AMERICAN ACADEMY of ACTUARIES

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June 11, 2018

Mr. Mike Boerner
Chair, Life Actuarial (A) Task Force
National Association of Insurance Commissioners
via Email: Reggie Mazyck (RMazyck@naic.org)
Re: APF 2018-17

Dear Mike,

Attached please find a revision of APF 2018-17 developed by the Life Reserves Work Group of the American Academy of Actuaries,[1] in response to comments received on our original version of this APF. Our recommendations are expressed as red-line comments to the current exposure draft. Brief discussions of the reasoning behind these changes are appended to the end of the APF, as is customary. Please note that we have included changes to Section 9.C.6.b.i, as well as changes to Section 9.C.4.b. The changes are included as we believe the considerations that apply to aggregation of model segments for the determination of credibility also apply to the aggregation of model segments for the determination of the sufficient data period.

With the exposure draft including several layers of red-lining, we have attached a copy of the two sections with all changes accepted.

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If you have any questions, please contact Ian Trepanier (trepanier@actuary.org) at the American Academy of Actuaries.

Sincerely,

Leonard Mangini, MAAA, FSA
Chairperson, Life Reserves Work Group
American Academy of Actuaries

[1] The American Academy of Actuaries is a 19,000-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

1850 M Street NW Suite 300 Washington, DC 20036 Telephone 202 223 8196 Facsimile 202 872 1948 www.actuary.org

Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

1. Identify yourself, your affiliation and a very brief description (title) of the issue.

   American Academy of Actuaries' Life Reserves Work Group (LRWG)
   Aggregation of mortality segments for the purpose of determining credibility.

2. Identify the document, including the date if the document is "released for comment," and the location in the document where the amendment is proposed:

   Exposure draft APF 2018-17 Aggregation of Mortality Segments, which is a proposal to change VM-20 Section 9.C.4.B from the Valuation Manual (January 1, 2018 edition), with NAIC Adoptions through August 8, 2017.

   Also includes a change to Section 9.C.6.b.ii of VM-20.

3. Show what changes are needed by providing a red-line version of the original verbiage with deletions and identify the verbiage to be deleted, inserted or changed by providing a red-line (turn on "track changes" in Word®) version of the verbiage. (You may do this through an attachment.):

   Please see below.

4. State the reason for the proposed amendment? (You may do this through an attachment.)

   1. On the Life Actuarial Task Force (LATF) call of May 24, 2018, the question was raised as to whether the conditions for using aggregate mortality for purposes of determining credibility set forth in Section 9.C.4.b should apply only to "top-down" processes in which an aggregate is first formed and then broken down into mortality subgroups, rather than to the aggregation of previously determined mortality segments. The LRWG agrees the two approaches will produce similar results, provided conservation of deaths is observed. Thus, the LRWG recommends that romanette (i) be eliminated and romanette (ii) incorporating the conservation of deaths principle be added.

   2. Among the comments discussed on the LATF call was the observation that requiring similar distribution systems and target markets was overly restrictive and could inhibit the development of new types of coverage. It was asserted that having similar underwriting processes should be sufficient for determining which policies may be aggregated for credibility determination. The LRWG believes that the original romanette (iii) was too restrictive, but notes that distribution systems and target markets can have an impact on the risk selection process and, to the extent they do, they should be considered part of the underwriting process. To reflect this perspective, the LRWG recommends consideration of eliminating the original romanette (iii) and the second to last paragraph of this subsection and clarifying in the first sentence of the Guidance Note that "underwriting processes" include such impact on risk selection.

   3. The application of Section 9.C.4.b to reinsurers was not clear in the exposure draft. The LRWG recommends consideration of the addition of a paragraph immediately following the new romanette (ii) in order to make clear that "underwriting processes" for reinsurers do not require the reinsurer to "look through" the treaty to the ceding company's underwriting of the underlying insureds, but rather refer to the processes by which reinsurers determine the expected mortality that underlies a reinsurance offer to a client company.

   4. The LRWG recommends consideration of revising the paragraph that now starts "Changes to underwriting processes…" by (1) generalizing the application of this paragraph to "changes in underwriting processes" rather than "underwriting processes that utilize new methods" and (2) allowing for changes that impact expected mortality, if properly justified by documented internal or published external studies. Additional editorial changes were made for clarity.

   5. The LRWG recommends consideration of eliminating the last paragraph of the subsection because it duplicates the requirement in Section 3.C.3.b of VM-31.

6. In the third sentence of the Guidance Note, the LRWG recommends consideration of changing “would” to “could “and adding risk assessment and financial statements to pricing as examples of company functions using mortality assumptions that could be compared when supporting the equivalence, for credibility determination, of two underwriting processes. The LRWG believes that providing pricing information should be optional and recommends consideration of a broadening of the list of sources of support because it believes that if the mortality assumptions used for risk assessment or financial reporting are consistent for policies underwritten using the two processes then these facts are also relevant in supporting the company’s position that the processes are equivalent.

7. The LRWG suggests that Section 9.C.6.b.ii be changed so that the same considerations that apply to the determination of credibility apply to the determination of the sufficient data period.

* This form is not intended for minor corrections, such as formatting, grammar, cross–references or spelling. Those types of changes do not require action by the entire group and may be submitted via letter or email to the NAIC staff support person for the NAIC group where the document originated.

