## Report

## of the

## **Society of Actuaries**

# **Improving the New Business Process**

## **Survey Subcommittee**

September 2011



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#### Introduction

This report presents the results of the Improving the New Business Process Survey conducted by the Society of Actuaries (SOA) Committee on Life Insurance Mortality and Underwriting Surveys. The Survey was conducted in September 2010 and sent to direct companies in the U.S. and Canada. Forty-three companies responded, however, not all of the companies responded to all questions.

The intent of the Survey was to examine the various changes insurance companies have recently made, or are considering making, to improve the new business process and to determine which changes were considered by the respondents to have had the most impact.

The Survey inquired about various components of the new business process from the time an application is first received at the company to the time the policy is mailed. It included sections on:

- The Application Process
- Changes to Underwriting Requirements
- Underwriting Systems
- Underwriting Resources
- Experience Based on Past Changes
- Policy Delivery

#### Caveat and Disclaimer

While we anticipate and hope the results prove useful for the industry, it should be noted that while the data the Survey Subcommittee received was comprehensive, it is by no means a look at the whole industry.

The SOA and the participating companies do not recommend, encourage or endorse any particular use of the information in this Survey. The SOA makes no warranty, guarantee or representation whatsoever and assumes no liability or responsibility in connection with the use or misuse of this Survey.

The Survey Subcommittee would like to thank all of the companies who participated in the 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 Jack Luff and 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.

## Improving New Business Process Survey Subcommittee

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### **Executive Summary**

Forty-three direct companies, eight Canadian and 35 American, completed this Survey. Not all companies answered all questions; therefore, the number of respondents may vary by question. Where the numbers were relatively small, the results are expressed as numbers only.

The following summary highlights some of the more significant observations in this report. If the reader is unfamiliar with any of the abbreviations used in this report, please see Appendix B.

#### **Application Process**

- Almost half (47%) of the respondents received all applications on paper.
- Thirty-four percent of the respondents indicated less than 60% of their business was paper.
- Thirty-four percent of the respondents had an electronic application and 56% planned to introduce an electronic application at some point in the future.
- Forty-six percent of respondents retrieved a scanned image of a paper application from a secure website.
- Fifty-nine percent accepted a scanned copy via email attachment.
- Fax continued to be the most common method of transmitting paper applications, with 83% of respondents accepting faxed copies of applications.
- Just over half of respondents (54%) received paper applications within three to five days. Most of the remaining respondents (26%) received them within six or seven days.
- Thirty-five percent of respondents reported NIGO percentages at or above 50% of applications received.

#### Changes to Underwriting Requirements

- Seventy-five percent of respondents changed their underwriting requirements in the previous two years.
- Seventy-seven percent of the changes made were considered more liberal, with changes to medical exams and stress ECGs leading the liberalizations, followed closely by changes to paramedical and resting ECG limits.
- Eighty percent of respondents anticipated making changes to underwriting requirements in the next two years.
- Seventy-four percent of the anticipated changes were considered more liberal, especially changes to APS, tele-interview and paramedical limits.
- The leading requirements added within the five years prior to the Survey date were cognitive/functional tests and blood profile test NT-proBNP. These tests were added for protective value reasons.
- An increased use of tele-interviews and blood profile test glycohemoglobin was also noted. Tele-interview was added for protective value reasons and because it decreased total turnaround time. Glycohemoglobin was added for protective value reasons only.
- The leading deleted requirement (59%) was the chest X-ray. Twenty-three percent deleted the stress ECG and medical exam.

#### **Underwriting Systems**

- The majority of respondents (80%) indicated the producer and/or their staff ordered age and amount underwriting requirements.
- Eighty-seven percent of the respondents received all or virtually all laboratory results electronically.
- Seventy-nine percent of the respondents reviewed all or virtually all of their blood profile results electronically, but only 61% of respondents reviewed all or virtually all of their oral fluid tests electronically.
- Electronic transmission of an image was the most common method of receiving underwriting evidence, in particular, APS, paramedicals, ECGs and lab results.
- The majority of respondents (83%) indicated they imaged applications at the front end; another 10% indicated they imaged after the new business process had been completed.
- Over two-thirds (70%) of the respondents with front-end imaging indicated their underwriters were able to choose which case they worked on next.
- One-third of respondents indicated they had an automated underwriting system. Of those respondents who did not have an automated underwriting system, 38% were planning on moving to one in the near future.
- Of the 11 respondents who provided the percentage of new life applications approved by their system, six indicated their system approval rates were 14% to 20% and four indicated 5% or less were approved. The maximum system approval rate was 50% as indicated by one respondent.

#### **Underwriting Resources**

- Sixty-two percent of respondents allowed their underwriters to work remotely from their home at least some of the time, while 38% did not. Only two respondents indicated they had underwriting managers who worked from home.
- How often remote underwriters were required to be in the office varied widely by respondent, from 2-3 days per week to not at all.
- Seventy-five percent of respondents indicated their underwriters interpreted resting ECGs.
- Over half (56%) of respondents had an underwriting team dedicated to large cases.

#### Effect of Past Changes to New Business Practices

- Respondents expected changes to APS guidelines, inspection report limits, medical exam limits and stress ECG limits to increase producer satisfaction.
- New business expenses were expected to increase due to changes in cognitive/functional testing limits, while they were expected to be reduced due to changes in APS guidelines, inspection report limits and medical exam limits.
- More than half (54%) of the respondents indicated they reduced turnaround time by making changes to age and amount underwriting requirements. Over one-third (36%) indicated that having an underwriting image system also reduced turnaround time. Approximately one-quarter indicated the introduction of either an electronic application or tele-interview decreased turnaround time.

- The largest portion of respondents (34%) indicated age and amount changes were the single change that had the most positive impact to the new business process. Electronic application and underwriting image system were each cited by seven (22%) respondents as having the most positive impact.
- There was no discernible pattern amongst companies with the highest percentage approved within 30 days by company demographics, having an electronic application or having an automated underwriting system. However, five of six respondents indicated they had liberalized their non-medical and/or medical limits.

#### Delivering the Policy

- A majority of respondents (84%) indicated that policies were physically mailed to the agent/broker/dealer.
- A majority of the respondents (86%) indicated that regular mail service was used to deliver policies to the policyowner.
- More than one-half (58%) of respondents indicated they obtained a signed delivery receipt from the agent/broker/dealer.

## **Section 1 – Demographic Information**

- 1.1 Each respondent was asked for which country they would be filling out this Survey. Of the 43 respondents, there were 35 U.S. companies and eight Canadian companies.
- 1.2 Respondents were asked about their company size based upon new life insurance face amount issued in 2009. Small companies were defined as having issued less than \$1 billion of face amount, medium companies issued between \$1 and \$50 billion of face amount and large as more than \$50 billion of face amount.

**Table 1 - Size of Company** 

Size	# of Respondents
Small	17 (40%)
Medium	22 (53%)
Large	3 (7%)
<b>Total # of Respondents</b>	42

As shown in Table 1, just over half of the respondents (53%) were medium-sized companies and 40% of respondents were small companies. Only three respondents were large companies.

1.3 Each respondent was asked about the type of insurance company they worked for.

**Table 2 - Type of Insurance Company** 

Type	# of Respondents
Stock	21 (49%)
Mutual	12 (29%)
Fraternal	5 (12%)
Other*	4 (10%)
<b>Total # of Respondents</b>	42

#### \*Other:

- bank/stock
- mutual holding
- private
- reciprocal

Almost half of the respondents worked for stock companies, as shown in Table 2. The next largest group worked for mutual companies, representing 29% of respondents.

1.4 The Survey asked whether each respondent's company was the life affiliate of a multi-line insurance group.

**Table 3 - Affiliate of Multi-Line Insurance Group** 

Affiliate	# of Respondents
Yes	21 (50%)
No	21 (50%)
<b>Total # of Respondents</b>	42

Table 3 shows that respondents were evenly split, with half being affiliated with a multi-line insurance group.

1.5 Each respondent was asked whether their company was a regional or national provider.

**Table 4 - Regional/National Provider** 

Provider	# of Respondents
National	29 (69%)
Regional	10 (24%)
Other*	3 (7%)
Total # of Respondents	42

#### \*Other:

- International
- Fraternal (2)

As shown in Table 4, the majority of respondents (69%) were national providers. Only 24% of respondents were regional providers. Two fraternal companies selected neither regional nor national, pointing out they were fraternal organizations.

## **Section 2 – Application Process**

This section of the Report examines how applications were received by the company, how long applications took to arrive at the company, whether those applications arrived "in good order" and other features of the application process.

2.1a The Survey asked respondents to indicate whether their company received some applications on paper and almost all (95%) indicated that they did. Table 5 displays the results.

**Table 5 - Applications Received on Paper** 

Received on Paper	# of Respondents
Yes	41 (95%)
No	2 (5%)
Total # of Respondents	43

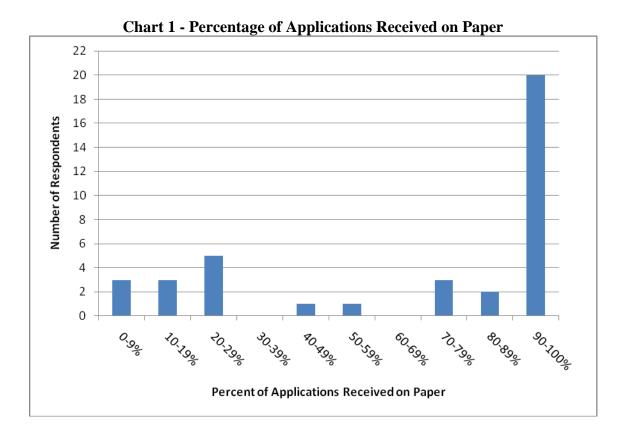
2.1b Of the 41 respondents who indicated they received paper applications, 38 provided a percentage of applications received on paper.

Table 6 - Percentage of Applications Received on Paper

Percentage	# of Respondents
100%	18 (47%)
90-99%	2 (5%)
80-89%	2 (5%)
70-79%	3 (8%)
60-69%	0 (0%)
50-59%	1 (3%)
40-49%	1 (3%)
30-39%	0 (0%)
20-29%	5 (13%)
10-19%	3 (8%)
0-9%	3 (8%)
<b>Total # of Respondents</b>	38

Almost half (47%) of the respondents received all applications on paper, as shown in Table 6. Thirteen (34%) indicated less than 60% of their applications were received on paper.

Chart 1 shows a histogram of the percentage of applications received on paper as an alternative view of the distribution of responses.



2.1c The Survey asked those respondents who received paper applications if they had any plans to introduce an electronic application.

**Table 7 - Plans for an Electronic Application** 

Plans	# of Respondents
We already have one	14 (34%)
Planning to introduce at some point in the future	12 (29%)
Will introduce in the next 12 months	9 (22%)
Will introduce in the next 13-24 months	2 (5%)
No plans to introduce	2 (5%)
Other*	2 (5%)
Total # of Respondents	41

#### \*Other:

- We have an electronic app for certain lines of business. Planning to introduce for other lines in near future.
- We have a proprietary electronic app and are working on a multi-carrier solution to be launched in the next 12 months.

Table 7 shows that a little over one-third indicated they already had an electronic application and over one-half indicated plans existed to introduce one in the future.

2.1d The Survey asked whether the percentage of applications received on paper differed by distribution channel. The results are shown in Table 8.

Table 8 – Whether Percentage of Applications Differed by Distribution Channel

Percentage Differed	# of Respondents
Yes	10 (24%)
No	31 (76%)
<b>Total # of Respondents</b>	41

For the ten respondents who answered "yes," the Survey then requested the percentage of applications received by paper per distribution channel. Responses varied by the number of channels indicated and percentages. One company did not offer any differentiation. Table 9 displays the results.

Table 9 – Applications Received on Paper by Distribution Channel

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Distribution Channel	# of Responses	Average	Min	Max
Career Agent/PPGA	6	35%	2%	85%
Independent Brokerage	5	83%	15%	100%
Direct Marketing	4	45%	0%	90%
Bank/Stockbroker	1	5%	N	I/A
Other*	2	0%	N	I/A
Total # of Respondents		9		

#### \*Other:

- One respondent identified an *Internal Phone Sales channel*, but offered no percentage.
- One respondent identified a *Home Service channel*, but offered no percentage.

Of those identifying a career agent channel percentage, two were at 80% or higher while the other four respondents were at 20% or lower. The independent brokerage channel had four respondents at 100% and one at 15%. The percentages for the direct marketing channel had two at or above 80% and two at or below 10%.

2.1e The Survey asked the respondents to indicate how their company accepted paper applications. Respondents were able to indicate more than one response.

**Table 10 - How Paper Applications were Accepted** 

How Accepted	# of Responses
Postal Services/Overnight/Courier	41 (100%)
Fax	34 (83%)
Email attachment	24 (59%)
Scanned image from a secure website	19 (46%)
Other*	1 (2%)
Total # of Respondents	41

<sup>\*</sup>The one respondent who indicated an "other" method for receiving paper applications did not specify what the "other" method was.

As shown in Table 10, every respondent (100%) accepted paper applications through some kind of postal delivery method, including overnight or courier options. A high percentage (83%) accepted fax copies while a majority (59%) accepted copies via an email attachment. Almost half (46%) accepted applications via a secure website as a scanned image.

