# Company Practice Survey of Individual Life Insurance Accelerated Underwriting – Preliminary Results

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#### Introduction

This report presents preliminary results from research initiated by the Reinsurance Section on company practices related to individual life insurance Accelerated Underwriting (AU).

Milliman was hired to conduct an AU survey for the SOA and independent surveys were sent to direct companies and reinsurers.

27 direct companies with AU programs responded to the direct company survey and 5 reinsurers responded to the reinsurer survey.

Most answers received were based on information/data between 1/1/2017 to 9/30/2018.

The following pages recap a May 21, 2019 presentation of the preliminary results given by the leaders of the Milliman research team, Al Klein and Karen Rudolph, at the SOA Life and Annuity Symposium.



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## Direct Company Practices

## **Accelerated Underwriting**

"Any fully underwritten life insurance program that allows some applicants to forgo having a medical or paramedical exam and providing fluids, if they meet certain requirements and/or meet a certain pre-determined threshold."

#### When AU programs began

27 companies responded

YEAR PROGRAM BEGAN	NUMBER OF COMPANIES	STILL IN TEST MODE
2011	1	
2014	2	
2015	1	
2016	5	
2017	8	3
2018	10	2



#### **Products that have AU programs**

27 companies responded with between 1 (13 co.) and 6 (1 co.) products

AU PRODUCTS			
PRODUCT	NUMBER OF COMPANIES		
Term	23		
<b>Equity Index Life</b>	10		
Whole Life (Par/Nonpar)	9		
Other UL (Other than ULSG)	9		
<b>UL with Secondary Guarantee</b>	8		
Variable UL	5		
Interest Sensitive Whole Life	1		



#### **Limitations**

Age, Amount, Risk Class

#### **AU Age and Amount Limits**

Age Limits – 27 companies responded

MINIMUM AGE		
MEASURE AGE		
Low	18 (21 co.)	
Average	19.7	
High	50	
Most common	18 (21 co.)	

MAXIMUM AGE		
MEASURE	AGE	
Low	39 (3 co.)	
Average	55.2	
High	85	
Most common	60 (8 co.)	



#### **AU Age and Amount Limits**

Face Amount Limits – 27 companies responded

MINIMUM FACE AMOUNT		
MEASURE FACE AMOUNT		
Low	\$0 (10 co.)	
Average	\$54,000	
High	\$150,000	
Most common	\$100,000 (12 co.)	

MAXIMUM FACE AMOUNT			
MEASURE FACE AMOUNT			
Low	\$300,000 (2 co.)		
Average	820,000		
High	\$2,500,000		
Most common	\$1,000,000 (11 co.)		



#### **Risk Class Limitations**

27 companies responded

RISK CLASS LIMITATIONS	NONSMOKER	SMOKER
<u>Available for all</u> risk classes (i.e., no restrictions)	19	16
Available for a <u>limited</u> number of risk classes	8	2
Not available for any risk classes	0	9



## **AU Eligible Applications**

- "Applications for life insurance where:
- (1) an AU program is available,
- (2) age and amount requirements for the AU program are met,
- (3) an agent opts into the program either explicitly or implicitly by going through a specific process (such as a tele-interview), and (4) an agent cannot opt-out of the program once the application has been submitted."

#### Percentage of all applications that are AU eligible

26 companies responded

AU ELIGIBLE APPLICATIONS			
PERCENTAGE NUMBER OF COMPANIE			
1%-25%	9		
26%-40%	6		
41%-60%	8		
61%-75%	1		
76%-100%	2		



## Algorithm

"The process that involves the use of rule sets/tools/calculations to determine who qualifies to have their underwriting requirements waived and if they are waived, what risk class they qualify for."

#### Number of algorithms used in AU process

27 companies responded

AU ELIGIBLE APPLICATIONS			
NUMBER OF ALGORITHMS	NUMBER OF COMPANIES		
1	14		
2	12		
> 2	1		



#### Who created the algorithm?

27 responded with between 1 (3 co.) and 5 (1 co.) resources, most common 3 and 4 (8 co.)

