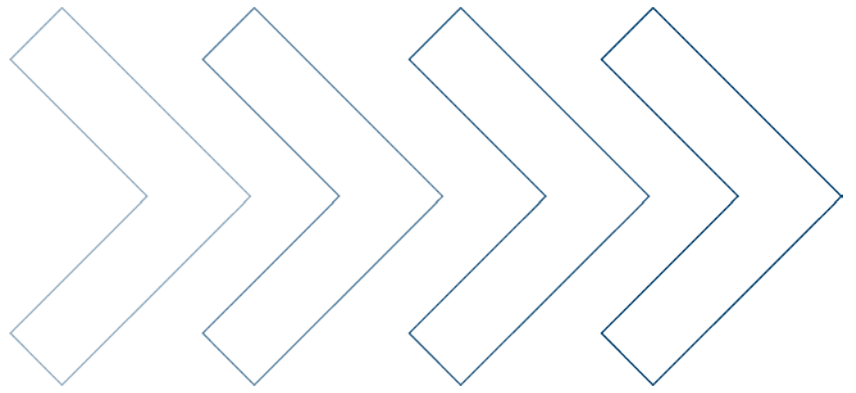




SOCIETY OF
ACTUARIES



2016 Older Age Underwriting Practices Survey Report



March 2017



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Introduction

This Survey was conducted by the Older Age Underwriting Practices Survey Subcommittee of the Society of Actuaries (SOA) Committee on Life Insurance Mortality and Underwriting Surveys. The purpose of this Survey was to elicit feedback regarding underwriting guidelines, requirements, assumptions and practices utilized in the assessment of older age applicants. The Subcommittee's goal was to conduct as comprehensive a survey as possible on older age underwriting practices.

This Survey is a follow up to similar surveys reported in 2001, 2007 and 2013. While many questions remained the same, we also revised some questions and added other ones that are more relevant to the current marketplace. The Subcommittee made comparisons among the results of the three surveys, where appropriate and possible. This Survey included a section on assumption setting, which was not included in the 2001 and 2007 Reports. The 2013 SOA Older Age Survey Report was a different format and focus from the 2001 and 2007 reports. It contains a section on assumption setting. Some, but not all, of the questions in the assumption setting section of this report are follow-ups from the 2013 SOA Older Age Survey Report.

Survey Scope

This Survey was conducted between July and September of 2016. It was sent to chief actuaries and chief underwriters of direct life insurance carriers operating in the U.S. and Canada. We received responses from 29 companies, which is comparable to the 28 companies responding to the 2007 Survey, but a dramatic reduction from the 2001 Survey when there were 88 respondents. The questions to this Survey can be found in Appendix B.

A complete list of participating companies is shown in Appendix A.

The Survey Subcommittee would like to thank all of the respondents who participated in this Survey. We also thank those who helped us review this document and offered helpful suggestions and thoughtful comments. Finally, the Survey Subcommittee thanks the Society of Actuaries staff for their help in completing this project, especially Korrel Rosenberg, without whose help this could not have been completed.

Comments about this report and suggestions for future surveys are welcome and can be addressed to the Committee on Life Insurance Mortality and Underwriting Surveys c/o The Society of Actuaries.

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Executive Summary

The Older Age Underwriting Practices Subcommittee Survey, henceforth referred to as the “Survey,” was designed to provide an overview of the recent state of the underwriting practices for older age applicants and was conducted between July and September 2016. We received 29 responses from direct life insurance carriers in the United States and Canada.

This Survey consisted of eight sections. A brief description and the highlights of each section are as follows:

Section 1 – Products and Programs: The purpose of this section was to obtain general information about the products and programs offered to the older age market. Here are the key findings of this section:

- The most common minimum age for the “older age market” was 70.
- More than half of the respondents reported they had products for the older age market.
- The four most common products offered to the older age market were Permanent Life, UL, Level Term, and Joint and Last Survivor.

Section 2 – Underwriting Resources: This section was focused on obtaining information regarding the underwriting resources used for assessing the older age market.

- The most common underwriting resources were medical director, reinsurer Internet search and geriatric literature.

Section 3 – General, Medical & Non-Medical Risk Evaluation & Testing: The purpose of this section was to obtain information about the various medical and non-medical tests and requirements that were used in the older age market to price and assess risk. This Survey asked similar questions to those found in the reports published in 2001 and 2007, and any pertinent changes or similarities are noted in this report. Some of those included the following:

- The reports from all three years were consistent in that some of the most specifically asked for criteria included being under the regular care of a physician, prescription medication use and driving history.
- There were some medical requirements, such as a Chest X-Ray, that are no longer used by any of those who responded to the Survey.
- There were some non-medical requirements, such as a face-to-face interview (inspection report), that are no longer used by any of those who responded to the Survey.
- Blood testing requirements have changed, most notably was the addition of NT-ProBNP. In the 2001 Report, it was not listed; in the 2007 Report, only one respondent considered it; and in the current report, it was one of the most frequently used tests that was different at the older ages.

Section 4 – Financial Underwriting: The purpose of this section was to obtain information about the financial underwriting of the older age market compared with all markets. This included how the financial position of the proposed insured was reviewed and what coverage limitations existed.

- Many of the requirements used for younger ages were also used at older ages, with the three most frequently used topping both age groups. The most significant change from earlier surveys was the use of the 4506-T in the United States to acquire officially filed tax forms, now at 25% versus no use in 2007.
- The definition of "income" allowed to determine an acceptable coverage limit was limited to "earned income" by 24% of respondents, but 76% allowed other "unearned income" to be included.
- The definition of "older age" on average increased from 64.6 in 2001 to 64.9 in 2007 to 66.4 in 2016.
- This Survey newly addressed the factor used to multiply by income to determine the coverage limit.

Section 5 – Preferred Risk Class Underwriting: The purpose of this section was to review the posture of companies on the use of preferred classes at older ages. This included differences in number of classes, ages permitting minimum and maximum coverage and any exceptions to age limitations.

- Over 85% of respondents had two or more Preferred Non-tobacco classes and 90% had a Preferred Tobacco class.
- The most common age for limiting preferred classes was 85 in all classes except Best Preferred where 80 was the most common.
- There were few retention differences by class.
- Only one respondent indicated allowing an exception to the maximum age allowed for a class.

Section 6 – Reinsurance: The purpose of this section was to obtain information on the use of reinsurance for the older age market compared to the use of reinsurance in general. The Survey found that almost all respondents used reinsurance for older ages, with the most common reasons being to assist in developing underwriting criteria and/or guidelines, and providing additional capacity.

- The percentage of business issued and placed automatically was similar across all ages.
- Slightly less old age business was applied for and placed facultatively.

Section 7 – Assumption Setting: This section asked a series of questions about mortality assumptions used for older ages to better understand the current practices in setting older age assumptions and older age mortality improvement assumptions.

- Seventy-five percent of respondents were using internal experience as the primary source for setting select period base mortality assumptions.
- A few respondents were starting to use the 2015 Valuation Basic Table (VBT) as the primary underlying mortality tables for pricing older age business.
- Seventy percent of the respondents varied mortality improvement assumptions by smoking status.
- Annual mortality improvement rates used by issue age differed noticeably between companies.

Section 8 – Regulatory and Compliance: The purpose of this section was to determine whether any changes were made at the older ages for regulatory and compliance purposes. The results indicated that no significant changes were made to the applications.

Section I. Products and Programs

The purpose of this section was to obtain general information about the products and programs recently offered to the older age market.

1.1 The Survey asked respondents at what age they considered the “older age market” to begin. The results are shown below in Table 1.1.

Table 1.1

Older Age Begins	# of Respondents	% of Respondents
50	2	7%
60	2	7%
65	5	17%
70	12	41%
>70	8	28%
Total # of Respondents	29	100%

The most common age was 70, followed by older than 70. The 2007 Survey Report also indicated age 70 to be the most common age where 31% of the respondents reported the older age market begins at age 70. A similar response was indicated in the 2001 Survey Report where age 70 was also the most common age reported by 27% of the respondents.

1.2 The Survey asked respondents if they had any products for the older age market. Twenty-nine respondents answered this question with 11 saying they did have such products, and the remaining 18 indicating they did not have such products.

1.3 For those respondents who indicated they offered products for the older age market, the Survey asked the minimum age at which the company offered these products. The results are shown below in Table 1.3.

Table 1.3

Minimum Age	# of Respondents	% of Respondents
0	3	27%
18	3	27%
20	1	9%
40	1	9%
50	3	27%
Total # of Respondents	11	100%

The most common minimum ages were 0, 18 and 50.

1.4 The Survey asked respondents if they had programs (i.e., no difference in product offered, but a different marketing or underwriting approach) designed exclusively for the older age market. There were 29 respondents, with 13 (45%) saying they did have such programs. The remaining 16 (55%) respondents did not have a program designed exclusively for the older age market. The 2007 Survey Report indicated a lower percentage (29%) of the respondents offering programs designed exclusively for the older age market.

1.5 The Survey asked the respondents who answered "Yes" to Question 1.4 if their programs varied by product. There were 12 respondents to this question. Three indicated they had a different program for the older age market, while the remaining nine indicated they did not.

1.6 The Survey asked for the minimum age at which these programs were offered. The results are shown below in Table 1.6.

Table 1.6

Minimum Age	# of Respondents	% of Respondents
0	1	8%
18	1	8%
50	3	23%
61	1	8%
65	1	8%
70	3	23%
71	2	15%
80	1	8%
Total # of Respondents	13	100%

Thirteen respondents reported a wide range of minimum ages for older age programs (0-80). The most common minimum ages were 50 and 70. The 2007 Survey Report indicated the most common minimum ages to be 50 and 75.

Additional comments from respondents:

- *Guaranteed Issue and Simplified Products have a different process for applicants age 70 and older, than fully underwritten products*

1.7 The Survey asked respondents to indicate riders/benefits they have sold to the older age market. There were 29 respondents and 66 responses. The results by product are shown below in Table 1.7.

Table 1.7

Individual Rider/Benefit	# of Responses	% of Responses
Accelerated death benefit	17	26%
Accidental death benefit	9	14%
Waiver of premium	9	14%
Critical illness	7	11%
Return of premium	7	11%
None	4	6%
Long-term care	4	6%
Spouse rider	4	6%
Maturity extension rider	3	5%
Disability	1	2%
Other-child rider	1	2%
Nursing home benefit	0	0%
Total # of Respondents	66	100%

The five most common riders or benefits offered to the older age market were Accelerated Death Benefit (26%), Accidental Death Benefit (14%), Waiver of Premium (14%), Critical Illness (11%) and Return of Premium (11%).

Additional comments from respondents:

- *Long term care rider or Enhanced benefit rider*
- *Permanent Life with Accelerated Death Benefit Rider*

Section II. Underwriting Resources

The purpose of this section was to obtain information about the underwriting resources used for assessing the older age market.

2.1 The Survey asked respondents to indicate the resources that were used for assessing the older age market. There were 29 respondents. The resources are shown in Table 2.1.

Table 2.1

Source of Information	# of Responses	% of Responses
Medical director	24	26%
Reinsurer	17	18%
Internet research	16	17%
Geriatric literature	11	12%
Medical physician/consultant	8	9%
Other*	5	5%
Medical nurse	4	4%
Specially trained underwriters	4	4%
Geriatric specialist	2	2%
Medical affiliation with hospital or other provider	1	1%
Specially trained agents	0	0%
Total # of Responses	92	100%

*Other Comments:

- *Underwriting Guidelines specific to Senior Assessment*
- *RX and MIB*
- *regular underwriters*
- *Reinsurance manual (2)*

The most common resources were medical director (26%), reinsurer (18%), internet search (17%) and geriatric literature (12%). This was similar to the 2007 Survey Report, which indicated the most common resources to be a staff medical director, specially trained underwriters and reinsurers.

Section III. Medical and Non-Medical Testing

The purpose of this section was to obtain information about the various medical and non-medical tests and requirements that were used in the older age market to price the risk.

For the purposes of this report, medical criteria are defined as the tests and measurements on the client and the client's fluids, such as blood, urine, physical measurements or medical information taken directly from the applicant during the time of the medical exam. Non-medical is everything else.

Non-Medical Criteria

3.1 The Survey asked companies about their non-medical criteria, and whether or not they specifically requested this information on their older age applicants. The question was further clarified to ask that, if an item was not specifically asked for, whether they would consider it, if they had the information on hand from another source through the course of normal and routine underwriting, or if they would not consider it even if they had the information. Similar questions were asked on prior surveys completed in 2001 and 2007, and some comparisons are noted.

The following tables break down the most common responses. Table 3.1a illustrates the most commonly used non-medical criteria whether specifically asked for or considered, if available. The next two tables, 3.1b and 3.1c, break this down further by identifying which were the most common criteria specifically requested, and the top responses for information that were used, if available, but not specifically requested. Only the top responses are provided in the following tables, with the complete table available in Appendix B.