NAIC Staff Comments:

Dates: Received	Reviewed by Staff	Distributed	Considered
Notes: Amendment Proposal 2018-17 revised 5_24_18			

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VM-20 Section 9.C.4:

b. Credibility may be determined at either the mortality segment level or at a more aggregate level. Experience for different mortality segments may be aggregated if the following two ~~three~~ conditions are met:

~~i. The company based its mortality on the aggregate experience and then used a methodology to subdivide the aggregate class into various mortality segments and a description of the methodology for sub-dividing is provided in the PBR Actuarial Report;~~

~~ii.~~i. The mortality segments were subject to the same or similar underwriting processes; and

~~iii.~~ii. The aggregate expected claims for the mortality segments are greater than or equal to the aggregate actual claims over the period in which the claims were observed, after appropriate adjustments are made to take into account adjustments made to company experience mortality under Section 9.C.2.~~mortality segments were sold by similar distribution systems and to similar market segments~~.

For assumed policies, “underwriting processes” means the processes by which the assuming company determines which risks to accept.

Changes to u~~U~~nderwriting processes which have been demonstrated ~~that utilize new methods, but which are expected~~ to produce similar mortality~~, may be treated as similar to previously established underwriting processes if these expectations regarding mortality are supported in the PBR Actuarial Report by published medical, clinical, actuarial, or industry studies. Alternatively, underwriting processes that utilize new methods, but which have been demonstrated to produce similar mortality~~ based on a retrospective demonstration using methods such as statistical analyses, predictive model back-testing ~~analytics,~~ or other modeling methods, or for which the expected change to mortality may be estimated based on documented internal studies or on published medical, clinical, actuarial, industry or other studies, may be treated as similar to previously established underwriting processes if the~~se~~ demonstration~~s~~ or documentation is ~~are~~ ~~provided~~summarized in the PBR Actuarial Report..

~~If the distribution system or target market for a mortality segment differs from that of the other mortality segments within the aggregate grouping, the mortality experience cannot be aggregated for credibility purposes unless the company expects and can demonstrate that the mortality experience of the segments is similar to that of the other mortality segments, and support is provided in the PBR Actuarial Report.~~

~~If the company determines mortality and credibility at an aggregate level, the mortality experience of each of the mortality segments within the aggregate shall be studied separately and the emerging results for each of these segments shall be presented in the PBR Actuarial Report.~~

Guidance Note: The intent of this section is to allow aggregation of different types of life insurance products (such as term, whole life, universal life (UL), etc.) and different underwriting and risk classes within these products for purposes of determining credibility when the underlying underwriting processes, including any impact on risk selection attributable to differences in distribution systems or ~~, and~~ target markets, are similar. The intent is not to allow broad aggregation of disparate underwriting methods such as guaranteed issue or simplified issue with fully underwritten products. With regard to changes in underwriting processes~~new methods~~, if there is one group of policies using a newly modified underwriting process ~~method~~ and one group of policies using a previously established underwriting process, showing that the mortality assumptions used for other company functions, such as pricing, risk assessment and the preparation of financial statements, for the two groups of policies are consistent c~~w~~ould be one part of supporting the company’s position that the two underwriting processes should be treated as equivalent for purposes of aggregation when determining credibility~~are equivalent~~.

c. A single level of credibility shall be determined over the entire exposure period, rather than at each duration within the exposure period. This overall level of credibility will be used to:

i. Determine the prescribed margin for company experience mortality rates.

ii. Determine the grading period (based on the credibility percentage shown in column (1) in the applicable table in Section 9.C.6.b.iii) for grading company experience mortality rates into the applicable industry basic table.

VM-20 Section 9.C.6.b.ii:

ii. In determining the sufficient data period the company shall first identify the last policy duration at which sufficient company experience data exists (using all the sources defined in Section 9.C.2.b). The sufficient data period then ends at the last policy duration that has 50 or more claims (i.e., no duration beyond this point has 50 claims or more) subject to the limits in Column 2 of the applicable table in Section 9.C.7.b.iii.b. The considerations in Section 9.C.4.b with respect to aggregation of mortality segment for the determination of credibility also apply to the aggregation of mortality segments for the determination of the sufficient data period. ~~The sufficient data period may be determined at a more aggregate level than the mortality segment if the company based its mortality on aggregate experience and then used a methodology to subdivide the aggregate class into various sub-classes or mortality segments.~~

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7. The LRWG suggests that Section 9.C.6.b.ii be changed so that the same considerations that apply to the determination of credibility apply to the determination of the sufficient data period.

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   i. The mortality segments were subject to the same or similar underwriting processes; and
   ii. The aggregate expected claims for the mortality segments are greater than or equal to the aggregate actual claims over the period in which the claims were observed, after appropriate adjustments are made to take into account adjustments made to company experience mortality under Section 9.C.2..

   For assumed policies, "underwriting processes" means the processes by which the assuming company determines which risks to accept.

   Changes to underwriting processes which have been demonstrated to produce similar mortality based on a retrospective demonstration using methods such as statistical analyses, predictive model back-testing or other modeling methods, or for which the expected change to mortality may be estimated based on documented internal studies or on published medical, clinical, actuarial, industry or other studies, may be treated as similar to previously established underwriting processes if the demonstration or documentation is summarized in the PBR Actuarial Report..

Guidance Note: The intent of this section is to allow aggregation of different types of life insurance products (such as term, whole life, universal life (UL), etc.) and different underwriting and risk classes within these products for purposes of determining credibility when the underlying underwriting processes, including any impact on risk selection attributable to differences in distribution systems or target markets, are similar. The intent is not to allow broad aggregation of disparate underwriting methods such as guaranteed issue or simplified issue with fully underwritten products. With regard to changes in underwriting processes, if there is one group of policies using a newly modified underwriting process and one group of policies using a previously established underwriting process, showing that the mortality assumptions used for other company functions, such as pricing, risk assessment and the preparation of financial statements, for the two groups of policies are consistent could be one part of supporting the company's position that the two underwriting processes should be treated as equivalent for purposes of aggregation when determining credibility.

c. A single level of credibility shall be determined over the entire exposure period, rather than at each duration within the exposure period. This overall level of credibility will be used to:

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