

Report
of the
Society of Actuaries
Older Age Underwriting Practices
Survey Subcommittee

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Introduction

The attached report presents the results of a survey conducted by the Older Age Underwriting Subcommittee of the Society of Actuaries Life Insurance Mortality and Underwriting Survey Committee. The purpose of this survey is to explore practices that underwriters utilize in both formal and informal ways to assess older age applicants.

As the "older age" population in the U.S. and Canada continues to grow, an increasing interest in issuing life insurance to this "older age" population has developed. "Older age" just several years ago meant issue ages 70 – 75 to most; however, today it often means issue ages to 85 and in some instances, 90 or higher. Some companies have done extensive research on how best to assess the older age risk and profitably issue business to this population. Others have taken some intuitive guesses as to how to issue this business.

A number of studies have been completed and extensive literature exists on mortality and survivorship among the elderly. We have attempted to provide a comprehensive report on older age underwriting practices. Other older age underwriting references and studies that we are aware of are shown in Appendix B.

The survey was conducted based on older age underwriting practices in effect during the summer of 2000. Eighty-eight companies responded to our survey, so we feel that we have a good representation of industry practices. A complete list of respondents is shown in Appendix C. We want to thank all of the companies that participated in this survey. Your time and effort in completing the survey has certainly contributed to making this what we believe is a most worthwhile project.

The Subcommittee also wants to thank ING Re for contributing the information found in Appendix B, as well as everyone who helped us review this document and offered helpful suggestions and comments. Finally, we want to thank the staff at the Society of Actuaries, in particular Jack Luff and Korrel Crawford, for their help in completing this project.

We have provided insight where we felt we could; however, our main goal was to present the results in an easy to use format. We hope that you find the results of our survey both interesting and helpful. We welcome comments and feedback on the content of the report so that the next survey can be even more valuable to you. Please send your comments to Jack Luff at the Society of Actuaries.

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Background

In the summer of 2000, the Society of Actuaries Subcommittee on Older Age Underwriting Practices surveyed U.S. and Canadian life insurance companies on their older age underwriting practices. Eighty-eight companies responded to our survey, however, not all companies responded to all questions.

In the report, percentages are usually calculated based on all 88 companies. However, in several instances, percentages are based on the number of companies responding to a particular question. In these instances, we have provided the number of companies that responded to that particular question and used that number in calculating the percentages shown.

Percentages have been rounded to whole numbers. Therefore, when summing the individual percentages, the totals may not add to 100%.

Results are presented in an easy to follow format and not necessarily in the order of the original survey. We have added insights where we felt they were appropriate.

Executive Summary

There are many interesting findings in this report. In the executive summary, we have highlighted what we felt were some of the more important observations.

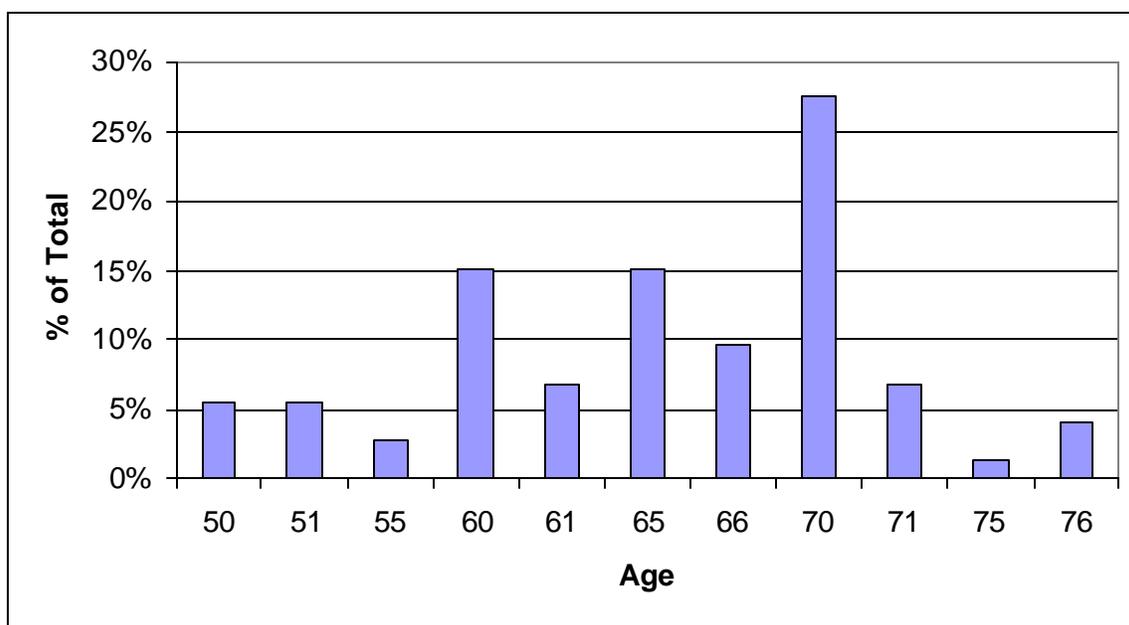
- Eighty-eight U.S. and Canadian life insurance companies responded to our survey on older age underwriting practices in the summer of 2000.
- There was no common definition of when older age begins. Over half of the companies responding to this question reported older ages beginning at age 70 (27%), 65 (15%) or 60 (15%) and the responses ranged from age 50 - 76.
- The maximum issue age varied by product type. Individual term insurance had the lowest average maximum issue age of 71.0 and joint and last survivor had the highest average maximum issue age of 83.5. Individual term had the widest range of responses; maximum issue ages ranged from 50 to 90. Only 13% of the respondents indicated that they make exceptions to their maximum issue age.
- Respondents wrote in what they felt were the leading indicators of mortality at the older ages. The top three responses were medical history/condition, activities of daily living/physical activity and mental health/status. Many other important indicators were also mentioned.
- Respondents indicated four main resources for assessing the older age underwriting practices. These were the Medical Director (84%), Reinsurer (81%), Internet research (69%) and geriatric literature (63%).
- The main sources of information for the older age population came from the Attending Physicians Statement (66%), paramedical exam (58%) and physical exam (42%). This was as we expected.