Table 3.1a Non-Medical Criteria Ranked by Use Whether Specifically Asked For or Considered If Available

Non-Medical Criteria	Specifically Requested	Considered if Available	Total Specifically Requested or Considered if Available % of Responses	Total # of Responses
Wheelchair use	58%	35%	93%	26
Fall history	52%	41%	93%	27
Eating/feeding	50%	43%	93%	28
Regular care of MD	84%	8%	92%	25
Oxygen use	54%	38%	92%	26
Traffic accidents	73%	18%	91%	26
Cognitive skills	54%	36%	90%	28

Table 3.1b Non-Medical Criteria Ranked by Specifically Requested

Non-Medical Criteria	Specifically Requested % of Responses	Total # of Responses
Under regular care of MD	84%	25
Prescription medication use	81%	26
Traffic accidents	73%	26
Assisted mobility	68%	28
Driving	67%	27
Pacemaker use	65%	27
Traffic violations	65%	28

Table 3.1c Non-Medical Criteria Ranked by Considered, but Not Specifically Requested

Non-Medical Criteria	Considered, but not Specifically Requested % of Responses	Total # of Responses
Wandering, being lost	72%	25
Diet and nutrition	68%	25
Multiple drug interactions	64%	25
Quality of diet	64%	25
Behavioral changes	62%	26
Trouble with community/legal	60%	25

The next table indicates the most common responses of criteria that were not considered, even if available.

Table 3.1d Non-Medical Criteria not Considered Even If Available

Non-Medical Criteria	Not Considered even if Available % of Responses	Total # of Responses
Acuity of hearing	64%	25
Acuity of eyesight	56%	25
Pet ownership	56%	25
Use of public transportation	50%	26
Weight training	48%	25

In this Survey, as well as those completed in 2007 and 2001, there were only three non-medical criteria that appeared in all as the highest percentage specifically requested. Those are 1) Under the Regular Care of a Physician, 2) Prescription Medication Use, and 3) Traffic Violations.

When the total percentage of non-medical criteria is considered; specifically requested or considered if available, there is little consistency between 2001 and the current Survey. The two criteria that appear higher on the current Survey are Oxygen use and Wheelchair use as both of these criteria originated in the 2007 Survey.

In the 2001 Survey, some of the highest percentages of non-medical criteria used in the older ages included family history, avocations and aviation, and those criteria were not asked in subsequent surveys.

As for non-medical criteria ranked highest as not even considered, the only consistent response from all the surveys was pet ownership.

There were a number of questions on this Survey that asked about various criteria that may be used that were considered Activities of Daily Living (ADL), routine activities that people tend to do every day without needing assistance. There are between 6-8 basic ADLs that may be considered and they include bathing, dressing, eating, oral care, transferring (including walking) and toileting.

Instrumental Activities of Daily Living (IADL), which are those activities that are not necessary for fundamental functioning, but do help indicate whether or not an individual is able to live independently in a community, can include cooking, shopping, managing medications, using the phone and being able to look up numbers, doing housework, doing laundry, driving or using public transportation and managing their own finances.

While there are some differences in what are considered ADLs and IADLs, the following tables list out what may be commonly categorized as ADLs and IADLs, and the percentage of responses for those activities that were specifically requested, considered if available, or not considered even if available.

Table 3.1e Non-Medical Criteria that may be Categorized as an Activity of Daily Living

Activity	Specifically Request	Consider if Available	Do Not Use	Total # of Responses
Assisted mobility	68%	21%	11%	28
Dressing	56%	33%	11%	27
Toileting	54%	35%	11%	26
Bathing	52%	37%	11%	27
Eating/feeding	50%	43%	7%	28
Physical activity (walking)	48%	33%	19%	27
Bladder/bowel incontinence	41%	44%	15%	27
Transferring	38%	29%	33%	24

Some of the individual categories may lend themselves to being grouped together and considered as a single category, such as toileting and bladder/bowel incontinence, and transferring, physical activity (walking) and assisted mobility. So, while an individual activity may not appear to be considered or specifically requested as frequently as one might expect, the total aggregate of ADLs considered may provide a clearer view as to which criteria were requested or considered.

Table 3.1f Non-Medical Criteria that may be Categorized as an Instrumental Activity of Daily Living
Note: Responses to individual activities that may be related are grouped together, but the percentage of responses listed are for the specific activity listed.

Activity	Specifically Request	Consider if Available	Do Not Use	Total # of Responses
Prescription medication use	81%	8%	12%	26
Over the counter medications	35%	42%	23%	26
Use of alternative medications	24%	48%	28%	25
Multiple drug interactions	16%	64%	20%	25
Traffic accidents	73%	18%	14%	26
Driving	67%	19%	15%	27
Traffic violations	65%	19%	15%	28
Public transportation use	19%	31%	50%	26
Managing finances	50%	29%	21%	28
Housework	44%	26%	30%	27
Meal planning and cooking	41%	26%	33%	27
Diet and nutrition	4%	68%	28%	25
Quality of diet	0%	64%	36%	25
Shopping	38%	27%	35%	26
Laundry	26%	44%	30%	27
Mental activities (Sudoku, numbers)	8%	52%	40%	25

When looking at the responses of criteria specifically requested (Table 3.1c) and criteria considered if available (Table 3.1d), it appears as though more of those who responded to the Survey placed greater importance on the Instrumental Activities of Daily Living than they did on Activities of Daily Living. However, if the activities that received the highest percentage of responses in Table 3.1f are considered, including Prescription Medication Use and the activities related to Driving, it becomes more evident why IADLs appear to carry more weight than ADLs.

From an underwriting point of view, what medications an older age applicant is taking and whether they are taking them properly are strong indicators of early mortality. Accidents and unintentional injury is one of the leading causes of death in the older ages, so the high percentage among those responding to the Survey would be expected.

When the responses from this Survey, and those completed in 2001 and 2007, were compared, it appeared there has been an increasing amount of emphasis placed on criteria that could be categorized as an Instrumental Activity of Daily Living. For example, in 2001, five of the top ten criteria that respondents did not consider at all were IADLs. In another instance, in 2001, 58% of those responding did not consider whether an individual could do their own laundry, whereas in this Survey, only 30% indicated they would not consider that activity.

3.2 The Survey asked if there were different testing requirements at older ages and, if so, what was the youngest age at which the requirement was requested. The results are shown below in Table 3.2.

Table 3.2

Requirement	# of Respondents Who Use	Range of what is considered youngest age	Most common youngest age
Build, or BMI (Body Mass Index)	11	50-75	3 request starting at age 71
Electrocardiogram (EKG)	11	41-81	2 request starting at age 50 2 request starting at age 71
Systolic Blood Pressure	7	50-71	3 request starting at age 71
Diastolic Blood Pressure	7	50-71	3 request starting at age 71
Pulse Rate	3	65-71	2 request starting at age 71
Pulse Pressure	2	61-65	
Treadmill EKG	2	65-70	
Forced Expiratory Volume (FEV1) or other pulmonary function test	1	70	70
Other: glomerular filtration rate (GFR)*	1	70	70
Other: Mature supplement*	1	70	70
Other: Paramed functional exam*	1	71	71

*Note on "Other," it is more than likely that other companies use a mature supplement and/or paramed functional exam, but these were not included on the Survey.

The Survey listed 15 possible requirements, plus an option to add others. Seven of the requirements were not used by any of the respondents.

In the surveys completed in 2001 and 2007, systolic and diastolic blood pressure was the top response, while in this Survey, it was third. Chest X-rays and Echocardiograms were ranked third and fourth in 2001. In the 2007 Survey, they ranked sixth and seventh. Neither of those options was chosen by any respondents in this Survey. Build was the second highest choice in both 2001 and 2007, and moved to the top option in this Survey.

3.3 The Survey asked about various blood profile tests, urinalysis results and physical measurement results. If those tests were used, respondents were asked to identify whether or not the “Normal” results were the same for all ages, higher for the older ages, or lower at the older ages.

Fifty-eight physical measurements, blood and urinalysis test options were included in the Survey. Out of those 58, only 11 test options had any significant changes in the normal variance for the older age market, and those results are provided in Table 3.3 below. A list of all 58 tests is included in Appendix B.

Table 3.3

Test Name	% with Normal Value Higher for Older Ages	% with Normal Value Lower for Older Ages	Total # of Respondents
Blood Pressure: Diastolic	87%	0%	15
Blood Pressure: Systolic	87%	0%	15
Build/BMI	80%	0%	15
NT ProBNP	71%	0%	14
Prostate Specific Antigen	69%	0%	16
Total cholesterol	67%	0%	12
Serum albumin	23%	15%	13
Serum creatinine	8%	31%	13
Urine red blood cells	0%	25%	12
Blood urea nitrogen	0%	18%	11
Hepatitis C	0%	18%	11

Blood Pressure (Diastolic and Systolic), Build/BMI, PSA and Total Cholesterol have remained consistent since the 2001 Survey as tests with higher values at the older ages. The biggest change in this Survey was the addition of NT-ProBNP, which had not been adopted by many insurers prior to the 2007 Survey. There have been changes in clinical and insurance medicine since the initial survey was published in 2001, and some of those changes are reflected in the latest survey as they relate to the older ages. For example, in 2001 NT-ProBNP (N-terminal pro-brain natriuretic peptide) was being researched for its uses in clinical medicine as a cardiac screening tool in the ER setting. This blood test was in the early stages of being adopted by life insurers in 2007 and now is in wide use across the industry in the older ages as a cardiac marker, and is reflected in the most recent survey. Another change in insurance medicine has been the understanding of the mortality implications of low serum albumin in the older ages. This can be an explanation for why fewer respondents reported a lower normal value at the older ages for serum albumin in the current survey versus the prior surveys.

3.4 Respondents were asked if they requested any of the following non-test sources of applicant information. If a non-test source was used in the older age market, respondents were asked to provide the lowest face amount at which this requirement was requested. The responses are noted in Table 3.4 below and include not only the lowest face amount among the respondents, but also the range of responses. One respondent indicated they determine requirements based on the amount of premium and not on the face amount and they are, therefore, not included in Table 3.4.

Table 3.4

Non-Test Requirement	# of Respondents Who Request	Range of Lowest Face Amounts Requested	Most Common Lowest Amount Request
APS	21*	\$0-\$25,000	10 request at all amounts
Motor vehicle report	20*	\$0-\$10,000,000	5 request at all amounts 5 request starting at \$100,000
Prescription database check	18	\$0-\$10,000,001	4 request at all amounts 4 request starting at \$10,000
Paramedical exam	18	\$0-\$100,000	10 request at all amounts
Inspection report	16	\$10,000-\$10,000,000	3 request starting at \$2,000,001
Tele-Underwriting	9	\$0-\$100,000	5 request at all amounts
Medical exam	8	\$25,000-\$10,000,001	2 request starting at \$10,00,000
Personal history interview	7	\$0-\$500,000	2 request at all amounts
Agent interview	6	\$0-\$25,000	3 request at all amounts
Phone interview by specialist	4	\$0-\$25,000	No common amount
Supplemental application	3	\$0-\$100,000	2 request at all amounts
Other: Mature assessment*	2	\$0-\$25,000	No Common Amount
Face-to-face interview with specialist	0		

*Note on "Other," it is more than likely that other companies use a mature supplement, but it was not included on the Survey.

There have been a number of changes in this category since the original survey in 2001, but there are a number of Non-Test Requirements that have remained fairly consistent.

An APS has remained the most requested non-test requirement in all of the surveys, while a paramedical exam has dropped from being the second most requested in 2001 and 2007 to the third most requested currently. In this Survey, a Prescription Database check was the second most requested, while in the 2007 Survey, it ranked eighth, and it was not an option in 2001.

The Face-to-Face Interview with a Specialist was one of the more popular choices in both 2001 and 2007, but no respondents selected it this time.

3.5 Respondents were asked about the use of various cognitive and functional tests, and whether they currently use them or had no current plans to use them. The results are shown below in Table 3.5.

Table 3.5

Test	Currently Use	No Current Plans to Use	Total # of Respondents
Activities of Daily Living (ADLs)	17	4	23
Instrumental Activities of Daily Living (IADLs)	14	8	22
Delayed word recall	12	7	23
Clock draw test	9	10	23
Get up and go test	9	9	22
Chair rise	5	16	22
Other*	1	0	1
Standing balance test	0	19	20
Mini mental status exam	0	21	21
Peak flow	0	21	21
Short portable mental status questionnaire	0	21	21

*Other test:

- *Confinement to nursing home*

This category was not in the 2001 Survey, but was part of the 2007 Survey. ADLs, IADLs and Delayed Word Recall were the most frequently requested cognitive and functional tests in the 2007 Survey, and the use of these has increased.

For example, in both surveys, there were 23 respondents for the Delayed Word Recall. In 2007, three respondents stated they currently use and 16 responded they had no current plan to use. In this Survey, 12 respondents noted they currently use and eight had no current plans to use.

