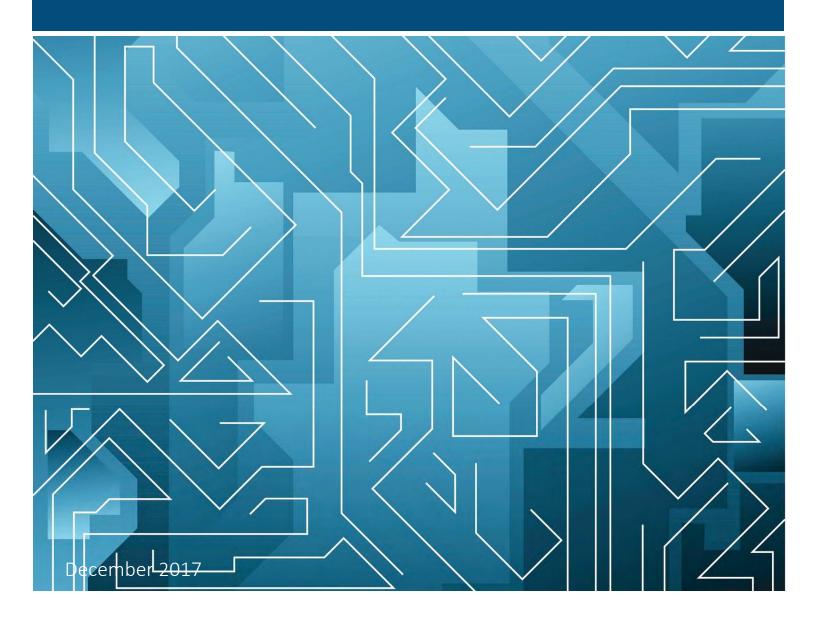


# Improving the New Business Process Survey Report





# Improving the New Business Process Survey Report

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### 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 undertook a survey in the fall of 2016 to examine the various changes life insurance companies have recently made, or are thinking of making, to improve the new business process. The Committee examined trends and compared results with the 2010 Survey on this topic and pertinent findings were noted as appropriate.

The Improving the New Business Process Survey, henceforth referred to as the "Survey," was intended to be completed by direct writing companies only. It looked at various components of the new business process from the time an application is first received to the time the policy is mailed. It included sections on:

- The Application
- Changes to Underwriting Requirements
- Underwriting Processes and Systems
- Underwriting Resources
- Impact of Past Changes
- Delivering the Policy

### **Survey Scope**

This Survey was conducted between September and October of 2016. It was sent to chief actuaries and chief underwriters of direct life insurance carriers operating in the US and Canada. We received responses from 24 companies, compared to 43 companies that responded to the 2010 Survey. A complete list of participating companies is shown in Appendix A.

The questions in this Survey can be found in Appendix B.

The Survey Subcommittee would like to thank all of the respondents who participated in this Survey. We also thank those who helped us review this document and offered helpful suggestions and thoughtful comments. Finally, the Survey Subcommittee thanks the Society of Actuaries staff for their help in completing this project, especially Korrel Rosenberg.

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 the New Business Process Subcommittee of the Society of Actuaries Committee on Life Insurance Mortality and Underwriting Surveys:

Sharon Smith, FALU, Chair Mary Ann Broesch, FSA, MAAA David M. Bruggeman, FSA, MAAA Michael H. Choate, FSA Everett Kunzelman, FLMI, ACS Norm Leblond, FALU Thomas D. McCarthy, FALU, CLU, FLMI

SOA Research Liaison: Korrel E. Rosenberg

### **Executive Summary**

This Survey was designed to examine the various changes life insurance companies have recently made, or are thinking of making, to improve the new business process. The Survey was conducted between September and October 2016. Twenty-four direct companies, five Canadian and 19 US, completed this Survey. Not all companies answered all questions; therefore, the number of respondents may vary by question.

The following summary highlights some of the more significant observations in this report.

