## **HEALTH ACTUARIAL (B) TASK FORCE**

Health Actuarial (B) Task Force Aug. 1, 2022, Minutes

Health Actuarial (B) Task Force June 30, 2022, Minutes (Attachment One)

Society of Actuaries Research Institute (SOARI) 2022 Individual Life Waiver of Premium (ILWOP)

Experience Study Presentation (Attachment One-A)

Health Actuarial (B) Task Force May 16, 2022, Minutes (Attachment Two)

American Academy of Actuaries (Academy) and SOARI Group Life Waiver of Premium Valuation Table (GLWPVT) Work Group Update (Attachment Two-A)

Long-Term Care Actuarial (B) Working Group June 24, 2022, Minutes (Attachment Three)

Long-Term Care Insurance Mortality and Lapse Study Update (Attachment Three-A)

SOA Research Institute/LIMRA Experience Studies Partnership Update (Attachment Four)

SOA Research Institute Activities Update (Attachment Five)

Academy Health Practice Council Update (Attachment Six)

https://naiconline.sharepoint.com/sites/NAICSupportStaffHub/Member%20Meetings/B%20CMTE/HATF/2022 Summer/Contents.docx

## **Draft Pending Adoption**

Draft: 8/9/22

Health Actuarial (B) Task Force
Virtual Meeting (in lieu of meeting at the 2022 Summer National Meeting)
August 1, 2022

The Health Actuarial (B) Task Force met Aug. 1, 2022. The following Task Force members participated: Andrew N. Mais, Chair, represented by Paul Lombardo (CT); Russel Toal, Vice Chair, represented by Julie Weinberg (NM); Mark Fowler represented by Jennifer Li (AL); Ricardo Lara represented by Ahmad Kamil (CA); Michael Conway represented by Eric Unger (CO); Vicki Schmidt represented by Nicole Boyd (KS); Kathleen A. Birrane represented by Brad Boban (MD); Timothy N. Schott represented by Marti Hooper (ME); Anita G. Fox represented by Kevin Dyke (MI); Grace Arnold represented by Julia Lyng (MN); Chlora Lindley-Myers represented by William Leung (MO); Eric Dunning represented by Michael Muldoon (NE); Marlene Caride represented by Seong-min Eom (NJ); Judith L. French represented by Craig Kalman (OH); Glen Mulready represented by Andrew Schallhorn (OK); Michael Humphreys represented by Jim Laverty (PA); Cassie Brown represented by Aaron Hodges (TX); Mike Kreidler represented by Lichiou Lee (WA); and Allan L. McVey represented by Joylynn Fix (WV). Also participating was: Tomasz Serbinowski (UT).

## 1. Adopted its June 30 and May 16 Minutes

Mr. Lombardo said the Task Force met June 30 and May 16. During these meetings, the Task Force took the following action: 1) heard a Society of Actuaries (SOA) Research Institute 2022 Individual Life Waiver of Premium (ILWOP) Experience Study presentation; and 2) heard an update on the American Academy of Actuaries (Academy) and SOA Research Institute Group Life Waiver of Premium Valuation Table (GLWPVT) Work Group efforts towards developing valuation tables to replace the 2005 Group Term Life Waiver Mortality and Recovery Tables in Actuarial Guideline XLIV—Group Term Life Waiver of Premium Disabled Life Reserves (AG 44).

Mr. Dyke made a motion, seconded by Ms. Weinberg, to adopt the Task Force's June 30 (Attachment One) and May 16 (Attachment Two) minutes. The motion passed unanimously.

## 2. Adopted the Report of the Long-Term Care Actuarial (B) Working Group

Mr. Serbinowski said the Working Group met June 24. During this meeting, the Working Group discussed the Academy and SOA Research Institute's final Long-Term Care Insurance Mortality and Lapse Study.

Mr. Hodges made a motion, seconded by Mr. Schallhorn, to adopt the report of the Long-Term Care Actuarial (B) Working Group (Attachment Three). The motion passed unanimously.

## 3. Heard an Update on the SOA Research Institute/LIMRA Experience Studies Partnership

Marianne Purushotham (Life Insurance Marketing and Research Association—LIMRA) and Dale Hall (SOA) gave an update on the SOA Research Institute/LIMRA Experience Studies Partnership (Attachment Four).

## 4. Heard an Update on the SOA Research Institute Activities

Mr. Hall gave an update on SOA Research Institute activities (Attachment Five).

## **Draft Pending Adoption**

## 5. Heard an Update from the Academy Health Practice Council

Barbara Klever (Blue Cross Blue Shield Association—BCBSA) gave an update on Academy Health Practice Council activities (Attachment Six).

## 6. Heard an Academy Update on Professionalism

Lisa Slotznick (Academy) said the Academy Committee on Qualifications (COQ) issued a final amended U.S. Qualification Standards (USQS) late in 2021 after exposing two drafts. She said during the exposure period, the COQ presented several webinars explaining the changes. She said the USQS specifies that qualifications for statements of actuarial opinion (SAO) are not limited to regulatory required opinions. She said the COQ has also updated frequently asked questions (FAQ) to help actuaries understand the USQS, and many of the FAQ started as questions received through the website. She said the COQ has received nine questions this year, two of which were referred to the Actuarial Board for Counseling and Discipline (ABCD) as requests for guidance. She said most of the other questions were about continuing education (CE) requirements and basic education.