- The most common medical tests used to evaluate the older age applicants were blood pressure (59%) and Prostate Specific Antigen (48%).
- There are a large number of non-medical criteria that are used in evaluating the older age applicants; 69 of these criteria were included in the survey. The top three criteria that companies *asked about* were prescription drug use (77%), tobacco use (77%) and whether the applicant was under the care of a regular physician (76%). The top non-medical criteria, which companies *did not specifically ask about, but considered* in evaluating the older age applicants, were ambulation/mobility (72%) and falls (72%).
- With respect to financial underwriting, there was very little difference in requirements between the younger and older age applicants.
- The main obstacles to doing more comprehensive questioning and testing at the older ages were the cost of testing or acquiring additional information (75%), agent pressure (60%) and the speed to issue (58%).
- Almost half of the respondents thought that their older age business was profitable. Most of the rest said that they were not sure whether or not the older age business was profitable.

When Does “Older Age” Begin?

We asked companies the age at which they considered “older age” to begin. 83% of the companies provided an age. Graph 1 below shows the distribution of the responses based on the 73 companies who answered this question. Table 1 below shows the low, average and high ages and the four most common responses reported for those companies that did report an age.

Graph 1: When Does “Older Age” Begin? – Distribution of Responses



The range at which companies reported older age to begin was from 50 to 76, with an average of 64.6 years. The distribution in Graph 1 above shows little consensus and indicates that there is not a common definition of when older age begins. Over half of the respondents to this question indicated that older age begins at 70 (27%), 65 (15%) or 60 (15%). Some geriatric literature suggests that older age begins at age 50. In fact, just over 10% of the respondents to this question reported that they felt that older age begins at age 50 or 51.

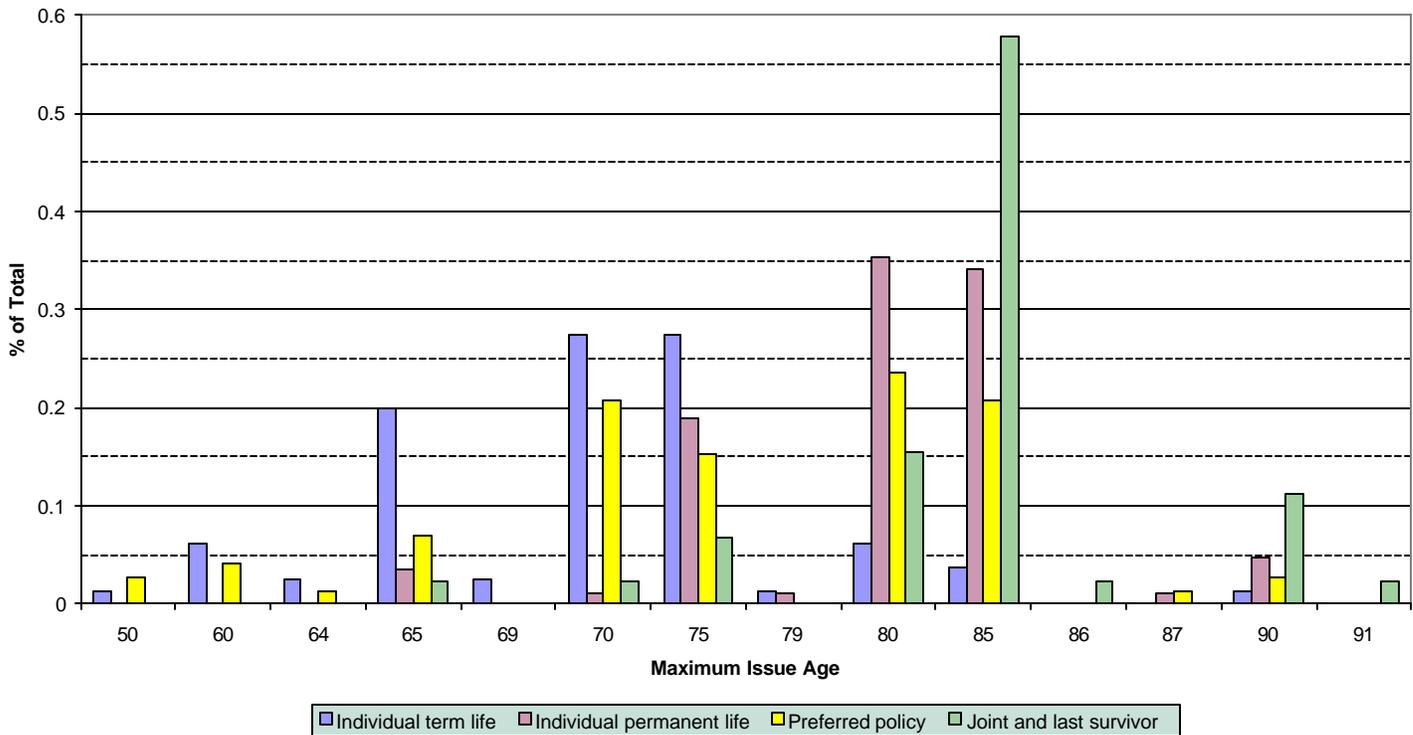
Table 1: When Does “Older Age” Begin?