2.1f The Survey asked respondents who accepted paper applications to indicate the average number of days between the time the application was written and the paper application was received at the office for processing. Several time periods were offered for an answer to be selected. Of the 41 respondents accepting paper applications, 39 provided an answer.

Table 11 - Average Days from Date of Paper Application to Received Date at Office

Average Days	# of Respondents
1-2 days	3 (8%)
3-5 days	21 (54%)
6-7 days	10 (26%)
8-10 days	2 (5%)
11-14 days	1 (3%)
>14 days	2 (5%)
<b>Total # of Respondents</b>	39

Just over half of respondents (54%) received the paper application within three to five days, as shown in Table 11. Most of the remaining respondents received them within six or seven days. A smaller number of respondents (8%) indicated receipt in one or two days, but 13% received applications in eight days or longer with 5% taking over 14 days to arrive.

2.1g The Survey asked what percentage of paper applications in 2009 were received NIGO. Only 34 of the 41 receiving paper applications answered the question. The results are shown in Table 12.

Table 12 - Percentage of Applications Received on Paper NIGO

Percentage	# of Respondents
1-9%	2 (6%)
10-29%	10 (29%)
30-49%	10 (29%)
50-69%	9 (26%)
70-94%	2 (6%)
95%	1 (3%)
<b>Total # of Respondents</b>	34

The responses ranged from 1% to 95%. The average percentage of responses was 37%, but 35% of the respondents reported NIGO percentages at or above 50% of applications received.

2.2a The Survey asked respondents whether their company accepted electronic applications, excluding a scanned or faxed image of a paper application.

**Table 13 - Applications Received Electronically** 

<b>Received Electronically</b>	# of Respondents
Yes	19 (44%)
No	24 (56%)
<b>Total # of Respondents</b>	43

Table 13 shows that 19 respondents (44%) accepted electronic applications.

Note 19 respondents indicated they accept applications electronically, while only 16 indicated they already have an electronic application as reported in Table 7. Two more respondents answered the question associated with Table 13. The subcommittee also noted other inconsistencies in responses and was unable to reconcile the differences.

2.2b The Survey asked what methods were used to accept electronic applications. Of the 19 companies accepting electronic applications, 17 responded with one or more methods of acceptance. The methods indicated by the companies are shown in Table 14 by order of frequency.

**Table 14 - Methods Used to Accept Electronic Applications** 

Method	# of Responses
Electronic	10 (59%)
On-line via website	9 (53%)
Fillable PDF completed & submitted electronically	6 (35%)
Other*	1 (6%)
Total # of Respondents	17

<sup>\*</sup>The "other" response noted that a PDF was printed, filled out by hand and then submitted as paper or by fax. This was a second method indicated by that respondent.

Ten respondents indicated only one method to accept electronic applications, while seven indicated more than one method. Of the ten using one method, five used the on-line via website method, four used electronic delivery and one used a fillable PDF. Of the seven using multiple methods, two used all three (not "other") and two used electronic and fillable PDF.

2.2c The Survey asked respondents to indicate the percentage of new applications submitted electronically and received as data. Of the 19 indicating receipt of electronic applications, 16 provided an estimated percentage, varying from 1% to 100%. Table 15 displays the results.

Table 15 - Percentage of Applications Received Electronically as Data

Percentage	# of Respondents
100%	1 (6%)
80-99%	5 (31%)
60-79%	3 (19%)
40-59%	0 (0%)
20-39%	4 (25%)
2-19%	2 (13%)
1%	1 (6%)
<b>Total # of Respondents</b>	16

The average of the responses was 56%. Nine (56%) of the 16 respondents reported more than 60% of applications were received electronically as data.

Chart 2 shows a histogram of the percentage of applications received electronically as an alternative view of the distribution of responses.

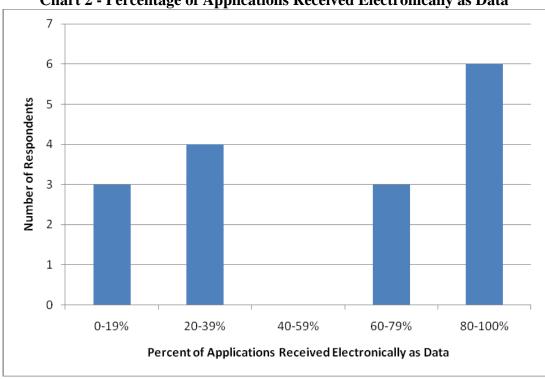


Chart 2 - Percentage of Applications Received Electronically as Data

2.2d The Survey asked respondents to indicate the percentage of applications received electronically by channel if a difference existed among distribution channels.

Table 16 – Percentage of Applications Received Electronically by Distribution Channel

Distribution Channel	100%	98%	80%	75%	25%	15%	1%	0%
Career Agent/PPGA	2	1	1	-	1	1	1	1
Independent Brokerage	1	1	-	1	1	1	1	2
Direct Marketing	1	1	-	-	1	1	1	ı
Bank/Stockbroker	1	1	-	-	ı	ı		ı
Other (telephone sales)	1	-	-	-	-	-	-	-
<b>Total # of Respondents</b>	7							

As shown in Table 16, of the seven respondents, three indicated a percentage in only one channel, two indicated percentages in two channels and two indicated percentages in three channels. Three of the six career agent/PPGA channel respondents indicated 98% or more of their applications were received electronically. Five of the seven respondents (71%) used electronic applications in the career agent/PPGA channel, far more than any respondent indicated in other channels.

2.2e The Survey asked respondents who have electronic applications to describe the system used to receive them. There were 16 respondents and the respondents could choose more than one description. The results are shown in Table 17.

**Table 17 - System for Receiving Electronic Applications** 

System	# of Responses
Developed in-house	14 (88%)
Developed commercially and used in-house	2 (13%)
Administered by an external third party	1 (6%)
Other*	1 (6%)
Total # of Respondents	16

#### \*Other:

• Proprietary system developed with a third party that is administered by the company

The majority of respondents (88%) developed an electronic application system in-house.

2.2f The Survey asked respondents to indicate how signatures were obtained and allowed respondents to choose more than one method.

**Table 18 - Methods for Receiving Signatures** 

Method	# of Responses
Electronic signature	13 (76%)
Wet signature	9 (53%)
Voice signature	2 (12%)
Total # of Respondents	17

Of the 17 respondents, electronic signature was the most common response (76%), followed by wet signature (53%), as seen in Table 18. Twelve respondents used one method, three used two methods (both using electronic signature and wet signature) and two used all three methods.

## **Section 3 – Changes to Underwriting Requirements**

This section of the Report examines how recently companies had revised or considered revising their age and amount requirements, including APS guidelines. It also examines what was done in the past and what was being considered in the future.

3.1a The first question in this section asked respondents to indicate how long ago a change was made to age and amount underwriting requirements. There were 41 respondents and the results are displayed in Table 19.

Table 19 – Time since Changes Made to Requirements

Time	# of Respondents
Less than 1 year	14 (34%)
1-2 years	17 (41%)
3-5 years	6 (15%)
6 or more years	3 (7%)
Never	1 (2%)
<b>Total # of Respondents</b>	41

Thirty-one (75%) of the respondents indicated a change had been made within the two years prior to the Survey date and a total of 91% within five years. Only three respondents (7%) indicated the last change was six or more years prior with one respondent indicating they had never made changes.

3.1b The Survey went on to ask what changes were made to age and amount underwriting requirements. Thirty-nine respondents provided details of the changes made. Table 20 is sorted by most "liberal" changes.

**Table 20 - Changes Made to Age and Amount Underwriting Requirements** 

	Increase	Decrease	9 11	
	Limit (More	Limit (More		Not
Requirement	Liberal)	<b>Conservative</b> )	No Change	Applicable
Medical Exam	17 (44%)	1 (3%)	20 (51%)	1 (3%)
Stress ECG	17 (44%)	0 (0%)	19 (49%)	3 (8%)
Resting ECG	16 (41%)	0 (0%)	21 (54%)	2 (5%)
Paramedical	16 (41%)	3 (8%)	17 (44%)	3 (8%)
Inspection Report	12 (31%)	2 (5%)	21 (54%)	4 (10%)*
Non-medical	11 (28%)	1 (3%)	24 (62%)	3 (8%)
APS Guidelines	9 (23%)	5 (13%)	20 (51%)	5 (13%)*
Blood Profile	7 (18%)	2 (5%)	27 (69%)	3 (8%)
MVR	5 (13%)	2 (5%)	29 (74%)	3 (8%)
Urinalysis	5 (13%)	1 (1%)	29 (74%)	4 (10%)
Tele-interview/Tele-application	4 (10%)	3 (8%)	27 (69%)	5 (13%)
Prescription Database Query	1 (3%)	9 (23%)	24 (62%)	5 (13%)*
Oral Fluid	1 (3%)	1 (3%)	33 (85%)	4 (10%)
Cognitive or Functional Testing	0 (0%)	7 (18%)	27 (69%)	5 (13%)
Total # of Respondents		39		

<sup>\*</sup>One company indicated that, while they made changes to their underwriting requirements, the effects of the changes were too complicated to summarize.

Of all 158 responses that indicated a change, 121 (77%) of the changes were considered more "liberal," increasing the amount/age for a requirement, and 37 (23%) were considered more "conservative," decreasing the amount/age for a requirement. Medical exam and stress ECG limits led the "more liberal" changes at 44% each. Resting ECG and paramedical limits were not far behind at 41% each. Prescription database query limits (23%) and cognitive or functional testing limits (18%) led the "more conservative" changes.

Chart 3 displays the responses in a graphical format.

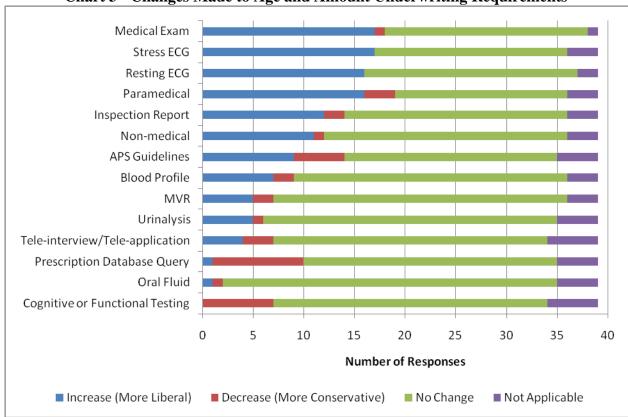


Chart 3 - Changes Made to Age and Amount Underwriting Requirements

3.2a The Survey asked respondents within what time frame they would consider next reviewing or changing age and amount underwriting requirements.

Table 21 – Time until Next Change for Requirements

Time	# of Respondents
Less than 1 year	12 (30%)
1-2 years	21 (53%)
3-5 years	1 (3%)
6 or more years	1 (3%)
Never	5 (13%)
<b>Total # of Respondents</b>	40

As shown in Table 21, 33 of the 40 respondents (83%) were expecting to make changes within two years of the Survey date, with 12 (30%) expecting to make changes in less than a year. Five respondents (13%) did not expect to ever make changes to their requirements.

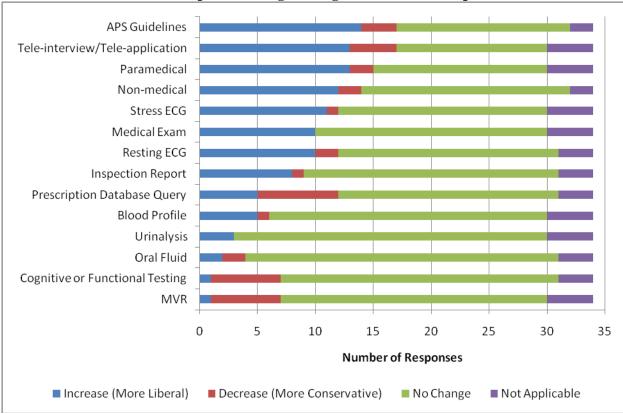
3.2b The Survey then asked what changes the respondents anticipate making to their age and amount requirements. Thirty-four respondents are anticipating changes, which are summarized in Table 22.

**Table 22 – Anticipated Changes to Age and Amount Requirements** 

	Increase	<b>Decrease Limit</b>	•	
	Limit (More	(More		Not
Requirement	Liberal)	Conservative)	No Change	Applicable
APS Guidelines	14 (41%)	3 (9%)	15 (44%)	2 (6%)
Tele-interview/Tele-application	13 (38%)	4 (12%)	13 (38%)	4 (12%)
Paramedical	13 (38%)	2 (6%)	15 (44%)	4 (12%)
Non-medical	12 (35%)	2 (6%)	18 (53%)	2 (6%)
Stress ECG	11 (32%)	1 (3%)	18 (53%)	4 (12%)
Medical Exam	10 (29%)	0 (0%)	20 (59%)	4 (12%)
Resting ECG	10 (29%)	2 (6%)	19 (56%)	3 (9%)
Inspection Report	8 (24%)	1 (3%)	22 (65%)	3 (9%)
Prescription Database Query	5 (15%)	7 (21%)	19 (56%)	3 (9%)
Blood Profile	5 (15%)	1 (3%)	24 (71%)	4 (12%)
Urinalysis	3 (9%)	0 (0%)	27 (79%)	4 (12%)
Oral Fluid	2 (6%)	2 (6%)	27 (79%)	3 (9%)
Cognitive or Functional Testing	1 (3%)	6 (18%)	24 (71%)	3 (9%)
MVR	1 (3%)	6 (18%)	23 (68%)	4 (12%)
Total # of Respondents		34		

Of all 145 changes anticipated, 108 (74%) were considered more "liberal," increasing the amount/age for a requirement, and 37 (26%) were considered more "conservative," decreasing the amount/age for a requirement. The most frequently anticipated "liberalization" was a change to APS guidelines, followed closely by tele-interview/tele-application limits and paramedical limits. The most frequently anticipated "conservative" changes were those for prescription database queries, cognitive or functional testing limits and MVR limits.