WHO CREATED THE ALGORITHM?			
RESOURCE	NUMBER OF COMPANIES		
Internal underwriting	23		
Internal actuary	22		
Reinsurer	15		
Internal data scientist	11		
Vendor	7		
Consultant	4		



#### Underwriting tools used in AU program algorithms

27 companies responded, but waive requirements (26) and determine risk class (23) had less respondents

TOP 10 UNDERWRITING TOOLS	WAIVE REQUIREMENTS	DETERMINE RISK CLASS
Prescription histories	23	22
MIB	23	19
MVR	21	23
Electronic application	20	19
Tele-underwriting interview	18	19
Credit data	18	9
ID authentication	11	4
Consumer data	10	5
Paper application	9	10
ID verification	8	3

Other tools: Propensity to smoke model (1/0) and write-ins Public Record (2/1), Prior underwriting decisions (1/1), Other insurance coverage (1/0), Previous internal applications (1/0), Proprietary matrix (0/1)



## Assumptions vs. Experience

Waiver by age, Waived vs. Non-waived, Mortality, Lapse, Expenses

#### Waiving of underwriting requirements on AU eligible apps

27 responded, but 14 provided either only one age group or an entry only for all ages

% AU ELIGIBLE EXPECTED TO WAIVE			
Measure	IA ≤ 50	IA > 50	ALL AGES
Average	42%	43%	47%
Most common	40% (3 co.)	15% (2 co.)	40% (3 co.)

% AU ELIGIBLE ACTUALLY WAIVED							
Range	IA ≤ 50 IA > 50 ALL AGES						
1%-25%	7	5	9				
26%-50%	7	4	7				
51%-75%	5	1	6				
76%-100%	2	2	3				
Average	40%	38%	44%				

16 companies indicated actual was lower than expected, 7 indicated higher, 4 the same



#### Assumptions for waived vs. not waived policies

26 companies responded for best NS class, 24 for all risk classes

### PRICING ASSUMPTIONS FOR POLICIES WHEN UNDERWRITING REQUIREMENTS WAIVED VS. WHEN UNDERWRITING REQUIREMENTS NOT WAIVED

ASSUMPTION: WAIVED WAS	BEST PREFERRED NONSMOKER CLASS	ALL RISK CLASSES
> 10% Lower	0	0
1%-10% Lower	1	2
The Same	6	6
1%-10% Higher	12	12
> 10% Higher	7	4



#### How does mortality experience compare to assumptions?

9 companies responded

MORTALITY EXPERIENCE VS. ASSUMPTIONS					
EXPERIENCE WAS	WHEN REQUIREMENTS WAIVED	WHEN REQUIREMENTS NOT WAIVED			
> 10% Lower	0	0			
1%-10% Lower	1	1			
The Same	2	0			
1%-10% Higher	2	6			
> 10% Higher	4	2			



#### Lapse experience

Lapse experience below is based on duration 1-2 experience, 5 companies responded

- 4 of 5 responding companies indicated their lapse experience on policies that qualified to have the underwriting requirements waived was lower than expected, with the other company indicating the experience was higher
- 3 of 5 responding companies indicated their lapse experience on policies that qualified to have the underwriting requirements waived was lower than fully underwritten experience, with 1 being about the same and 1 being higher



#### **Expenses considered for pricing purposes**

26 companies responded

EXPENSE	CONSIDERED	NOT CONSIDERED		
Medical/paramedical exam	24	2		
Fluid testing	24	2		
Additional data sources	23	3		
Underwriters' time	19	7		
Design of program	3	22		
Implementation of program	3	22		
Development of algorithm	2	23		
Other expenses considered included: Fee per applicant, Reinsurance, Tele-underwriting interview, Cost				

Other expenses considered included: Fee per applicant, Reinsurance, Tele-underwriting interview, Cost of using third party model, and Value of fewer not-takens; 1 indicated they will add more next time

2 companies indicated that the costs were amortized and 18 companies indicated they weren't



#### **Other Measures**

Incomplete, Withdrawn, Not taken

## Incomplete

"Applicant did not provide enough information for the algorithm/underwriter to make a decision (the case usually is changed to Incomplete after a waiting period)."

#### Withdrawn

"The applicant withdraws their application either pre or post the underwriting decision."

#### Not taken

"The applicant receives the policy but opts not to sign it or surrenders during the free look period. The latter might be difficult for companies to retrieve since it often resides in the Inforce Admin system rather than the New Business system."

#### **Incomplete applications**

17 companies responded, but some did not respond to all categories. Also, 4 companies indicated they could not split between incomplete and withdrawn and 2 companies indicated they could not split between incomplete, withdrawn, and not taken. In each of these cases, the percentages were divided equally between the categories.