### **Section 2 - The Application**

- Over three-quarters of responding companies received both paper and electronic applications (e-App).
- Respondents indicated they planned to reduce their use of paper and disconnected e-App applications within the next 12-24 months and increase their use of web-based e-App applications.
- Career agents were most likely to use electronic applications, with one-third of the respondents indicating over 80% of their applications were received electronically.
- Companies' e-Apps were available on a PC, tablet, and smart phone.
- Almost all responding companies accepted electronic signatures and nearly one-quarter accepted voice signatures.
- Over half of the responding companies indicated that within 12-24 months they expected to receive webbased e-Apps over 80% of the time.
- Just over half of responding companies accept trial applications.

### Section 3 – Changes to Underwriting Requirements

- Responding companies noted the following changes to their underwriting requirements over the last two years:
  - o The most common requirement **added** was eIR, followed by NT pro-BNP.
  - A few requirements showed increased use, including non-medical, NT pro-BNP, tele-interview,
     HbA1C, prescription database query, motor vehicle record (MVR) and predictive analytics.
  - Very few requirements were deleted by responding companies; IR was deleted by two companies.
  - Some requirements showed decreased use, including ECG, paramedical exam, medical exam, APS guidelines and blood profile.
  - Many requirements were **not used** including credit report/scoring, dried blood spot, PFT (Pulmonary Function Test), lab score, predictive analytics, functional testing, oral fluid and eIR.
  - Several common requirements were **not changed**, including PSA, MVR, blood profile, IR, hemoglobin, APS guidelines and HbA1C.
- Most prevalent reasons prompting changes to requirements over the last 2 years:
  - Protective Value: NT pro-BNP, HbA1C, ECG, prescription database query, tele-interview, medical exam.
  - o Faster: non-medical, ECG, paramedical exam, tele-interview, NT pro-BNP, APS guidelines.
  - Competitive: non-medical, paramedical exam, ECG, blood profile, ETT (Exercise Tolerance Test),
     IR.
- Of the 27 listed underwriting requirements, over the **next** 2 years, responding companies noted:
  - The most common requirement anticipated to be added was predictive analytics, followed by credit report/scoring.
  - Requirements anticipated to be increased included non-medical, predictive analytics, prescription database query and tele-interview.

- The medical exam was the most common requirement anticipated to be deleted.
- A few requirements anticipate decreased use, most notably paramedical exam, blood profile, ECG, and APS guidelines.
- Many requirements are **not anticipated to be used**, including dried blood spot, PFT, ETT, and oral fluid.
- Several common requirements are **not anticipated to be changed**, including PSA, MVR, HbA1C, mature age questions, hemoglobin, APS guidelines, and cognitive testing.
- Most prevalent reasons prompting changes to requirements over the next 2 years:
  - Protective Value: predictive analytics, tele-interview, credit report/scoring, prescription database query.
  - o Faster: predictive analytics, non-medical, paramedical exam, blood profile, ECG, tele-interview.
  - o Competitive: predictive analytics, non-medical, paramedical exam, blood profile, ECG, tele-interview.
- Most prevalent resources at responding companies involved in determining changes to underwriting requirements included underwriting, actuarial, reinsurers, medical, and competitive intelligence.

### Section 4 – Underwriting Processes and Systems

- Underwriting/new business was the most prevalent resource for ordering age and amount requirements and APS requirements. Almost one-third of respondents noted current use of APS summaries created by someone other than the attending physician. Of those not using currently, just over one-third were considering using APS summaries.
- Over half of responding companies had an automated underwriting system (AUS) that made underwriting
  decisions and another over one-third were planning on moving to an AUS in the near future (1-2 years).
  Of those with an AUS, or planning to move to an AUS, over half purchased their AUS with customization,
  while one-third developed their AUS in-house.
- Of the variety of data that was fed into their AUS, most prevalent by responding companies included MIB, e-App, lab results, and MVR.
- The top actions or decisions made by responding companies' AUS were:
  - Approved preferred/standard
  - o Refer to underwriting partial assessment
  - o Recommend underwriting requirements
  - Refer to underwriting no assessment
- Two-thirds of responding companies used tele-interviewing. Of those:
  - Over half used tele-interviewing for just their Part 2, nearly one-half used it for their Part 1 and Part 2;
  - Half made tele-interviewing mandatory for new business within certain parameters, over onethird made it optional for their producers, a few made it mandatory for all business;
  - Over three-quarters used an external vendor, a few used an internal unit; and
  - Just over three-quarters had expanded questions with drill down capability, a few had no drill down capability, and one had drill down capability and additional functionality.