	Age	Number	%
Low	50	4	5
Average	64.6	73	100
High	76	3	4
Most Common Responses	70	20	27
	60	11	15
	65	11	15
	66	7	10

Maximum Issue Age

Companies were asked to provide the maximum issue age at which they routinely issue individual term life insurance, individual permanent life insurance, preferred risk policies and joint and last survivor. Graph 2 below shows the distribution of responses by product type. Table 2 below shows, by product, the number of companies that responded to this question and the low, average, and high maximum issue ages. It also shows the three most common maximum issue ages reported.

Graph 2: Maximum Issue Age by Product Type – Distribution of Responses



91% (80 of 88) of the companies responding to the survey reported that they issue individual term life insurance. Not surprisingly, term had the lowest average maximum issue age (71.0) of the four products. More than half the responding companies indicated that they issue individual term life insurance up to issue age 70 (28%) or 75 (28%). The range of maximum issue ages reported was 50 to 90. Note that only one company reported issue age 50 and one reported issue age 90.

97% (85 of 88) of the responding companies reported that they issue individual permanent life insurance. Individual permanent life had an average maximum issue age of 80.7 years, almost 10 years higher than individual term life. Over two-thirds of the companies reported that they issue individual permanent life insurance up to either issue age 80 (35%) or 85 (34%). The range of maximum issue ages reported was 65 to 90.

82% (72 of 88) of the companies reported that they issue preferred products, reporting an average of 75.6 years. Of the responding companies that issue preferred products, 40% reported the same issue age for term as preferred and 38% reported the same issue age for permanent as preferred. In addition, 19% of the companies with preferred products reported a different maximum issue age than either term or permanent, while the remaining 3% reported the same age for term and permanent. The most common maximum issue ages reported for preferred products are 80 (at 24%), then 70 and 85 (each with 21%). The range of maximum issue ages reported is 50 to 90.

51% (45 of 88) of the companies responding to the survey reported that they issue joint and last survivor products. This product had the oldest average maximum issue age of 83.5 years. By far, the most companies reported issuing joint and last survivor up to issue age 85 (58%). Note that the issue age for joint and last survivor products may be either an average age or the Joint Equal Age based on the

responding company's calculation; we did not ask them to specify. The range of maximum issue ages reported was 65 to 91.

Table 2: Maximum Issue Age by Product Type

Product		Age	Number	%
Individual Term	Low	50	1	1
	Average	70.1	80	100
	High	90	1	1
	Most Common Responses	70	22	28
		75	22	28
65		16	20	
Product		Age	Number	%
Individual Permanent	Low	65	3	4
	Average	80.7	85	100
	High	90	4	5
	Most Common Responses	80	30	35
		85	29	34
75		16	19	
Product		Age	Number	%
Preferred	Low	50	2	3
	Average	75.6	72	100
	High	90	2	3
	Most Common Responses	80	17	24
		70	15	21
85		15	21	
Product		Age	Number	%
Joint and Last Survivor	Low	65	1	2
	Average	83.5	45	100
	High	91	1	2
	Most Common Responses	85	26	58
		80	7	16
90		5	11	

Exceptions to Maximum Issue Age

We asked companies whether they allow exceptions to the maximum issue ages reported in Table 2 and Graph 2 above. 10% of the companies reported that they allow exceptions; their responses vary by product type. The low number of companies that reported making exceptions is surprising to us because we thought that more companies have the ability to, and do make, an occasional exception.

For individual term life insurance, one company reported that it makes an exception up to issue age 80 (from age 75 as originally reported).

For individual permanent life insurance, eight companies make exceptions to the reported maximum issue ages. Of these, three companies allow exceptions up to issue age 80 (from 75), two issue up to age 85 (from 80), another two issue up to age 89 (from 85) and one issues up to age 80 (from 70).

None of the companies reported making exceptions to the maximum issue ages reported above for preferred products.

For joint and last survivor products, three companies reported making exceptions to the reported maximum issue ages. Two companies issue up to age 89 (from 85) and one company issues up to age 80 (from 75).

Indicators of Mortality

We asked the respondents to write-in up to three items that they felt were the most important indicators of mortality at the older ages. 69 companies provided a total of 199 responses. Since these responses were quite varied, we summarized them into 15 categories as shown in Table 3 below. The percentages are calculated by dividing the number of respondents in a particular category by the total number of respondents to this question (69).

Table 3: Indicators of Mortality at the Older Ages

Indicator	Number of Respondents	% of Companies Responding to this Question
Medical history/condition	42	61
ADL's/physical activity	27	39
Mental health/status	20	29
Cardiovascular	17	25
Health condition/history	16	23
Family history	13	19
Lifestyle/mobility	10	14
Financial	10	14
Falls	9	13
Testing	9	13
Cancer	8	12
Smoking	6	9
Death of spouse	3	4
Social	3	4
Other	6	9

We feel that all of the write-in items mentioned are important in determining mortality in the older ages. Combining the various responses was difficult, as a number of the items could have potentially been placed in another category. Some of the specific responses are described below.

“Medical history/condition” was the only category selected by over 50% of the respondents. Combining the medical-related categories (medical, health, cardiovascular and cancer) produces a response rate of 83, far exceeding any other category.

“Medical history/condition” responses include medical history (specifically mentioned 16 times), medical findings, medical care (4 times), physician visits, hospitalization, medication, stroke (2 times), impairments (5 times), weight loss, complete blood count and genetics.

ADL stands for Activities of Daily Living. “ADL’s/physical activity” includes all mention of ADL’s (18) and all mention of activity including physical activity (8) and regular exercise of the mind, body and spirit.

“Mental health/status” includes mental health (3), mental status (4), mental capacity, dementia, cognitive ability/impairment (4) and depression (3).