INCOMPLETE					
MEASURE	% OF FULLY U/W BUSINESS PRIOR TO AU	% WHEN WAIVED			
Low	2% (2 co.)	1%	1% (4 co.)		
Average	7%	6%	5%		
High	14% (2 co.)	16%	9% (2 co.)		
Most common	8% (3 co.)	3% (3 co.)	1% (4 co.)		



#### Withdrawn applications

17 companies responded, but some did not respond to all categories. Also, 4 companies indicated they could not split between incomplete and withdrawn and 2 companies indicated they could not split between incomplete, withdrawn, and not taken. In each of these cases, the percentages were divided equally between the categories.

WITHDRAWN					
MEASURE	% OF FULLY U/W BUSINESS PRIOR TO AU	% WHEN WAIVED			
Low	2% (2 co.)	2% (2 co.)	1% (3 co.)		
Average	6%	7%	4%		
High	13%	19%	10%		
Most common	8% (4 co.)	8% (3 co.)	7% (3 co.)		



#### **Not Taken applications**

17 companies responded, but some did not respond to all categories. Also, 4 companies indicated they could not split between incomplete and withdrawn and 2 companies indicated they could not split between incomplete, withdrawn, and not taken. In each of these cases, the percentages were divided equally between the categories.

NOT TAKEN				
MEASURE	% OF FULLY U/W BUSINESS PRIOR TO AU	% WHEN WAIVED		
Low	0% *	1% (4 co.)	0% *	
Average	7%	5%	4%	
High	29%	11% (2 co.)	14%	
Most common	8% (3 co.)	1% (4 co.)	3% (4 co.)	

<sup>\*</sup> This a small percentage that rounds to 0%.



## Random Holdouts

"are where a company decides to put an applicant, who has qualified to have their requirements waived, through full underwriting. This is typically done randomly, e.g., every 10th case, every 25th case, etc."

#### **Random Holdouts**

15 companies responded

RANDOM HOLDOUTS				
MEASURE PERCENTATGE HELD OUT				
Low	0.5%			
Average	5.9%			
High	11%			
Most common	5% (5 co.)			



## **Post-Issue Audits**

"are when an insurance company collects additional information on the applicant after the policy has been issued, e.g., an APS, to help determine if they missed any important information when they waived the underwriting requirements for that applicant."

## Estimate of underwriting findings from random holdouts and post-issue audits

14 companies responded on random holdouts and 8 companies responded on post-issue audits

FINDINGS	POSITIVE		NEGATIVE			
AUDIT	BETTER THAN EXPCT'D	AS EXPCT'D	WORSE RISK CLASS	SMOKER	SUB-STD	DECLINE
Random holdouts	6%	79%	12%	1%	2%	1%
Post-issue audits	3%	84%	9%	1%	2%	1%
Test of Random Holdout Mortality	75%	100%	125% 200% 200% 800%			
Resulting mortality is 112.5%.						



#### Post-Issue Audits – Targeted vs. Actually Audited

8 companies responded to % targeted and 7 responded to % audited

TARGETED			
MEASURE PERCENTATGE TARGETED			
Low	2%		
Average	10.1%		
High	20%		
Most common	5% (2 co.)		

AUDITED		
MEASURE	PERCENTAGE AUDITED	
Low	1%	
Average	7.1%	
High	15%	
Most common	None were same	

4 companies indicated a lower % for actually audited and 3 indicated the same %



#### Top 3 reasons for conducting post-issue audits

13 companies responded with 2 companies providing only their top reason

REASON		RANK				
		2	3	Wt'd Rank		
Determine magnitude of cases that slipped through	5	3	0	21		
Determine weaknesses in underwriting process *	3	2	7	20		
Determine % of cases that slipped through	2	3	2	14		
Determine if applicant smokes	2	1	1	9		
Be able to quickly catch errors and make changes	0	2	1	5		
Other companies do it	1	0	0	3		
* One company in directed they lead for work to atropath an undersur						

<sup>\*</sup> One company indicated they look for ways to strengthen underwriting process



#### **Tools used for post-issue audits**

14 companies responded with between 1 (5 co.) and 4 (1 co.) tools

TOOL	NUMBER OF COMPANIES
APS	10
MIB Plan F Follow up	6
<b>Prescription histories</b>	5
Inspection report	1
MIB	1
MVR	1
Consumer data	0
Credit data	0
Identification check	0
Telephonic follow up with insured	0
Other tool (write-in): Consulting company	