Chart 4 displays the responses in a graphical format.



**Chart 4 - Anticipated Changes to Age and Amount Requirements** 

The Survey Subcommittee combined those responses to recent changes in guidelines with responses to future changes to give a view into how the market had and would continue to evolve. Respondents could have provided answers in both sections. Of changes made or anticipated as covered in questions 3.1a through 3.2b, there were 229 (76%) more "liberal" and 74 (24%) more "conservative." Of the liberalizations made or anticipated, the most common were paramedical limits with 29 responses (40%), followed by stress ECG limits with 28 responses (38%) and medical exam limits with 27 responses (37%). The least common was cognitive or functional testing limits with only one response (1%).

Of the "conservative" changes made or anticipated, the most frequent were prescription database query limits with 16 (22%) and cognitive or functional testing limits with 13 (18%). The least frequent were stress ECG limits, medical exam limits and urinalysis limits, each with one (1%).

3.3a The Survey asked respondents to indicate what requirements had been added within the past five years from the Survey date and the reasons for the additions. Some respondents cited more than one reason for the addition. A list of possible choices was provided, along with the opportunity to name other requirements. Table 23 displays the results.

**Table 23 – Requirements Added in Past Five Years** 

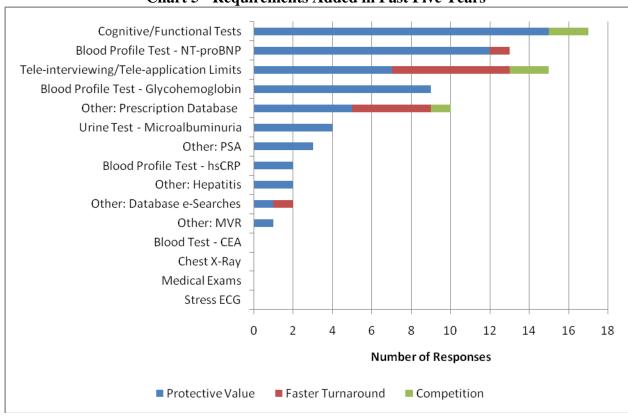
		Protective	Faster	
Requirement	Respondents	Value	Turnaround	Competition
Cognitive/Functional Tests	15	15	0	2
Blood Profile Test – NT-proBNP	12	12	1	0
Tele-interviewing/Tele-application Limits	10	7	6	2
Blood Profile Test - Glycohemoglobin	9	9	0	0
Other: Prescription Database	5	5	4	1
Urine Test - Microalbuminuria	4	4	0	0
Other: PSA	3	3	0	0
Blood Profile Test - hsCRP	2	2	0	0
Other: Hepatitis	2	2	0	0
Other: Database e-Searches	1	1	1	0
Other: MVR	1	1	0	0
Blood Test – CEA	0	0	0	0
Chest X-Ray	0	0	0	0
Medical Exams	0	0	0	0
Stress ECG	0	0	0	0
Total # of Responses	64	61	12	5

Of the 15 respondents who added cognitive/functional tests, all 15 cited protective value as a reason and two did it for competitive reasons as well. The 12 respondents who added NT-proBNP cited protective value as a reason, with one adding faster turnaround time as an additional reason. Of the ten respondents who added tele-interviewing/tele-application, the most common reasons were protective value and faster. All nine who added glycohemoglobin did it for protective value reasons. Of the five who added prescription database query, all five did so for protective value, but four also indicated faster and one indicated competition.

The requirements added by the most respondents within the five years prior to the Survey date were cognitive/functional tests with 15 (or 23% of the additions noted, but 52% of the respondents) and NT-proBNP with 12 (19% of additions and 41% of the respondents). Tele-interviewing/tele-application limits were next with ten (16% of additions and 34% of respondents) and glycohemoglobin with nine (14% of additions and 31% of respondents).

Of the 78 responses to reasons given for adding requirements, 61 (78%) related to protective value, 12 (15%) to speed (faster) and only five (6%) to competition.

Chart 5 displays the responses in a graphical format.



**Chart 5 - Requirements Added in Past Five Years** 

Some companies changed several requirements while a significant number changed none. Table 24 shows a summary of the number of requirements added.

**Table 24 - Number of Requirements Added** 

Number	# of Respondents
0	14
1	8
2	5
3	7
4	8
7	1
<b>Total # of Respondents</b>	43

Of the 43 respondents, 29 (67%) indicated they added additional requirements and 14 (33%) did not.

3.3b The Survey asked respondents to indicate what requirements have been deleted within the past five years and the reasons for each deletion. There were 22 respondents who indicated deleting a requirement. Table 25 lists the changes in order of the most frequently named requirements and the reasons. Respondents were able to indicate more than one reason.

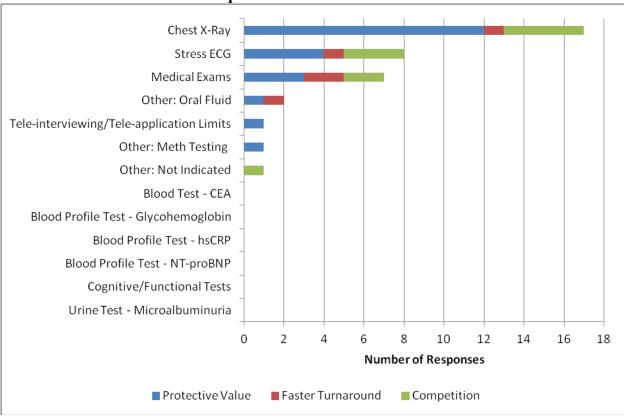
**Table 25 – Requirements Deleted in Past Five Years** 

•		Protective	Faster	
Requirement	Respondents	Value	Turnaround	Competition
Chest X-Ray	13	12	1	4
Stress ECG	5	4	1	3
Medical Exams	5	3	2	2
Other: Oral Fluid	1	1	1	0
Tele-interviewing/Tele-application Limits	1	1	0	0
Other: Meth Testing	1	1	0	0
Other: Not Indicated	1	0	0	1
Blood Test – CEA	0	0	0	0
Blood Profile Test – Glycohemoglobin	0	0	0	0
Blood Profile Test – hsCRP	0	0	0	0
Blood Profile Test – NT-proBNP	0	0	0	0
Cognitive/Functional Tests	0	0	0	0
Urine Test – Microalbuminuria	0	0	0	0
Total Responses	27	22	5	10

Four respondents deleted two requirements each and 18 deleted one. Of the 13 respondents who indicated deleting chest X-ray, 12 cited protective value as a reason, one cited faster turnaround and four cited competition. Of the five respondents who indicated deleting stress ECGs, four cited protective value as a reason, one cited faster and three cited competition. Of the five respondents who indicated deleting medical exams, three cited protective value as a reason, two cited faster and two cited competition.

The leading deleted requirement with 13 of the respondents (59%) deleting was the chest X-ray. Five respondents (23%) deleted the stress ECG and medical exam.

Chart 6 displays the responses in a graphical format.



**Chart 6 - Requirements Deleted in Past Five Years** 

The Survey Subcommittee compared the reasons for additions and deletions of requirements. Protective value was the primary driver for both additions (78%) and deletions (59%). Competition was a more significant reason with deletions than with additions with ten (27%), giving that reason for a deletion versus five (6%) of the reasons for additions. Faster turnaround time was less of a reason for additions (15%) and deletions (14%).

### **Section 4 – Underwriting Systems**

This section of the Report examines how age and amount requirements (including APS) were ordered, received and reviewed and the systems used to support the underwriting function.

4.1 The Survey asked respondents to indicate who ordered age and amount underwriting requirements. Respondents were able to indicate more than one response. There were 41 respondents with a total of 70 responses.

**Table 26 - Who Ordered Requirements** 

Who	# of Responses
Producer and/or staff	33 (80%)
The company	26 (63%)
Tele-interview vendor	11 (27%)
<b>Total # of Respondents</b>	41

As seen in Table 26, the majority of respondents (80%) indicated the producer and/or their staff ordered age and amount underwriting requirements. Almost two-thirds (63%) indicated the company ordered underwriting requirements. Just over one-quarter (27%) indicated the tele-interview vendor orders the requirements. The responses suggest companies were flexible in this area.

4.2 The Survey asked respondents who ordered the APS. Respondents were able to indicate more than one response. There were 41 respondents with a total of 55 responses. Table 27 displays the results.

Table 27 - Who Ordered APS

Who	# of Responses
The company	36 (88%)
Producer and/or staff	13 (32%)
Tele-interview vendor	4 (10%)
Other*	2 (5%)
Total # of Respondents	41

#### \*Other:

- outside vendor
- APS vendor

The majority of respondents (88%) indicated the company ordered APS. Almost one-third (32%) of respondents allowed the producer and/or staff to order APS. Only 10% of respondents had arrangements with a tele-interview vendor to order APS. Respondents tended to control the ordering of APS more stringently than other underwriting requirements.

4.3a The Survey asked respondents what percentage of their laboratory results were received electronically (excluding sensitive results, e.g., positive HIV/drug). Table 28 shows the actual percentages as reported by the respondents.

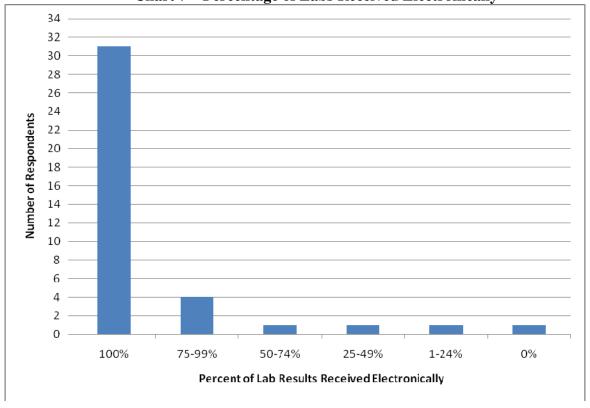
**Table 28 - Percentage of Labs Received Electronically** 

Percentage	# of Respondents
100%	31 (79%)
99%	3 (8%)
90%+	1 (2.6%)
60%	1 (2.6%)
25-30%	1 (2.6%)
1%	1 (2.6%)
0%	1 (2.6%)
<b>Total # of Respondents</b>	39

Eighty-seven percent of the respondents received all or virtually all laboratory results electronically. Only one respondent indicated none of their labs were received electronically. In addition to the above responses, another respondent indicated "we no longer do lab work."

Chart 7 shows a histogram of the percentage of lab results received electronically as an alternative view of the distribution of responses.

**Chart 7 – Percentage of Labs Received Electronically** 



4.3b Respondents were then asked to indicate what percentage of blood profile results were reviewed electronically. Seventy-nine percent of the respondents reviewed all or virtually all of their blood profile results electronically, as shown in Table 29. Only 18% of respondents indicated none of their blood profile lab results were reviewed electronically.

Table 29 - Percentage of Blood Profiles Reviewed Electronically

Percentage	# of Responses
100%	24 (73%)
99%	2 (6%)
30%	1 (3%)
0%	6 (18%)
Total # of Respondents	33

Respondents were asked what percentage of urine results are reviewed electronically. Eighty-one percent of the respondents indicated all or virtually all of their urine results were reviewed electronically. Only 16% of the respondents indicated none of their urine results were reviewed electronically. Table 30 displays the results.

Table 30 - Percentage of Urine Results Reviewed Electronically

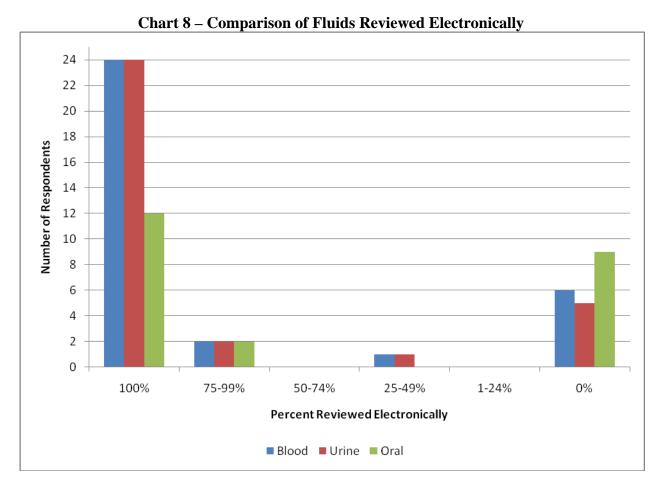
of the Results Reviewed Electronically			
Percentage	# of Responses		
100%	24 (75%)		
99%	2 (6%)		
30%	1 (3%)		
0%	5 (16%)		
<b>Total # of Respondents</b>	32		

Respondents were asked what percentage of oral fluid results were reviewed electronically. As shown in Table 31, 61% of the respondents reviewed all or virtually all of their oral fluid results electronically. However, 39% of respondents indicated none of their oral fluid results were reviewed electronically.