“Health condition/history” includes current health (3), health history, how well a person deals with their health status, attention and adherence to their own health maintenance, nutrition, functionality (2) and frailty.

“Cardiovascular” includes health, history of, disorders and disease. It also includes EKG’s, which were mentioned three times.

Besides the various ways of mentioning ADL’s, “Family history” was the single most selected item (13 times).

Lifestyle or mobility was mentioned seven times. “Lifestyle/mobility” also includes lack of independence, family support/living arrangements and environment (spouse, etc.)

“Falls” were mentioned in one form or another nine times. This included recent falls, number of falls and frequency of falls.

“Cancer” includes history of and evidence of cancer.

“Testing” includes build, blood pressure (2), APS information, MVR, lab tests (3), PSA testing and pulmonary function.

“Financial” includes children as owner/beneficiary, economic status (3), finances (3), source of premium payments, purpose of insurance and need for life insurance.

“Smoking” includes use and history of smoking.

“Death of a spouse” includes recent loss, health of the spouse and death (2).

“Social” includes active social life (2) and social isolation.

“Other” includes active at work (2), age, alcohol use, anti-selection and our favorite response “that unknown factor of why someone who is supposed to die doesn’t and someone who isn’t supposed to die does.”

In conclusion, there are many important factors in determining mortality at the older ages. Some factors which have more significance at the older ages than at the younger ages include ADL's, physical activity, mental health/status, mobility, living arrangements, falls and death or health of a spouse.

Resources

We asked about the resources that the company had for assessing underwriting practices for the older age market. Table 4 below ranks the resources by availability.

Table 4: Resources

Resource	% of Responding Companies
Medical Director	84
Reinsurer	81
Internet research	69
Geriatric literature	63
Medical physician/consultant	35
Specially trained underwriters	22
Medical affiliation with hospital or other provider	13
Medical nurse	11
Geriatric specialist	8
Specially trained agents	3

The most commonly available resources were the Medical Director (84%), Reinsurers (81%), Internet research (69%) and geriatric literature (63%). All other resources were available for less than half of the respondents.

Sources of Information

We asked whether companies took different actions or had different requirements or limits for older age applicants based on various sources of information. Table 5 below ranks the sources of information which enabled companies to take different actions or for which they have different requirements for older age applicants.

Table 5: Sources of Information

Source of Information	% of Responding Companies with Different Actions/ Requirements/Limits
Attending Physicians Statement (APS)	66
Paramedical exam—MD	58
Physical exam	42
Personal history interview (PHI)	24
Motor vehicle record (MVR)	17
Telephone (if other than PHI)	10
Face-to-face interview	7
Supplemental application	6
Agent interview	5
Special application	3
Experience system	1

Companies had differences for the older ages, particularly with the Attending Physicians Statements (66%), Paramedical Exams - MD (58%) and Physical Exams (42%). All other sources of information had differences at the older ages by less than a quarter of the respondents.

Underwriting Requirements

We asked companies whether they *requested* different underwriting requirements for older age applicants for several specific items. The results are shown in Table 6 below. A follow-up question asked whether or not companies *interpreted* these requirements differently for older age applicants. These results are shown in Table 7 below.

Table 6: Requested Underwriting Requirements

Underwriting Requirement	% of Responding Companies with Differences
Attending physician statements (APS's)	72
Electrocardiograms (EKG's)	66
Physical exam	48
Maximum table rating for permanent life	26
Maximum table rating for term life	20
Pulse rate	3

The most requested underwriting requirements for the older ages were attending physician statements (APS's) - 72%, electrocardiograms (EKG's) - 66% and physical exam - 48%.

Table 7: *Interpreted Underwriting Requirements*

Underwriting Requirement	% of Responding Companies with Differences
Electrocardiograms (EKG's)	25
Attending physician statements (APS's)	22
Physical exam	15
Maximum table rating for permanent life	14
Maximum table rating for term life	10
Pulse rate	5

Only a small percentage of respondents indicated that they interpreted the underwriting requirements differently for the older ages. The top two responses here were electrocardiograms (EKG's) – 25% and attending physician statements (APS's) – 22%.

Medical Testing Requirements

We asked whether companies had different medical testing requirements for older age applicants. The results are shown in Table 8 below.

Table 8: Medical Testing Requirements

Testing Requirement	% of Responding Companies with Differences
Prostate specific antigen (PSA)	48
Chest x-rays	11
Echocardiogram	7
Pulse rate	6
Ankle/arm blood pressure index (AAI)	2
Waist/chest ratio	2
Complete blood count (CBC)	1
Waist/hip ratio	1
Forced expiratory volume (FEVI) and/or other pulmonary function tests	1

Of the medical testing requirements that we asked about (those shown in Table 8 above), PSA was the only testing requirement where there was a noteworthy difference (48%) between the testing done at older and younger ages. All other medical testing requirements had differences between the older and younger ages by no more than 11% of the respondents.

Lab and Other Testing Requirements

For various laboratory tests, we asked whether companies made any change to their range of “normal” readings when underwriting older age applicants. For those that did make such a change, we asked

whether the range was higher or lower than that for younger applicants. Table 9 below shows the results ranked by the percentage of companies making a change to their “normal” range. A number of respondents did not indicate whether the range was higher or lower and these are shown in the “no response” column.