### Section 5 - Underwriting Resources

- Of the 24 respondents, over three-quarters reported their underwriters worked remotely at least some of the time. Of those respondents who allowed underwriters to work remotely:
  - Almost one-third allowed all of their underwriters to work remotely at least some of the time
  - The majority allowed at least some underwriters to work remotely 5 days per week

- Almost half of responding companies reported their underwriting managers worked remotely at least some of the time. Of those respondents who allowed underwriting managers to work remotely:
  - More than one-third allowed all of their underwriting managers to work remotely at least some of the time
  - Eighteen percent allowed at least some underwriting managers to work remotely 5 days per week
- Over half of respondents noted at least some of their underwriters could interpret ECGs. Of those companies with underwriters who could interpret ECGs:
  - Over half noted that 25% or less of their underwriters could interpret ECGs
  - o Over half noted that abnormal ECGs were always referred to the medical department
- Just over three-quarters of responding companies had one or more specialty underwriting teams. The most prevalent teams were audit, large case underwriting, training, and jet underwriting.
- Just over half of responding companies noted they used face amount to assign new business cases to their underwriters.
- One-third of respondents noted they outsourced underwriting. Of those companies that outsourced their underwriting:
  - o Half only outsourced 1-5% of their business
  - o One quarter outsourced all of their business
- All responding companies reported their underwriting approval limits varied by underwriting experience, with almost two-thirds noting they imposed some restrictions by age of proposed insured.
- While it varied significantly from company to company, half of the respondents noted their underwriters reviewed between 1,001-2,000 cases per year.

### **Section 6 – Impact of Past Changes**

- About one-quarter of respondents indicated their companies approved at least 90% of the cases within 30 days. Half of the respondents indicated their companies approved at least 80% of the cases within 30 days.
- Respondents ranked changes to age and amount requirements, underwriting rules engine, APS ordering/APS management, and electronic application as the top changes that increased their percentage of cases approved within 30 days.
- The changes made to the new business process that had the most positive impact were APS ordering or management thereof, age and amount requirements, underwriting rules engine, underwriting resource management, and electronic application.

### Section 7 – Delivering the Policy

- Almost two-thirds of respondents indicated their company decided how policies were delivered to the policyowner, while almost one-third indicated the agent/broker/dealer made the decision.
- Responding companies primarily delivered their policies by mailing to the agent/broker/dealer and, to a lesser extent, by mailing directly to the policyowner.
- Some respondents delivered the policy electronically to the agent/broker/deal or to the policyowner.
   Typically, these were downloaded from a secure website or sent via encrypted email. This compares to
   the prior survey from 2010 where only 5% were sent electronically to the agent and 5% were sent
   electronically to the policyholder.

### Section 1: Demographic Information

The Survey only included results from direct writing companies for their fully underwritten individual life market(s). In this section, information about responding companies is reported.

1.1 Each respondent was asked for which country they would be filling out this Survey. Of the 24 respondents, there were 19 US companies and five Canadian companies.

Small companies were defined as having issued less than \$1 billion of face amount annually, medium companies issued between \$1 and \$50 billion of face amount and large as more than \$50 billion of face amount.

Size	<b>United States</b>	Canadian	Totals
Small	9	2	11
Medium	8	3	11
Large	2	0	2
Total	19	5	24

1.2 Respondents were asked about the type of insurance company they worked for.

Туре	# of Respondents
Stock	9
Fraternal	5
Mutual	5
Other*	5
Total # of Respondents	24

### \*Other:

- Private Ownership Company Clubs
- Member owners
- Mutual holding company
- Financial Services Holding Company
- We are a for profit division of a Non-Profit organization

The largest category of respondents worked for stock companies (38%).