Table 31 - Percentage of Oral Fluids Reviewed Electronically

Percentage	# of Responses
100%	12 (52%)
99%	2 (9%)
0%	9 (39%)
<b>Total # of Respondents</b>	23

Chart 8 compares the percentage of blood profile, oral fluid and urine results that are reviewed electronically.



In reviewing the overall results of questions 4.3a and 4.3b, it is interesting to note more respondents review blood and urine results electronically than oral fluids. Because of the simplicity of reviewing oral fluid tests electronically, the Survey Subcommittee was surprised by these results. The percentage of blood and urine results reviewed electronically were virtually the same, which makes sense given blood profile kits include a urine sample as well. There were fewer respondents to the oral fluid question than blood and urine, which may be a reflection of fewer companies using oral fluids as a screening tool. This may be due to the predominance of preferred classes in the market, which require a blood profile.

4.4 The Survey asked respondents to indicate how underwriting evidence was received. Respondents were able to indicate more than one response. A total of 38 respondents answered this question. Table 32 has been sorted by the most common method of receiving underwriting evidence.

**Table 32 – How Underwriting Evidence was Received** 

		Paramedical		Stress	Lab		Total
	APS	/ Medical	ECG	ECG	Results	MVR	Responses
Electronic Transmission							
of Image	33	27	27	22	21	17	147
Mail / Courier (paper)	16	20	21	20	6	4	87
Fax	15	16	17	14	9	7	78
Electronic Transmission							
of Data	0	2	0	0	18	19	39
Total # of Respondents			_	38			

Electronic transmission of an image was the most common method of receiving underwriting evidence, in particular APSs (86% of respondents), paramedicals (71%), ECGs (71%) and lab results and the second most common method of receiving MVRs. There were 147 responses to underwriting evidence / results received as an electronic transmission of an image.

Receiving a paper copy of the evidence via mail/courier was the next most common method with 87 responses. This was the second most common method of receiving ECGs (55% of respondents), stress ECGs (53%), paramedical/medical (53%) and APSs (42%).

It is interesting to note that fax continued to be used by many respondents as an alternate way to receive ECGs (45% of respondents), paramedical/medical (42%), APSs (39%) and stress ECGs (37%). There were 78 responses to evidence received via fax.

Electronic transmission of data was the least common method overall. However, it was the most common method of receiving MVRs (50% of respondents) and second most common method of receiving laboratory results (47%). There were 39 responses to evidence received as an electronic transmission of data.

Chart 9 displays the responses in a graphical format.

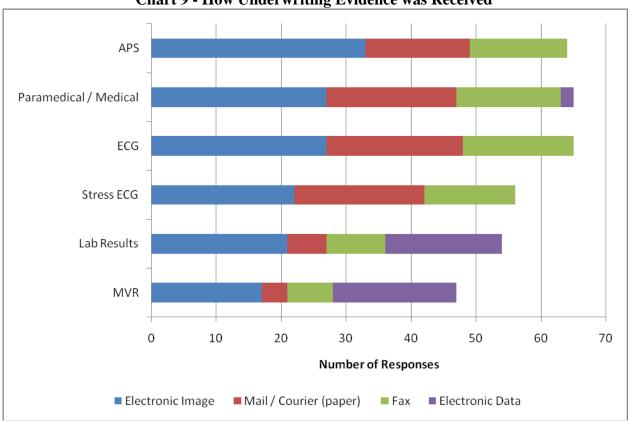


Chart 9 - How Underwriting Evidence was Received

4.5a The Survey asked respondents whether their companies' applications and underwriting evidence were imaged as part of the new business workflow. Table 33 displays the results.

Table 33 - Are Applications and Underwriting Evidence Imaged

Imaged	# of Respondents
Yes, front end imaging	33 (83%)
Yes, back end imaging	4 (10%)
No	3 (7%)
<b>Total # of Respondents</b>	40

The majority of respondents (83%) indicated they imaged applications at the front end; another 10% indicated they imaged after the new business process had been completed. Only 7% of respondents indicated they did not image their applications and underwriting evidence.

The three respondents who did not have an image system were all small companies, as identified in Section 1 of the Survey.

4.5b For those 33 respondents who indicated they image at the front-end of the new business process, the Survey asked if their underwriters had an option to choose which case they worked on next.

Table 34 - Underwriters Chose Which Case They Worked on Next

<b>Underwriters Chose Case</b>	# of Respondents
Yes	23 (70%)
No	10 (30%)
Total # of Respondents	33

As shown in Table 34, over two-thirds (70%) of the respondents indicated their underwriters were able to choose which case they worked on next.

4.5c The four respondents who indicated they imaged at the back-end of the new business process, were asked if they were considering moving to front-end imaging. Table 35 displays the results.

**Table 35 - Considered Moving to Front-End Imaging** 

Considered Moving	# of Respondents
Yes	3
No	1
Total # of Respondents	4

Three indicated they were considering moving to front-end imaging.

4.5d Table 36 shows that, of the three respondents who indicated their applications were not imaged, one respondent indicated they were planning on moving to an image environment in the near future and two did not have any plans.

Table 36 - Planned on Moving to an Image Environment

Planned on Moving	# of Respondents			
Yes	1			
No	2			
<b>Total # of Respondents</b>	3			

4.6a The Survey asked respondents if their company had an automated underwriting system that made underwriting decisions.

**Table 37 - Automated Underwriting System** 

<b>Automated Underwriting System</b>	# of Respondents		
Yes	14 (34%)		
No	27 (66%)		
Total # of Respondents	41		

Table 37 shows that about one-third (34%) of respondents indicated they did have an automated underwriting system. Ten of the 14 respondents with an automated underwriting system were American and four were Canadian. Twenty-eight percent of the respondents from American companies and 57% from Canadian companies indicated they had an automated underwriting system.

Three of the respondents' companies with an automated underwriting system were small, nine were medium and two were large. Eighteen percent of small, 50% of medium and 67% of large companies who responded to this question had an automated underwriting system.

4.6b For those respondents who indicated they did not have an automated underwriting system, the Survey asked if they were planning on moving to one in the near future.

Table 38 - Moving to Automated Underwriting System in Near Future

Moving	# of Respondents
Yes	10 (38%)
No	16 (62%)
<b>Total # of Respondents</b>	26

Just over one-third (38%) indicated they were planning on moving to an automated system, as seen in Table 38.

4.6c For those respondents who indicated they did have an automated underwriting system, the Survey asked how the system was acquired. Table 39 displays the results.

Table 39 - How System was Acquired

How	# of Respondents			
Purchased	7 (54%)			
Home grown	4 (31%)			
Other	2 (15%)			
Total # of Respondents	13			

Over half (54%) indicated they had purchased the system while 31% indicated it was home grown. Two respondents indicated "Other," although they did not provide details.

4.6d The Survey asked those respondents who had an automated underwriting system what information was entered manually for evaluation by the system. There were 15 responses to this question and they appear in Table 40.

Table 40 - Manually Entered for Evaluation by Automated UW System

Manually Entered	# of Responses		
Paper application	6		
Lab results	3		
Paramedical / Medical	1		
APS	0		
Other*	5		
<b>Total # of Respondents</b>	10		

#### \*Other:

- *Electronic application*
- Feed from electronic application
- Only interview is manual everything else is automated except EKG and APS
- Prescription data info, MVR, MIB, IAI
- Telephone interview

More than half (60%) of the respondents manually entered information from the paper application, 30% manually entered lab results and none manually entered information from the APS.

4.6e The Survey asked respondents for the maximum face amount of insurance their automated underwriting system could approve at various ages. Responses are shown in Table 41. Not all amounts were selected by all respondents for all ages. A dash indicates "no response" in that cell.

Table 41 – Maximum Face Amount Approved by Automated Underwriting System

Approved by Automated Underwriting System						
	Age					
Amount	35	45	55	65	75	
\$0	2	2	2	6	9	
\$10,000	-	-	2	-	-	
\$25,000	2	1	-	-	-	
\$50,000	-	-	-	-	1	
\$75,000	-	-	-	1	-	
\$99,999	-	-	1	1	-	
\$100,000	-	-	2	-	-	
\$150,000	-	-	-	1	-	
\$200,000	-	1	-	-	-	
\$249,000	2	2	1	1	1	
\$250,000	2	4	2	2	1	
\$300,000	3	-	-	-	-	
\$500,000	2	2	2	-	-	
\$2,000,000	1	1	1	1	1	
Median (\$000)	250	250	100	75	0	
Total # of Respondents	14	13	13	13	13	

At ages 35, 45 and 55, the amount the system could approve varied widely from \$0 to \$2,000,000. At age 35, half of the respondents indicated approval limits between \$249,999 and \$300,000, while at 45 limits reported by half of the respondents were between \$200,000 and \$250,000 and at age 55, the range between \$99,999 and \$250,000 contained half the responses.

Half of the respondents did not allow the system to approve a life insurance application on someone age 65 or older for any amount of life insurance. The maximum amount the system approved for people age 65 and older ranged from \$75,000 to \$2,000,000.

At age 75, three-quarters of the respondents did not allow the system to approve an application for life insurance, regardless of the amount. The maximum amount the system approved for people over age 75 was \$2,000,000.

4.6f The Survey asked respondents what percentage of new life applications was approved by the system.

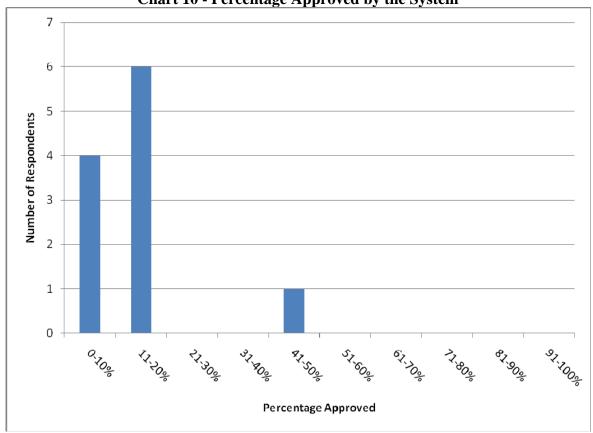
**Table 42 - Percentage Approved by the System** 

Percentage	# of Respondents
1%	1
5%	3
14%	1
15%	3
20%	2
50%	1
<b>Total # of Respondents</b>	11

Of the 11 respondents, six (55%) indicated their system approval rates were between 14% and 20%, as seen in Table 42. Four (36%) respondents indicated 5% or less were approved by the system. The maximum system approval rate was 50% as indicated by one respondent.

Chart 10 shows a histogram of the percentage of new life applications approved by the system as an alternative view of the distribution of responses.

**Chart 10 - Percentage Approved by the System** 



4.6g The Survey asked respondents what percentage of new life applications had a system-recommended (but not a system-approved) decision.

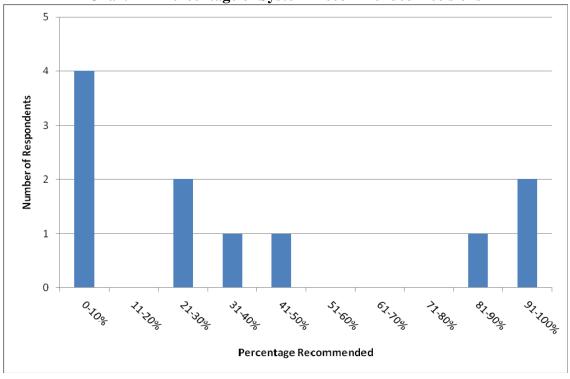
Table 43 - Percentage of System-Recommended Decisions

Percentage	# of Respondents
0%	2
1%	1
10%	1
21%	1
30%	1
37%	1
50%	1
85%	1
95%	1
99%	1
<b>Total # of Respondents</b>	11

As shown in Table 43, there was a wide range of responses from 0% - 99%, with an average response of 39% and a median of 30%.

Chart 11 shows a histogram of the percentage of system-recommended decisions as an alternative view of the distribution of responses.

**Chart 11 - Percentage of System-Recommended Decisions** 



# **Section 5 – Underwriting Resources**

This section of the Report examines the use of remote underwriters, how ECGs were interpreted, and how new business cases were assigned. In this section, there was a significant reduction in the number of respondents, with only 13 to 21 responding to each question.

5.1a The Survey asked respondents if any of their underwriters worked remotely from their home at least some of the time. Table 44 displays the results.

**Table 44 - Underwriters Worked Remotely** 

Worked Remotely	# of Respondents
Yes	13 (62%)
No	8 (38%)
<b>Total # of Respondents</b>	21

Sixty-two percent of respondents allowed their underwriters to work remotely at least some of the time.