#### **Disclosures**

Waiving requirements, Rescissions

# When post-issue audit finds a case that should have been declined

13 Respondents

DO YOU RESCIND THE POLICY?		
Yes, in all circumstances	1	
Yes, some in some circumstances*	12	
Never	0	



<sup>\* 2</sup> companies indicated that they are currently reviewing their policy

# Reasons for rescinding a AU policy

23 Respondents

#### WILL YOU RESCIND A POLICY UNDER YOUR AU PROGRAM FOR:

REASON	NUMBER OF COMPANIES
Material nondisclosure	16
Material misrepresentation	21
Other reasons	0
Not applicable, we never rescind	2



<sup>\* 2</sup> companies indicated that they use the same rules as on traditional underwriting

# Reasons for rescinding a AU policy

21 Respondents

	DO YOU EXPECT THE FOLLOWING TO BE LESS, THE SAME, OR MORE THAN ON YOUR TRADITIONAL PROGRAMS?			
LEVEL	MATERIAL NONDISCLOSURE	MATERIAL MISREPRESENTATION	FRAUD	
Less *	1	1	1	
Same	8	6	13	
More **	11	12	4	
# Companies	20	19	18	

<sup>\*</sup> The company that indicated less nondisclosure and misrepresentation did so because they have a different underwriting approach for AU.

<sup>\*\*</sup> Six companies indicated that they felt that there may be slightly more nondisclosure, but it shouldn't be significant.

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# When requirements are not waived

DO YOU RETAIN THE FOLLOWING?				
	REASON SOURCE			
Yes	22	20		
No	3	3		
% Yes	88%	87%		
# Companies	25	23		

DO YOU DISCLOSE THE FOLLOWING?			
	REASON	SOURCE	
Yes	6	6	
No	18	16	
% Yes	25%	27%	
# Companies	24	22	



# **General Questions**

Filing, Changes, Challenges

# Filing flexibility

24 Respondents

# DO YOU FILE YOUR AU APPLICATION TO ALLOW FOR FLEXIBILITY, I.E., NOT HAVING TO REFILE FOR CHANGES?

	NUMBER OF COMPANIES
Yes, as much as we could	12
Yes, to a limited extent	5
No	7



# **Highlights of Current/Planned Changes**

As of 2018 companies indicated they were working on or planned changes to:

- Their algorithms (15), with 7 to be additions and 6 to be less restrictive
- The way they collect app data (8)
- Their data sources (8), with 7 being new additions
- Face Amount limits (11), with all 11 being less restrictive
- Instant decisions (5), with all being new additions
- Issue age limits (7), with 6 being less restrictive
- Products (5), with all being new additions
- Random holdouts (8), with half making them more and half making them less restrictive
- Risk classes that can qualify for waiver (6), with 5 being added and 6 being less restrictive
- Vendor score(s) (5), with 4 being less restrictive



### Top 5 challenges in designing/developing your AU program

27 companies responded

RANK					
1	2	3	4	5	Wt'd Rank
3	1	7	2	3	47
3	2	3	6	1	45
3	5	1	2	0	42
5	2	1	1	1	39
3	3	1	0	2	32
2	1	3	2	1	28
2	2	1	0	0	21
0	1	4	0	4	20
2	1	1	1	0	19
0	1	2	4	0	18
1	2	1	0	1	17
1	2	0	0	2	15
1	0	1	1	1	11
0	0	1	2	3	10
0	0	0	4	2	10
	3 3 5 3 2 2 2 0 2 0 1 1 1	3 1 3 2 3 5 5 5 2 3 3 3 2 1 2 2 0 1 2 2 0 1 1 2 1 0 1 1 2 1 1 2 1 1 0 0 0 0	1     2     3       3     1     7       3     2     3       3     5     1       5     2     1       3     3     1       2     1     3       2     1     3       2     1     1       0     1     4       2     1     1       0     1     2       1     2     0       1     0     1       0     0     1	1     2     3     4       3     1     7     2       3     2     3     6       3     5     1     2       5     2     1     1       3     3     1     0       2     1     3     2       2     1     3     2       2     2     1     0       0     1     4     0       2     1     1     1       0     1     2     4       1     2     0     0       1     0     1     1       0     0     1     2	1     2     3     4     5       3     1     7     2     3       3     2     3     6     1       3     5     1     2     0       5     2     1     1     1       3     3     1     0     2       2     1     3     2     1       2     1     3     2     1       2     1     0     0     4       2     1     1     1     0       0     1     2     4     0       1     2     1     0     1       1     2     1     0     1       1     2     0     0     2       1     0     1     1     1       0     0     1     2     3