There have also been changes in tests that were used less frequently in this Survey when compared to the 2007 Survey. In the 2007 Survey, one of the 21 respondents noted they currently use the Standing Balance Test. In this Survey, no respondents indicated they currently use and 19 answered they had no current plans to use.

3.6 Respondents were asked if they used any of the following information to validate applicant information at the older ages and to check all that applied. The results are shown below in Table 3.6.

Table 3.6

Validation Method	# of Respondents
MIB	23
Attending physician statement	22
Motor vehicle report	20
Paramedical exam	20
Prescription database check	20
*Other (listed immediately below)	*20
*Database searches	*11
*Credit report	*6
*Tele-interview	*2
*Company specific senior assessment	*1
Inspection report	11
MD medical exam	7
Internal personal history interview	6
Vendor personal history interview	6
Face-to-face interview	1

This question was not asked in the 2001 Survey, but was asked in 2007. Not surprisingly, the top four factors in 2007 were still in the top four, although with some minor changes. In 2007, an APS was used to validate applicant information on 100% of the older age applicants, and MIB was second with 96% of respondents stating they used it. MIB and the APS have swapped placed in the current Survey, but the use of a Motor vehicle report and Paramedical exam has stayed the same in both.

The biggest change in this Survey was the number of respondents who utilize a Prescription database check. In this Survey, a majority of respondents indicated the use of an Rx check, while in 2007, only 30% of respondents used an Rx check.

3.7 Respondents were asked to rank what they felt were the top five most important indicators of early mortality, with “1” being the most important and “5” being the fifth important.

The table below shows the ranking of factors with the factor that received the most total responses listed first.

Table 3.7

Factor	1	2	3	4	5	Total # of Respondents
Current health condition	10	4	3	1	1	19
Cognitive function	2	10	4	2	0	18
Frailty	3	2	3	5	2	15
Activities of daily living	2	3	6	0	0	11
Current mental health	0	2	2	5	2	11
Comorbidities	2	1	3	1	2	9
History of heart disease	2	0	0	4	0	6
History of cancer	0	1	1	0	4	6
Mobility	0	0	1	1	3	5
Active lifestyle	1	0	0	2	1	4
Instrumental activities of daily living	1	0	0	0	2	3
Gait speed	0	0	0	2	1	3
Financial condition	0	0	0	0	3	3
Longevity of parents	0	0	0	0	2	2
Social condition	0	0	0	1	0	1
Living arrangements	0	0	0	0	0	0
Rural/city living	0	0	0	0	0	0
Self-perceived health	0	0	0	0	0	0
Support structure	0	0	0	0	0	0

A similar question was asked in the prior surveys, and the top three factors listed were consistent through all of them. In fact, the top five factors ranked by total importance (the factors with the highest total responses) were identical in the 2007 and current Survey. However, the individual numbers in the ranking of importance for each category were different, although still similar.

Family history is a factor that has appeared to lose some of its importance at the older ages. In the 2001 Survey, family history was the sixth most chosen factor. In 2007, family history was ranked lower as a factor, but it did have respondents listing it as third most important. In this Survey, only two respondents chose it as a factor and they chose it as the fifth most important.

3.8 Respondents were asked if they had a maximum substandard table rate that they approved at various age ranges. Some respondents answered using traditional table ratings, while others responded with debits. For consistency, table ratings were converted to debits with the assumption that 1 table rating equals 25 debits. The results are summarized in Table 3.8 below using debits.

Table 3.8

Issue Age	Lowest Maximum Debits Allowed*	Highest Maximum Debits Allowed	Most Common Maximum Debits Allowed	Total # of Respondents
65	+150	+500	+400	21
70	+100	+500	+400	21
75	+50	+500	+400	21
80	+50	+400	+400	19
85	+50	+225	+150	18
90	+0	+225	+0	9

*One respondent did not allow any substandard business at the older ages and was not included in this column.

The results were very similar to the results reported in 2007. This Survey and the one in 2007 both showed the greatest drop off in maximum ratings allowed, and most common maximum rating debits allowed between the ages of 80-85.

In the 2007 Survey, the highest maximum debits allowed remained consistent at +500 through all age groups, including age 90, and the most common maximum debits allowed at age 90 was tied between +100 and +150.

In this Survey, the highest maximum debits dropped from +500 to +400 at age 80, and was +225 at age 90. In addition, the most common maximum debits allowed in this Survey was +0, although there were some respondents who offered higher debits in that age band. There were also a lower number of respondents at age 90 in both surveys.

This Survey would indicate that more respondents had a higher amount of lowest maximum debits allowed at age 85 (+50 currently versus +0 in 2007), but the 2007 Survey indicated that, in the 75 and 80 age bands, the lowest maximum debits allowed was +100, while currently it has dropped to +50.

Section IV. Financial Underwriting

The determination of the appropriate amount of coverage to be considered is important so that only a prudent amount is offered. In this section, the Survey sought guidelines and rules related to financial underwriting for older ages compared with younger ages.

4.1 The Survey asked several questions in the first overall question. The first was what requirements were used to evaluate the financial status and the financial risk of the proposed insured. Furthermore, the Survey requested if the requirements were used both at “older ages,” as well as “younger ages,” and at what amount of coverage applied for where the requirements first utilized. The responses are presented in several tables that follow.

The first table, 4.1a, reviews the responses to what requirements were used at older ages. The Survey asked respondents to check all that were used and provided space to list other requirements utilized.

Table 4.1a

Requirement Used at Older Ages	Yes	% of Respondents
Source of income	10	45%
Commercial inspection report	9	41%
Statement from accountant	9	41%
Tax returns	9	41%
Telephone interview	8	36%
Unaudited financial statement	8	36%
Audited financial statement	7	32%
Credit report	7	32%
Cover letter from agent	5	23%
Tax returns via 4506-T (US Only)	5	23%
Financial institution statement	4	18%
W-2 (US) or T-4 (CAN)	4	18%
Statement from financial planner	3	14%
Identification service (scored or not)	3	14%
Scored credit report	1	5%
Other*	5	25%
Total # of Respondents	22	

*Other:

- *Inspection alternative database search*
- *Lexis Nexis search*
- *Applicant stated income*
- *Personal balance sheet*
- *Financial supplement*

Of the 29 respondents, 22 indicated at least one requirement used at older ages. Seven respondents did not indicate any specific requirements. Source of income was the most frequent with ten responses, and three other responses (commercial inspection report, statement from accountant and tax returns) had nine each. Further comments on the most frequent responses were noted after the next chart, along with comparative remarks between older and younger age requirements.

Table 4.1b reviews the responses to what requirements were used at younger ages. The Survey asked respondents to check all that were used and provided space to list other requirements utilized.

Table 4.1b

Requirement Used at Younger Ages	Yes	% of Respondents
Source of income	10	53%
Commercial inspection report	9	47%
Statement from accountant	9	47%
Audited financial statement	7	37%
Credit report	7	37%
Unaudited financial statement	7	37%
Tax returns	6	32%
Cover letter from agent	5	26%
Telephone interview	5	26%
Financial institution statement	4	21%
Tax returns via 4506-T (US Only)	4	21%
Identification service (scored or not)	3	16%
Statement from financial planner	3	16%
W-2 (US) or T-4 (CAN)	3	16%
Scored credit report	1	5%
Other*	4	20%
Total # of Respondents	19	

*Other:

- *Inspection alternative database search*
- *Applicant stated income*
- *Personal balance sheet*
- *Financial supplement*

Of the 29 respondents, 19 indicated at least one requirement used at younger ages. Ten respondents did not indicate any specific requirements. There were seven respondents indicating no requirements for either category and three that did not indicate requirements at younger ages, but did specify requirements at older ages. Source of income was the most frequent with ten responses, and two other responses (commercial inspection report and statement from accountant) had nine each.

While ten requirements were utilized by the same number of respondents at both older and younger ages, the common like-responses for the individual requirements were different. The three most popular were used at both older and younger ages – source of income, commercial inspection report, and statement from accountant. The next three most used for older ages were tax returns, telephone interview and unaudited financial statement. The next three most used for younger ages were audited financial statement, credit report and unaudited financial statement.

There was difficulty comparing this Survey with the 2001 and 2007 Surveys as the questions were somewhat different and the approaches to all three unique. The 2001 Survey focused on differences from younger to older on financial underwriting. The 2007 Survey did the same, but offered more details. New requirements developed in recent years (such as scored credit reports, which has just started in the past couple of years) and new tools utilized (such as 4506-T in the US to acquire actual filed tax returns and which are utilized by almost a quarter of respondents today versus none nine years ago) should show more of an impact in future surveys.

Table 4.1c covers the requirements used by respondents at older ages.

Table 4.1c

Requirement Used at Older Ages	Yes	Responses Received on Amount When First Used	Amount of Coverage When First Used		
			Highest	Lowest	Most Common
Source of income	10	8	ALL (3)*	0 (2)*	ALL (3)*
Commercial inspection report	9	9	5,000,001	100,000	1,000,000 (2)
Statement from accountant	9	8	5,000,001	IC*	5,000,000 (3)
Tax returns	9	6	10,000,001	1,000,001	5,000,000 (2)
Telephone interview	8	7	2,000,001	10,000	NONE
Unaudited financial statement	8	7	10,000,001	1,000,000	1,000,001 (2)
Audited financial statement	7	7	10,000,000	IC*	1,000,000 (2)
Credit report	7	6	5,000,000	25,000	NONE
Cover letter from agent	5	4	ALL*	10,000	NONE
Tax returns via 4506-T (US Only)	5	4	3,000,000	1,000,000	NONE
Financial institution statement	4	3	5,000,000	1,000,001	NONE
W-2 (US) or T-4 (CAN)	4	3	10,000,000	1,000,001	NONE
Identification service (scored or not)	3	3	ALL (2)*	25,000	ALL (2)*
Statement from financial planner	3	2	2,000,000	1,000,001	NONE
Scored credit report	1	1	25,000		
Other (Applicant stated income)	1	1	10,000		
Other (Financial supplement)	1	1	2,000,000		
Other (Inspection alternative database search)	1	1	2,000,000		
Other (Lexis Nexis search)	1	1	1,000,001		
Other (Personal balance sheet)	1	1	2,000,000		

*Note that "ALL" is indicated as a "Highest" response, but actually includes all cases from \$1 of coverage and higher. Where the response was "0," it is indicated as the "Lowest" amount to secure the requirement. In actuality, the responses are the same, resulting in all coverages having the requirement. "IC" (Individual Consideration) is indicated as the "Lowest" value since any amount could initiate the requirement need.

Since numerous responses indicated a nonnumeric response (such as "ALL"), no average was calculated or median indicated. Where only one response was indicated, only the "Highest" column was noted. The "most common" response was indicated where there was one with "NONE" indicated if there was none. The amount when first used varied significantly by requirement and within requirements.

The responses varied considerably. For example, Tax Returns were required by some as low as \$1,000,001 of coverage, but by others not until \$10,000,001. These differences were present throughout the responses.

As with the older ages in Table 4.1c above, the amount when first used varied significantly by requirement and within requirements for younger ages, as presented in Table 4.1d.

Table 4.1d

Requirement Used at Younger Ages	Yes	Responses Received on Amount When First Used	Amount of Coverage When First Used		
			Highest	Lowest	Most Common
Source of income	10	8	ALL (3)*	0 (2)*	ALL (3)*
Commercial inspection report	9	9	10,000,001	1,000,000	5,000,000 and 2,000,000 (2 each)
Statement from accountant	9	8	10,000,000 (2)	2,000,000	5,000,000 (3)
Audited financial statement	7	7	10,000,000 (3)	1,000,000	10,000,000 (3)
Credit report	7	6	5,000,000 (2)	100,000	5,000,000 (2)
Unaudited financial statement	7	7	10,000,001	1,000,000	2,000,001 (2)
Tax returns	6	6	10,000,001	2,000,001	10,000,000 (2)
Cover letter from agent	5	4	ALL*	1,000,000 (2)	1,000,000 (2)
Telephone interview	5	5	2,000,001	25,000	NONE
Financial institution statement	4	3	10,000,000	2,000,001	NONE
Tax returns via 4506-T (US Only)	4	4	10,000,000 (2)	2,000,000	10,000,000 (2)
Identification service (scored or not)	3	3	ALL (2)*	50,000	ALL (2)*
Statement from financial planner	3	2	5,000,001	5,000,000	NONE
W-2 (US) or T-4 (CAN)	3	3	10,000,000	2,000,001	NONE
Scored credit report	1	1	50,000		
Other (Applicant stated income)	1	1	10,000		
Other (Financial supplement)	1	1	5,000,000		
Other (Inspection alternative database search)	1	1	2,000,000		
Other (Personal balance sheet)	1	1	2,000,000		

*Note that "ALL" is noted as a "Highest" response, but actually includes all cases from \$1 of coverage and higher. Where the response was "0," that is indicated as the "Lowest" amount to secure the requirement. In actuality, the responses are the same, resulting in all coverages having the requirement.