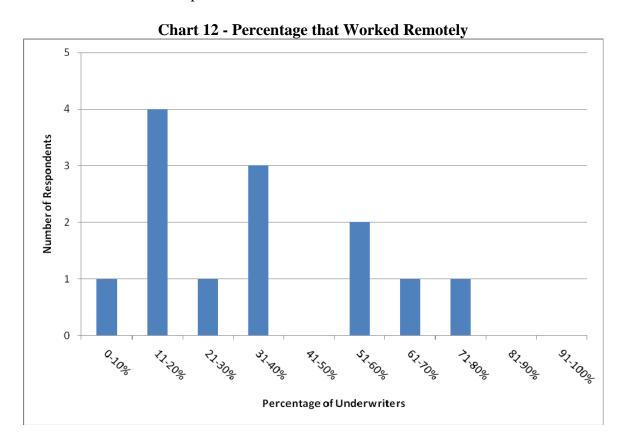
5.1b For those 13 respondents who indicated their underwriters worked remotely, the Survey asked what percentage of their underwriters worked remotely at least some of the time.

**Table 45 - Percentage that Worked Remotely** 

Percentage	# of Respondents
2%	1
15-20%	4
30-33%	4
57-65%	3
80%	1
<b>Total # of Respondents</b>	13

Table 45 shows that the majority of responses ranged from 15% to 65%, with an average of 33% and a median of 31%.

Chart 12 shows a histogram of the percentage of underwriters working remotely as an alternative view of the distribution of responses.



5.1c The Survey asked those same 13 respondents to indicate the maximum percentage of time their company would have allowed an underwriter to work remotely.

Table 46 – Maximum Percentage of Time Allowed to Work Remotely

Percentage	# of Respondents
100%	10
95%	1
60%	1
40%	1
<b>Total # of Respondents</b>	13

Ten of the respondents (77%) allowed their underwriters to work remotely 100% of the time, as seen in Table 46.

5.1d The Survey went on to ask those 13 respondents what percentage of their underwriters worked remotely the maximum time allowed by their company.

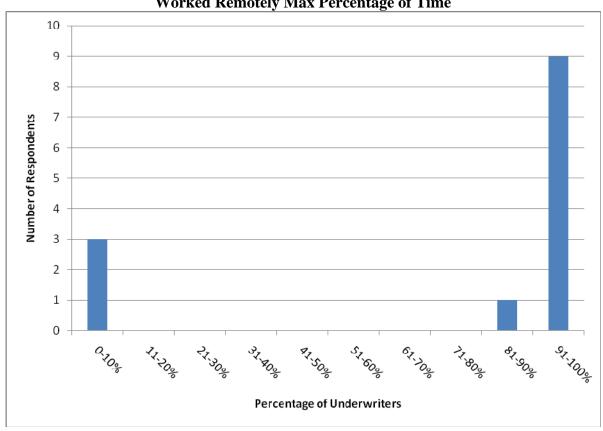
**Table 47 - Percentage of Underwriters Who Worked Remotely Max Percentage of Time** 

Percentage	# of Respondents
95% to 100%	9
90%	1
0% to 5%	3
<b>Total # of Respondents</b>	13

As shown in Table 47, three of the respondents indicated that 0% to 5% of their underwriters worked remotely the maximum allowable percentage of time while the remaining ten respondents indicated 90% to 100%.

Chart 13 shows a histogram of the percentage of underwriters working remotely the maximum percentage of time as an alternative view of the distribution of responses.

**Chart 13 - Percentage of Underwriters Who Worked Remotely Max Percentage of Time** 



5.1e The Survey asked how often remote underwriters were required to be in the office. Table 48 displays the results.

Table 48 - How Often Remote Underwriters were in Office

How Often	# of Respondents
2-3 days per week	3
1 day per quarter	1
1-2 day per year	2
Not required	2
Other*	2
<b>Total # of Respondents</b>	10

#### \*Other:

- Local telecommuters for some meetings
- Web meetings

The length of time remote underwriters were required to be in the office varied widely by respondent from 2-3 days per week to not at all.

5.2a The Survey asked respondents if any of their underwriting managers worked remotely from home at least some of the time.

Table 49 - Underwriting Managers Worked Remotely From Home

Managers Worked Remotely	# of Respondents
Yes	2 (10%)
No	18 (90%)
Total # of Respondents	20

Table 49 shows that only two respondents (10%) indicated they have underwriting managers who worked remotely from home. Due to the low positive (Yes) response rate, the Survey Subcommittee did not include the answers to the follow-up questions in this Report.

5.3a The Survey asked respondents if any of their underwriters interpreted resting ECGs.

**Table 50 - Underwriters Interpreted Resting ECGs** 

<b>Underwriters Interpreted ECGs</b>	# of Respondents
Yes	15 (75%)
No	5 (25%)
Total # of Respondents	20

Of the 20 respondents, three-quarters indicated their underwriters interpreted resting ECGs, as shown in Table 50.

5.3b Of those respondents who indicated their underwriters interpreted resting ECGs, the Survey asked what percentage of them did so.

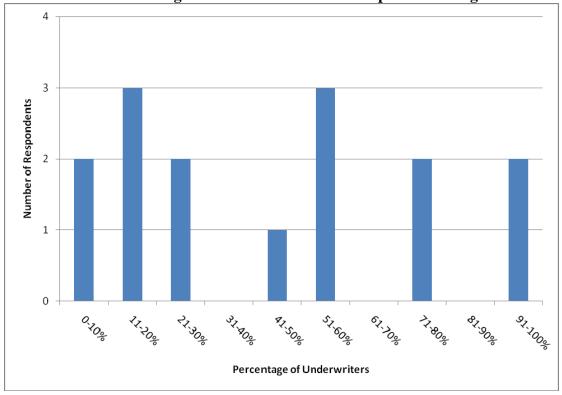
Table 51 - Percentage of Underwriters Who Interpreted Resting ECGs

Chaci writers who interpreted itesting 200	
Percentage	# of Respondents
1%-3%	2
14%-21%	4
30%	1
50%-60%	4
80%	2
100%	2
Total # of Respondents	15

About half of the respondents indicated most of their underwriters interpreted resting ECGs.

Chart 14 shows a histogram of the percentage of underwriters who interpreted resting ECGs as an alternative view of the distribution of responses.

**Chart 14 - Percentage of Underwriters Who Interpreted Resting ECGs** 



5.3c The Survey then asked how abnormal ECGs were handled. Table 52 displays the results.

Table 52 - How Abnormal ECGs were Handled

How Handled	# of Respondents	
Always refer to Medical Consultant/Director	15 (83%)	
Interpreting underwriter makes a		
recommendation within guidelines	2 (11%)	
Interpreting underwriter makes all		
recommendations	1 (6%)	
Total # of Respondents	18	

The majority of respondents (83%) indicated the resting ECGs would be referred to a medical consultant/director if the underwriter interpreted it as abnormal. Two respondents (11%) indicated the interpreting underwriter would make a recommendation within the guidelines

5.4a The Survey asked if the respondents had any specialized underwriting teams. Respondents were able to indicate more than one type of team.

**Table 53 - Specialized Underwriting Teams** 

Teams	# of Responses
Large case	10 (56%)
Product line	5 (28%)
Jet underwriting	4 (22%)
No specialized underwriting teams	3 (17%)
Older age	2 (11%)
Highly substandard (impaired risk)	0 (0%)
Other*	9 (50%)
Total # of Respondents	18

### \*Other:

- *Distribution* (2)
- Regional Teams (2)
- Teams assigned to production sources
- Top advisor
- Million Dollar Round Table Agents
- Referral Team
- Risk Committee for Exception Review

Table 53 shows there were 18 respondents to this question with a total of 40 responses. Over half (56%) of respondents had an underwriting team dedicated to large cases. Half of the respondents had other specialized underwriting teams not listed in the Survey as shown under "\*Other." Underwriting teams specializing in product lines was the next most common (28%), followed by jet underwriting teams (22%). Three respondents had no specialized underwriting teams (17%).

5.4b For those respondents with specialized underwriting teams, the Survey asked how business was assigned to them: by distribution channel, face amount, geographical region, randomly, producer or other. Respondents were able to indicate more than one method of new business assignment.

Since there were only 15 respondents to this question, it was difficult to derive any meaningful conclusions from the data. For large case teams, the most common method for distributing work was by face amount. For those respondents who distributed business by distribution channel, large case and product line underwriting teams were most common. Respondents used a variety of methods to distribute cases to teams. There were also a number of write-in comments:

- East and west regional teams, large case team
- Premium
- Special programs are assigned to specified underwriters within each distribution team
- All substandard and decline business. Any business that is outside our underwriting "stretch" criteria.
- Teams are assigned to production sources and underwriters handle all business submitted from those firms in accordance with approval authority.
- We have four different distribution channels and within each we have three segregated teams based on face amount and specific producer.

5.4c The Survey asked respondents to indicate how new business was assigned to underwriters who were not part of a specialized team. Respondents were able to indicate more than one type of assignment method.

Table 54 - How New Business was Assigned to Underwriters

How Assigned	# of Responses
Face amount	6 (24%)
Geographical region	5 (20%)
Randomly	5 (20%)
Distribution channel	4 (16%)
Specific producer or producer groups	3 (12%)
Other*	3 (12%)
Total # of Respondents	14

### \*Other:

- Integrated technology that separates based on above. We are fully imaged.
- Product
- Sales Office

There were 14 respondents to this question with a total of 26 responses, as shown in Table 54. Almost one quarter of the respondents assigned new business by face amount. Geographical region and randomly were the next most common choices with 20% of responses for each method.

## **Section 6 – Effect of Past Changes to New Business Practices**

This section of the Report inquires about the effect of some of the changes presented in prior sections.

6.1 The first question asked respondents whether, for certain changes to underwriting requirements, they expected mortality, underwriting consistency, producer satisfaction, turnaround time and new business expenses to increase, decrease or remain the same. Turnaround time was defined as the time from the signing of the application to policy issue. Since not all respondents made changes to all the requirements listed, the number of responses varied widely, from 4 to 20 depending on which requirement and which measure.

Table 55 displays the number of respondents who replied that the quantity at the top of each column would *increase*. Table 56 displays the number of respondents who replied that the quantity at the top of each column would *decrease*. Table 57 displays the number of respondents who replied that the quantity at the top of each column would *stay the same*. Table 58 displays the number of respondents who replied that the change in the quantity at the top of each column was *unknown*.

**Table 55 - Underwriting Requirement that was Changed** 

<b>Underwriting Requirement that was</b>	Number of Respondents stating an Increase in:				
Changed (could be more liberal or more conservative)	Expected Mortality	Underwriting Consistency	Producer Satisfaction	Total Turnaround Time	New Business Expenses
APS guidelines	0	8	13	7	6
Blood profile limits	2	1	2	0	2
Cognitive or functional testing limits	3	6	1	4	9
Inspection report limits	1	3	9	4	2
Medical exam limits	1	0	10	4	0
MVR limits	1	1	1	2	2
Non-medical limits	1	0	5	6	1
Oral fluid limits	0	0	2	1	1
Paramedical limits	2	2	7	5	1
Prescription Database query limits	1	3	2	3	7
Resting ECG limits	1	2	6	1	0
Stress ECG limits	2	1	9	5	0
Tele-interview / tele-application limits	2	6	5	1	1
Urinalysis limits	1	1	2	1	0

**Table 56 - Underwriting Requirement that was Changed** 

<b>Underwriting Requirement that was</b>	Number of Respondents stating a Decrease in:				
Changed (could be more liberal or	Expected	Underwriting	Producer	Total Turnaround	New Business
more conservative)	Mortality	Consistency	Satisfaction	Time	Expenses
APS guidelines	5	1	3	12	10
Blood profile limits	0	0	0	1	2
Cognitive or functional testing limits	7	0	4	1	0
Inspection report limits	1	0	1	4	10
Medical exam limits	0	0	0	7	10
MVR limits	2	0	1	1	2
Non-medical limits	1	0	1	2	5
Oral fluid limits	0	0	0	0	1
Paramedical limits	1	1	1	4	8
Prescription Database query limits	6	0	1	3	2
Resting ECG limits	0	0	0	3	7
Stress ECG limits	1	0	0	4	8
Tele-interview / tele-application limits	3	0	0	3	4
Urinalysis limits	0	0	0	0	2

**Table 57 - Underwriting Requirement that was Changed** 

<b>Underwriting Requirement that was</b>	Number of Respondents stating No Change in:				
Changed (could be more liberal or more conservative)	Expected Mortality	Underwriting Consistency	Producer Satisfaction	Total Turnaround Time	New Business Expenses
APS guidelines	8	9	3	1	2
Blood profile limits	4	4	3	5	3
Cognitive or functional testing limits	0	2	2	4	2
Inspection report limits	10	9	3	5	3
Medical exam limits	12	13	4	4	3
MVR limits	2	5	4	3	3
Non-medical limits	6	9	4	3	3
Oral fluid limits	2	2	1	1	1
Paramedical limits	6	6	2	3	2
Prescription Database query limits	0	4	5	3	1
Resting ECG limits	6	6	3	5	1
Stress ECG limits	5	7	1	1	0
Tele-interview / tele-application limits	1	1	1	2	3
Urinalysis limits	3	3	2	3	3

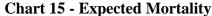
**Table 58 - Underwriting Requirement that was Changed** 