Ms. Slotznick said actuaries who were qualified before the amended version of the USQS took effect remain qualified, and the changes mostly apply to new actuaries. She said the USQS now includes a new requirement for one hour of bias CE, which applies to all actuaries. She said CE can be obtained through self-study.

Darrell Knapp (Actuarial Standards Board—ASB) said the ASB has been focusing on six themes currently running through the ASB's work: 1) addressing various tasks within scope, such as conducting reviews; 2) using a template to increase consistency in language across Actuarial Standards of Practice (ASOPs); 3) trying to avoid duplication with ASOP No. 1, Introductory Actuarial Standard of Practice, with "materiality" and "professional judgment" as examples; 4) adding guidance for reliance on other actuaries and experts; 5) focusing on the distinction between documentation and disclosures; and 6) focusing on gender, race, and employer type diversity on committees and task forces. He said because ASOP No. 1 calls on actuaries to always use professional judgment, the ASB is trying to avoid saying "the actuary should use professional judgment" in other ASOPs.

Mr. Knapp said the ASB approved an exposure draft of ASOP No. 41, Actuarial Communications in June, which will soon be released for exposure and go through the typical exposure process. He said the ASB will review the proposed exposure draft of ASOP No. 12, Risk Classification at its September meeting, and it should be exposed soon after that. He said the ASB is trying to find the right balance between the importance of risk classification systems to actuarial work and potential abuses in their application. He said a revision to ASOP No. 28, Statements of Actuarial Opinion Regarding Health Insurance Assets and Liabilities that was recently implemented took effect July 1. He said the ASB just released a technical correction to the scope of ASOP No. 28, along with that of ASOP No. 36, Statements of Actuarial Opinion Regarding Property/Casualty Loss, Loss Adjustment Expense, or Other Reserves. He said the current scope of each ASOP has a mutual exclusion where if one applies, the other does not. He said both ASOPs were originally written with the scope limited to NAIC SAOs. He said the scope of both ASOPs has been expanded to include broader SAOs, and as a result, the ASB must address those exclusions simultaneously and is therefore exposing just the scope of ASOP No. 28. He said the ASB is working on revisions to ASOP No. 49, Medicaid Managed Care Capitation Rate Development and Certification.

Shawna Ackerman (California Earthquake Authority—CEA) said the ABCD performs the two primary functions of addressing requests for guidance (RFGs) and investigations into complaints. She said the ABCD may recommend discipline, but it is up to the organization the subject actuary is a member of to decide whether to discipline an actuary. She said recent RFGs in the health area included questions about the obligation to report under Precept 13, Violations of the Code of Professional Conduct of the Academy's Code of Professional Conduct (CPC) and the procedures for doing that, as well as qualifications. She said the majority of RFGs are related to CPC Precept 1, Integrity and the actuary's responsibility to the public.

## **Draft Pending Adoption**

Mr. Lombardo asked when bias CE webinars will be conducted. Ms. Slotznick said several webinars that qualify for bias CE were produced and are available to Academy members on its website.

## 7. <u>Discussed an Academy and SOA Research Institute GLWPVT Work Group Valuation Tables Proposal</u>

Mr. Lombardo said the Academy and SOA Research Institute GLWPVT Work Group has proposed valuation tables to replace the 2005 Group Term Life Waiver Mortality and Recovery Tables in AG 44. He said the proposed tables exhibit higher recovery rates and lower mortality factors than the current tables. He said the proposal is exposed for a public comment period ending Aug. 11.

Having no further business, the Health Actuarial (B) Task Force adjourned.

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Draft: 7/18/22

## Health Actuarial (B) Task Force Virtual Meeting June 30, 2022

The Health Actuarial (B) Task Force met June 30, 2022. The following Task Force members participated: Andrew N. Mais, Chair, represented by Paul Lombardo (CT); Russel Toal, Vice Chair, represented by Julie Weinberg (NM); Mark Fowler represented by Jennifer Li (AL); Ricardo Lara represented by Rodney Haviland (CA); Michael Conway represented by Eric Unger (CO); Amy L. Beard represented by Stephen Chamblee (IN); Vicki Schmidt represented by Nicole Boyd (KS); Timothy N. Schott represented by Marti Hooper (ME); Anita G. Fox represented by Kevin Dyke (MI); Chlora Lindley-Myers represented by William Leung (MO); Eric Dunning represented by Michael Muldoon (NE); Marlene Caride represented by Seong-min Eom (NJ); Glen Mulready represented by Andrew Schallhorn (OK); Michael Humphreys represented by Jim Laverty (PA); Cassie Brown represented by Aaron Hodges (TX); Mike Kreidler represented by Lichiou Lee (WA); and Allan L. McVey represented by Joylynn Fix (WV).

## 1. Heard an ILWOP Experience Study Presentation

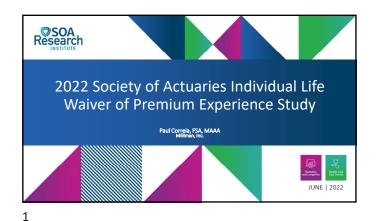
Paul Correia (Milliman) gave a presentation (Attachment One-A) on the Society of Actuaries (SOA) Research Institute 2022 *Individual Life Waiver of Premium (ILWOP) Experience Study*. He said the study's objectives are to:
1) compare recent industry experience for ILWOP insurance products to the expected incidence and claim termination rates from the 1952 SOA Disability Table; 2) analyze actual-to-expected (A/E) incidence and claim termination ratios across key segments such as gender and attained age; 3) develop an illustrative experience basis for calculating policy and claim reserves based on the results from the A/E studies; and 4) compare reserves calculated using experience assumptions to the reserves calculated using the 1952 SOA Disability Table for an illustrative cohort of ILWOP business.