Other challenges had 1-2 votes (Wt'd Rank): Other internal stakeholder buy-in (8), Internal actuarial buy-in (4), Rescissions from post-issue audit findings (3), Random holdouts (2), Reinsurer buy-in (2), Vendor buy-in (2), Post-issue audits (1), Determining lapse assumptions (0), Write-ins: Filing and approval of new app (5), Updating preferred criteria (4)

# Direct Company PBR

# Aggregation (of Mortality Segments) in the Valuation Manual

# 2017, 2018, 2019 Valuation Manuals

- No contemplation for aggregating policy groups with dissimilar underwriting (as well, "similar" underwriting not defined)
- Only adjustments for incremental changes in underwriting, with published medical/clinical studies underpinning the estimated impact, were contemplated

This left Accelerated Underwriting techniques somewhat unguided.....



# **Aggregation (of Mortality Segments) in the Valuation Manual**

### 2020 Valuation Manual

- Permits aggregation of underwriting processes that are expected to produce similar mortality if supported by back-testing performed at least every 3 years, reinsurer studies, or published studies.
- Permits aggregation of underwriting processes for which the expected change to mortality has been reasonably estimated and is due to one or more specific, identifiable modifications to the established underwriting process if supported by back-testing performed at least every 3 years, reinsurer studies, or published studies



# **Aggregation (of Mortality Segments) in the Valuation Manual**

# 2020 language introduces flexibility in aggregating mortality segments

- Without this flexibility AU policy groups would have to stand on their own
  - Critical mass not achieved
  - 0% (or very low) partial credibility
  - Would lead to use of industry table + industry margin