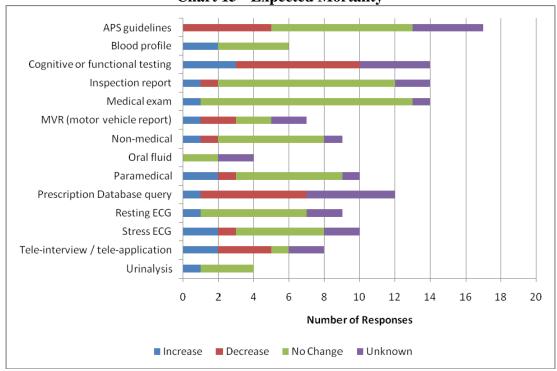
<b>Underwriting Requirement that was</b>		Number of Respondents stating the change was Unknown:			
Changed (could be more liberal or more conservative)	Expected Mortality	Underwriting Consistency	Producer Satisfaction	Total Turnaround Time	New Business Expenses
APS guidelines	4	0	0	0	0
Blood profile limits	0	1	1	0	0
Cognitive or functional testing limits	4	3	4	2	1
Inspection report limits	2	0	0	0	0
Medical exam limits	1	0	1	0	1
MVR limits	2	0	0	0	0
Non-medical limits	1	0	0	0	0
Oral fluid limits	2	2	2	2	2
Paramedical limits	1	1	0	0	0
Prescription Database query limits	5	4	3	2	2
Resting ECG limits	2	1	1	1	2
Stress ECG limits	2	1	1	1	2
Tele-interview / tele-application limits	2	1	2	2	1
Urinalysis limits	0	0	0	0	0

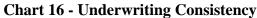
A few highlights of the preceding tables are apparent:

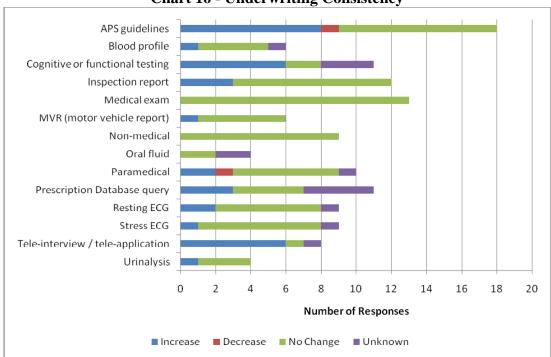
- The combination with the most responses was APS guidelines/turnaround time, which had 20 respondents choosing from increase, decrease, same or unknown.
- No consensus emerged on changes to expected mortality or underwriting consistency.
- Respondents expected changes to APS guidelines, inspection report limits, medical exam limits and stress ECG limits to increase producer satisfaction.
- Changes in APS guidelines were expected to decrease total turnaround time.
- New business expenses were expected to increase due to changes in cognitive/functional
  testing limits, while they were expected to be cut due to changes in APS guidelines,
  inspection report limits and medical exam limits.

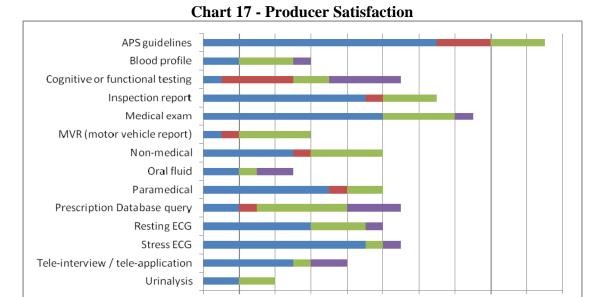
Charts 15-19 compare the reported effect of changes in underwriting requirements on expected mortality, underwriting consistency, producer satisfaction, total turnaround time and new business expenses.







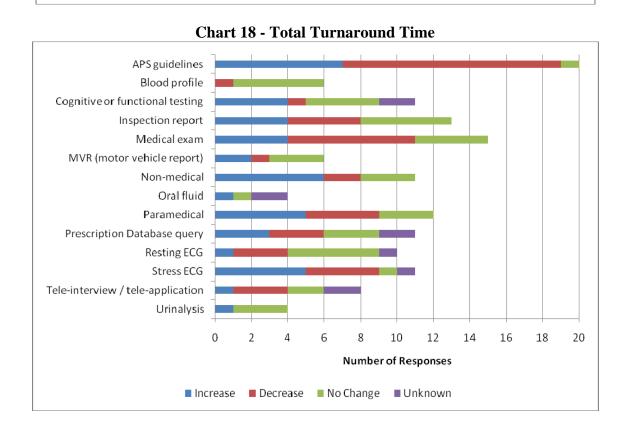


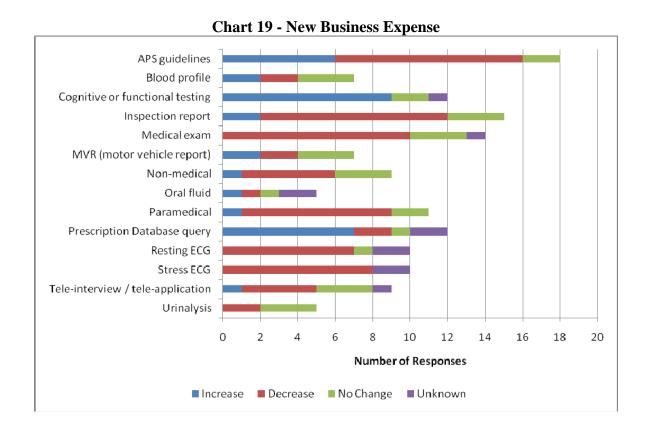


**Number of Responses** 

Unknown

■ Increase ■ Decrease ■ No Change





The Survey asked respondents to indicate what percentage of cases were approved within 30 days. Twenty-eight companies responded to this question and Table 59 displays the results.

**Table 59 - Percentage Approved Within 30 Days** 

	Percentage
Minimum Percentage Indicated	40%
Maximum Percentage Indicated	95%
Most Common Percentage	80%
Average Percentage	74%
Total # of Respondents	28

The Subcommittee reviewed company demographics of the respondents with the seven highest percentages (85% and above) and found no significant correlation by nationality, size, multi-line affiliate and regional or national provider. Interestingly, only two of the seven respondents had an electronic application. We then went on to review correlations by liberalizations to underwriting requirements made amongst six of the seven respondents. Five of the six increased either their non-medical or medical limits. Next, we reviewed whether the respondents received and reviewed lab results electronically and found that while all six received 100% of the labs electronically, only four reviewed 100% of the labs electronically. Lastly, we determined that only three of the six respondents indicated they had an automated underwriting system.

6.3 The Survey then asked respondents to indicate which changes increased the percentage of cases approved within 30 days. Respondents could indicate more than one change.

Table 60 - Changes Made which Increased Approval Percentage

Change	# of Responses
Age and amount changes, including APS	15 (54%)
Underwriting Image System	10 (36%)
Electronic application	7 (25%)
Tele-interview	6 (21%)
Underwriting Rules Engine	3 (11%)
Other*	5 (18%)
Total # of Respondents	28

## \*Other:

- Ongoing review of Underwriting Guidelines
- Better pending management
- No effect-we approve within 24 hours
- Prescription Database query
- Changes to Life System and rules in place

As seen in Table 60, more than half (54%) of the respondents indicated they reduced turnaround time by making changes to age and amount underwriting requirements. Over one-third (36%) indicated that having an underwriting image system reduced turnaround time. Approximately one-quarter (21-25%) indicated that the introduction of either an electronic application or teleinterview decreased turnaround time.

6.4a The Survey asked respondents to indicate which single change made in the last two years to the new business process had the most positive impact. Thirty-two respondents answered this question and the results are displayed in Table 61.

**Table 61 – Changes Made Having Most Positive Impact** 

Change	# of Respondents
Age and amount changes, including APS	11 (34%)
Electronic application	7 (22%)
Underwriting Image System	7 (22%)
Tele-interview	1 (3%)
Underwriting Rules Engine	1 (3%)
Other*	5 (16%)
Total # of Respondents	32

### \*Other:

- Have had e app, rules engine greater than 2 years. Within 2 years made minor age and amount requirement changes as well as process changes
- Processes put in place to address applications Not In Good Order
- Improvements to image system
- Rx data base inquiry

The largest portion of respondents (34%) indicated age and amount changes had the most positive impact. Electronic application and underwriting image system were each cited by seven respondents (22%) as having the most positive impact.

6.4b Respondents were asked why the one change they cited in 6.4a had such a positive impact. The responses were quite candid and are in Table 62.

**Table 62 - Reasons for Positive Impact** 

	02 - Reasons for Positive Impact
Change Made (Changes in italics	D
were supplied by respondents)	Reasons
Age and amount changes, including APS	• Fewer MD exams means less expense with no loss in
Ars	protective value.
	NT-proBNP testing improves mortality.
	Replacing paramedicals with vitals reduced 4 days off cycle
	time
	• Tele-interview, imaging and rules engines in place > 2 years,
	as a result age/amount requirements changes would be the
	most positive impact. Impact in process with number of
Electronic application	<ul> <li>handlings/file by UW or MD, and positive field reaction.</li> <li>All requirements are included. Electronically entered in</li> </ul>
Liectionic application	• All requirements are included. Electronically entered in administrative system and electronically transmitted to vendor
	for ordering exam, labs and APS.
	<ul> <li>Ease of doing business and increased accuracy.</li> </ul>
	<ul> <li>Faster transmission of the app to the home office</li> </ul>
	<ul> <li>Paperless and faster turnaround time</li> </ul>
	<ul> <li>Reduced cycle time and labor costs</li> </ul>
Tele-interview	<ul> <li>Improved accuracy of information and improved issue times</li> </ul>
Underwriting Image System	<ul> <li>Processes are more efficient with an imaging systems: quicker</li> </ul>
Onderwriting image bystem	turn-around for app file set-up, receipt and matching of
	requirements, addressing status and case inquiries, policy
	issue
	Direct downloads from vendors and efficiencies in document
	(evidence) attachment to application.
	Work flow automated and more efficient
	• It has allowed us to essentially get all underwriting
	requirements into single system as efficiently as possible and
	not rely on costly and time consuming shipping of papers
	between vendors/agents/reinsurers
Underwriting Rules Engine	• Our future e-app and underwriting rules engine will reduce
	the cycle time in the advisor distribution channel from the
	traditional papers/courier/scan process. This decreased the
	amount of re-work required at the head office level. We also
	found that the reduction of APS requirements where
	appropriate decreased overall cycle time.
Processes put in place to address	• These processes have placed a focus on NIGO apps and
applications Not In Good Order	reduce our touches and expenses on applications that often get
7	uncompleted.
Improvements to image system	Improved workflows and automated receipt of requirements.
Rx data base inquiry	• Confirms what's on the app or uncovers history that may not
	be mentioned. Can reduce the need for the APS and other
	requirements.

6.5a Next, the Survey asked respondents, of the changes listed, which one had their company made in the last two years that was the biggest disappointment. The responses can be found in Table 63.

Table 63 - Biggest Disappointment among Changes Made

Change	# of Respondents
Tele-interview	3
Electronic application	2
Underwriting Rules Engine	2
Age and amount changes, including APS	1
Underwriting Image System	0
Other*	6
Total # of Respondents	14

### \*Other:

- Attempting to implement tele-underwriting
- Instant Issue Process
- Shorter application forms
- Processes that were implemented that placed less emphasis on quality and total file review

6.5b Then the Survey asked why the changes made in 6.5a were such a disappointment. Table 64 displays the results.

**Table 64 - Reasons for Disappointment** 

Table 64	- Reasons for Disappointment	
Change Made (Changes in		
italics were supplied by		
respondents)	Reasons	
Electronic application	<ul> <li>Adoption rate is very low and has therefore not decreased the number of applications that are not in good order.</li> <li>Producers don't use it.</li> </ul>	
Tele-interview	<ul> <li>Tele-app has not decreased costs or turnaround. Find it difficult often to make contact quickly and agents often create problems by ordering exams in addition to submitting a tele-app. Since the blood draw, urine, and measurements are arranged at time of tele-app, when agent also orders exam this results in 2 appointments made for labs/measurements.</li> <li>We didn't launch appropriately or market the benefits so it never really took off. Trying again very soon with a well thought out marketing plan as we recognize the benefits.</li> <li>Has not really resulted in fewer APSs</li> </ul>	
Underwriting Rules Engine	<ul> <li>Inability to complete</li> <li>Migrating to upgraded rules engine. Functionality and speed of upgraded system significantly poorer than previous engine.</li> </ul>	
Attempting to implement tele- underwriting	• We have been working on implementing a tele- underwriting system for 18 months. We expected this process to take less time than it has.	
Instant issue process	New business not meeting production goals.	
Shorter application forms	• We anticipated lower error rates or missed questions, but they were far less significant than anticipated.	
Processes that were implemented that placed less emphasis on quality and total file review	• Processes were implemented to gain efficiency on a portion of our business, but ultimately placed less emphasis on total file review and quality. Since have modified our procedures to reemphasize total file review and quality while still trying to maintain efficiencies.	

6.6 The Survey asked respondents to indicate the average number of new business cases underwritten by a life underwriter annually. Separate responses were requested for underwriters working primarily from their home and underwriters working primarily in a company office. The answers to this question had a great deal of variance.