The Task Force identified the following items that it will need to appropriately evaluate the experience study results: 1) the definition of disability that determines disability benefit eligibility as used in the 1952 SOA Disability Table; 2) whether the 1952 SOA Disability Table includes margins; and 3) a comparison of aggregate active life and disabled life reserves using industry data.

Mr. Lombardo said the Task Force will consider whether to proceed with the development of new valuation tables to replace the 1952 SOA Disability Table after it has reviewed needed additional information to be provided by the SOA Research Institute.

Having no further business, the Health Actuarial (B) Task Force adjourned.

Meetings/Member Meetings/B CMTE/HATF/2022\_Summer/06-30-22/Minutes\_HATF\_06-30-22 LTCAWG.docx



## **Presentation Disclaimer**

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## 2022 SOA ILWOP Experience Study

Objectives

- Compare recent industry experience for individual life waiver of premium (ILWOP) insurance products to the expected incidence and claim termination rates from the 1952 SOA Disability
- > Analyze actual-to-expected (A/E) incidence and claim termination ratios across key segments such as gender, attained age, etc.;
- > Develop an illustrative experience basis for calculating policy and claim reserves based on the results from the A/E studies; and
- > Compare reserves calculated using experience assumptions to the reserves calculated using the 1952 SOA Disability Table for an illustrative cohort of ILWOP business

**SOA** Research

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## 2022 SOA ILWOP Experience Study

Background

According to a survey performed by the SOA in 2018, most insurers use the 1952 SOA Disability Table for calculating statutory policy and claim reserves for ILWOP products.

Statutory Reserve Assumptions Source: 2018 Survey Sponsored by the Society of Actuaries						
Valuation Table	Incidence Rates	Claim Termination Rates				
1952 SOA Disability Table	8	10				
1964 CDT Table	0	0				
1985 CIDA Table	2	1				
2013 Individual Disability Table	0	0				
Company experience	1	1				
Other	1	1				

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## 2022 SOA ILWOP Experience Study Summary of Experience Studies

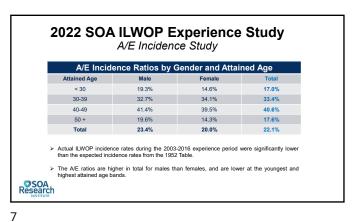
A/E Incidence Study

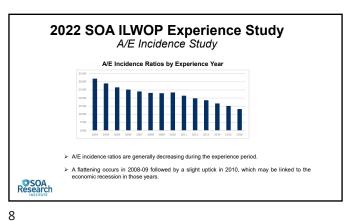
- Gender
- Attained age
- Issue age Policy duration
- Face amount
- Observation year Smoker status
- Issue state
- Annualized premium
- Underwriting methods
- Insurance type

## A/E Claim Termination Study

- Gender and claim duration
- Attained age and claim duration Issue Age and claim duration Diagnosis and claim duration
- Smoker status and claim duration
- Annualized premium and claim duration

### 2022 SOA ILWOP Experience Study Exposures Policy Database Claim Database Attained Age Claim Male Female Total Male Female Total 20,749,573 20,100,210 40,849,783 7,843 3,949 11,792 30-39 17,559,372 15,334,133 **32,893,505** 2 9,986 4,901 14,887 22,382,278 16,723,459 39,105,736 7,064 3,583 10,647 50 + 28,598,176 17,442,206 46,040,382 4 4,460 2,225 6,685 Total 89,289,398 69,600,008 158,889,406 5.9 13 434 6 272 19 706 10+ 55.151 15.294 70,445 Total 97,938 36,223 134,160





## 2022 SOA ILWOP Experience Study A/E Incidence Study A/E Incidence Ratios by Coverage Type ncluded with Base Policy Optional Rider 26.4% 22.1% The A/E incidence ratios are higher when ILWOP benefits are offered as an optional rider than when benefits are included in the base policy. May indicate adverse selection risk, or that policyholders are not as aware of waiver of premium benefits when they are included in the base policy. SOA Research

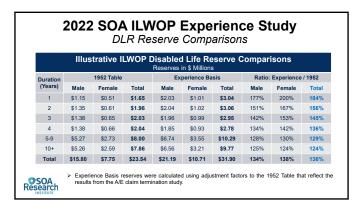
2022 SOA ILWOP Experience Study A/E Claim Termination Study A/E Claim Termination Ratios by Gender and Claim Duration Claim Duration (Years) Male 35.6% 45.1% 47.3% 42.2% 46.8% 82.2% **59.2%** Female 30.1% 36.0% 39.7% 35.5% 39.8% 69.6% 45.4% Total 33.6% 41.6% 44.4% 39.7% 44.3% 79.1% 54.7% Actual ILWOP claim termination rates during the 2003-2016 experience period were lower than the expected claim termination rates from the 1952 Table. > The overall A/E claim termination ratio is 54.7%, although the ratios are lower for claims in durations 1-9 years than in durations 10+ years.