Additional margin for uncertainty considered a requirement

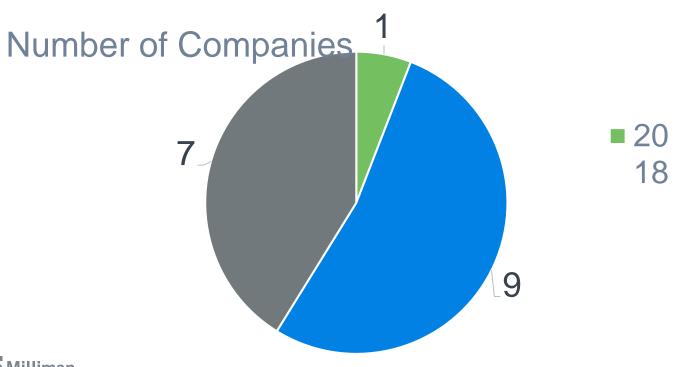


### **VM-20 AUW Mortality Assumption Status**





# **Expected VM-20 Valuation Year for policy groups with AU**





# **Aggregating for VM-20 Credibility**

Of 27 companies with AU programs





# **Supporting Rationale for Aggregating**

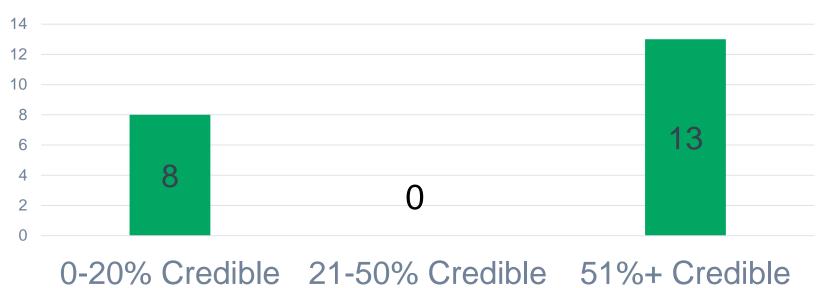






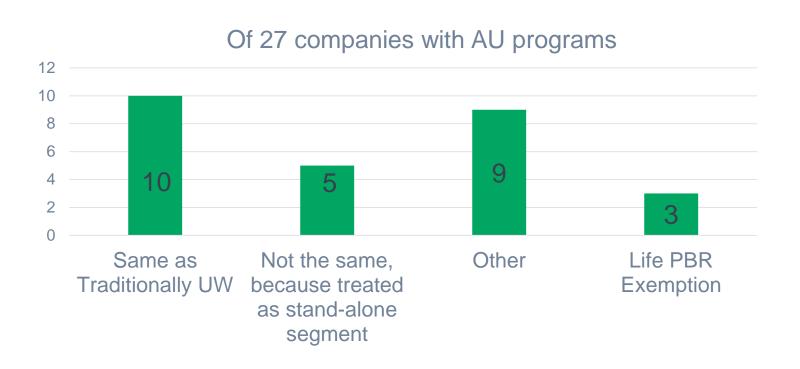
# **Level of Partial Credibility**

### Of the Block That Includes the AU Policies





# **Anticipated Company Experience Mortality**



# **Anticipated Company Experience Mortality**

# Within the "Other" category, these comments

- Treating AU policies similar to treatment for substandard policies
- Are in the early stages of assumption development. Preliminary plans are to use a blended risk factor based on misclassification assumptions within AU segments. Analysis is on-going to determine if company should treat AU as a stand-alone segment
- There is an adjustment to the total mortality to reflect the AU impact, similar to what is done when making other major underwriting policy changes over time.



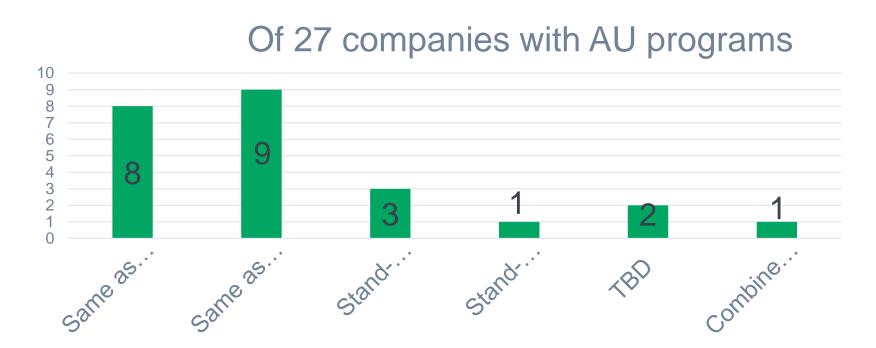
# **Anticipated Company Experience Mortality**

Within the "Other" category, these comments....continued

- Company starts with traditionally underwritten experience and adds adjustments for changes in practice equal to the anticipated percent increase in mortality due to acceleration.
- Company experience plus a factor
- TBD (2)



# **Applicable Company Experience Margin**





# **Applicable Company Experience Margin**

#### **General Comments**

- Treating AU as stand alone, and the additional margin (beyond prescribed margin) is not yet determined
- AU program mortality is expected to be very close to traditionally UW mortality, so the additional margin will be small
- Regulators are looking to change VM-20 to require an extra mortality margin if AU issued policies are involved



# **Applicable Industry Mortality**







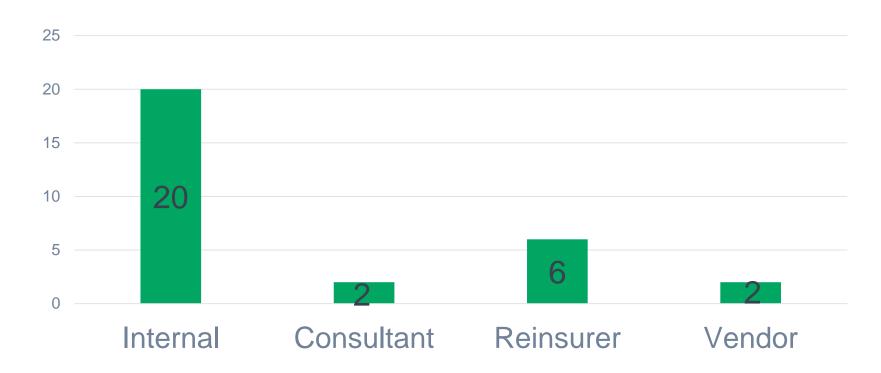
# **Applicable Industry Mortality**

#### **General Comments**

- Would only bump to the next RR table if expected increase was significant enough
- Early stages, have not determined approach