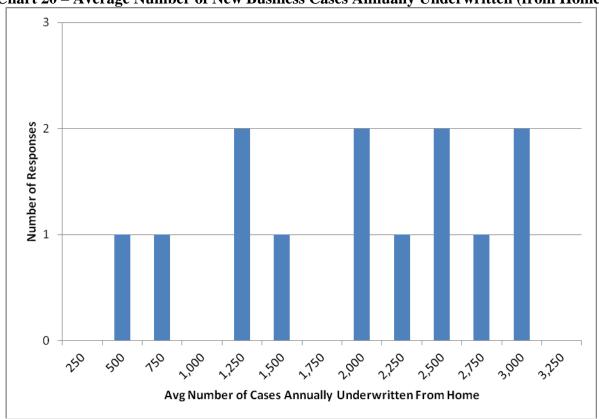
For underwriters working from home, there were 13 responses, averaging 1,880 cases per year. The distribution of responses is shown in Table 65 below:

Table 65 – Average Number of New Business Cases Annually Underwritten (from Home)

Range of Responses	# of Responses
<1000	2
>1000 and <=2000	5
>2000	6

Chart 20 shows a histogram of the average number of new business cases underwritten annually from home as an alternative view of the distribution of responses.

**Chart 20 – Average Number of New Business Cases Annually Underwritten (from Home)** 



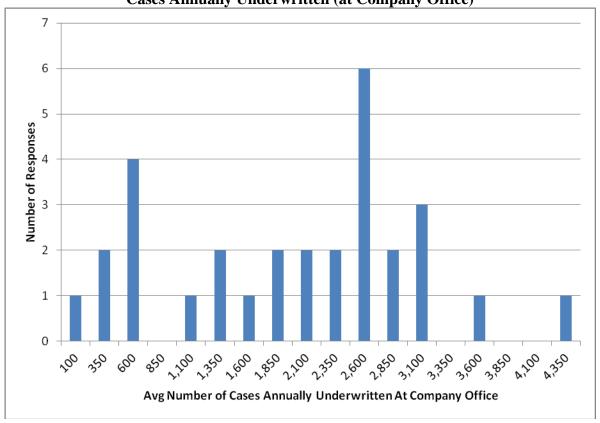
For underwriters working in a company office, there were 31 responses, averaging 1,987 cases per year. The distribution of responses is shown in Table 66 below:

Table 66 – Average Number of New Business Cases Annually Underwritten (at Company Office)

Range of Responses	# of Responses
<1000	7
>1000 and <=2000	8
>2000 and <=3000	13
>3000	3

Chart 21 shows a histogram of the average number of new business cases underwritten annually at the company office as an alternative view of the distribution of responses.

Chart 21 – Average Number of New Business Cases Annually Underwritten (at Company Office)



Although there are slightly more cases underwritten annually by underwriters working in a company office, the Survey Subcommittee felt there was not a statistically significant difference in productivity from those working at home.

# **Section 7 – Delivering the Policy**

There are many ways that a policy can be delivered into the hands of the policyowner. This section of the Report investigates the delivery methods and how security and confidentiality were maintained during the process.

7.1 The Survey asked respondents to indicate how policies were delivered to the policyowner. Respondents were able to indicate more than one method. There were 38 respondents to this question with a total of 55 responses.

**Table 67 – Policy Delivery Method** 

Delivery Method	# of Responses
Mailed to the agent/broker/dealer	32 (84%)
Mailed directly to the policyowner	16 (42%)
Sent electronically to the agent/broker/dealer	2 (5%)
Sent electronically directly to the policyowner	2 (5%)
Other*	3 (8%)
Total # of Respondents	38

#### \*Other:

- Agent prints off in office
- Depends on distribution channel
- Handed to agent at sales office

As shown in Table 67, a majority of respondents (84%) indicated that policies were physically mailed to the agent/broker/dealer, while 42% indicated policies were physically mailed to the policyowner. Over one-third (37%) of the 38 respondents indicated both delivery methods were used. Only ten percent of respondents indicated the use of electronic media to deliver policies.

7.2 The Survey asked respondents to indicate who decided the method for delivering the policy. Respondents were able to select only one decision-maker. A total of 39 respondents answered this question.

**Table 68 - Who Decided Method of Policy Delivery** 

Decision-Maker	# of Respondents
The company	20 (51%)
Agent/broker/dealer	17 (44%)
Policyowner	2 (5%)
<b>Total # of Respondents</b>	39

Table 68 shows that about one-half (51%) of respondents indicated that the company decided how policies were delivered to the owner. Less than one-half (44%) indicated the company allowed the agent/broker/dealer to decide upon the method. Only five percent of respondents indicated the policyowner made the decision.

7.3 For those respondents who indicated a policy was mailed directly to the policyowner or the agent/broker/dealer, the Survey asked about the method of mail delivery. Respondents were able to indicate more than one mail method. There were 35 respondents to this question with a total of 52 responses.

**Table 69 - Method of Mail Delivery** 

Method	# of Responses
Regular mail (e.g., USPS or Canada Post)	30 (86%)
Courier service (e.g., Fed Ex or UPS) with	
confirmation receipt	14 (40%)
Express mail with confirmation receipt	8 (23%)
Total # of Respondents	35

Table 69 shows a large majority of the respondents (86%) indicated that regular mail service was used to deliver policies to the policyowner. Other methods were split between private courier services (40%) or express mail with confirmation receipt (23%). Nearly one-third (31%) of the 35 respondents indicated more than one method was used for mail delivery.

7.4 Those four respondents who indicated a policy was sent electronically to the policyowner or the agent/broker/dealer were asked about the method of electronic delivery. Respondents were able to indicate more than one method, but none did so. Table 70 displays the results.

**Table 70 - Method of Electronic Delivery** 

Tuble 70 Method of Electronic Denvery	
Method	# of Responses
Regular email	1
Secure/encrypted email	1
Downloaded from a secure website	2
Total # of Respondents	4

Two respondents indicated they used regular or secure email and two required the policyowner to download the policy from a secure website.

7.5 For those policies that were physically delivered or sent via regular mail or courier service, the Survey asked respondents to indicate how delivery was confirmed. Respondents were able to indicate more than one method. For this question, there were a total of 44 responses from 33 separate respondents.

**Table 71 - Method of Delivery Confirmation** 

Method	# of Responses
Signed delivery receipt in the case of agent/broker/dealer	
physical delivery to policyowner	19 (58%)
Delivery is not confirmed	18 (55%)
Mail-back delivery receipt in the case of regular mail	
delivery to policyowner	6 (18%)
Follow-up phone call from agent/broker/dealer in the	
case of regular mail delivery to policyowner	0
Follow-up phone call from company in the case of	
regular mail delivery to policyowner	0
Other*	1 (3%)
Total # of Respondents	33

#### \*Other:

• Delivery is not confirmed when mailed to agent. If Delivery Receipt is required when agent delivers (based on state), those requirements are met.

Table 71 shows that more than one-half (58%) of respondents indicated that they obtained a signed delivery receipt from the agent/broker/dealer. About the same number (55%) indicated that they did not always get delivery confirmation. Interestingly, six companies indicated "delivery is not confirmed" but also indicated "signed delivery receipt" or "mail-back delivery" as their method of delivery confirmation. The Survey Subcommittee interpreted this to mean that obtaining delivery confirmation was not mandatory. Only 18% required a mail-back delivery receipt when policies were sent via regular mail. No respondents indicated that follow-up phone calls were made by the agent or the company.

One respondent indicated that they did not routinely get delivery confirmation when a policy was delivered to the agent; however, if required by a particular state, they would obtain confirmation that the policy was subsequently delivered to the policyowner.

# **Appendix A - List of Participating Companies**

AAA Life Insurance Company

Alfa Life Corporation

Allianz Life

Allstate Financial

American National

Amica Life Insurance Company

AXA Equitable Life Insurance Company

**BMO** Life Assurance Company

Cincinnati Life Insurance Company

Citizens Security Life Insurance Company

Co-operators Life

**CUNA Mutual Insurance Society** 

EMC National Life Company

Farm Bureau Life Insurance Company of Michigan

Fidelity Life

Genworth

Grange Life Insurance

Guarantee Trust Life

Guardian Life

**Jackson National** 

Knights of Columbus (U.S.)

Knights of Columbus (Canada)

La Survivance, Compagnie D'assurance Vie

Motorists Life Insurance Company

New York Life

Ohio National Financial Services

Pan-American Life Insurance Group

Principal Financial Group

**RBC** Life Insurance Company

Shelter Life Insurance Company

State Farm Life Insurance Company

Sun Life Financial (U.S.)

Sun Life Financial (Canada)

Svmetra Life

The Hartford

The Standard Life Insurance Company of Canada

Thrivent Financial

Transamerica Life Canada / Aegon Canada

Trustmark Insurance

USAA

Western Fraternal Life Association

Western-Southern Financial Group

Woman's Life Insurance Society

# Appendix B - Abbreviations

**APS**: attending physician statement

**CEA:** carcino-embryonic antigen

**ECG:** electrocardiogram

**HsCRP:** high sensitivity C-reactive protein

**MVR:** motor vehicle report

**NIGO:** not in good order

NT-proBNP: N-terminal pro-B-type natriuretic peptide

**PDF**: portable document format

**PPGA**: personal producing general agent

**PSA**: prostate specific antigen

## **Appendix C - Improving the New Business Process Survey**

### Introduction

New Business leaders are continuously challenged with finding ways to make the new business process faster, cheaper and better. The Committee on Life Insurance Mortality and Underwriting Surveys of the Society of Actuaries is undertaking a survey to examine the various changes insurance companies have recently made, or are thinking of making, to improve the new business process. One of the Committee's goals with this survey is to determine which changes were considered by the respondents to have had the most impact.

This survey looks at various components of the new business process from the time an application is first received at your company to the time the policy is mailed. It is intended for direct writing companies only and includes sections on:

- Paper versus Electronic Applications
- Underwriting Requirements
- Systems and Resources
- Impact of Changes Made to the New Business Process
- Policy Delivery

Please complete the survey for your company's U.S. and / or Canadian fully underwritten individual life business. Exclude simplified and guaranteed issue products, group life products and conversions. Unless otherwise indicated, state your answers relative to the number of applications, rather than by face amount or premium.

## **Section 1 - Demographic Information**

In this section of the survey, some information about your company and its market(s) will be collected. This survey is intended to be filled out by direct writing companies only for their fully underwritten individual life market(s). Please do not complete this survey if you represent a reinsurer or consulting firm.

1. For which country will you be filling out this survey? If you operate in both countries, please fill out a separate survey for each.
O United States O Canada
2. What is your company size, based upon new life insurance face amount issued in 2009?
<ul> <li>Small (less than \$1 billion)</li> <li>Medium (between \$1 billion and \$50 billion)</li> <li>Large (more than \$50 billion)</li> </ul>
3. What type of life insurance company do you work for?
O Stock O Mutual O Fraternal O Other (please describe)
4. Is your company the life affiliate of a multi-line insurance group?
O Yes O No
5. Do you consider your company a regional or national provider?
<ul><li> Regional</li><li> National</li><li> Other (please describe)</li></ul>

## **Section 2 - Application Process**

\*Please describe Other:

This section examines (i) how applications are received by your company, (ii) how long they take to arrive at the company, (iii) whether they arrive in "good order" and (iv) other information relative to the application process. Please state your answers relative to the number of applications, rather than by face amount or premium.

1a.	Do you accept new business applications on paper?
	Yes No
b. <b>'</b>	What percentage of your new business applications is on paper?
c. V	What are your plans, if any, to introduce an electronic application? (Check one)
000000	We already have one Will introduce in the next 12 months Will introduce in the next 13-24 months Planning to introduce at some point in the future Not currently investigating No plans to introduce Other (please describe)  Does the percentage of new business applications on paper differ by distribution channel?
	Yes No
If y	ves, please provide the percentage of applications received on paper by channel:
	Career agent / PPGA Independent brokerage Bank / stockbroker Direct marketing Other (please describe*)

e. I	How do you accept paper applications? (Check all that apply)
	Postal services / overnight / courier Fax Email attachment Scanned image retrieved from secure website Other (please describe)
	What is the average number of days between the date of the paper application and the date the olication is received at your office? (Check one)
0000	1-2 days 3-5 days 6-7 days 8-10 days 11-14 days Greater than 14 days
_	What percentage of your paper applications received in 2009 was initially NIGO (Not In Good der)?
	Do you accept applications electronically (submitted as data as opposed to a scanned / faxed age of a paper application)?
	Yes No
b. <b>'</b>	What methods are used to deliver these applications to your company? (Check all that apply)
	On-line via website Electronic Fillable PDF completed and submitted electronically Other (please describe)
	What percentage of all of your new business applications is received electronically and omitted as data?
	If this percentage differs by distribution channel, please provide the percentage of applications reived electronically by channel.
	Career agent / PPGA Independent brokerage Bank / stockbroker Direct marketing Other (please describe*)

*Please describe Other:
e. Describe the system used to receive electronic applications. (Check all that apply)
<ul> <li>□ Developed commercially and used in-house</li> <li>□ Developed in-house</li> <li>□ Administered by an external third party</li> <li>□ Other (please describe)</li></ul>
f. How are signatures obtained? (Check all that apply)
☐ Electronic signature ☐ Voice signature ☐ Wet signature ☐ Other (alexandragilar)
Other (please describe)

## **Section 3 - Changes to Underwriting Requirements**

This section examines how recently companies have examined their age and amount requirements (including APS guidelines), and what they have done or are anticipating doing in the near future.