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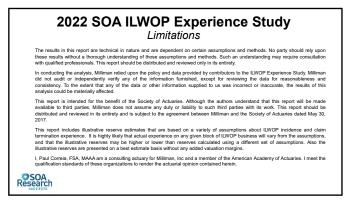
## 2022 SOA ILWOP Experience Study A/E Claim Termination Study Actual and Expected Claim Terminations for attained age group 50+ > Actual claim terminations in later durations are dominated by deaths SOA Research

A/E Claim Termination Study						
A/E Claim Termination Ratios by Disability Diagnosis						
Disability Diagnosis	Actual Terminations	Expected Terminations	A/E Ratio			
Cancer	8,358	8,638	96.8%			
Circulatory	4,334	9,573	45.3%			
Musculoskeletal	7,656	20,323	37.7%			
Mental & Nervous	3,457	9,941	34.8%			
Nervous System	2,563	7,541	34.0%			
Other	18,164	49,530	36.7%			
No Diagnosis	89,628	139,660	64.2%			
Total	134,160	245,206	54.7%			

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Draft: 5/31/22

## Health Actuarial (B) Task Force Virtual Meeting May 16, 2022

The Health Actuarial (B) Task Force met May 16, 2022. The following Task Force members participated: Andrew N. Mais, Chair, represented by Paul Lombardo (CT); Russel Toal, Vice Chair, represented by Julie Weinberg (NM); Jim L. Ridling represented by Jennifer Li (AL); Ricardo Lara represented by Rodney Haviland (CA); Michael Conway represented by Eric Unger (CO); Amy L. Beard represented by Stephen Chamblee (IN); Vicki Schmidt represented by Nicole Boyd (KS); Timothy N. Schott represented by Marti Hooper (ME); Anita G. Fox represented by Kevin Dyke (MI); Chlora Lindley-Myers represented by William Leung (MO); Eric Dunning represented by Michael Muldoon (NE); Marlene Caride represented by Seong-min Eom (NJ); Glen Mulready represented by Andrew Schallhorn (OK); Michael Humphreys represented by Jim Laverty (PA); Cassie Brown represented by Aaron Hodges (TX); Mike Kreidler represented by Lichiou Lee (WA); and Allan L. McVey represented by Joylynn Fix (WV).

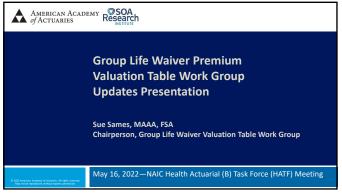
## 1. Heard an Update on GLWPVT Development

Sue Sames (Willis Towers Watson) gave an update (Attachment Two-A) on the American Academy of Actuaries (Academy) and Society of Actuaries Research Institute (SOARI) Group Life Waiver of Premium Valuation Table (GLWPVT) Work Group (Work Group) efforts towards developing valuation tables to replace the 2005 Group Term Life Waiver Mortality and Recovery Tables in Actuarial Guideline XLIV—Group Term Life Waiver of Premium Disabled Life Reserves (AG 44).

Ms. Sames said the Work Group will submit an executive summary of the table development process and a paper detailing the predictive analytics approach to table development to the Task Force. Mr. Lombardo said the Task Force will schedule a future meeting to hear an overview of the predictive analytics approach and executive summary, and hold a question-and-answer (Q & A) session with the Work Group.

Having no further business, the Health Actuarial (B) Task Force adjourned.

Member Meetings\2022 NAIC Meetings\Summer National Meeting\Committee Meetings\HEALTH INS and MANAGED CARE (B) COMMITTEE\Health Actuarial (B) TF\Conference Calls\5-16 HATF\05-16-22 HATF.docx



Agenda Background, Scope and Approach Recommendation Proposed table Predictive Analytics Comparison of 2005 and 2022 Tables Considerations for AG 44 Credibility Retroactive Margins How can we best support HATF in its approval process? AMERICAN ACADEMY RESEARCH

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## Background: Description of Benefits and Reserves

- □ Waiver of Premium is a disability benefit on group term life coverage
- If the insured is disabled under the terms of the contract, premiums are waived and benefits are payable upon death
  - Unless the insured recovers or benefits expire, e.g., upon attainment of age 65
  - Possible company variations include: definition of disability, elimination period, benefit period, benefit reduction schedules based on age
- Reserves are the actuarial present value of future benefits
  - Calculated using a double decrement of mortality and recovery, as described in Actuarial Guideline 44 (AG 44)

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## **Background: Evolution of Waiver Tables**

- Historically insurers used 75% of the face amount as the reserve Krieger Table published in 1971, based on 1955-65 data

  - 135,000 life-years of experience

  - Table dimensions:

    recovery/death decrements separated
    disability duration (quarters 4-8 and years 3-10 select, then ultimate by attained age) age at disability
     A de facto standard

  - SOA 2005 Table published in 2006, based on 1993 through 2002 data
  - 750,000 life-years (~6x more than Krieger study)

  - Added gender to table dimensions AG 44 introduced 2005 Table as a valuation standard
- New table (SOA 2022) is based on 2006 to 2015 data
- Over 2 million life-years (~3x more than 2005 study)
- - Adding "diagnosis group" dimension to SOA 2005 table structure Developed using predictive analytics

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Background, Scope, and Approach

