset default rate calculation is prescribed in VM20.
  - Various other rules that the model must follow.

## Deterministic Reserve

---

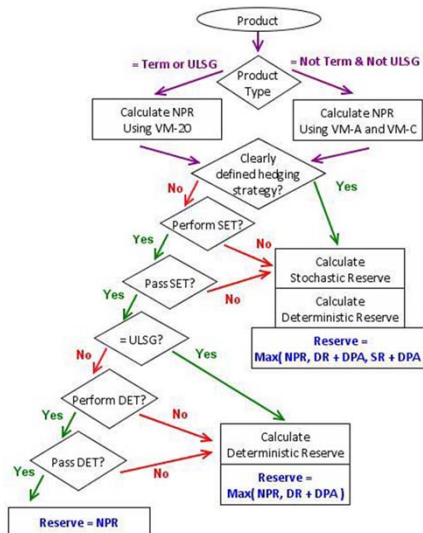
- The Deterministic Reserve is calculated by running an integrated Asset-Liability model under scenario 12 of the Stochastic Exclusion Test Scenarios. VM20 allows for two separate, but theoretically equivalent methods of calculating this reserve:
  - The Gross Premium Valuation method uses the present value of premiums, benefits, and expenses at the net asset earned rate
  - The Direct Iteration Method dictates that you find the amount of starting assets that exactly liquidate benefits and expenses
- In theory the two methods are equivalent, however in practice, there may be differences depending on various elements of the model.

## Stochastic Reserve

---

1. Run your Asset-Liability Model under a set of 50-10,000 prescribed scenarios.
2. Calculate the Greatest Present Value of Accumulated Deficiencies at 105% of the 12 month Treasury Yield, and add the starting asset amount to get the reserve specific to each scenario.
3. The Stochastic Reserve is simply CTE(70) of these scenario reserve amounts.

## PBR Flow Chart



## Life Insurance & Annuities Committee

- Federal Legislative Update
  - The Department of Labor continues to push for expanded fiduciary rules with the goal of having them in place before President Obama leaves office.
  - Senator Elizabeth Warren released a report critical of compensation to annuity sellers.
- Life Insurance Policy Illustrations
  - Some members are not comfortable with changes to the regulation, having to get state approvals for the entire package, and losing uniformity across most states.
  - It was remarked that the illustrations themselves are not uniform despite the regulation, the regulation is out-of-date, and Buyers' Guides should be reviewed.
  - The Committee ended up establishing a subgroup to focus more narrowly on appropriate narrative product descriptions and readability.
- CDA Working Group
  - The Working Group reported that it had adopted a guidance document, which now includes a cancellation benefit.
  - An objection was raised that the prescribed cancellation benefit is weak and that CDAs need true nonforfeiture benefits.
  - A mutual company selling par annuities asked for guidance in applying the Annuity Disclosure Model Regulation.

## Miscellaneous Working Groups, Subgroups and Committees

---

- Nonforfeiture Modernization Working Group
  - The Academy Task Force proposed a retrospective approach based upon actual gross premiums paid. To support the approach they provided sample results for a number of life and annuity products.
  - Birny Birnbaum, a designated NAIC consumer representative, recommended that the task force focus on products containing Guaranteed Lifetime Withdrawal Benefits because consumers do not understand them well.
- Experience Reporting Subgroup
  - One regulator noted that the subgroup will start to collect data on life policyholder behavior in addition to lapses on LTC. The subgroup is currently collecting data on life mortality and lapses.
- C-3 Phase II/AG 43 Subgroup
  - One regulator recommended that the subgroup's charge be expanded to modify AG 43 for whatever comes out of the NAIC Variable Annuity Issues Working Group.

## Miscellaneous Working Groups, Subgroups and Committees

---

- Executive Committee
  - The Committee will ask the Financial Condition (E) Committee to develop regulatory tools for group capital assessment. Group in this sense means considering all insurance entities within the same corporate umbrella, instead of treating each legal entity separately.
  - The Health Insurance Reserves Model Regulation will be revised to recognize a new table for the valuation of cancer expense benefits.
- Capital Adequacy Task Force
  - Health RBC in conjunction with the Academy will evaluate asset risk and issue a report in the first quarter of 2016.
  - Life RBC formulas take tax effects into account, but Health and P&C do not. CADTF must determine whether to continue the Life tax effects, and if so, whether to make Health and P&C consistent with Life.

## Contact Information and Websites

---

If you are interesting in receiving copies of the slides contact me at  
[mclifford@polysystems.com](mailto:mclifford@polysystems.com)

Websites:

NAIC/LATF

[http://www.naic.org/committees\\_a\\_latf.htm](http://www.naic.org/committees_a_latf.htm)

PBR Working Group

[http://www.naic.org/committees\\_ex\\_pbr\\_imp\\_rev\\_wg.htm](http://www.naic.org/committees_ex_pbr_imp_rev_wg.htm)

HATF

[http://www.naic.org/committees\\_b\\_ha\\_tf.htm](http://www.naic.org/committees_b_ha_tf.htm)