Table 9: Underwriting Requirements

Underwriting Requirement	% of Responding Companies with Change to Normal			
	Range	Range Higher	Range Lower	No Response
Blood pressure (diastolic)	59	90	0	10
Blood pressure (systolic)	59	90	0	10
Prostate specific antigen (PSA)	28	88	0	12
Total cholesterol	24	90	5	5
Build	14	92	8	0
Cholesterol/HDL ratio	13	91	0	9
Glucose (blood)	11	100	0	0
Triglycerides	11	89	0	11
Alkaline phosphatase	4	100	33	0
Apolipoproteins	4	100	0	0
Blood urea nitrogen (BUN)	4	67	0	0
Fructosamine	4	67	0	33
Height/Weight ratio	4	100	0	0
LDL/HDL ratio	4	100	0	0
LDL/VLDL ratio	4	100	0	0
Pulse rate	4	100	0	0
Body mass index	2	100	0	0
Serum albumin	2	0	50	50
Urine glucose	2	100	0	0
Creatinine	1	100	0	0
Hematocrit	1	0	0	100
Neutrophil count (differential count)	1	100	0	0
Serum creatinine	1	0	100	0
Total bilirubin	1	100	0	0
Total protein	1	100	0	0
Urine protein	1	100	0	0

Blood pressure - diastolic and systolic (59%) was the only underwriting requirement where at least half of the respondents indicated a change to their normal range for the older ages. The next two were PSA (28%) and total cholesterol (24%). All other underwriting requirements had changes made to their normal range by less than 15% of the respondents.

No companies reported different normal ranges for the following: Alanine transaminase (ALT) or Serum glutamate pyruvate transaminase (SGPT), Albumin (blood), Aspartate transaminase (AST) or Serum glutamic oxaloacetic transaminase (SGOT), Carbohydrate-deficient transferrin (CDT), Gamma-glutamyl transpeptidase (GGTP) or Gamma-glutamyl transferase (GGT), Globulin, Hemoglobin, Hemoglobin-associated acetaldehyde (HAA), Lymphocyte count (differential count) or Serum calcium.

When comparing whether companies used a higher range or lower range for the older ages, the survey results generally show that most companies are using a higher range. This result needs to be interpreted cautiously and looked at for each underwriting requirement separately. Even though only a small percentage of the respondents indicate that they used a lower range for both total cholesterol and build, this reflects some recent information that lower cholesterol and lower weight may also have an impact on mortality at the older ages.

Non-Medical Criteria

We asked companies about their use of non-medical criteria. We wanted to know whether a company *specifically asks* about these criteria for older age applicants. If they responded that they didn't *specifically ask* about the criterion, we asked whether or not they *considered* the criterion in making an underwriting decision.

The following three tables rank the most common non-medical criteria about which companies *specifically ask* (Table 10), *consider* (Table 11), or *do not consider* (Table 12) in making underwriting decisions for the older ages. Only the top ten or eleven responses are shown. For a complete list of all non-medical criteria, see Appendix A. Due to rounding, the percentages for each criterion in Tables 10, 11 and 12 may not always add to 100%.

Table 10: Non-Medical Criteria – Ranked by "Specifically Asks"

Non-Medical Criterion	% of Respondents - Specifically Asks	% of Respondents - Does Not Ask, But Considers	% of Respondents - Does Not Consider	% of Respondents - No Answer
Prescription drug use	77	16	5	2
Tobacco use	77	17	5	1
Under care of a regular physician	76	20	2	1
Aviation risk	69	20	9	1
Hazardous avocation	68	22	8	2
Depression	68	28	3	0
Family history	67	17	15	1
Traffic violations	66	25	6	3
Driving	57	28	14	1
Income	57	27	15	1
Alcohol consumption	52	42	5	1

Over three-quarters of the companies responding to this survey *specifically ask* about prescription drug use and tobacco use (both at 77%) and under the care of a regular physician (76%) when making an underwriting decision for the older age applicants. Another five non-medical criteria were *specifically asked* about by two-thirds of the respondents and three additional non-medical criteria were *specifically asked* about by over half of the respondents.

Table 11: Non-Medical Criteria – Ranked by "Does Not Ask, But Considers"

Non-Medical Criterion	% of Respondents - Specifically Asks	% of Respondents - Does Not Ask, But Considers	% of Respondents - Does Not Consider	% of Respondents - No Answer
Ambulation/mobility inside/outside	22	72	7	0
Falls	17	72	10	1
Assisted mobility (e.g., use of crutches or cane)	22	70	8	0
Oxygen use	17	70	11	1
Trouble with loss of balance	14	67	17	2
Physical therapy	9	67	22	2
Mobility	18	66	15	1
Memory problems	15	66	18	1
Pacemaker use	24	65	9	2
Cognitive skills	15	65	19	1

There were 28 non-medical criteria that at least half of the respondents *consider* when making underwriting decisions for the older age applicants. Note that many of these criteria were more focused on activities of daily living (ADL's), while the non-medical criteria about which companies *specifically ask* appear to be those common to all insureds, not just older ones. The top four answers were ambulation/mobility and falls (both at 72%) and assisted mobility and oxygen use (both at 70%).

Table 12: Non-Medical Criteria – Ranked by "Does Not Consider"

Non-Medical Criterion	% of Respondents - Specifically Asks	% of Respondents - Does Not Ask, But Considers	% of Respondents - Does Not Consider	% of Respondents - No Answer
Teeth (own/artificial)	1	21	77	1
Education	4	26	69	1
Pet ownership	2	28	67	2
Sexual activity	1	30	67	2
Time use	3	31	64	2
Public transportation use	3	32	63	2
Telephone use	5	31	63	2
Household safety	2	37	59	1
Laundry	7	34	58	1
Shopping	7	35	56	2
Meal planning and cooking	8	36	56	0

There were 19 non-medical criteria that at least half of the respondents *do not consider* when making underwriting decisions for the older age applicants. The top four are teeth (77%), education (69%), and pet ownership and sexual activity (both at 67%).

Financial Underwriting Requirements

We inquired as to whether companies had different financial underwriting requirements for older age applicants. The results are shown in Table 13 below.