- A group of volunteers representing a good cross-section of companies, reinsurers and consultants working in group life
- □ The group commenced in 2019
- Volunteers represent members of the SOA and the Academy, and we are ably supported by their staff
- We had an external consultant conducting the data analytics under our direction

## Our purpose in meeting with HATF:

- Provide an overview of our process
- Present our recommended Group Life Waiver of Premium Valuation Table and Actuarial Guideline 44, as well as supporting information
- Develop a better understanding of how we can support HATF in your review process

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## Recommendation

## **Supporting Documents:**

- Table
- Revised AG 44
- Paper supporting predictive analytics by external consultant, Jerry Holman

Improvements over 2005 Table:

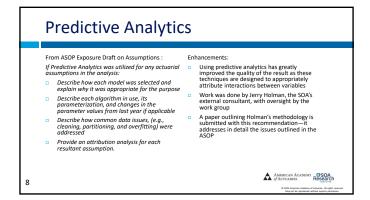
- Significantly more (and better) data
- Using predictive analytics better reflects interaction of variables
- Including diagnosis as a new variable improves fit

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## **Proposed Table** Structure Consistent with 2005: Enhancements: Factors reflecting diagnosis Select period based on: gender Unisex basis age at disability Used same 15 diagnosis variables Group Long-Term Disability ("LTD") duration of disability Grouped low/medium/high separately for deaths and recoveries Durations 11+ are on an attained Protocol established for unknown diagnosis Developed using predictive analytics AMERICAN ACADEMY Research 7



Comparison of 2005 and 2022 Tables

Total - All Benefit Periods 90A 2005 SOA 2022 Compare %

Reserve: Experience Table 94-30 B 90A 2005 SOA 2022 Compare %

Reserve: Valuation Table (Full margins) 95-228 B 94-78 B 92%

Margin (Valuation Reviewer) 1 71-25% 12-75% 95%

Ibute 1: Collabor Reviewer) 1 71-25% 212-31% 105%

Department Charits

To assess the impact of the new table, we calculated reserves for the 239,381 claims open at the end of 2014

Reserves are calculated using the experience tables and then adding in the margins

Results are quite close 99% and 92%

Margins are quite ligh for the 2005 Table. We feel that the lower margin is appropriate given that the 2022 Table has more data, more variables and a much stronger technique

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# Comparison of 2005 and 2022 Tables (cont.) | Total - All Beards Periods | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.0 2005 | 50.

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	Δ	G 44—Margins
		The current AG 44 assesses margin on each decrement separately
		25% for mortality, i.e., mortality rates are multiplied by 125%
		<ul> <li>35% for recovery, i.e., recovery rates are multiplied by (1-35% or 65%)</li> </ul>
		<ul> <li>These margins were based on Krieger's work in 1970 and result in a very high overall reserve margin of 21.0%, as well as even higher margins for "To Age 65"</li> </ul>
		Under our proposal, the base reserve is first calculated on an experience basis, with the margin applied after
		<ul> <li>Margins start at 15% and grade down to 5% for companies with fully credible experience</li> </ul>
		<ul> <li>The formula, which is based on that for group long-term disability, is provided in the proposed revision to AG 44</li> </ul>
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□ We feel strongly that the proposed table is a very good representation of industry experience. We also want to enable companies to reflect their own experience.

 □ We continue the practice of assessing credibility separately for mortality and recovery. We assess credibility separately by duration group, as follows:

 □ Group 1: durations up to 24 months
 □ Group 2: durations 24 to 60 months
 □ Group 3: duration over 60 months
 □ For full credibility, each mortality group requires 800 claims; recovery requires 1,700 claims.

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## AG 44—Retroactivity

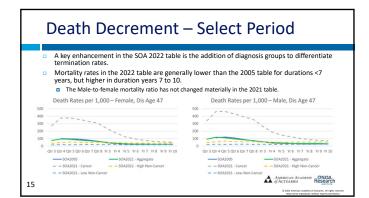
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- Our proposed revised AG 44 is provided.
- Because this table is an enhancement to the prior version, our proposal would allow companies to apply it, along with the AG 44 revisions, retroactively to all claims at their election.
  - Note that the current AG 44 allows an insurer to apply the 2005 Table retroactively to pre-AG 44 claims subject to the approval of the commissioner in the state of domicile.

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## Appendix The following slides illustrate the impact of the diagnosis groupings Death decrement – select period Death rates – select period table compare Death rates – ultimate period Recovery decrement – select period Recovery rates – select period table compare Recovery rates – select period table compare Recovery rates – ultimate period Recovery rates – ultimate period



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# Death Rates — Ultimate Period Diagnosis will differentiate ultimate death rates in the 2022 table. Notably, the 2022 table ultimate mortality for males is higher than the 2005 table for ages 42 to 70. Female ultimate mortality is also generally higher, but to a lesser degree. Death Rates per 1,000 – Female, Att. Age Death Rates per 1,000 – Male, Att. Age

Recovery Rates — Select Period

Like death rates, diagnosis group will be utilized to differentiate recovery rates in the 2022 table.

The 2022 table has recovery rates 2-3x higher than the 2005 table for the first 4 years of disability for all disability ages.

Female recovery rates remain 10-20% higher than male rates, based on the underlying experience data.