1a. How long ago did your company make any changes to your life age and amount underwriting requirements? (Check one)
O Less than 1 year
O 1-2 years
O 3-5 years
O 6 or more years
O Never
b. Please indicate the changes you made.  Key:
I = Increase the face amount / age at which you will accept an underwriting requirement (i.e., generally more liberal limits)
D = Decrease the face amount / age at which you require an underwriting requirement (i.e., generally more conservative limits)
N = No change or not applicable

## **PAST CHANGES**

	APS guidelines			
Blood profile limits				
Cognitive or functional testing lin				
	Inspection report limits			
	Medical exam limits			
	MVR limits			
	Non-medical limits			
	Oral fluid limits			
	Paramedical limits			
	Prescription Database query limits			
	Resting ECG limits			
	Stress ECG limits			
	Tele-interview / tele-application limits			
	Urinalysis limits			
	me does your company anticipate next reviiting requirements? (Check one)	iewing	g / changing your life	
<ul> <li>Less than 1 year</li> <li>1-2 years</li> <li>3-5 years</li> <li>6 or more years</li> <li>Never</li> </ul>				
b. Please indicate the cha	inges you anticipate making.			
Key:				
$I = Increase \ the \ face \ amount \ / \ age \ at \ which \ you \ will \ accept \ an \ underwriting \ requirement \ (i.e., \ generally \ more \ liberal \ limits)$ $D = Decrease \ the \ face \ amount \ / \ age \ at \ which \ you \ require \ an \ underwriting \ requirement \ (i.e., \ generally \ more \ conservative \ limits)$ $N = No \ change \ or \ not \ applicable$				

#### **FUTURE CHANGES**

APS guidelines

Blood profile limits

Cognitive or functional testing limits

Inspection report limits

Medical exam limits

**MVR** limits

Non-medical limits

Oral fluid limits

Paramedical limits

Prescription Database query limits

Resting ECG limits

Stress ECG limits

Tele-interview / tele-application limits

Urinalysis limits

3a. Please indicate any requirement your company has added within the past 5 years and the	
reasons which correspond to your motivation for decision. (Check all that apply)	

	Protective Value	Faster	Competitive Pressure
Blood profile test - CEA			
Blood profile test - Glycohemoglobin			
Blood profile test - hsCRP			
Blood profile test - NT - proBNP			
Blood profile test - Other1 (please describe*)			
Chest x-ray			
Cognitive / functional tests			
Medical exams			
Stress ECG			
Tele-interviewing / tele-application limits			
Urine test - microalbuminuria			
Urine test - Other2 (please describe*)			
Other3 (please describe*)			
Other4 (please describe*)			
Other5 (please describe*)			
Other6 (please describe*)			

*Please describe Others:	
--------------------------	--

Other1

Other2

Other3

Other4

Other5

Other6

b. Please indicate any require	ement your company h	nas deleted within the	he past 5 years and the
reasons which correspond to	your motivation for d	ecision. (Check all	that apply)

	Protective Value	Faster	Competitive Pressure
Blood profile test - CEA			
Blood profile test - Glycohemoglobin			
Blood profile test - hsCRP			
Blood profile test - NT - proBNP			
Blood profile test - Other1 (please describe*)			
Chest x-ray			
Cognitive / functional tests			
Medical exams			
Stress ECG			
Tele-interviewing / tele-application limits			
Urine test - microalbuminuria			
Urine test - Other2 (please describe*)			
Other3 (please describe*)			
Other4 (please describe*)			
Other5 (please describe*)			
Other6 (please describe*)			

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Other1

Other2

Other3

Other4

Other5

Other6

## **Section 4 - Underwriting Systems**

This section examines how age and amount requirements (including APS guidelines) are ordered, received and reviewed, and asks about the systems used to support the underwriting function.

	Who orders age and amount underwriting requirements (other than APS)? (Check all that ply)
	Company Producer and / or staff
	Tele-interview vendor Other (please describe)
2.	Who processes the APS order? (Check all that apply)
	Company Producer and / or staff Tele-interview vendor Other (please describe)
	Excluding "sensitive" results (e.g., positive HIV / drug) what percentage of lab results is evived electronically?
	If some or all of your lab results are received electronically, please indicate what percentage is viewed electronically for each of the following specimens:
	Blood Oral fluid Urine

4. How are underwriting forms / evidence (exams,	ECGs, inspections, etc.) received from service
providers? (Check all that apply)	

	Mail / Courier (paper)	Electronic Transmission of Data	Electronic Transmission of an Image	Fax	Other (please describe)
APS					
ECG					
Lab Results					
Motor Vehicle Report					
Paramedical / Medical					
Stress ECG					

Report								
Paramedical / Medical								
Stress ECG								
5a. Are your appl workflow?	5a. Are your applications and underwriting evidence imaged as part of the new business workflow?							
<ul><li>Yes, front-end</li><li>Yes, back-end</li><li>No</li></ul>	0 0							
b. If yes to front-cases they work of		your underwriters have a	n option to pick	and cho	oose which			
O Yes O No								
c. If yes to back-e	end imaging, are	you considering moving	to front-end ima	ging?				
O Yes O No								
d. If no, are you p	olanning on movi	ng to an image environn	nent in the near f	uture?				
O Yes O No								
6a. Do you have an automated underwriting system that makes underwriting decisions?								
O Yes O No								

b. If no, are you planning on movin	g to a	n automated underwr	iting system in the near future?
O Yes O No			
c. If yes, how was the system acquir	red? (	Check one)	
<ul><li> "Home grown" (developed in-he</li><li> Purchased</li><li> Other (please describe)</li></ul>	•		
d. Please indicate which information underwriting system. (Check all that		•	valuation by your automated
<ul> <li>□ APS information</li> <li>□ Lab results</li> <li>□ Paper application</li> <li>□ Paramed / Medical</li> <li>□ Other (please describe)</li> </ul>			
e. In the chart below, indicate the mapprove:	naxim	um face amount the a	utomated underwriting system car
	35	Maximum Amount	

f. What percentage of new life applications is approved by the system?

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g. What percentage of new life applications has a system-recommended (but not a system-approved) decision?

# **Section 5 - Underwriting Resources**

This section examines the use of remote underwriters, how ECGs are interpreted and how new business cases are assigned.

1a. Do any of your underwriters work remotely from their home at least some of the time?
O Yes O No
b. If yes, what percentage work remotely at least some of the time?
c. What is the maximum percentage of time that your company would allow an underwriter to work remotely?
d. What percentage of your underwriters who work remotely work the maximum percentage remotely?
e. How often are remote underwriters required to be in the office? (Choose one)
No. of days per week: No. of days per month: No. of days per quarter: No. of days per year: Other (please describe)
2a. Do any of your underwriting managers work remotely from their home at least some of the time?
O Yes O No
b. If yes, what percentage work remotely at least some of the time?
c. What is the maximum percentage of time that your company would allow an underwriting manager to work remotely?
d. What percentage of your underwriting managers who work remotely work the maximum percentage remotely?
3a. Do any of your underwriters interpret resting ECGs?
O Yes O No

b. What percentage of underwriters interpret resting ECGs?								
c. How are abnormal ECGs	handled? (Ched	ck one)						
<ul> <li>Always refer to Medical Consultant / Director</li> <li>Always refer to another underwriter who makes a recommendation</li> <li>Interpreting underwriter makes a recommendation within guidelines</li> <li>Interpreting underwriter makes all recommendations</li> <li>Other (please explain)</li> </ul>								
4a. Do you have any of the f	following speci	alized underwrit	ting teams	? (Check	all that ap	pply)		
<ul> <li>☐ Highly substandard (impaired risk)</li> <li>☐ Jet underwriting</li> <li>☐ Large case</li> <li>☐ Older age</li> <li>☐ Product line</li> <li>☐ Other teams (please describe)</li> <li>☐ No specialized underwriting teams</li> <li>b. For any of the specialized underwriting teams you have, please indicate how business is assigned to them. (Check all that apply)</li> </ul>								
	Highly Substandard	Jet Underwriting	Large Case	Older Age	Product Line	Other Teams		
Distribution channel								
Face amount								
Geographical region								
Randomly								
Specific producer or producer groups								
Other (please describe*)								
*Please describe Other:  c. How is new business assigned to underwriters who are not part of a specialized team? (Check all that apply)								
<ul> <li>□ Distribution channel</li> <li>□ Face amount</li> <li>□ Geographical region</li> <li>□ Randomly</li> <li>□ Specific producer or pro</li> <li>□ Other (please describe)</li> </ul>	ducer groups							

### **Section 6 - Actual Experience Based on Past Changes**

1. In Section 3, you described changes or anticipated changes to underwriting requirements. This question will gauge the impact of the changes that were made. To make this survey as meaningful as possible, please provide as much information as you can.

### Key:

I = Increased

D = Decreased

S = Same

U = Unknown

		Expe Mort			Underwriting Consistency			Producer Satisfaction				Total Turnaround Time (application signed to policy issued)				New Business Expenses				
APS guidelines	O	O	O	O	O	O	O	O	O	O	O	0	O	O	0	O	O	O	O	0
Blood profile limits		0	0	O	O	0	0	O	O	O	O	0	0	0	0	0	O	0	0	O
Cognitive or functional testing limits	O	0	0	O	0	O	O	O	0	O	O	O	0	O	O	O	O	0	0	0
Inspection report limits	0	0	0	O	O	0	0	0	O	0	0	0	0	0	0	O	0	0	0	0
Medical exam limits		0	0	$\mathbf{O}$	O	0	0	O	O	$\mathbf{O}$	O	0	0	0	0	O	O	0	0	O
MVR (motor vehicle report) limits	O	0	0	O	0	O	0	O	0	O	0	O	0	O	O	O	O	0	0	0
Non-medical limits	0	0	0	O	O	0	0	0	O	0	0	0	0	0	0	O	0	0	0	0
Oral fluid limits	0	0	0	$\mathbf{C}$	O	O	0	O	O	$\mathbf{O}$	O	0	O	O	O	0	0	0	0	O
Paramedical limits		0	0	$\mathbf{O}$	O	$\mathbf{O}$	0	0	O	$\mathbf{O}$	O	0	0	$\mathbf{O}$	0	O	0	0	0	O
Prescription Database query limits	O	0	0	O	0	0	0	O	O	O	0	O	0	0	O	O	O	0	0	0
Resting ECG limits		0	0	$\mathbf{C}$	$ \circ $	$\mathbf{O}$	0	0	O	$\mathbf{C}$	O	0	0	$\mathbf{O}$	O	O	0	0	0	O
Stress ECG limits	O	0	O	0	O	0	0	0	O	0	O	0	0	0	0	0	O	O	O	O
Tele-interview / tele- application limits	O	0	0	0	0	0	O	O	0	0	O	0	0	0	O	O	0	0	0	0
Urinalysis limits	O	O	O	0	O	O	O	0	O	0	O	0	0	O	C	0	O	O	O	O

Additional comments:

2. What percentage of cases are approved within 50 days?
3. Which changes did you make that increased the percentage of cases approved within 30 days (Check all that apply)
<ul> <li>□ Age and amount changes, including APS</li> <li>□ Electronic application</li> <li>□ Tele-interview</li> <li>□ Underwriting Image System</li> <li>□ Underwriting Rules Engine</li> <li>□ Other (please describe)</li> </ul>
4a. What one change to the new business process has your company made in the last two years that has had the most positive impact? (Check one)
<ul> <li>Age and amount changes, including APS</li> <li>Electronic application</li> <li>Tele-interview</li> <li>Underwriting Image System</li> <li>Underwriting Rules Engine</li> <li>Other (please describe)</li> </ul>
b. Why?
5a. What one change to the new business process has your company made in the last two years that has been the biggest disappointment? (Check one)
O Age and amount changes O Electronic application O Tele-interview O Underwriting Image System O Underwriting Rules Engine O Other (please describe)
b. Why?
6. What is the average number of new business cases annually underwritten by a life underwrite working primarily:
From their home? In a company office (home office, head office, regional office, etc.)

## **Section 7 - Delivering the Policy**

There are many ways that a policy can be delivered into the hands of the policyowner. This section of the survey investigates what methods companies use and how security and confidentiality are maintained during the process.

1. ]	How are policies delivered to the policyowner? (Check all that apply)
	Mailed to the agent / broker / dealer Mailed directly to the policyowner Sent electronically to the agent / broker / dealer Sent electronically directly to the policyowner Other (please describe)
2.	Who decides how the policies are delivered to the policyowner? (Check one)
<b>O</b>	Agent / broker / dealer Policyowner The company Other (please describe)
	In the case of mail delivery (either directly to the policyowner or to the agent / broker / aler), what is the mode? (Check all that apply)
	Regular mail (e.g., USPS or Canada Post)  Express mail with confirmation receipt  Courier service (e.g., Fed Ex or UPS) with confirmation receipt  Other (please describe)
	In the case of electronic delivery directly to the policyowner or to the agent / broker / dealer ich of the following methods is used? (Check all that apply)
	Regular mail Secure / encrypted mail Downloaded from a secure website Other (please describe)

	If the policy is physically delivered or sent via regular mail or courier service, how is delivery
COI	nfirmed? (Check all that apply)
	Delivery is not confirmed
	Signed delivery receipt in the case of agent / broker / dealer physical delivery
	Follow-up phone call from agent / broker / dealer in the case of regular mail delivery
	Follow-up phone call from company in the case of regular mail delivery
	Mail-back delivery receipt in the case of regular mail delivery
	Other (please describe)