# 1.3 The Survey asked respondents through which distribution channels their company issued business. (Check all that apply)

Distribution Channel	# of Responses
Brokerage	12
Career Agent	12
Producing General Agents	9
Banks/Savings	4
Direct Response	4
Worksite Marketing	4
Online	3
Multiple Line Exclusive	2
Stockbroker	2
Home Service	1
Other*	5
Total # of Respondents	24

### \*Other:

- Call Center
- P & C agents
- Independent Marketing Organizations
- Multi Line Non Exclusive
- Our Agents

Half of responding companies distributed products through brokerage and half distributed through career agents.

Number of Distribution Channels	# of Respondents
1	9
2	5
3	5
4	3
5 or more	2
Total # of Respondents	24

Almost two-thirds (62%) of respondents reported their company issued business through more than one distribution channel.

### Section 2: The Application

This section examines paper, electronic ("e-App"), and trial applications. Respondents were asked to state their answers relative to the percentage of applications, rather than by face amount or premium.

### 2.1a The Survey asked respondents to indicate how their company received applications.

Applications	# of Respondents
Both Paper and Electronic	19
Paper only	3
Electronic only	2
Total # of Respondents	24

Over three-quarters (79%) of responding companies received both paper and electronic applications.

# 2.1b Respondents were asked to provide the percentage of their company's new business applications by application type and their future goal % (defined as 12 – 24 months).

	# of Respondents					
Application Type	0%	1% - 20%	21% - 40%	41% - 60%	61% - 80%	81% - 100%
Paper Current	2	10	3	3	3	0
Paper Future	10	7	3	1	0	0
Disconnected e-App Current	12	1	1	2	2	3
Disconnected e-App Future	15	3	0	1	1	1
Web-Based e-App Current	6	3	3	1	3	4
Web-Based e-App Future	2	0	2	2	4	11
Other Current*	1	1	1	0	0	1
Other Future*	2	0	1	1	0	0
Total # of Respondents				21		

#### \*Other:

• Call Center (Current: 1-20%; Future: 21-40%)

• Wet-signed application that is scanned by agent (Current: 21-40%; Future: 0%)

• Home grown on laptop (Current: 81-100%; Future: 0%)

• E app usage other 50% will be in a disconnected mode (Current: 0%; Future: 41-60%)

Respondents indicated their company planned to reduce their use of paper and disconnected e-App applications within the next 12-24 months and increase their use of web-based e-Apps, with over half indicating they would use web-based e-Apps 81-100% of the time.

### 2.1c The Survey asked respondents to indicate the percentage of e-Apps received by distribution channel.

e-Apps Received by	# of Respondents					
<b>Distribution Channel</b>	0%	1% - 20%	21% - 40%	41% - 60%	61% - 80%	81% - 100%
Brokerage	14	4	2	0	0	1
Career Agent	11	0	1	0	2	7
Multiple Line Exclusive	19	1	0	0	0	1
Banks/Savings	19	1	1	0	0	0
Direct Response	19	0	1	1	0	0
Personal Producing GA	17	2	0	0	0	2
Stockbroker	19	1	0	0	1	0
Worksite Marketing	20	0	0	0	0	1
Home Service	20	1	0	0	0	0
Online	19	1	1	0	0	0
Other*	0	1	1	0	1	2
Total # of Respondents				21		

### \*Other:

- Call Center
- P & C Agents
- Specific Distribution
- Multi Line non exclusive
- Mobile

Career agents were most likely to use e-Apps, with one-third of the respondents indicating over 80% of their company's applications were received electronically. Brokerage distribution channel was next most likely, with one-third of responding companies using e-Apps at least some of the time.

### 2.1d Respondents were asked how their company's e-App was developed.

e-App Development	# of Respondents
Purchased - customization	10
Home Grown	9
Purchased – no customization	0
Other*	2
Total # of Respondents	21

### \*Other:

- Combination of home grown and purchased
- Current laptop app is home grown. Migrating to purchased.

Almost half (48%) of the responding companies purchased and customized their e-App, while 40% indicated their e-App was home grown.