Since numerous responses indicated a nonnumeric response (such as "ALL"), no average was calculated. Where only two responses were indicated, only the highest and lowest were shown and "Most Common" was left blank. Where only one response was indicated, only the "Highest" column was noted. Where there was a tie for the most common value, the higher value was indicated.

The 2001 and 2007 Surveys did not present this extent of detail.

4.2 The Survey asked the respondents to define what they considered income. Respondents were further asked if “only earned income” was considered income. Of the 29 respondents, 21 provided a response.

Only about one quarter of respondents (24%) limited coverage to “earned income.” Most respondents (76%) allowed other types of income to be included in determining the acceptable amount of coverage to be considered.

The 76% of respondents who answered “No” were asked about additional sources of income that were considered in the total income to determine coverage to be offered. Respondents were asked to check all that apply and offer “other” responses, if any.

Table 4.2a

Other Sources Considered as Income	Yes	% of Respondents
Earned income plus unearned income	12	80%
Earned income plus other investment distributions	8	53%
Earned income plus retirement account distributions	7	47%
Earned income plus Social Security	7	47%
Other*	2	13%
Total # of Respondents	15	

*Other:

- *Earned income plus other income that will terminate upon death*
- *We consider ‘at risk’ income. That is income that will cease upon death*

Of the 16 respondents considering more than earned income, 15 offered other sources that were considered. Of those, 12 also included unearned income and eight included other investment distributions. The following table shows the distribution of responses by respondents to the answers for other sources considered as income.

Table 4.2b

Other Sources Considered as Income Responses	# of Responses	% of Responses
All four sources indicated	5	33%
Only earned income plus Social Security	4	27%
Earned income plus three of four sources indicated (excluding retirement account distributions)	2	13%
Only earned income plus other (see table 4.2b above)	2	13%
Only earned income plus other investment distributions	1	7%
Only earned income plus retirement account distributions	1	7%
Total # of Respondents	15	

The two respondents providing “Other” responses had no other response indicated and were essentially the same answer. Of the 15 respondents, seven included at least three other sources of income in addition to earned income, and eight considered earned income plus one other source.

The earlier surveys did not address this issue. The allowable coverage can be very different based on what is defined as income to be multiplied by a factor. The more types of “income” allowed (or the broader the definition), the higher the coverage permitted.

4.3 The Survey requested the factor multiplied by the total income derived from 4.2b (above) that determines the allowable coverage to be considered. The question further asked for the beginning age defined as “older” and the ending age. Factors were requested for both the beginning and ending ages.

In Table 4.3a, the definition of “older age” is reviewed.

Table 4.3a

Older Age Range	# of Responses	Minimum	Maximum	Most Common
Youngest age*	21	50	71 (4)	70 (5)
Oldest age	18	70 (4)	90	80 and 85 (5 each)

*Note that two respondents listed a range for the youngest age at 66-70.

From the specific details of the responses, excluding the two respondents offering a range, 16 of the responses for the youngest age were between the ages of 65 and 71, inclusive. Ten of the responses for the oldest age were between the ages of 80 and 85, inclusive, with seven of the remaining eight at 70 or 71.

From the details, the average of the 21 youngest ages (using 66 for the two with the 66-70 range) was 66.4 years. The average for the older ages was 78.2 years.

The 2001 Survey found the range of what was considered old to be from 50 to 76, with an average of 64.6 years. The 2007 Survey average was similar at 64.9 years. These results would be comparable with the 66.4 years in this Survey, showing a gradual trend upward.

In Table 4.3b, the range for the income factor used to derive an acceptable limit of coverage is displayed.

Table 4.3b

Factor Range	# of Responses	Minimum	Maximum	Most Common
Youngest age	21	3	15	5 (13)
Oldest age*	18	1	7 (2)	5 (7)

*Note that one respondent of the 18 for the oldest age factor was “IC” (Individual Consideration).

While a range from 3 to 15 existed as the factor at the youngest age, 72% were at a factor of five and 83% were at a factor of four to six, inclusive. The factor at the older age showed more variability, with only 39% being at the most common and 50% being between four and six, inclusive.

In the following Table 4.3c, the comparison of factors from youngest to oldest is made.

Table 4.3c

Change in Factor from Youngest Age to Oldest Age	# of Responses	% of Responses
No change in factor	9	50%
Decrease in factor at older age	7	39%
Increase in factor at older age	0	0%
Other*	2	11%
Total # of Respondents	18	

*Other:

- One respondent went from a factor of 5 at the younger age to “IC” (Individual Consideration)
- One respondent went from a factor of 5 to a specific maximum amount of coverage regardless of income

In comparing the 18 who offered both minimum and maximum age and factor information, 50% showed no change in the factor for their respective ranges of age, meaning the higher age had the same factor as the lower age within the range, while 39% showed a decrease in the factor. There were two other responses that were variable in results based on the facts of the proposed insurance with the possibility of a decrease or increase in the factor. No respondent indicated an increase in the factor at the older age of the range.

The previous surveys did not address the “factor” issue, which is used to define the allowable coverage.

Section V. Preferred Risk Class Underwriting

Preferred underwriting is a popular feature in many products in many companies. In this section, the Survey sought details about past differences in younger versus older ages by class along with any exceptions considered.

5.1 The Survey asked participants what preferred risk classes were offered or not offered at older ages, the maximum ages, the minimum and maximum amounts and any retention differences by class. In addition, questions were asked about exceptions to any maximum age limits.

In the following Table 5.1a, the responses on what classes were generally offered are provided.

Table 5.1a

Classes	Yes	% of Respondents
Best preferred non-tobacco	20	95%
Other preferred or better than non-tobacco	18	86%
Non-preferred non-tobacco	20	95%
Preferred tobacco	19	90%
Non-preferred tobacco	20	95%
Total # of Respondents	21	

Not all 21 respondents provided information on all classes. Generally, the five classes were consistently seen in the large majority of responses.

As for “sub-classes” or classes within the Other Preferred and Preferred Tobacco general classes, Table 5.1b shows what was provided by respondents.

Table 5.1b

# of Classes	Other Non-Tobacco Preferred Class	% of Responses	Preferred Tobacco Class	% of Responses
2	6	60%	2	20%
1	4	40%	8	80%
No response	8		9	
Total # of Respondents	18		19	

The preferred tobacco class offered fewer “sub-classes” than the other preferred non-tobacco class. There was consistency among respondents in having only one or two “sub-classes,” versus more, which may have been more popular in the past.

The maximum age allowed by class is illustrated in Table 5.1c.

Table 5.1c

Classes	Yes	Respondents on Maximum Age by Class	Highest Age	Lowest Age	Most Common Age
Best preferred non-tobacco	20	17*	85 (3)	75 (6)	80 (7)
Other preferred or better than non-tobacco	18	15*	90	75	80 and 85 (6 each)
Non-preferred non-tobacco	20	17**	90 (3)	75 (2)	85 (7)
Preferred tobacco	19	16*	90	70	85 (6)
Non-preferred tobacco	20	17**	90 (3)	75 (2)	85 (7)

*Note that these three classes had a response of "ANY" from one respondent.

**Note that these two classes had a response of "ANY" and a response of "NO LIMIT" (one each) from two different respondents.

Twenty-one different respondents indicated having at least one class. Of the total, 13 gave maximum age information on every class, four gave information on some classes and four gave no maximum age information. As the Notes indicate (see * and ** below the table), two respondents in two classes and one respondent in the other three classes allowed the class at "any" (or "no limit") age. For those indicating a limit, 85 was the most common age when regarding all classes collectively, being the maximum on 29 (39%) of the 75 limits provided across all classes. Eighty was the second most common age with 24 (32%) across all classes. The responses for the classes Non-Preferred Non-Tobacco and Non-Preferred Tobacco were identical.

In the next table, 5.1d, we looked at the minimum coverage or amount for each of the classes.

Table 5.1d

Classes	Yes	Respondents on Minimum Coverage by Class	Highest Minimum Amount	Lowest Minimum Amount	Most Common Minimum Amount
Best preferred non-tobacco	20	16*	250,000	0	100,000 (5)
Other preferred or better than non-tobacco	18	15*	250,000	0	100,000 (5)
Non-preferred non-tobacco	20	14*	250,000	0	50,000 (4)
Preferred tobacco	19	14*	250,000	0	100,000 (5)
Non-preferred tobacco	20	14*	250,000	0	50,000 (4)

*Note that one respondent in all classes responded "ALL." That could be interpreted as "0," which was the response of another respondent in all classes, or "1," which was another response in the two tobacco classes by one respondent.

Among all 73 responses to all minimum coverages allowed, \$50,000 and \$100,000 were each responses 17 times (or 23% each). Again, the two classes of Non-Preferred Non-Tobacco and Non-Preferred Tobacco had the exact same responses from all 14 respondents. From the table, \$250,000 was the highest

minimum in each class, the Preferred classes (3) had \$100,000 as the most common minimum, and the Non-Preferred classes (2) had \$50,000 as the most common minimum.

In Table 5.1e, we reviewed the maximum coverage or amount allowed by class.

Table 5.1e

Classes	Yes	Respondents on Maximum Coverage by Class	Highest Maximum Amount	Lowest Maximum Amount	Most Common Maximum Amount
Best preferred non-tobacco	20	11	10,000,000	250,000	2,000,000 (2)
Other preferred or better than non-tobacco	18	11	10,000,000	250,000	2,000,000 (2)
Non-preferred non-tobacco	20	11	10,000,000	250,000	2,000,000 (2)
Preferred tobacco	19	11	10,000,000	250,000	2,000,000 (2)
Non-preferred tobacco	20	11	10,000,000	250,000	2,000,000 (2)

There were responses from 12 different respondents, but 11 each per class, with each answering for at least three classes. The responses were identical for all 12 respondents across the classes.

“\$10,000,000+” was a response from one respondent in all classes and “\$10,000,000” by another respondent in all classes. “2,000,000+” was another response from one respondent in all classes and “\$2,000,000” by two other respondents in all classes.

There were several responses that suggested no maximum existed. There were responses from respondents of “ALL,” “NO LIMIT,” “ANY,” “NONE” and “N/A” that would imply there was no maximum. Table 5.1f notes the frequency of these answers.

Table 5.1f

Classes	Responses of “ANY,” “ALL,” or “NO LIMIT”	Responses of “NONE” or “N/A”
Best preferred non-tobacco	3	2
Other preferred or better than non-tobacco	3	3
Non-preferred non-tobacco	2	3
Preferred tobacco	3	3
Non-preferred tobacco	2	3

The next table, 5.1g, covers the responses on retention differences. The Survey only asked about differences and did not request details on the amount or any other aspects.

Table 5.1g

Classes	# Offering This Class	Respondents With Retention Differences (YES)	% of Those Offering the Class
Best preferred non-tobacco	20	2	10%
Other preferred or better than non-tobacco	18	3	17%
Non-preferred non-tobacco	20	6	30%
Preferred tobacco	19	2	11%
Non-preferred tobacco	20	6	30%

The Non-Preferred classes (2) had more retention differences than the Preferred classes (3). Out of the 57 responses to Preferred classes, 12% had retention differences compared with 30% of the Non-Preferred classes.

5.2 The Survey asked about exceptions permitted to the maximum age limit stipulated for a class. There was one affirmative response. That respondent indicated they “fully retained” any exception in the preferred Non-Tobacco classes while seeking “facultative consideration” on Non-Preferred and all Tobacco classes.

Table 5.2

Classes	Exceptions Allowed to Maximum Age Limits	Facultative?	Fully Retained?
Best preferred non-tobacco	1	No	Yes
Other preferred or better than non-tobacco	1	No	Yes
Non-preferred non-tobacco	1	Yes	No
Preferred tobacco	1	Yes	No
Non-preferred tobacco	1	Yes	No

Aside from this response, no details were acquired by the Survey.

Section VI. Reinsurance

6.1 The Survey asked participants whether their company used reinsurance for older ages.

Ninety-six percent of the respondents indicated they used reinsurance for older ages.

6.2 The Survey asked participants whether their company used reinsurance to evaluate older ages. The results are shown below in Table 6.2.