Table 13: Financial Underwriting Requirements

Requirement	% of Responding Companies with Differences
Source of income	10
Unaudited financial statement	3
Statement from financial planner	1
Cover letter from agent (write-in)	1
Audited financial statement	0
Financial institution statements	0
Tax returns	0
W2 forms	0

The most common response was source of income, but only 10% indicated that they have different financial underwriting requirements between the older and younger age applicants for this requirement. It appears that there is not much of a difference in financial underwriting requirements between the younger and older age applicants.

Review of Underwriting Guidelines

We asked how often underwriting guidelines were reviewed. Table 14 below shows the results.

Table 14: How Often Underwriting Guidelines are Reviewed

Timeframe	Older Age Underwriting Guidelines % of Responding Companies	General Underwriting Guidelines % of Responding Companies
As needed	78	66
Every year	9	17
Every 2 years	6	10
Every 3+ years	5	7
Other	1	0
No response	1	0

More than three-quarters of the respondents reported that they review their underwriting guidelines for older ages on an “as-needed” basis; this compares to about two-thirds of respondents that review their general underwriting guidelines on an “as-needed” basis. This seems to imply that more companies

review their general underwriting guidelines more regularly than their older age guidelines. The company with the “Other” response indicated that the guidelines were currently being developed.

After asking how often underwriting guidelines were reviewed, we asked when they were last reviewed and when they are next planned for review. Tables 15 and 16 below show these results.

Table 15: When were Underwriting Guidelines Last Reviewed?

Timeframe	Older Age Underwriting Guidelines % of Responding Companies	General Underwriting Guidelines % of Responding Companies
Within last year	50	59
1-2 years ago	26	26
3+ years ago	19	13
Other	2	1
No response	2	1

Half of the respondents reported that they reviewed their older age underwriting guidelines within the last year. This compares to 59% of the respondents who reported that they reviewed their general underwriting guidelines within the last year. Again, this is an indication that general underwriting guidelines are reviewed more frequently than older age underwriting guidelines. Over three-quarters of the respondents indicated that they have reviewed their older age underwriting guidelines and their general underwriting guidelines within the last two years. Of the “Other” responses, one company said that they continually review underwriting guidelines and one said that they are currently developing their underwriting guidelines for the older ages.

Table 16: When will the Underwriting Guidelines for Older Ages Next be Reviewed?

Timeframe	% of Responding Companies
This year	18
In 1-2 years	42
In 3+ years	0
No current plan	39
N/A	1

Most respondents planned to next review their older age underwriting guidelines in 1 – 2 years (42%) or had no current plans to review them (39%). 18% of the respondents planned to review their underwriting guidelines for the older ages within the next year and no one said that they planned to review them longer than two years from now.

Obstacles to Older Age Underwriting

We asked companies to indicate whether or not certain obstacles kept them from asking more comprehensive questions or doing more testing at the older ages. The percentage of companies, which felt that they had encountered the particular problem (or obstacle), is shown in Table 17 below.

Table 17: Obstacles to Older Age Underwriting

Problem	% of Responding Companies
Cost of testing/acquiring additional information	75
Agent pressure	60
Speed of issue	58
Protective value of test	49
Privacy issues	48
Insult to applicant	41

Cost was an obstacle for three-quarters of the respondents. Agent pressure and the speed to issue were also issues for over 50% of the respondents. All of the obstacles we asked about were issues for over 40% of the respondents.

Six companies indicated that they were able to ask more comprehensive questions and do more testing as needed. Of these, three companies did not indicate that any of our obstacles were a problem for them. However, the other three still pointed out what they felt were obstacles despite saying that they were able to ask more comprehensive questions and do more testing as needed.

Additional insights were gleaned from the write-in comments. One respondent mentioned that they get what they want, but that there are costs! Another respondent mentioned that a good APS on an older age applicant is better than any test.

Special Products & Marketing Programs

As more companies begin to write business at the older ages, they have developed special plans for the older ages in order to better manage this risk. Some of the ways that they limit their risk include special underwriting programs, limited payment plans, reducing the face amount and special products. 28% of the companies indicated that they offer special life insurance products (other than joint and last survivor) for older age applicants. We received 15 write-in responses to this question, which are summarized in the categories shown in Table 18 below.

Table 18: Special Products

Category	Number of Respondents
Underwriting	5
Smaller face amount	4
Product	4
Limited pay	2

It was difficult to categorize the 15 write-in responses. A number of the write-ins could fit in more than one category.

“Underwriting” includes limited underwriting (2), standard through table 4 treated differently (2) and multiple issue bands for rating. One company said that their limited underwriting includes no attending physician statements or medical tests and they insure people with impairments unless they have been hospitalized over the last 12 months or diagnosed with AIDS.

“Smaller face amount” includes a whole life product issued to age 80, a final expense product issued to \$25,000 and age 85 and a funeral home product issued to \$15,000 and age 85.

“Product” includes whole life with issue ages 50 to 85, variable universal life, a special product issued at ages 50 to 75 and graded death benefit whole life at issue ages 50 to 85.

“Limited pay” includes a one-payment policy with a maximum face amount of \$15,000 and a maximum issue age of 95 and a single-pay or 20-pay plan issued to age 85.

We also asked about special marketing programs for older ages. 22% of the companies provided eight write-in answers regarding special marketing programs for older ages. Examples include burial or final expense-type programs (4), wealth transfer or estate planning programs (2) and long-term care.

These products and marketing programs are becoming more popular as the older age population grows and companies try to tap into these potential new markets.

Is the Older Age Business Profitable?

We asked whether the respondents felt that their business at the older ages was profitable. 49% indicated that they felt that the business was profitable, 3% thought that the business wasn't profitable and 48% weren't sure or didn't answer.