### 2.1e The Survey asked on what devices the company's e-App was available. (Check all that apply)

Device Availability	# of Responses
PC (e.g. laptop or desktop)	21
Tablet (e.g. iPad)	9
Smart Phone (e.g. iPhone)	4
Other	0
Total # of Respondents	21

All respondents indicated their company's e-App was available on a PC. Forty-three percent indicated their company's e-App was also available on a tablet. Nineteen percent indicated their company's e-App was available on a smart phone, in addition to a tablet and a PC.

### 2.2 Respondents were asked how signatures are obtained on e-Apps. (Check all that apply)

Signatures	# of Responses
Electronic	19
Wet	12
Voice	5
Other*	2
Total # of Respondents	21

### \*Other:

- Web Signed consider Signature pad
- Topaz sig pad

Almost all (90%) responding companies accepted electronic signatures, over half (57%) accepted wet signatures, and almost one quarter (24%) accepted voice signatures. Four (19%) responding companies accepted electronic, wet and voice signatures.

### 2.3a Respondents were asked if their company accepts Trial Applications (also known as Inquiries or Prelims).

Trial Applications	# of Respondents
No	10
Yes – All (Any type)	6
Yes – Exception Basis	3
Yes – Select Channels/Producers	2
Other*	2
Total # of Respondents	23

#### \*Other:

- It's not an actual application, just an email inquiry that any agent can submit. No MIB is run.
- Trial applications were reviewed by a special unit of underwriters

Fifty-two percent of responding companies accepted trial applications. Of those, half accepted trial applications without any restrictions.

### 2.3b The Survey asked who reviews Trial Applications.

Trial Application Review	# of Respondents
All Underwriters	7
Special Unit of Underwriters	6
Outsourced	0
Other	0
Total # of Respondents	13

Of the 13 responding companies, a little over half (54%) had all underwriters reviewing trial applications and a little under half (46%) had a special unit handling them.

### 2.3c Respondents were asked what percentage of Trials become a formal application.

% of Trials becoming Formal Applications	# of Respondents
0 – 2%	2
3 – 5%	0
6 – 10%	2
11 – 20%	0
21 – 30%	1
31 – 40%	0
Over 40%	1
Unknown	8
Total # of Respondents	14

Two-thirds of respondents who provided an answer indicated 10% or less of their trial applications became formal applications.

### 2.3d The Survey asked what the responding company's ultimate placement percentage was for Trials.

Placement % for Trials	# of Respondents
0 – 2%	1
3 – 5%	1
6 – 10%	1
11 – 20%	1
Over 20%	3
Unknown	7
Total # of Respondents	14

Half of the 14 respondents did not know the placement percentage for trials. The largest percentage (21%) noted by the respondents was over 20% placement.

# 2.3e Respondents were asked if their company set parameters with producers to maintain the ability to send Trials.

<b>Producer Parameters for Maintaining Trials</b>	# of Respondents
No Set Parameters	12
Yes – Rarely Enforced	1
Yes – Placement Ratios	0
Yes – Not for Top Producers	0
Other	0
Total # of Respondents	13

Twelve (92%) of the respondents indicated their company did not set parameters to maintain the ability to send trials.

### Section 3: Changes to Underwriting Requirements

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

3.1a. Respondents were asked if their company added, removed, increased, decreased, or left unchanged the requirements listed below, within the last two years.

	# of Respondents					
Implemented Changes to						No
U/W Requirements	Not Used	Add	Delete	Increase	Decrease	Change
Non-Medical	1	1	0	10	2	10
Paramedical Exam	2	0	0	1	12	9
Abbreviated Paramedical	4	0	0	4	3	13
Medical Exam	7	0	0	1	8	8
Tele-interview	5	0	0	9	2	8
Blood Profile	0	0	1	1	6	16
Dried Blood Spot	20	0	0	0	0	4
HbA1C	0	1	0	8	1	14
PSA	1	0	0	0	2	21
NT pro-BNP	3	3	1	10	1	6
Hemoglobin	8	0	0	0	1	15
Lab Score	18	2	0	1	1	2
Urine HIV	11	0	1	1	2	9
Oral Fluid	15	1	0	1	0	7
ECG	0	0	0	0	13	11
ETT	14	0	1	0	4	5
PFT	20	0	0	0	0	4
APS Guidelines	0	0	0	1	8	15
MVR	0	0	0	5	2	17
IR	2	0	2	1	3	16
eIR	15	4	0	0	0	5
Credit Report/Scoring	21	0	0	0	0	3
Predictive Analytics	17	2	0	5	0	0
Mature Age Questions	9	0	0	2	0	13
Cognitive Testing	12	0	0	2	1	8
Functional Testing	17	0	0	1	0	6
Prescription Database Query	6	0	0	8	0	9
Other 1	2	1	0	0	0	0
Other 2	2	0	0	0	0	0