Recovery Rates per 1,000 – Female, Dis Age 47

Recovery Rates per 1,000 – Male, Dis Age 47

Recovery Rates per 1,000 – Male, Dis Age 47

Recovery Rates per 1,000 – Male, Dis Age 47

Recovery Rates per 1,000 – Male, Dis Age 47

Recovery Rates per 1,000 – Male, Dis Age 47

Recovery Rates per 1,000 – Male, Dis Age 47

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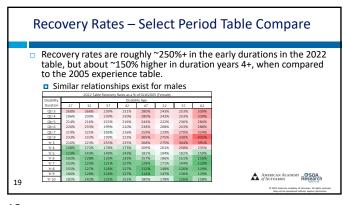
Recovery Rates per 1,000 – Male, Dis Age 47

Recovery Rates per 1,000 – Male, Dis Age 47

Recovery Rates per 1,000 – Male, Dis Age 47

Recovery Rates per 1,000 – Male, Dis Age 47

Recovery Rates



Piagnosis will differentiate ultimate recovery rates in the 2022 as well.

Diagnosis will differentiate ultimate recovery rates in the 2022 as well.

The Mid diagnosis group does in fact exhibit higher recovery rates than the high diagnosis group.

The 2022 table will have recovery rates 150-200% higher than the 2005 table in the ultimate period.

Recovery Rates per 1,000 – Female, Att. Age

Recovery Rates per 1,000 – Male, Att. Age

Recovery Rates per 1,000 – Male, Att. Age

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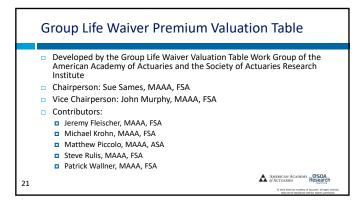
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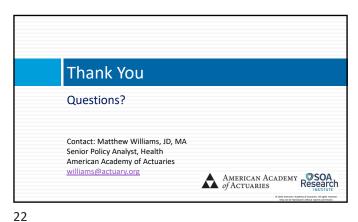
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Draft: 7/5/22

## Long-Term Care Actuarial (B) Working Group Virtual Meeting June 24, 2022

The Long-Term Care Actuarial (B) Working Group of the Health Actuarial (B) Task Force met June 24, 2022. The following Working Group members participated: Tomasz Serbinowski, Chair (UT); Jennifer Li (AL); Lisa Luo (CA): Paul Lombardo (CT); Hannah Howard (FL); Marti Hooper (ME); Michael Muldoon (NE); Bill Carmello (NY); Craig Kalman (OH); Andrew Schallhorn (OK); Steve Boston (PA); Andrew Dvorine (SC); and Aaron Hodges (TX).

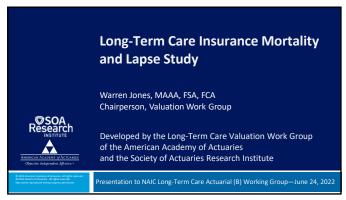
## 1. Discussed an LTCI Mortality and Lapse Study

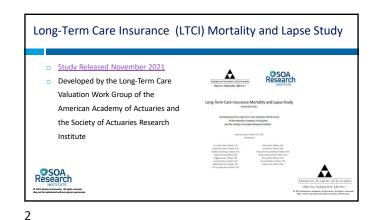
Warren Jones (Retired) gave an update (Attachment Three-A) to the American Academy of Actuaries (Academy) and Society of Actuaries (SOA) Research Institute's Final Long-Term Care Insurance (LTCI) Mortality and Lapse Study (Mortality and Lapse Study) as requested by the Working Group during its March 9 meeting. He said the Academy Long-Term Care Valuation Work Group used more recent SOA Long-Term Care Intercompany Experience Study data in a comparison to the Mortality and Lapse Study's earlier experience data. He said the more recent experience data has significant limitations that affect its use and that the original earlier data set is a much better data source than the newer source for the purpose of creating a valuation mortality table.

Mr. Serbinowski said the Working Group will draft a set of questions concerning the use of marital status and risk class adjustments, as well as the use of static versus generational tables to be included with an exposure of the Mortality and Lapse Study recommended tables. He said the questions and recommended tables will be exposed in early July for a public comment period of 60 days.

Having no further business, the Long-Term Care Actuarial (B) Working Group adjourned.

Meetings/Member Meetings/B CMTE/HATF/2022 Summer/LTCAWG/06-24-22/Minutes LTCAWG 06-24-22docx





## Requests of the LTC Valuation Work Group

- Develop a replacement mortality table for LTCI active life reserves
  - o Based on the 2012 Individual Annuity Mortality Table
  - Recommend a margin for conservatism
- Develop a replacement lapse table
  - Recommend a margin for conservatism
- Consider developing tables for valuation on total lives basis as well as active lives basis



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## **Mortality Valuation Tables**

- Developed valuation mortality table
  - Mortality is select and ultimate; all previous valuation mortality tables have been aggregate
  - Optional factors are provided for marital status and risk
  - Mortality tables are provided for both total lives and active lives (off-claim) exposures

Margin for valuation mortality tables is included Tables are included in the report as an Excel file

## **Data Source**

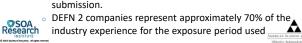
- □ SOA/LIMRA LTC Voluntary Lapse and Mortality Experience Study
  - Comprised of experience data from 2000 through 2011 for 22 companies
- □ Selected the observation period 2008–2011 to reflect more recent trends
- Identified certain participating companies with relatively more accurate data submitted