Retention Reduction

We asked the age at which companies typically reduce their retention among older ages. Table 19 below shows the average age of retention reduction, low and high reported ages and most common responses, by product type, for companies reporting a reduction in retention at the older ages. Please note that, for individual term, 24 companies responded; for individual permanent, 45 companies responded; and for both preferred and joint and last survivor, 28 companies responded

Table 19: First Age Retention is Reduced, for Older Age Applicants

Product		Age	Number	%
Individual Term	Low	60	2	8
	Average	64.8	24	100
	High	76	2	8
	Most Common Responses	61	9	38
		66	6	25
65		3	13	
Product		Age	Number	%
Individual Permanent	Low	61	11	24
	Average	68.6	45	100
	High	81	1	2
	Most Common Responses	61	11	24
		66	9	20
76		7	16	
Product		Age	Number	%
Preferred	Low	61	9	32
	Average	68.0	28	100
	High	81	1	4
	Most Common Responses	61	9	32
		66	6	21
76		5	18	
Product		Age	Number	%
Joint and Last Survivor	Low	61	4	14
	Average	69.9	28	100
	High	81	1	4
	Most Common Responses	76	7	25
		66	6	21
61		4	14	

56% of the companies reported that they reduced their retention at older ages. Two-thirds of these reported that they varied the reduction age by product type. 44% of the total respondents either left the question blank or wrote in “n/a.” We’ve interpreted this to mean that they do not reduce their retention at the older ages. However, for those that reported “n/a” or left the question blank, there may be different interpretations. We are unable to tell whether companies never reduce their retention, or don’t reduce their retention by age – implying that they may reduce it by some other way (for example, one company said that they reduce retention “by rating, not age”). We believe that other companies may reduce retention by rating as well. Another interpretation could be that they reduce their retention at a younger age and it remains level thereafter, so it is not further reduced at the older ages.

For individual term life insurance, the average age of the 24 companies that reported a reduction in retention at the older ages is 64.8 years. The most common responses were age 61 (38%), age 66 (25%) and age 65 (13%).

For individual permanent life insurance, the average age of the 45 companies that reported a reduction in retention at the older ages is 68.6 years. The most common responses were age 61 (24%), age 66 (20%) and age 76 (16%).

For preferred products, the average age of the 28 companies that reported a reduction in retention at the older ages is 68.0 years. The most common responses were age 61 (32%), age 66 (21%) and age 76 (18%).

For joint and last survivor, the average age of the 28 companies that reported a reduction in retention at the older ages is 69.9 years. The most common responses were age 76 (25%), age 66 (21%) and age 61 (14%). Note that the issue age for joint and last survivor products may be either an average age or the Joint Equal Age based on the responding company's calculation.

Finally, 25% of the companies indicated that they further reduce their retention at some higher ages than reported above.

Reinsurance

We asked several questions about the type of reinsurance used for the older age applicants. The first question that we asked was what percentage of the older age applicants are submitted for reinsurance facultatively. We also asked what percentage of the older age issued and placed policies are reinsured facultatively and automatically. The results are shown in Table 20 below.

Table 20: Reinsurance of Older Ages

% Submitted or Placed	Respondents that <u>submitted older age</u> <u>applicants for</u> <u>reinsurance</u> <u>facultatively:</u>	Respondents that <u>reinsured issued and</u> <u>placed older age policies</u> <u>facultatively:</u>	Respondents that <u>reinsured issued and</u> <u>placed older age policies</u> <u>automatically:</u>
	% of Responding Companies	% of Responding Companies	% of Responding Companies
0-1	17	16	18
>1-5	17	18	7
>5-10	13	10	5
>10-20	9	5	5
>25-50	6	6	11
>50-75	3	5	2
>75-90	1	0	5
>95-99	0	0	9
100	2	1	0
Unknown/NA	28	31	26
Other	3	0	2
No response	0	7	10

It is interesting to note that the answers ranged from 0% to 100%. This makes sense as some companies rely extensively on their reinsurers in the older age market, while others either do not use reinsurance at all or use it sparingly.

Facultative Submissions

Over one-third of the respondents (30 companies) reported that they submitted 5% or less of their older age applicants for facultative reinsurance. The largest single responses came from those that submitted exactly 5% and exactly 10% of their older age cases facultatively (9 companies each). At the other end of the spectrum, 2% of the respondents submitted all of their older age applicants for facultative reinsurance. There was a large number of companies that responded “unknown” or “N/A” to this question - 28%. Of the three respondents in the “Other” category, two said that it depends on the amount applied for and one said that it depends on the rating of the applicant.

We asked how these percentages compared to those for the younger ages. 23% said that the percentages for the older age applicants were lower, 41% said that they were higher and 19% said that they were the same. 16% did not respond to this question and 1% said that they didn’t know. This result is a little surprising in that we would have expected more facultative submissions at the older ages when compared to the younger ages.

It is also a little surprising that only 41% indicated that a higher percentage of older age applicants were submitted facultatively. The reason for this may have been that companies were looking at this question on a face amount versus number basis.

Reinsurance on Issued and Placed Business

Of the issued and placed older age policies that were reinsured facultatively, 34% indicated that they reinsured 5% or less of their older age business facultatively. The most common responses were those who said that they reinsured 5% (9 companies) and 10% (7 companies) of their business facultatively. No one said that they reinsured over 75% of their older age business facultatively. In the “Other” category, one respondent said that they facultatively reinsured all business over age 70 and another said that they facultatively reinsured all business over age 75. There was a large number of companies that responded either “unknown” or “N/A” (31%) or that did not respond (another 7%).