There were 24 respondents to this question, but please note not all requirements had a response. The survey results for questions 3.1a and 3.1b are an indication of the huge flux in underwriting requirements over the last

two years. There is a wealth of data in the responses to this survey question. Not all 'Other' responses included comments.

Results on changes to requirements within the last two years are summarized below under the bolded headings in the order of prevalence:

**Add** (number of respondents followed by requirement(s) noted)

- 4 eIR
- 3 NT pro-BNP
- 2 Lab Score, Predictive Analytics
- 1 Non-Medical, HbA1C, Oral Fluid, 'Other'
  - o Online Underwriting Questionnaire

Increase (number of respondents followed by requirement(s) noted)

- 10 Non-Medical, NT pro-BNP
- 9 Tele-interview
- 8 HbA1C, Prescription Database Query
- 5 MVR, Predictive Analytics
- 4 Abbreviated Paramedical
- 2 Mature Age Questions, Cognitive Testing
- 1 Paramedical Exam, Medical Exam, Blood Profile, Lab Score, Oral Fluid, APS Guidelines, IR, Functional Testing

**Delete** (number of respondents followed by requirement(s) noted)

- 2 IR
- 1 Blood Profile, NT pro-BNP, ETT

**Decrease** (number of respondents followed by requirement(s) noted)

- 13 ECG
- 12 Paramedical Exam
- 8 Medical Exam, APS Guidelines
- 6 Blood Profile
- 4 ETT
- 3 Abbreviated Paramedical, IR
- 2 Non-Medical, Tele-interview, PSA, Urine HIV, MVR
- 1 HbA1C, NT pro-BNP, Hemoglobin, Lab Score, Cognitive Testing

**Not Used** (number of respondents followed by requirement(s) noted)

- 21 Credit Report/Scoring
- 20 Dried Blood Spot, PFT
- 18 Lab Score
- 17 Predictive Analytics, Functional Testing
- 15 Oral Fluid, eIR

- 14 ETT
- 12 Urine HIV, Cognitive Testing
- 9 Mature Age Questions
- 8 Hemoglobin
- 7 Medical Exam
- 6 Prescription Database Query
- 5 Tele-interview
- 4 Abbreviated Paramedical, 'Other'
  - o None of the 'Other' responses included any comments
- 3 NT pro-BNP, Paramedical Exam, IR
- 1 Non-Medical, PSA

### No Change (number of respondents followed by requirement(s) noted)

- 21 PSA
- 17 MVR
- 16 Blood Profile, IR
- 15 Hemoglobin, APS Guidelines
- 14 HbA1C
- 13 Abbreviated Paramedical, Mature Age Questions
- 11 ECG
- 10 Non-Medical
- 9 Paramedical Exam, Urine HIV, Prescription Database Query
- 8 Medical Exam, Tele-interview, Cognitive Testing
- 7 Oral Fluid
- 6 NT pro-BNP, Functional Testing
- 5 ETT, eIR
- 4 Dried Blood Spot, PFT
- 3 Credit Report/Scoring
- 2 Lab Score

For the requirements that changed within the last two years, participants were able to select up to three reasons prompting their changes: **Protective Value**, **Faster or Competitive**.