Table 6.2

Evaluation of Older Ages	# of Respondents	% of Respondents
Assist in developing underwriting criteria and/or guidelines	14	78%
Provide additional capacity	14	78%
Assist in underwriting individual cases	9	50%
Provide mortality experience	9	50%
Total # of Respondents	18	

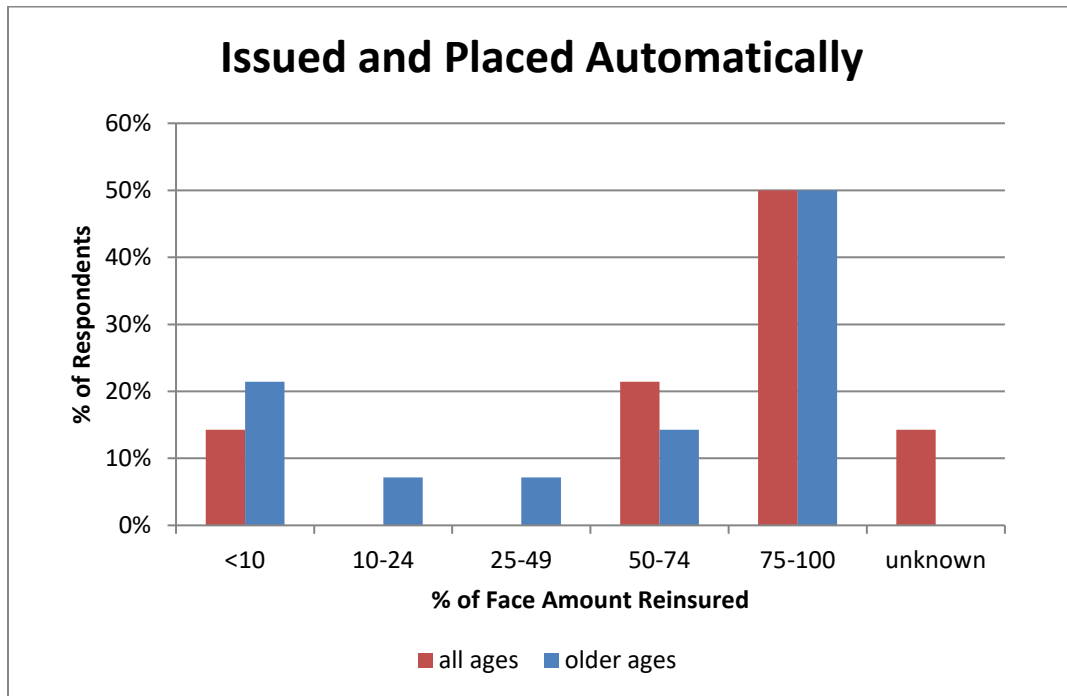
Seventy-eight percent of respondents used reinsurance to assist in developing underwriting criteria and/or guidelines and to provide additional capacity. This was followed by assisting in underwriting individual cases and providing mortality experience, used by half of the respondents.

6.3 The Survey asked participants what percentage of their company’s **total** and **older age** issued and placed policies (by face amount) was placed automatically. The results are shown below in Table 6.3 and Chart 6.3.

Table 6.3

Issued and Placed Policies Placed Automatically	Total		Older Age	
	Count	Percentage	Count	Percentage
<10%	2	14%	3	21%
10% - 24%	0	0%	1	7%
25% - 49%	0	0%	1	7%
50% - 74%	3	21%	2	14%
75% - 100%	7	50%	7	50%
Unknown	2	14%	0	0%
Total # of Respondents	14		14	

Chart 6.3



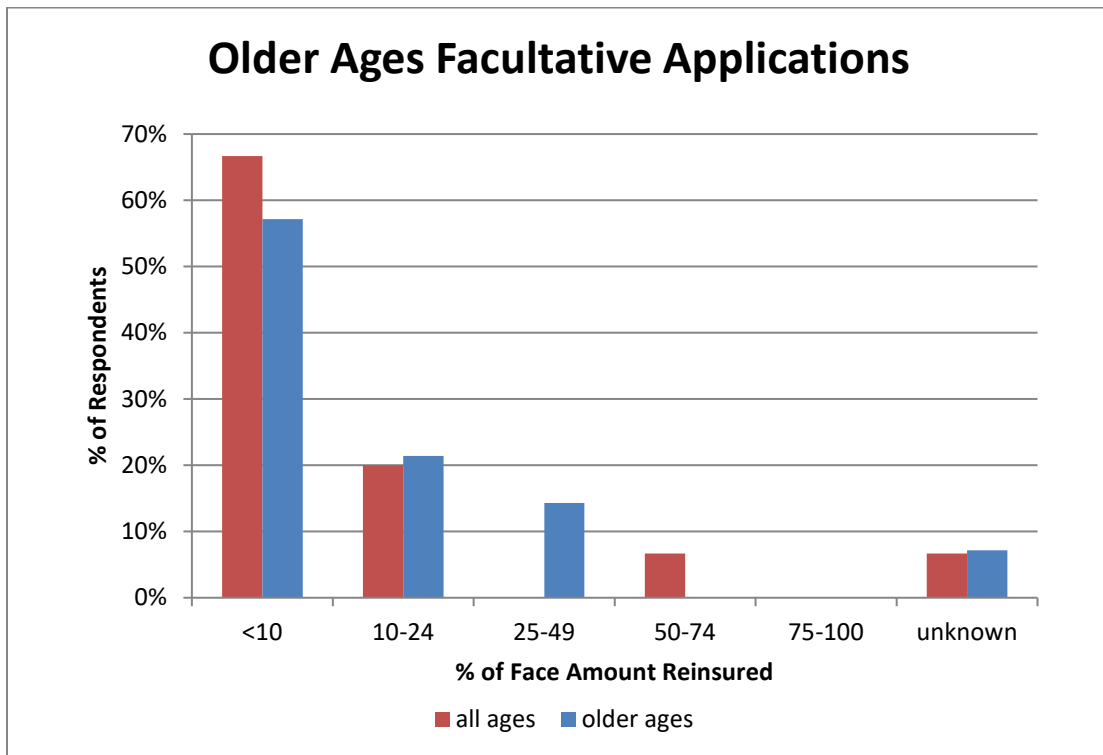
Fifty percent of the respondents indicated issuing placing between 75% and 100% of their total and older age business automatically.

6.4 The Survey asked what percentage of their company’s **total** and **older age** applications (by face amount) was placed facultatively. The results are shown below in Table 6.4 and Chart 6.4.

Table 6.4

Applications Placed Facultatively	Total		Older Age	
	Count	Percentage	Count	Percentage
<10%	10	67%	8	57%
10% - 24%	3	20%	3	21%
25% - 49%	0	0	2	14%
50% - 74%	1	7%	0	0%
75% - 100%	0	0	0	0%
Unknown	1	7%	1	7%
Total # of Respondents	15		14	

Chart 6.4



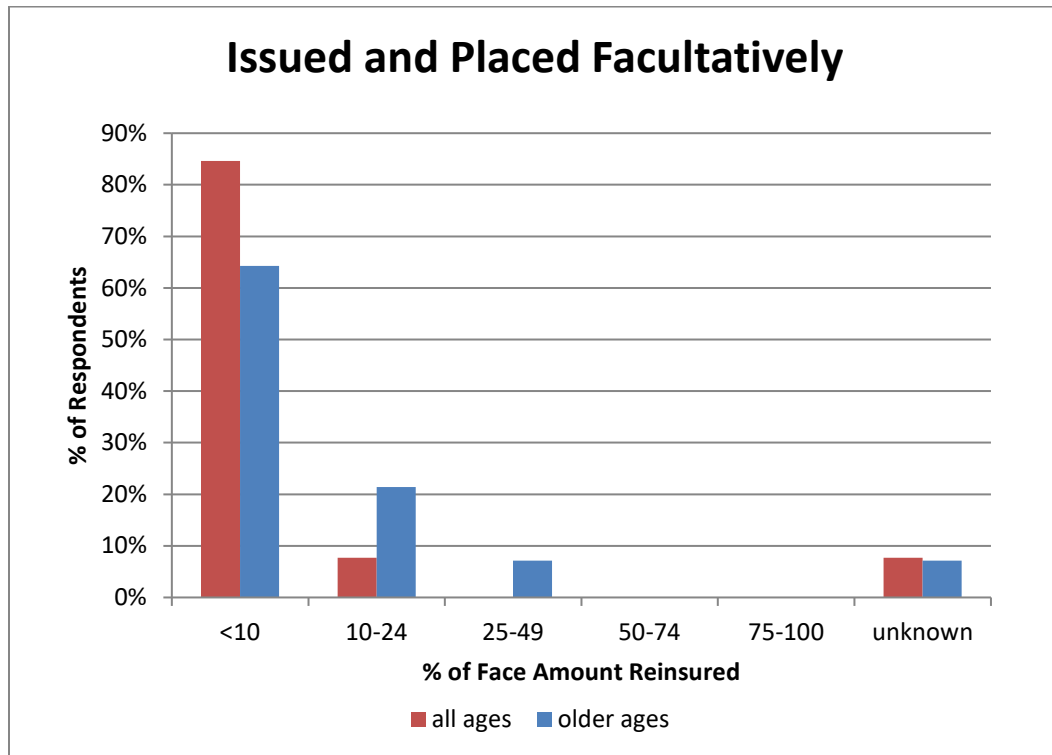
Slightly fewer respondents, 57% compared to 67%, indicated placing less than 10% of their older age business facultatively compared to all business. The results were similar regardless of age for the number of respondents placing between 10-24% of their business facultatively.

6.5 The Survey asked participants what percentage of their company’s **total** and **older age** issued and placed (by face amount) was placed facultatively. The results are shown below in Table 6.5 and Charts 6.5a, b and c.

Table 6.5

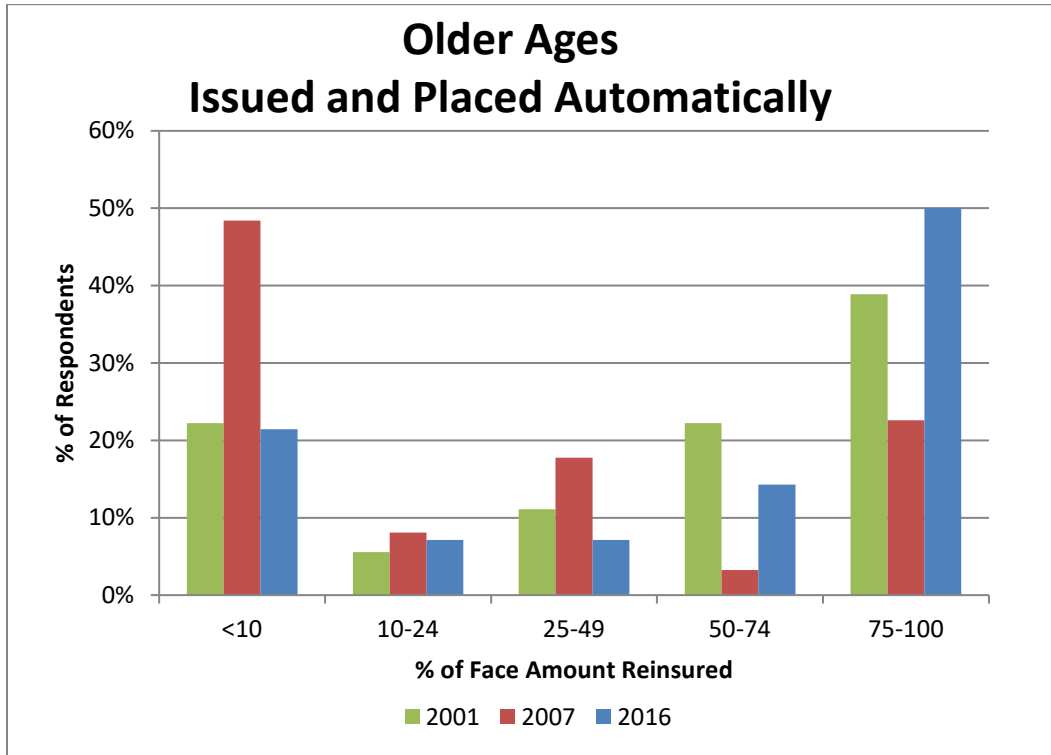
Issued and Placed Policies Placed Facultatively	Total		Older Age	
	Count	Percentage	Count	Percentage
<10%	11	85%	9	64%
10% - 24%	1	8%	3	21%
25% - 49%	0	0	1	7%
50% - 74%	0	0	0	0%
75% - 100%	0	0	0	0%
Unknown	1	8%	1	7%
Total # of Respondents	13		14	

Chart 6.5a



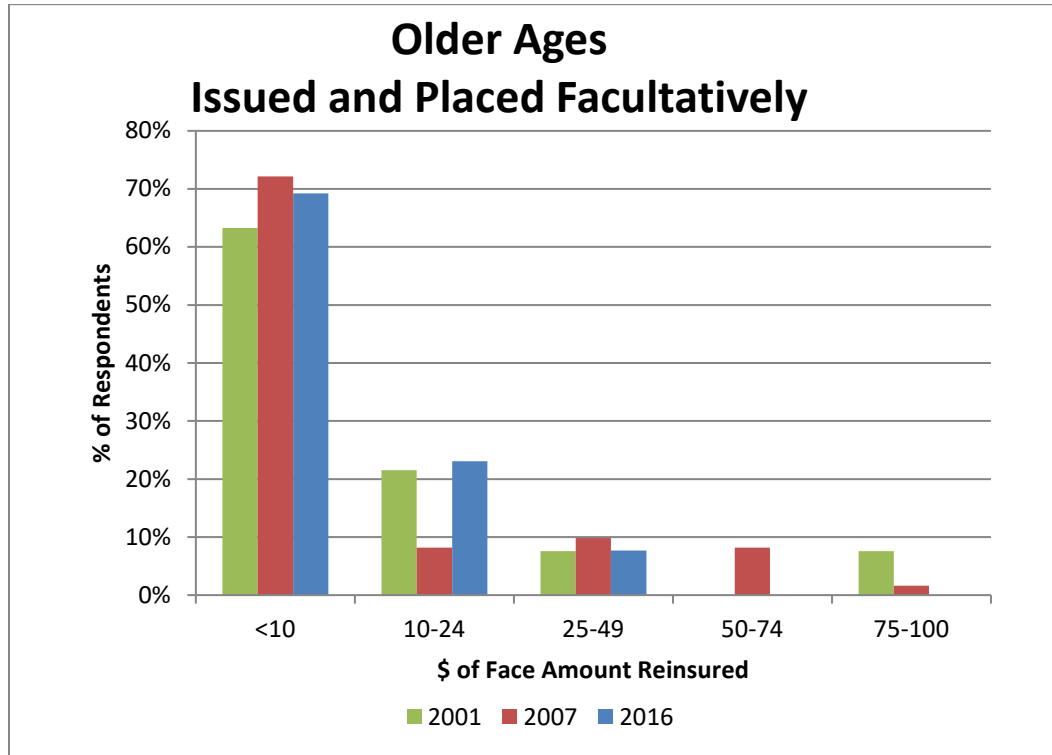
More respondents (85%) indicated issuing and placing less than 10% of their total business facultatively compared to their older age business (64%). This was opposite from the 10-24% range where more respondents (21%) issued and placed more of their older age business compared to their total business (8%).