### Individuals/Groups involved in mortality assumption process





# Data sources used to establish mortality expectations

Data Source	Responses
Company's own internal experience data for only policies issued through AU programs	9
Company's own internal experience data <u>not</u> written through AU (ex: traditionally UW policies)	16
Published medical, clinical, actuarial, or industry studies	5
Retrospective demonstrations	14
<u>Consultants</u> have provided the company with its basis for expected mortality for policies issued through AU	1
Reinsurers have provided the company with its basis for expected mortality for policies issued through AU	12



# Reinsurer Opinions

# Introduction

#### Overview

- 5 reinsurers responded to the reinsurer survey, but some did not answer all of the questions
- On some of the ranking questions, a couple of reinsurers decided to use more votes than we gave them



# Range of Expected Mortality when Requirements Waived

RELATIVE TO FULLY U/W MORTALITY LEVELS IN 2018 (AND EXCLUDING MORTALITY IMPROVEMENT), WHERE WILL MORTALITY BE IN 2023?	LOW MORTALITY CLIENT	HIGH MORTALITY CLIENT
More than 50% lower	0	0
More than 20% up to 50% lower	0	0
More than 10% up to 20% lower	0	0
1-10% lower	2	0
Within 1% in either direction	0	0
1-10% higher	3	1
More than 10% up to 20% higher	0	2
More than 20% up to 50% higher	0	2
More than 50% higher	0	0



# Range of Expected Mortality when Requirements Not Waived

RELATIVE TO FULLY U/W MORTALITY LEVELS IN 2018 (AND EXCLUDING MORTALITY IMPROVEMENT), WHERE WILL MORTALITY BE IN 2023?	LOW MORTALITY CLIENT	HIGH MORTALITY CLIENT
More than 50% lower	0	0
More than 20% up to 50% lower	0	0
More than 10% up to 20% lower	1	0
1-10% lower	2	0
Within 1% in either direction	1	1
1-10% higher	1	3
More than 10% up to 20% higher	0	0
More than 20% up to 50% higher	0	1
More than 50% higher	0	0



# Range of Expected Lapse Rates when Requirements Waived

RELATIVE TO FULLY U/W LAPSE RATE LEVELS IN 2018, WHERE WILL LAPSE RATES BE IN 2023?	LOW LAPSE CLIENT	HIGH LAPSE CLIENT
More than 3% lower	3	0
More than 1% up to 3% lower	1	1
Within 1% in either direction	0	3
More than 1% up to 3% higher	0	0
More than 3% higher	0	0
Do not know	1	1



### Range of Expected Lapse Rates when Requirements Not Waived

RELATIVE TO FULLY U/W LAPSE RATE LEVELS IN 2018, WHERE WILL LAPSE RATES BE IN 2023?	LOW LAPSE CLIENT	HIGH LAPSE CLIENT
More than 3% lower	0	0
More than 1% up to 3% lower	1	0
Within 1% in either direction	4	3
More than 1% up to 3% higher	0	2
More than 3% higher	0	0
Do not know	0	0



# Top 5 AU components that have an impact on mortality

4 reinsurers responded, 1 reinsurer provide two votes for rank 2

RANK							
1	2	3	4	5	Wt'd Rank		
1	2	0	1	0	15		
1	0	2	0	0	11		
0	1	1	1	0	9		
1	0	1	0	0	8		
1	0	0	0	2	7		
0	1	0	1	1	7		
0	1	0	0	0	4		
0	0	0	1	0	2		
0	0	0	0	1	1		
	0 1 1 0 0	1 2 1 0 0 1 1 0 1 0 1 0 0 1 0 1 0 0	1     2     3       1     2     0       1     0     2       0     1     1       1     0     1       1     0     0       0     1     0       0     1     0       0     0     0       0     0     0	1     2     3     4       1     2     0     1       1     0     2     0       0     1     1     1       1     0     1     0       0     1     0     0       0     1     0     0       0     0     0     1       0     0     0     1	1     2     3     4     5       1     2     0     1     0       1     0     2     0     0       0     1     1     1     0       1     0     1     0     0       1     0     0     0     2       0     1     0     1     1       0     1     0     0     0       0     0     0     1     0		

Note: One reinsurer added a comment that "the importance of these items will vary by client and program."