	# of Responses		
Reason for Changes to U/W	Protective		
Requirements	Value	Faster	Competitive
Non-Medical	4	12	12
Paramedical Exam	3	9	9
Abbreviated Paramedical	3	6	4
Medical Exam	7	5	6
Tele-interview	9	8	5
Blood Profile	6	6	7
Dried Blood Spot	1	1	1
HbA1C	11	1	2
PSA	5	0	2
NT pro-BNP	14	8	6
Hemoglobin	2	1	2
Lab Score	3	0	1
Urine HIV	2	1	3
Oral Fluid	2	2	1
ECG	10	10	8
ETT	3	5	7
PFT	1	0	1
APS Guidelines	6	8	6
MVR	6	4	4
IR	5	5	7
eIR	1	3	3
Credit Report/Scoring	3	1	0
Predictive Analytics	4	5	4
Mature Age Questions	5	1	1
Cognitive Testing	4	1	1
Functional Testing	2	0	1
Prescription Database Query	10	4	3
Other 1	0	1	1
Other 2	0	0	0

There were 24 respondents to this question, but please note not all requirements had a response. Results for each reason are summarized below under the bolded headings in the order of prevalence:

Protective Value (number of respondents followed by requirement(s) noted)

- 14 NT pro-BNP
- 11 HbA1C
- 10 ECG, Prescription Database Query
- 9 Tele-interview
- 7 Medical Exam

- 6 Blood Profile, APS Guidelines, MVR
- 5 PSA, IR, Mature Age Questions
- 4 Non-Medical, Predictive Analytics, Cognitive Testing
- 3 Paramedical Exam, Abbreviated Paramedical, Lab Score, ETT, Credit Report/Scoring
- 2 Hemoglobin, Urine HIV, Oral Fluid, Functional Testing
- 1 Dried Blood Spot, PFT, eIR

### Faster (number of respondents followed by requirement(s) noted)

- 12 Non-Medical
- 10 ECG
- 9 Paramedical Exam
- 8 Tele-interview, NT pro-BNP, APS Guidelines
- 6 Abbreviated Paramedical, Blood Profile
- 5 Medical Exam, ETT, IR, Predictive Analytics
- 4 MVR, Prescription Database Query
- 3 eIR
- 2 Oral Fluid
- 1 Dried Blood Spot, HbA1C, Hemoglobin, Urine HIV, Credit Report/Scoring, Mature Age Questions, Cognitive Testing, , plus one 'Other' (below)
  - Online Underwriting Questionnaire

### **Competitive** (number of respondents followed by requirement(s) noted)

- 12 Non-Medical
- 9 Paramedical Exam
- 8 ECG
- 7 Blood Profile, ETT, IR
- 6 Medical Exam, NT pro-BNP, APS Guidelines
- 5 Tele-interview
- 4 Abbreviated Paramedical, MVR, Predictive Analytics
- 3 Urine HIV, eIR, Prescription Database Query
- 2 HbA1C, PSA, Hemoglobin
- 1 Dried Blood Spot, Lab Score, Oral Fluid, PFT, Mature Age Questions, Cognitive Testing, Functional Testing, plus one 'Other' (below)
  - Online Underwriting Questionnaire

# 3.1b. Participants were asked to indicate whether their company anticipates adding, removing, increasing, decreasing, or leaving unchanged the following requirements in the next two years.

	# of Responses					
Anticipated Changes to U/W						No
Requirements	Not Used	Add	Delete	Increase	Decrease	Change
Non-Medical	1	0	0	11	3	9
Paramedical Exam	2	0	0	1	14	7
Abbreviated Paramedical	4	0	0	4	6	10
Medical Exam	7	0	3	0	6	7
Tele-interview	1	2	0	9	5	7
Blood Profile	0	0	1	2	12	9
Dried Blood Spot	20	0	0	0	0	4
HbA1C	0	0	0	6	3	15
PSA	1	0	0	0	2	21
NT pro-BNP	3	0	1	7	1	12
Hemoglobin	7	1	0	1	1	14
Lab Score	11	1	0	6	1	5
Urine HIV	11	0	1	1	2	9
Oral Fluid	14	1	2	1	1	5
ECG	1	0	2	0	12	9
ETT	15	0	0	0	3	6
PFT	18	0	0	0	0	6
APS Guidelines	0	0	0	1	9	14
MVR	0	0	1	4	0	19
IR	5	0	1	0	6	12
eIR	11	2	0	2	1	8
Credit Report/Scoring	11	6	0	6	0	1
Predictive Analytics	3	9	0	10	1	1
Mature Age Questions	7	1	0	1	0	15
Cognitive Testing	9	2	0	0	0	13
Functional Testing	11	1	0	0	0	11
Prescription Database Query	5	0	0	10	1	8
Other 1	2	1	0	0	0	1
Other 2	2	0	0	0	0	1