## **Data Source**

- Data from 10 companies (DEFN 2 in Report) satisfied the following conditions:
  - Deaths are separately identified from lapses
  - Unknown terminations are less than 25% of total
  - Performed matching with Social Security death records within the previous three years from the date of





## More Recent Experience Study

- Long-Term Care Intercompany Experience Study— Aggregate Database 2000–2016 Report published August 12, 2020
- Limitations:
  - Credible data for ages over attained age 80 by individual age from few companies that submitted directly to LIMRA
  - Data via MIB is aggregated for attained ages over 90 and LIMRA has grouped the data for ages 80-90

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## More Recent Experience Study

- Limitations Continued:
  - Not able to apply DEFN 2 filter used by the 2016 study. DEFN 2 filter provided a better determination of mortality v. lapse
  - Not able to do the same level of validation due to limitations of the data provided and length of time between the data submissions to MIB and when received at LIMRA (over 1 year)
  - Not able to calculate active life exposures; only total life mortality can be calculated

o Only 6 of the original 10 DEFN companies participated in both studies

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Conclusions

- 2016 study has more exposures (2012–2016)
- 2016 experience includes data for more recent period (2016 v. 2011)
- 2016 study has significant limitations that impact its use
- By including the DEFN 2 filter, the 2011 study is a much better data source than the 2016 source for purpose of creating a valuation mortality table
- Limitations of the 2016 study should be considered when designing future
   LTCI mortality experience studies that could be used to develop valuation
   mortality tables

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2023 American Academy of Achievies, Al egylis, men May not be repolacies without egyens provisora. **Additional Information** 

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A Powerful Industry Partnership

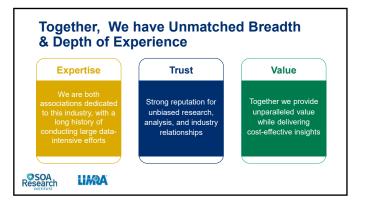
In 2021, LIMRA and the SOA Research Institute entered into a partnership to support the industry with a comprehensive program of industry experience studies.

This program will provide timely, consistent, and comprehensive releases of industry experience data — providing you with the necessary tools for addressing product development, pricing, and regulatory strategies.

Research LIMPA

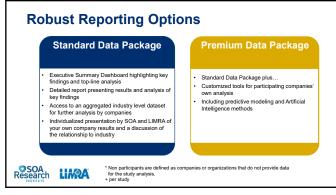
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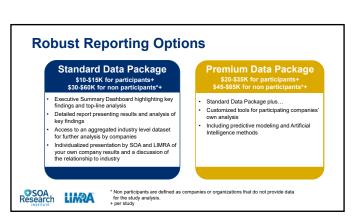
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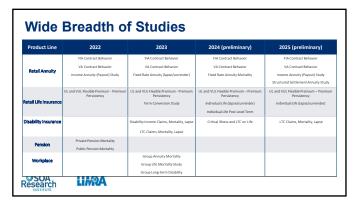




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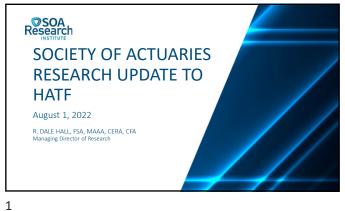




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## Background

- · This research follows upon previous work, including:
  - SOA study released in March 2017: Medicaid Managed Care Organizations:
  - Considerations in Calculating Margin in Rate Setting
  - https://www.soa.org/Files/Research/medicaid-managed-report.pdf MHPA study and model published in June 2019: Underwriting Gain Development for
  - Managed Medicaid Capitation Rates
- Worked with industry to create current project and Project Oversight Group
- Highlighted at SOA Health Meeting in June

## Historical Underwriting Margins and Ratios Realized

	Underwriting Margin <sup>1</sup> included in Rate Development	Actual Underwriting Ratio <sup>2</sup> from NAIC filings	% of MCOs operating at a Loss <sup>2</sup> from NAIC filings
2016	1.30%	1.36%	32.5%
2017	1.29%	0.27%	37.6%
2018	1.29%	0.66%	36.8%
2019	1.18%	(0.25%)	48.1%
2020	1.15%	2.89%	23.1%
Overall Average	1.24%	0.99%	35.6%

## Purpose of the Underwriting Margin Model

To calculate the cost of capital and determine the risk margin necessary to achieve a user defined target of

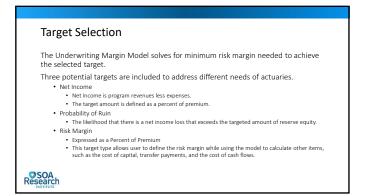
- net income before taxes, or
- · the probability of ruin

### while considering:

- · cost of capital. transfer payments,
- cash flow considerations, and
- · unachieved withholds

Note: All components are dependent on each other.

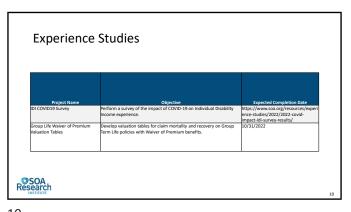




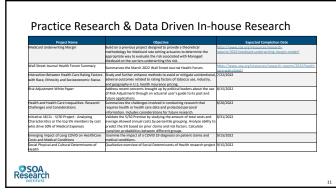


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## **About the American Academy of Actuaries**

The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy and its boards also set qualification, practice, and other professionalism and ethical standards for actuaries credentialed by one or more of the five U.S.-based actuarial organizations in the United States.