# Top 6 Items/Tools for success in AU programs

5 reinsurers responded, 1 reinsurer provided two votes for ranks 3 & 6 and another provided two rank 6 votes

ITEM / TOOL	RANK							
	1	2	3	4	5	6	Wt'd Rank	
Prescription histories	3	1	1	0	0	0	27	
Credit data	0	1	1	2	0	0	15	
MIB	1	0	1	0	2	0	14	
<b>Electronic Health Records</b>	1	1	0	0	1	0	13	
Random holdouts	0	1	1	0	0	2	11	
MVR	0	0	1	2	0	0	10	
Predictive algorithm(s)	0	1	0	0	1	1	8	
Post-issue underwriting	0	1	0	0	0	1	6	
Financial data	0	0	1	0	0	0	4	
Demographic data	0	0	0	1	0	0	3	

#### Advice on design, implementation, or overall success of AU programs

4 reinsurers responded

#### **ADVICE**

Start conservative and expand gradually as you learn.

Be open to new data, but cognizant of how it is currently viewed by regulators, and how it might change in the future.

Be clear on program objectives.

Communicate and train as you develop the program.

Have strong focus on change management and training of staff.

Do back-testing so you have benchmarks to compare to emerging results.

Experience monitoring is critical so you can learn quickly and adjust as issues emerge. Don't wait.

It is essential to have a random holdout process and post-issue audits so data can be collected and analyzed for comparison to your initial pricing assumptions (credible experience studies are a few years out).

Track misrepresentation rates (smoking, BMI, personal/family history), misclassification, and severity of declines that would have been accepted standard or better.

Monitor early duration lapse and preferred class prevalences compared to fully underwritten.

Engage your reinsurance partners for help in setting up your AU program and monitoring process.

# **Concluding thoughts – Part 1**

- AU programs are still relatively new
- They will continue to evolve as:
  - Agents and applicants provide feedback
  - Companies better understand the programs
  - Companies decide how to better position themselves
  - New tools become available
  - Regulatory positions are taken
- I think AU programs provide a more positive customer experience, but companies need to be aware of the extra costs so they maintain their profitability
- I also think that 10 years from now, these programs won't look like they are today



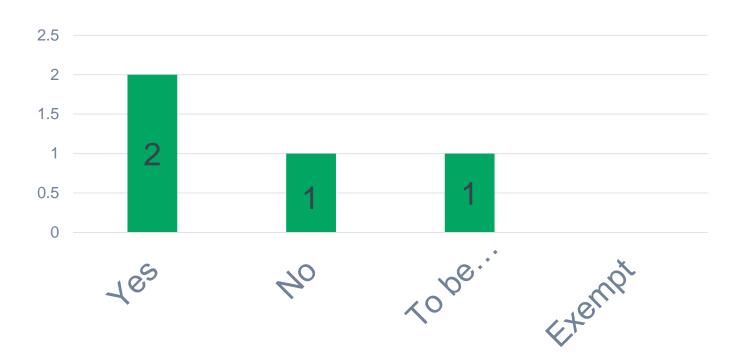
# Reinsurer PBR

# VM-20 AUW Mortality Assumption Status 4 Reinsurer Participants





# **Aggregating for VM-20 Credibility**4 Reinsurer Participants





# **Supporting Rationale for Aggregating 4 Reinsurer Participants**





# **Anticipated Company Experience Mortality and Margin 4 Reinsurer Participants**

Experience Mortality	Responses
The same as for traditionally UW business	1 of 4
Not the same, AU treated as stand-alone segment	2 of 4
Other: "Advancement of predictive analytics tool would be expected to allow companies to get to traditionally UW levels of mortality going forward "	
	1 of 4
Margin on Mortality	Responses
The same as for traditionally UW business	2 of 4
Not the same, AU treated as stand-alone segment	2 of 4



# **Anticipated Company Experience Mortality 4 Reinsurer Participants**

Source of Data used to Establish Expected Mortality	Responses
Companies own internal experience data for only AU policies	3 of 4
Our company's own internal experience data not written through AU program (ex. The traditionally UW policies)	2 of 4
Published medical, clinical, actuarial, or industry studies that demonstrate mortality expectations for policies issue through AU programs as compared to those issue through previously established UW processes	
	2 of 4
Retrospective demonstrations	3 of 4



# **Concluding thoughts – Part 2**

- The report and complete survey results will be posted on the SOA website when done (sometime this year)
- Please contact us with any feedback or questions
- We would like to thank:
  - The SOA for allowing us to do this survey
  - The participating companies for taking the time to complete the survey and for their willingness to share early results and feedback
  - The POG for their insightful help in designing the survey and comments on this presentation