Chart 6.5b



The 2001 and current Surveys had similar results with respect to the amount of business that was issued and placed automatically at the older ages. However, it was noted that, in the 2007 Survey, more respondents indicated ceding less of their business automatically at the older ages. For example, 36% of the respondents in both the 2001 and current Surveys responded to ceding less than 50% of their older age business automatically, while in 2007, that number was 75%.

Chart 6.5c



The responses on the amount of business issued and placed facultatively at the older ages were more consistent across the three surveys with more than 90% of the respondents ceding less than 50% of their older age business facultatively.

Section VII. Assumption Setting

Assumption setting for older ages is a difficult task given the lack of credible experience. In this section, the Survey asked a series of questions about mortality assumptions used for older ages to better understand the current practice in setting older age assumptions and older age mortality improvement assumptions.

7.1 Respondents were asked to indicate the sources used for developing older age mortality and other assumptions for the most popular fully-underwritten permanent life product. The results are shown below in Tables 7.1a, b, c and d.

Table 7.1a

Sources Used for Select Period Base Mortality Development	# of Responses		
	Primary	Secondary	NA or Not Used
Internal experience studies	9 (75%)	2 (17%)	1 (8%)
Actuarial judgment	2 (17%)	4 (33%)	6 (50%)
Industry experience studies/research	1 (8%)	8 (67%)	3 (25%)
Reinsurers	1 (8%)	4 (33%)	7 (58%)
Underwriting/medical department judgment	1 (8%)	-	11 (92%)
External consultants	-	2 (17%)	10 (83%)
US population statistics (CDC, etc.)	-	2 (17%)	10 (83%)
Total # of Respondents	12		

For select period base mortality development, the majority (75%) of the respondents used internal experience studies as their primary source. More than half (67%) of the respondents used industry experience studies as their secondary source. Half (50%) of the respondents used actuarial judgment, whereas few (17%) respondents used population mortality data as their primary or secondary source.

In the 2013 Survey, 12 (71%) of 17 respondents used internal experience studies as the primary source, and actuarial judgment was the most frequently used secondary source.

Table 7.1b

Sources Used for Ultimate Period Base Mortality Development	# of Responses		
	Primary	Secondary	NA or Not Used
Internal experience studies	5 (42%)	4 (33%)	3 (25%)
Industry experience studies/research	4 (33%)	4 (33%)	4 (33%)
Actuarial judgment	2 (17%)	4 (33%)	6 (50%)
Reinsurers	1 (8%)	4 (33%)	7 (58%)
Underwriting/medical department judgment	1 (8%)	-	4 (33%)
External consultants	-	2 (17%)	10 (83%)
US population statistics (CDC, etc.)	-	2 (15%)	10 (85%)
Total # of Respondents	12		

For the ultimate period base mortality development, internal experience studies remained the main primary source used (42%). An equal number of respondents used internal experience studies (33%), industry experience studies (33%), reinsurers (33%) and actuarial judgment (33%) as their secondary sources. One respondent indicated the mortality tables used were fully select.

In the 2013 Survey, 10 (58%) of 17 respondents used internal experience studies as the primary source. Actuarial judgment was the most commonly used secondary source.

Table 7.1c

Sources Used for Preferred Mortality Discounts Development	# of Responses		
	Primary	Secondary	NA or Not Used
Internal experience studies	5 (42%)	2 (17%)	5 (42%)
Underwriting/medical department judgment	2 (17%)	-	10 (83%)
Actuarial judgment	1 (8%)	4 (33%)	7 (58%)
External consultants	1 (8%)	2 (17%)	9 (75%)
Industry experience studies/research	1 (8%)	4 (33%)	7 (58%)
Reinsurers	1 (8%)	4 (33%)	7 (58%)
US population statistics (CDC, etc.)	-	1 (8%)	11 (92%)
Total # of Respondents	12		

For preferred mortality discounts development, internal experience studies (42%) remained the main primary source used. Industry experience studies (33%), reinsurers (33%) and actuarial judgment (33%) were the leading secondary sources.

In the 2013 Survey, 10 (58%) of 17 respondents used internal experience studies as the primary source. Actuarial judgment was the most frequently used secondary source.

Table 7.1d

Sources Used for Mortality Improvement Development	# of Responses		
	Primary	Secondary	NA or Not Used
Industry experience studies/research	5 (42%)	2 (17%)	5 (42%)
Internal experience studies	4 (33%)	5 (42%)	3 (25%)
External consultants	2 (17%)	1 (8%)	9 (75%)
Actuarial judgment	1 (8%)	5 (42%)	6 (50%)
Reinsurers	1 (8%)	5 (42%)	6 (50%)
Underwriting/medical department judgment	-	1 (8%)	11 (92%)
US population statistics (CDC, etc.)	-	3 (25%)	9 (75%)
Total # of Respondents	12		

For mortality improvement development, industry experience studies/research (42%) was the main source used. Internal experience studies (42%), reinsurers (42%) and actuarial judgment (42%) were the leading secondary sources used.

In the 2013 Survey, six (46%) of 13 respondents used internal experience studies as the primary source. Industry experience studies/research and actuarial judgment were the most frequently used secondary sources.

For question 7.1, respondents were also asked to provide examples of the industry studies that they referred to in setting assumptions. The following responses were received:

- *Industry experience studies/research used: SOA, Towers*
- *Industry Experience Studies: ILEC, TOAM S3, and 2001VBT*
- *ILEC and VBT tables, studies, and research; Human Mortality Database*
- *Industry Experience 2015 VBT*

7.2 Respondents were asked to select the primary underlying mortality tables used in developing new business pricing assumptions for fully-underwritten permanent life insurance product at older ages. For those respondents who used internally developed tables, they were asked to provide the underlying table(s) based on which the internal tables were developed. The results are shown below in Tables 7.2a, b and c.

Table 7.2a

Nature of the Primary Underlying Mortality Table Used for Older Ages	# of Respondents
External table used as is	7 (64%)
Internally developed table	3 (27%)
Other*	1 (9%)
Total # of Respondents	11

*Other:

- *None of the above were used*

When developing older age assumptions, most of the respondents used external table as is (64%). In the 2013 Survey, 11 (61%) of 18 respondents used internally developed tables.

Table 7.2b

Primary Underlying Mortality Table Used for Older Ages - External Tables	# of Respondents
2015 Valuation Basic Table (VBT)	3 (43%)
2008 Valuation Basic Table (VBT)	3 (43%)
2001 Valuation Basic Table (VBT)	1 (14%)
SOA 1975-80 Basic Table, "Tillinghast Extension"	-
SOA 1975-80 Basic Table, "Milliman Extension"	-
SOA 1975-80 Basic Table, "Manulife Extension"	-
SOA 1975-80 Basic Table, Other Extension (describe)	-
SOA 1990-95 Basic Table	-
SOA 1985-90 Basic Table	-
Bragg Mortality Table	-
Other Industry Table	-
Total # of Respondents	7

The main tables used by respondents were the 2015VBT and 2008VBT. One respondent who selected 2015VBT indicated the table used was "81% to 90% of 2015 VBT varies by attained age and gender."

In the 2013 Survey, the 2008VBT and 2001VBT were the main tables used.

The respondents who used an internally developed table were asked to select the basis of the underlying table(s) on which the internal tables were developed. The four tables selected by the three respondents were 2015 Valuation Basic Table (VBT), 2008 Valuation Basic Table (VBT), 2001 Valuation Basic Table (VBT) and 2001 CSO.

7.3 Respondents were asked to provide the number of years of selection by issue age assumed for the most popular fully underwritten permanent life plan. The results are shown below in Table 7.3.

Table 7.3

# of Years of Selection	Issue Age Assumed (# of Respondents)						
	45	65	70	75	80	85	90
5-9							2 (22%)
10-14					1 (11%)	2 (22%)	
15-19				1 (11%)	2 (22%)	1 (11%)	1 (11%)
20-24			1 (11%)	2 (22%)	1 (11%)	1 (11%)	1 (11%)
25-29	7 (78%)	7 (78%)	6 (67%)	4 (44%)	4 (44%)	2 (22%)	1 (11%)
30-39			1 (11%)	2 (22%)	1 (11%)		
40-49		2 (22%)	1 (11%)				
60+	2 (22%)						
NA						3 (33%)	4 (44%)
Total # of Respondents	9						

Twenty-five was the most frequently used select period for issue ages 70 and under. Three (33%) of nine respondents used the same select period for all issue ages up to issue age 80, whereas the remaining six used a shorter select period for issue age 80 than for issue age 45.

7.4 Respondents were asked if there was an attained age (issue age+duration-1) by which the impact of preferred underwriting was assumed to wear off. The results are shown below in Table 7.4.

Most (58%) of the respondents indicated that preferred underwriting was assumed to wear off by a certain attained age. Respondents who indicated the impact of preferred underwriting was assumed to wear off by a certain attained age were then asked to specify that attained age.

Table 7.4

Attained Age Where Preferred Underwriting is Assumed to Wear Off	# of Respondents
101-110	3 (43%)
91-100	2 (29%)
Did not provide a response	1 (14%)
Other*	1 (14%)
Total # of Respondents	7

*Other:

- *90-110; Varies by age*

Among the respondents who provided an attained age, all of them wore off preferred underwriting by attained age 110.

Additional comment from respondent:

- *Preferred underwriting is assumed to start to wear off starting at attained age 70 grading to standard assumption by age 110.*

7.5 Respondents were asked if there was an attained age (issue age+duration-1) by which the insured mortality was assumed to have converged to general population mortality. The results are shown below in Table 7.5.

Half (50%) of the respondents indicated the insured mortality was assumed to converge to general population by a certain attained age. Respondents who indicated the insured mortality was assumed to have converged to general population mortality by a certain attained age were then asked to specify that attained age.

Table 7.5

Attained Age where Insured Mortality is Assumed to Converge to General Population Mortality	# of Respondents
101-110	3 (50%)
91-100	1 (17%)
Did not provide a response	2 (33%)
Total # of Respondents	6

For all those who provided an age, the convergence happened prior to age 110.

7.6 Respondents were asked if there was an attained age (issue age+duration-1) by which mortality improvements were no longer applied. The results are shown below in Table 7.6.

Most (70%) of the respondents indicated that mortality improvement no longer applied by a certain attained age. Respondents who indicated that mortality improvements were no longer applied by a certain attained age were then asked to specify that attained age.

Table 7.6

Attained Age	# of Respondents
<91	1 (14%)
91-100	3 (43%)
101-110	2 (29%)
Other*	1 (14%)
Total # of Respondents	7

*Other:

- *No additional improvement beyond policy duration 20*

Additional comment from respondent:

- *No mortality improvement is used beyond duration 15.*

7.7 Respondents were asked to choose the factors by which the mortality improvement assumption varied. The results are shown below in Table 7.7.

Table 7.7

Factors by Which the Mortality Improvement Assumption Varied	# of Responses
Gender	10 (100%)
Attained age	7 (70%)
Smoker/non smoker	7 (70%)
Duration*	6 (50%)
Issue age	1 (10%)
Policy size	1 (10%)
Distribution channel	-
Product type	-
Underwriting class	-
Year of birth (cohort)	-
Total # of Respondents	10

*One respondent noted that mortality improvement varied by policy year. This Survey assumes that policy year and duration are in the same category, and grouped that response under 'Duration.'

All respondents varied mortality improvement assumptions by gender. Most of them varied them by attained age (70%) and smoking status (70%).

In the 2013 Survey, most respondents varied improvement assumptions by duration, followed by gender. Not many respondents varied assumptions by smoking status.