With respect to automatic reinsurance, 18% of the respondents indicated that they reinsured 1% or less of their older age business automatically and 11% indicated that they reinsured 25 – 50% of their older age business automatically. The largest number of respondents with the same response were those that reinsured none of their older age business automatically (8 companies) and those that reinsured 5% of their older age business automatically (6 companies). Again, there was a large number of companies that responded “unknown” or “N/A” (26%) or that did not respond (10%). One of the “Other” respondents said that some business up to age 75 was automatically reinsured and the other said that all business under age 71 was automatically reinsured.

Appendix A

Alphabetical List of Non-medical Criteria (in percents)

<u>Criteria</u>	<u>Specifically Asks</u>	<u>Does Not Ask, But Considers</u>	<u>Does Not Consider</u>	<u>No Answer</u>
Alcohol consumption	52	42	5	1
Ambulation/mobility inside/outside	22	72	7	0
Assisted mobility (e.g., use of crutches or cane)	22	70	8	0
Aviation risk	69	20	9	1
Balance tests	2	61	35	1
Bathing	15	48	38	0
Bladder and bowel continence	17	64	18	1
Chair rise time	3	43	52	1
Cognitive skills	15	65	19	1
Delayed word recall (DWR)	3	59	36	1
Depression	68	28	3	0
Diet and nutrition	5	60	34	1
Dressing	13	51	35	1
Driving	57	28	14	1
Eating/feeding	11	56	33	0
Education	4	26	69	1
Exercise	17	53	28	1
Eye examinations	9	36	53	1
Falls	17	72	10	1
Family history	67	17	15	1
Gait velocity	2	50	47	1
Grip strength	3	41	53	2
Hazardous occupation	68	22	8	2
Health of spouse or significant other	5	41	51	3
Hearing	20	33	45	1
Hobbies	15	42	42	1
Household safety	2	37	59	1
Housework	10	34	55	1
Income	57	27	15	1
Intellectual stimulation	8	38	54	1
Laundry	7	34	58	1
Lifestyle	16	57	26	1
Living arrangement	11	53	34	1
Managing finances	10	52	36	1
Meal planning and cooking	8	36	56	0
Memory problems	15	66	18	1
Mental attitude	7	63	30	1
Mobility	18	66	15	1
Non-prescription medications use (e.g., aspirin)	24	47	28	1
Other physical performance tests	3	60	34	2
Oxygen use	17	70	11	1
Pacemaker use	24	65	9	2
Pet ownership	2	28	67	2

<u>Criteria</u>	<u>Specifically Asks</u>	<u>Does Not Ask, But Considers</u>	<u>Does Not Consider</u>	<u>No Answer</u>
Physical activity (e.g., walking, gardening)	13	61	24	2
Physical therapy	9	67	22	2
Power of attorney	5	59	34	2
Preparing meals	8	38	52	2
Prescription drug use	77	16	5	2
Public transportation use	3	32	63	2
Recent death of spouse or significant other	6	62	29	2
Recreational activities	13	48	38	2
Sexual activity	1	30	67	2
Shopping	7	35	56	2
Short Portable Mental Status Questionnaire (SPMSQ)	2	49	47	2
Social activities	11	43	43	2
Sports activities	20	41	36	2
Support network (e.g., family, friends, neighbors)	8	38	52	2
Teeth (own/artificial)	1	21	77	1
Telephone use	5	31	63	2
Time use	3	31	64	2
Tobacco use	77	17	5	1
Toileting	10	56	32	2
Traffic violations	66	25	6	3
Transferring	7	44	44	5
Traveling	22	43	32	2
Trouble with loss of balance	14	67	17	2
Under care of a regular physician	76	20	2	1
Volunteer work	14	39	45	2
Wheelchair use	31	58	10	1

Appendix B

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Appendix C

Companies Participating in Older Age Underwriting Practices Survey

Academy Life
Aid Association for Lutherans
AIG Life
ALFA Life Corp.
Allstate Life
American Community
American National Insurance Co.
American Republic
American United Life
Americo Cos.
AXA Assurances
Beneficial Life
Berkshire Life
BMA
Catholic Knights
Catholic Life
CGU Life Ins. Co. of America
Citizens Security Life
Clarica Life
Columbus Life
Concordia Life
Continental General
CUNA Mutual
Employers Modern Life
Equitable Life of Canada
Erie Insurance Group
Farm Bureau Life of MO
Fortis Financial Group
Grange Life Insurance
Guardian Life
GuideOne Life Insurance Co.
Hartford Life Insurance Co.
Illinois Mutual
Imperial Life
IOF Foresters
Jackson National Life
L'Excellence
Life of Georgia
LifeUSA
London Life/Great-West Life
Lutheran Brotherhood
Lutheran Life Ins. Society of Canada
Manulife Financial (Canada)
Manulife Financial (U.S.)

Maritime Life Assurance Co.
MassMutual
Merrill Lynch
MetLife
Midland National Life
Milwaukee Life Insurance
Minnesota Life
Modern Woodmen of America
MONY Life
MTL Insurance Co.
Mutual of America
National Life
National Western Life
New York Life
North American Co. for Life & Health
Northwestern Mutual Life
Pacific Guardian Life
Pan-American Life
Pekin Life Insurance Co.
PEMCO Life
Physicians Mutual
Pioneer Mutual Life
Promutuel Vie Inc.
Provident Mutual
Reliable Life Insurance Co.
Rocky Mountain Life
Royal & SunAlliance Financial
Safeco
Security National Life
Sentry Life Insurance Co.
Shelter Life
Sons of Norway
Southern Farm Bureau Life
State Farm Life
United Farm Family Life
United Heritage Mutual Life
United Investors Life
United Investors Life
UNUMProvident
Washington Life Ins. Co. of America
Western Fraternal Life Assoc.
Western-Southern Life
Woodmen of the World
Zurich Canada