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## **Public Policy and the Academy**

The Academy, through its public policy work, seeks to address pressing issues that require or would benefit from the application of sound actuarial principles. The Academy provides unbiased actuarial expertise and advice to public policy decision-makers and stakeholders at the state, federal, and international levels in all areas of actuarial practice.

**Health Practice Council—Key Policy Priorities for 2022** 

- Health Equity
- □ COVID-19: Implications for Health Care Utilization and Spending
- Insurance Coverage
- Long-Term Care
- Medicare Sustainability
- Payment and Delivery Reform
- Climate Change and Health

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## **Health Equity**

- Issue Briefs:
  - Data Collection for Measurement of Health Disparities (forthcoming)
  - Health Risk Assessment and Risk Adjustment in the Context of Health Equity (forthcoming)
- Comment Letters:
  - Comment letter to the Colorado Division of Insurance on the implementation of Colorado Revised Statute (C.R.S.) § 10-3-1104.9. The law prohibits unfair discrimination based on certain personal characteristics—race, color, national or ethnic origin, religion, sex, sexual orientation, disability, gender identity, or gender expression—in any insurer practice. It also prohibits the use of external data, algorithms, or predictive models that unfairly discriminate against individuals with these characteristics. (2022)

## **COVID-19: Implications for Health Care Utilization and Spending**

- □ Issue Briefs / Papers:
  - Considerations for Reflecting the Impact of COVID-19 in Medicaid Managed Care Plan Rate **Setting** (2021)
- Webinars:
  - May 24 "Health Spending Projections in the Wake of COVID-19" (Webinar)

# Health Insurance Coverage Issue Briefs: Privers of 2023 Health Insurance Premium Changes (and infographic) (2022) Comment Letters: Comments on Family Glitch Proposed Rules (2022) Comments on Draft 2023 Actuarial Value (AV) Calculator Methodology (2022) Comments on 2023 Notice of Benefit and Payment Parameters (NBPP) (2022) Comment Letter to CMS/CCIIO on Exposure Draft of Risk Adjustment Technical Paper (2021) Virtual Briefing: July 5 – "Drivers of 2023 Health Insurance Premium Changes"



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# Payment and Delivery Reform Issue Briefs: Implications of Hospital Price Transparency on Hospital Prices and Price Variation (2022) Comment Letters: Comments on 2023 Notice of Benefit and Payment Parameters (NBPP) (2022) Comments to CMS on Payment Parameters Proposed Rule (2021) Webinars: April 14 - "Hospital Prices: Can Greater Price Transparency Drive Lower Prices and Reduce Price Variation?" May 24 - "Health Spending Projections in the Wake of COVID-19"

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# Climate Change and Health In November of 2021, the Academy launched the Climate Change Joint Task Force ■ Membership is comprised of members from the Health, Casualty, Life, and Pension practice areas and is organized under the Risk Management and Financial Reporting Council (RMFRC) ■ Comment Letters: ■ Comment Letter to the International Sustainability Standards Board (ISSB) on the exposure draft of Climate-related Disclosures (due on July 29, 2022) ■ Comment Letter to the Securities and Exchange Commission's (SEC) request for public input on the enhancement and standardization of climate-related disclosures. (2022) ■ Comment Letter on the RFI from the U.S. Department of Labor (DOL) Employee Benefits Security Administration (EBSA) on possible Agency Actions to Protect Life Savings and Pensions from Threats of Climate-Related Financial Risks (2022) ■ Comment Letter on the RFI from the U.S. Department of the Treasury and FIO on Climate-Related Financial Risk and the Insurance Sector (2021)—and forthcoming to the Department of Labor on Environmental, Social, and Governance (ESG)

HPC NAIC Workstreams—HRBC

□ Health Risk-Based Capital (E) Working Group (HRBC)
□ Request for Comprehensive Review of the H2—
Underwriting Risk Component and Managed Care Credit
Calculation in the Health Risk-Based Capital Formula
□ July 2021 Academy comment letter
□ January 2022 Academy report
□ July 2022 Timeline Letter

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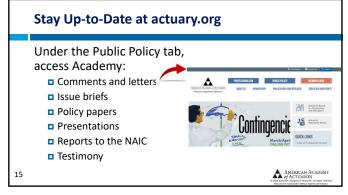
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# HPC NAIC Workstreams—LTCAWG ■ NAIC Long-Term Care Actuarial (B) Working Group ■ Long-Term Care Insurance Mortality and Lapse Study ■ Original request from the NAIC LTCAWG ■ Report released November 2021 ■ Developed by the Long-Term Care Valuation Work Group of the Academy and SOARI ■ Exposed by the NAIC LTCAWG until Sept. 5, 2022 ■ Presentation to NAIC HATF in November 2021 ■ Update presentation to NAIC LTCAWG in June 2022

## Academy 2022 Annual Meeting and Public Policy Forum "Envision Tomorrow: American Academy of Actuaries 2022 Annual Meeting and Public Policy Forum" in Washington, D.C. November 2 and 3, 2022 Health-specific breakout sessions: Health Care Workforce Shortages Climate Change and Health Regulating the Affordable Care Act: What's New for 2023? Will feature representatives from the Center for Consumer Information and Insurance Oversight (CCIIO) of the Centers for Medicare & Medicaid Services (CMS)

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