7.8 Respondents were asked to provide, by issue age and gender, the maximum, minimum and average annual mortality improvement rate. The results are shown below in Tables a, b, c, d, e and f.

Table 7.8a Male Maximum Improvement

Maximum Annual Mortality Improvement (%)	Issue Age Assumed (# of Respondents)									
	25	45	65	70	75	80	85	90	95	100
0 or NA	-	-	-	-	-	-	2 (22%)	3 (33%)	4 (44%)	6 (67%)
0.01-0.50	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	3 (33%)	2 (22%)
0.51-1.00	3 (33%)	2 (22%)	2 (22%)	2 (22%)	2 (22%)	2 (22%)	1 (11%)	2 (22%)	1 (11%)	1 (11%)
1.01-1.50	2 (22%)	4 (44%)	2 (22%)	2 (22%)	2 (22%)	2 (22%)	5 (56%)	3 (33%)	1 (11%)	-
1.51-2.00	3 (33%)	2 (22%)	4 (44%)	4 (44%)	4 (44%)	4 (44%)	-	-	-	-
Total # of Respondents	9									

Table 7.8b Male Minimum Improvement

Minimum Annual Mortality Improvement (%)	Issue Age Assumed (# of Respondents)									
	25	45	65	70	75	80	85	90	95	100
0 or NA	2 (22%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	3 (33%)	5 (56%)	5 (56%)	7 (78%)
0.01-0.50	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	3 (33%)	4 (44%)	2 (22%)	3 (33%)	1 (11%)
0.51-1.00	3 (33%)	4 (44%)	2 (22%)	2 (22%)	3 (33%)	2 (22%)	-	1 (11%)	1 (11%)	1 (11%)
1.01-1.50	2 (22%)	3 (33%)	3 (33%)	3 (33%)	3 (33%)	2 (22%)	2 (22%)	1 (11%)	-	-
1.51-2.00	1 (11%)	-	2 (22%)	2 (22%)	1 (11%)	1 (11%)	-	-	-	-
Total # of Respondents	9									

Table 7.8c Male Average Improvement

Average Annual Mortality Improvement (%)	Issue Age Assumed (# of Respondents)									
	25	45	65	70	75	80	85	90	95	100
0 or NA	-	-	-	-	-	-	2 (22%)	3 (33%)	4 (44%)	6 (67%)
0.01-0.50	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	2 (22%)	3 (33%)	4 (44%)	2 (22%)
0.51-1.00	4 (44%)	2 (22%)	2 (22%)	2 (22%)	3 (33%)	4 (44%)	3 (33%)	2 (22%)	-	1 (11%)
1.01-1.50	3 (33%)	6 (67%)	4 (44%)	4 (44%)	3 (33%)	2 (22%)	2 (22%)	1 (11%)	1 (11%)	-
1.51-2.00	1 (11%)	-	2 (22%)	2 (22%)	2 (22%)	2 (22%)	-	-	-	-
Total # of Respondents	9									

Table 7.8d Female Maximum Improvement

Maximum Annual Mortality Improvement (%)	Issue Age Assumed (# of Respondents)									
	25	45	65	70	75	80	85	90	95	100
0 or NA	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	3 (33%)	4 (44%)	5 (56%)	7 (78%)
0.01-0.50	2 (22%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	-	3 (33%)	1 (11%)
0.51-1.00	3 (33%)	5 (56%)	3 (33%)	3 (33%)	3 (33%)	3 (33%)	3 (33%)	4 (44%)	-	-
1.01-1.50	2 (22%)	1 (11%)	3 (33%)	3 (33%)	3 (33%)	3 (33%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)
1.51-2.00	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	-	-	-
Total # of Respondents	9									

Table 7.8e Female Minimum Improvement

Minimum Annual Mortality Improvement (%)	Issue Age Assumed (# of Respondents)									
	25	45	65	70	75	80	85	90	95	100
0 or NA	3 (33%)	2 (22%)	2 (22%)	2 (22%)	2 (22%)	2 (22%)	4 (44%)	6 (67%)	6 (67%)	8 (89%)
0.01-0.50	3 (33%)	4 (44%)	1 (11%)	1 (11%)	2 (22%)	4 (44%)	3 (33%)	2 (22%)	2 (22%)	-
0.51-1.00	1 (11%)	2 (22%)	3 (33%)	3 (33%)	3 (33%)	1 (11%)	1 (11%)	-	1 (11%)	-
1.01-1.50	2 (22%)	1 (11%)	3 (33%)	3 (33%)	2 (22%)	2 (22%)	1 (11%)	1 (11%)	-	1 (11%)
1.51-2.00	-	-	-	-	-	-	-	-	-	-
Total # of Respondents	9									

Table 7.8f Female Average Improvement

Average Annual Mortality Improvement (%)	Issue Age Assumed (# of Respondents)									
	25	45	65	70	75	80	85	90	95	100
0 or NA	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	3 (33%)	4 (44%)	5 (56%)	7 (78%)
0.01-0.50	2 (22%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	1 (11%)	3 (33%)	3 (33%)	3 (33%)	1 (11%)
0.51-1.00	3 (33%)	6 (67%)	4 (44%)	4 (44%)	4 (44%)	4 (44%)	2 (22%)	1 (11%)	-	1 (11%)
1.01-1.50	3 (33%)	1 (11%)	3 (33%)	3 (33%)	3 (33%)	3 (33%)	1 (11%)	1 (11%)	1 (11%)	-
1.51-2.00	-	-	-	-	-	-	-	-	-	-
Total # of Respondents	9									

When comparing older age improvements to younger age improvements, the majority of the respondents used a lower average annual mortality improvement for issue age 80 than for issue age 45. For most of the respondents, the female improvement rates provided were 0.5% lower than those for males.

7.9 Respondents were asked to provide, by issue age, the **number of durations** for which mortality improvement is assumed. The results are shown below in Table 7.9.

Table 7.9

# of Durations of Improvement	Issue Age Assumed (# of Respondents)									
	25	45	65	70	75	80	85	90	95	100
01-10	2 (25%)	2 (25%)	2 (25%)	2 (25%)	2 (25%)	2 (25%)		2 (25%)	2 (25%)	1 (13%)
11-20	4 (50%)	4 (50%)	4 (50%)	4 (50%)	4 (50%)	5 (63%)	4 (50%)	2	1 (13%)	
21-30				1 (13%)	1 (13%)	1 (13%)	1 (13%)			
31-50			2 (25%)	1 (13%)	1 (13%)					
51-70		2 (25%)								
71+	2 (25%)									
NA or no improvement							3 (38%)	4 (50%)	5 (63%)	7 (88%)
Total # of Respondents	8									

Six (75%) of the eight respondents used the same years of improvement for all issue ages up to 80. All of these six respondents used durations between 10 and 20.

Additional comments from respondents:

- *minimum and average are to attained age 110, which is the age at which no more improvements are assumed*
- *No improvement in first duration. / No improvement beyond attained age 100. / 15 years of improvement starting with 2nd policy year / Improvement factor varies by attained age / Average calculated over Min(16 policy years, 100 - Issue Age)*

Section VIII. Regulatory and Compliance

8.1 The Survey asked participants, in addition to the information or testing requirements noted in Section III, whether their company asked any other questions specifically to older age applicants for regulatory and compliance purposes.

Eighty percent of the respondents did not ask any additional questions specifically for older age applicants for regulatory and compliance purposes. For those who responded, the questions related to premium financing, STOLI and the intent to sell policies in the secondary market.

8.2 The Survey asked participants whether any questions excluded on the application for older age applicants for regulatory and compliance purposes.

All respondents indicated not excluding any questions on the application for older ages for regulatory and compliance purposes.

8.3 The Survey asked participants whether any changes were made to the application form to accommodate older age applicants for regulatory and compliance purposes. The results are shown below in Table 8.3.

Table 8.3

Changes Made to the Application	# of Respondents	% of Respondents
Alternative address for notices	4	100%
Different font size or other printing changes	3	75%
Additional disclosure requirements	2	50%
Other	1	25%
Total # of Respondents	4	

An alternative address for notices was a change made by all of those who responded. This was followed by different font size or other printing changes and additional disclosure requirements.

8.4 The Survey asked participants, at any age in the older age range, if there was a reduction in the number of classes allowed.

The responses were split evenly as to whether a reduction was made in the number of classes allowed. For those who did make a reduction, the responses included:

- No preferred best class offered beyond issue age 61
- Only standard or preferred rates available for ages 75 and older
- Over 80
- 200 debit limit at over 75

Appendix A – Participating Companies

AAA Life
Accordia Life
Allstate
American Family Life Insurance Company
American-Amicable Ins. Co. of Texas
AXA
Equitable Life of Canada
Federated Insurance
Great West Life and Annuity
GWL
Industrielle Alliance
Ivari
Kansas City Life
Lincoln Financial Group
Lincoln Heritage Life Insurance Company
Manulife
MetLife
Mutual Trust Life Insurance Company
National Mutual Benefit
New York Life
Northwestern Mutual
Principal Financial
Protective Life Insurance Company
Prudential
Sammons Financial Group
Securian
Sun Life Financial
USAA Life
Voya Financial

Appendix B – Older Age General & Underwriting Sources Survey

I. Products and Programs

1. At what age does your company consider the "older age market" to begin?

2a. Does your company have any products for the older age market?

Yes (Continue with Question 2b)

No (*Skip to Question 3a*)

b. At what minimum age does your company begin to offer these products?

3a. Does your company have any programs (i.e., no difference in product offered, but a different marketing or underwriting approach) designed exclusively for the older age market?

Yes (Continue with Question 3b)

No (*Skip to Question 4a*)

b. Does this vary by product?

Yes

No

c. At what minimum age does your company begin to offer these programs?

Additional comments:

As you answer the remainder of the questions in this survey, please answer based on the age provided in Question 1.

4a. Indicate the individual products which your company sells to the older age market. (Check all that apply)

Final expense

Graded premium whole life

Guaranteed issue

Joint and last survivor

Level term

Other term

Permanent life

Pre-need
Simplified issue
Single premium UL
Single premium whole life
UL
Underwritten annuities
Variable life (including VUL)
None
Other (please specify)

b. Indicate the individual riders/benefits which your company sells to the older age market.
(Check all that apply)

Accelerated death benefit
Accidental death benefit
Disability
Long-term care
Maturity extension rider
Return of premium
Spouse rider
Waiver of premium
Nursing home benefit
Critical illness
None
Other (please specify)

Additional comments:

II. Underwriting Requirements/Resources

1. Which of the following resources does your company use for assessing the older age market (based on your definition of older age)? (Check all that apply)

Geriatric literature

Geriatric specialist

Internet research

Medical affiliation with hospital or other provider

Medical director

Medical nurse

Medical physician/consultant

Reinsurer

Specially trained agents

Specially trained underwriters

Other (please specify)

Other (please specify)

Other (please specify)

III. General, Medical & Non-Medical Risk Evaluation & Testing

1. When underwriting an older age applicant, which of the following risk factors does your company either specifically request information about, use if the information is incidentally provided or not use at all? (Please check one of the three columns for each risk factor below.)

Risk Factor	Specifically Request	Use if Available	Do Not Use
Active/Passive Lifestyle			
Acuity of Eyesight			
Acuity of Hearing			
Assisted Mobility (canes, crutches, etc.)			
Bathing			
Behavioral Changes			
Bladder, Bowel Incontinence			
Chair Rise Time			
Cognitive Skills			
Delayed Word Recall			
Depression			
Diet and Nutrition			
Dressing			
Driving			
Eating/Feeding			
Exercise			
Fall History			
Gait Velocity			
Grip Strength			
Hobbies			
Housework			
Laundry			
Living Arrangements			
Managing Finances			
Meal Planning and Cooking			
Memory Problems			
Mental Status Questionnaire Results			
Mental Activities (e.g., crossword puzzles)			
Multiple Drug Interactions			
Over the Counter Medications			
Oxygen Use			
Pacemaker Use			
Pet Ownership			
Physical Activity (e.g., walking, gardening)			
Physical Performance Tests			
Physical Therapy			
Power of Attorney			
Prescription Medication Use			
Public Transportation Use			

Quality of Diet			
Recreational Activity			
Shopping			
Social Activities			
Sports Activities			
Support Network (e.g., family, friends)			
Toileting			
Traffic Accidents			
Traffic Violations			
Transferring			
Travel/Trips			
Trouble with Balance			
Trouble with Community or Legal System			
Under Care of Regular Physician			
Use of Alternative Medicines			
Volunteer Work			
Wandering or Being Lost			
Weight Training			
Wheelchair Use			
Other (please specify)			

2. Does your company have different testing requirements for the older age applicants (based on your definition of older age)? If yes, please indicate youngest age within your older age range at which your company had different requirements.

Testing Requirement	Yes	No	Youngest Age
Ankle/Arm Pressure Index (AAI)			
Bone Density			
Build or Body Mass Index (BMI)			
Chest X-Rays			
Complete Blood Count			
Echocardiogram			
Electrocardiogram (EKG)			
Forced Expiratory Volume (FEV1) or other Pulmonary Function Test			
Pulse Pressure			
Pulse Rate			
Systolic Blood Pressure			
Diastolic Blood Pressure			
Treadmill EKG			
Waist/Chest Ratio			
Waist Hip Ratio			
Other (please specify)			
Other (please specify)			

3. For which of the following tests does your company use different normal values for older ages than for younger ages? (Check all that apply and if there is a different value, please indicate whether it is higher or lower.)

Test	Not Used	Normal Value Same	Normal Value Higher for Older Age	Normal Value Lower for Older Age
Albumin				
Alkaline Phosphatase				
ALT (SGPT)				
AST (SGOT)				
Apolipoproteins				
Blood Pressure (Systolic)				
Blood Pressure (Diastolic)				
Blood Urea Nitrogen				
Body Mass Index				
Build				
Calcium				
CDT				
CEA				
Cholesterol/HDL ratio				
Creatinine				
Ferritin				
Fibrinogen				
Fructosamine				
GGT				
Globulin				
Glucose				
Glycated Protein				
HAA				
Height/Weight Ratio				
HDL				
Hematocrit				
Hemoglobin				
Hemoglobin A1C				
Hepatitis B				
Hepatitis C				
Homocysteine				
HsCRP				
Hyaline Casts				
Iron				
Lactate Dehydrogenase (LDH)				
LDL/HDL Ratio				
LDL/VLDL Ratio				
Lymphocyte Count				
Mean Corpuscular Volume				
Neutrophil Count				
Platelets				

Pro BNP				
Protein/Creatinine Ratio				
PSA				
Pulse Pressure				
Pulse Rate				
Red Blood Cell Count				
Total Bilirubin				
Total Cholesterol				
Total Protein				
Triglycerides				
Uric Acid				
Urine Creatinine				
Urine Glucose				
Urine Protein				
Urine Red Cell Count				
Urine White Cell Count				
White Blood Cell Count				
Other (please specify)				
Other (please specify)				

4. For the older age market, please indicate the lower and upper face amount limits for the following sources of non-test applicant information.

Source	Do Not Use	Lower Face Amount Limit	Upper Face Amount Limit
Agent Interview			
Attending Physician Statement			
Face-to-Face Interview by Specialist			
Inspection Report			
Medical Exam			
Motor Vehicle Report			
Paramedical Exam			
Personal History Interview			
Phone Interview by Specialist			
Prescription Database Check			
Supplemental Application			
Teleunderwriting			
Other (please specify)			
Other (please specify)			

5. Please indicate whether you currently use or are planning to use any of the following cognitive or functional tests.

Test	Currently Use	Plan to Use	No Current Plan to Use
Activities of Daily Living (ADLs)			
Chair Rise Time			
Clock Draw Test			
Delayed Word Recall			
Get Up and Go Test			
Instrumental Activities of Daily Living (IADLs)			
Mini Mental Status Exam			
Peak Flow			
Short Portable Mental Status Questionnaire			
Standing Balance Test			
Other (please specify)			
Other (please specify)			

6. Which of the following methods are used to validate applicant information for older ages?
(Check all that apply)

- Attending Physician Statement
- Credit Report
- Database Searches
- Face-to-Face Interview
- Inspection Report
- Internal PHI
- Medical Exam
- MIB
- MVR
- Paramedical Exam
- Prescription Database Inquiry
- Vendor PHI
- Other (please specify)

7. As part of the underwriting process, an underwriter must identify many factors that affect mortality. Rank your top five most important indicators of mortality at the older ages, with "1" being the most important and "5" being the fifth important.

- Active Lifestyle
- Activities of Daily Living (ADLs)
- Cognitive Function
- Comorbidities
- Current Health Condition
- Current Mental Health

- Family History
- Financial Condition
- Frailty
- Gait Speed
- History of Cancer
- History of Heart Disease
- Instrumental Activities of Daily Living (IADLs)
- Living Arrangements
- Longevity of Parents
- Mobility
- Rural/City Living
- Self-Perceived Health
- Social Condition
- Support Structure
- Other (please specify)

8. What is the maximum substandard table rating that your company will assess the older age applicant at each of the following ages?

Age	Maximum Table Rate (debits)
65	
70	
75	
80	
85	
90	

IV. Financial Underwriting

1. What requirements are used to evaluate the financial status and financial risks of the proposed insured at older ages versus younger clients and when are those requirements first used by amount of coverage?

Requirement	Used at Older Ages?	Amount of Coverage When First Used	Used at Younger Ages?	Amount of Coverage When First Used
	Yes/No		Yes/No	
Audited financial statement				
Commercial inspection report				
Cover letter from agent				
Credit report				
Identification service (scored or not)				
Financial institution statement				
Scored credit report				
Source of income				
Statement from accountant				
Statement from financial planner				
Tax returns				
Tax returns via 4506-T (US Only)				
Telephone interview				
Unaudited financial statement				
W-2 (US) or T-4 (CAN)				
Other (please specify)				
Other (please specify)				
Other (please specify)				
Other (please specify)				
Other (please specify)				

2. What is considered income?

a. Only earned income - Yes/No

If yes, skip to question 3.

b. *If no, check all of the following that apply:*

Earned income plus retirement account distributions

Earned income plus other investment distributions

Earned income plus Social Security

Earned income plus unearned income

Other (list all):

3. Based on the answer to question 2a or 2b, what factor multiplied by income is used to calculate the allowable insurance at older ages and does the factor change with age? (For example, if you use 2 times income, then the factor is "2".)

Older Ages Range (Beginning Age and Ending Age)	Factor

V. Preferred Risk Class Underwriting

1. What “preferred risk classes” are available at older ages, not available at older ages, to what maximum age, at what face amount/net amount at risk range and with any retention differences?

Class		Available at Older Ages?		Maximum Age	Minimum Amount	Maximum Amount	Retention Differences?	
		Yes	No				Yes	No
Best Preferred Non Tobacco User								
Other Preferred or better than Non Tobacco User	# of classes?							
Non-Preferred Non Tobacco User								
Preferred Tobacco User	# of classes?							
Non-Preferred Tobacco User								

- 2a. Are exceptions permitted for the preferred maximum age limits? Yes/No

If yes, answer b.

b.

Class	Facultative?		Fully Retained?	
	Yes	No	Yes	No
Best Preferred Non Tobacco User				
Other Preferred Non Tobacco User				
Non-Preferred Non Tobacco User				
Preferred Tobacco User				
Non-Preferred Tobacco User				

VI. Reinsurance

1. Does your company use reinsurance (for older ages)?
 - If yes, answer this section’s questions
 - If no, *skip this section*

2. How does your company use reinsurance to evaluate older ages? (check all that apply)

Assist in developing underwriting criteria and/or guidelines

Assist in underwriting individual cases

Provide additional capacity

Provide mortality experience

Other (please specify)

3. The following questions deal with automatic reinsurance.
 - a. What percentage of your company’s **total issued and placed policies** (by face amount) is placed automatically?
 - b. What percentage of your company’s **older age issued and placed** (by face amount) is placed automatically?

% Reinsured Automatically	Total Issued and Placed	Older Age Issued and Placed
<10%		
10% - 24%		
25% - 49%		
50% - 74%		
75% - 100%		
Unknown		

4. The following questions deal with facultative reinsurance.
 - a. What percentage of your company’s **total applications** (by face amount) is submitted facultatively?
 - b. What percentage of your company’s **older age applications** (by face amount) is submitted facultatively? Older age as answered in Section I, question 1.

% Reinsured Facultatively	Total Applications	Older Age Applications
<10%		
10% - 24%		
25% - 49%		
50% - 74%		
75% - 100%		
Unknown		

- c. What percentage of your company's **total issued and placed policies** (by face amount) is submitted facultatively?
- d. What percentage of your company's **older age issued and placed** (by face amount) is submitted facultatively?

% Reinsured Facultatively	Total Issued and Placed	Older Age Issued and Placed
<10%		
10% - 24%		
25% - 49%		
50% - 74%		
75% - 100%		
Unknown		

- 5. What is your company's maximum retention limit by issue age?

Retention Limit	65	70	75	80	85	90
<\$500,000						
\$500,000 - \$999,999						
\$1,000,000 - \$4,999,999						
\$5,000,000 and over						

- 6. How much additional capacity is currently provided by your company's reinsurers by issue age (as a percentage of your retention) for your most popular fully-underwritten permanent life product? For example, if your company's retention is \$1,000,000 and your reinsurance capacity is \$2,500,000, the additional capacity is 150%.

Additional Capacity	65	70	75	80	85	90
None						
0 - 49%						
50% - 99%						
100% - 149%						
150% - 200%						
200% - 249%						
>250%						

VII. Assumption Setting

For all questions in section, please provide information related to pricing assumptions. If answers differ by product, please provide those associated with the male nonsmokers of the most popular fully-underwritten permanent life product unless specified otherwise.

1. Please indicate the sources used for developing older age mortality and other pricing assumptions for your most popular fully-underwritten permanent life product. Select the appropriate response from the in-cell drop downs. **Please select only one "Primary" source** in each assumption column and select **"Secondary" for any additional sources utilized.**

Source	Select Period Base Mortality	Ultimate Period Base Mortality	Preferred Mortality Discounts	Mortality Improvement
Internal experience studies Industry experience studies/research (please specify) External consultants Reinsurers Population statistics (CDC, etc.) Actuarial judgment Underwriting/medical department judgment Other (please specify)				

Additional comments or descriptions

2. Please select the primary underlying mortality tables used for developing new business pricing assumptions for fully-underwritten permanent life insurance product **at older ages**. If internally developed tables are used, please select the underlying table(s) based on which the internal tables are developed, if applicable. If only the company experience is used, please indicate in Additional Comments below.

(For example, if the pricing table used is 70% of 01VBT, please select 'Used as is' for '2001 Valuation Basic Table (VBT)' under 'External Table used as is'. If the table used is a combination of 01VBT and 08VBT, please select 'Used in internal table' for both '2001 Valuation Basic Table (VBT)' and '2008 Valuation Basic Table (VBT)' under 'Internal Table, Developed Based on:')

	External Table used as is	Internal Table, Developed Based on: (i.e.,)
2015 Valuation Basic Table (VBT)		
2008 Valuation Basic Table (VBT)		
2001 Valuation Basic Table (VBT)		
SOA 1975-80 Basic Table, "Tillinghast Extension"		
SOA 1975-80 Basic Table, "Milliman Extension"		
SOA 1975-80 Basic Table, "Manulife Extension"		
SOA 1975-80 Basic Table, Other Extension (please specify)		
SOA 1990-95 Basic Table		
SOA 1985-90 Basic Table		
CIA 1997-2004 Mortality Table		
Bragg Mortality Table		
Other Industry Table (please specify)		

Additional comments or descriptions

3. Enter the number of years of selection by issue age assumed for your most popular fully underwritten permanent life plan (at that age)

Issue Age	Select Period
45	
65	
70	
75	
80	
85	
90	

4. Is there an attained age (issue age+duration-1) by which the impact of preferred underwriting is assumed to wear off?

If yes, please specify the attained age: Additional Comments:

5. Is there an attained age by which the insured mortality is assumed to **have converged** to general population mortality by?

If yes, please specify the attained age: Additional Comments:

6. Is there an attained age by which no additional annual mortality improvements are applied?

If yes, please specify the attained age: Additional Comments:

7. Please choose the factors by which your annual mortality improvement assumption varied: (Check all that apply)

Improvement Variables	Varies by?
Issue Age	
Attained Age	
Year of Birth (Cohort)	
Gender	
Duration	
Underwriting Class	
Smoker/Non Smoker	
Policy Size	
Product Type	
Distribution Channel	
Other (please specify)	

Additional comments:

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8. Please enter the maximum, minimum and average annual mortality improvement rate for each issue age below (for example, if issue age 45 has 1% improvement in duration 1, 2% in duration 2 and 3% in duration 3, the maximum % is 3%, minimum % is 1% and the average is 2% in this scenario)

Issue Age	Male NonSmoker			Female NonSmoker		
	Maximum%	Minimum%	Average%	Maximum%	Minimum%	Average%
25						
45						
65						
70						
75						
80						
85						
90						
95						
100						

Additional comments:

9. For each issue age, please enter the number of durations for which mortality improvement is assumed.

Issue Age	Duration

VIII. Regulatory & Compliance

1. In addition to the information or testing requirements noted in Section III, does your company ask any other questions specifically to older age applicants for regulatory and compliance purposes? (Please specify)
2. Are any questions excluded on the application for older age applicants for regulatory and compliance purposes? (Please specify)
3. Are there any changes made to the application form to accommodate older age applicants for regulatory and compliance purposes? (Check all that apply)
 - Different font size or other printing changes
 - Alternative address for notices
 - Additional disclosure requirements
 - Other (Please specify)
4. At any age in the older age range, is there a reduction in the number of classes allowed?

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