There were 24 respondents to this question, but please note not all requirements had a response. Results on changes to requirements within the next two years are summarized below under the bolded headings in the order of prevalence:

**Add** (number of respondents followed by requirement(s) noted)

- 9 Predictive Analytics
- 6 Credit Report/Scoring
- 2 Tele-interview, eIR, Cognitive Testing
- 1 Hemoglobin, Lab Score, Oral Fluid, Mature Age Questions, Functional Testing, plus one 'Other' (below)
  - o Prescription database scoring

Increase (number of respondents followed by requirement(s) noted)

- 11 Non-Medical
- 10 Predictive Analytics, Prescription Database Query
- 9 Tele-interview
- 7 NT pro-BNP
- 6 HbA1C, Lab Score, Credit Report/Scoring
- 4 Abbreviated Paramedical, MVR
- 2 Blood Profile, eIR
- 1 Paramedical Exam, Hemoglobin, Urine HIV, Oral Fluid, APS Guidelines, Mature Age Questions

**Delete** (number of respondents followed by requirement(s) noted)

- 3 Medical Exam
- 2 Oral Fluid, ECG
- 1 Blood Profile, NT pro-BNP, Urine HIV, MVR, IR

**Decrease** (number of respondents followed by requirement(s) noted)

- 14 Paramedical Exam
- 12 Blood Profile, ECG
- 9 APS Guidelines
- 6 Abbreviated Paramedical, Medical Exam, IR
- 5 Tele-interview
- 3 Non-Medical, HbA1C, ETT
- 2 PSA, Urine HIV
- 1 NT pro-BNP, Hemoglobin, Lab Score, Oral Fluid, eIR, Predictive Analytics, Prescription Database Query

Not Used (number of respondents followed by requirement(s) noted)

- 20 Dried Blood Spot
- 18 PFT
- 15 ETT
- 14 Oral Fluid
- 11 Lab Score, Urine HIV, eIR, Credit Report/Scoring, Functional Testing
- 9 Cognitive Testing

- 7 Medical Exam, Hemoglobin, Mature Age Questions
- 5 IR, Prescription Database Query
- 4 Abbreviated Paramedical, plus four 'Other' (below)
  - None of the four 'Others' included any comments
- 3 NT pro-BNP, Predictive Analytics
- 2 Paramedical Exam
- 1 Non-Medical, Tele-interview, PSA, ECG

### **No Change** (number of respondents followed by requirement(s) noted)

- 21 PSA
- 19 MVR
- 15 HbA1C, Mature Age Questions
- 14 Hemoglobin, APS Guidelines
- 13 Cognitive Testing
- 12 NT pro-BNP, IR
- 11 Functional Testing
- 10 Abbreviated Paramedical
- 9 Non-Medical, Blood Profile, Urine HIV, ECG
- 8 eIR, Prescription Database Query
- 7 Paramedical Exam, Medical Exam, Tele-interview
- 6 ETT, PFT
- 5 Lab Score, Oral Fluid
- 4 Dried Blood Spot
- 2 'Other'
  - o Neither 'Other' included any comments
- 1 Credit Report/Scoring, Predictive Analytics

For the requirements that respondents anticipated changing within the next two years, they were able to select up to three reasons prompting their changes: Protective Value, Faster or Competitive.

	# of Respondents			
Reason for Anticipated Changes	Protective			
to U/W Requirements	Value	Faster	Competitive	
Non-Medical	2	11	12	
Paramedical Exam	4	11	12	
Abbreviated Paramedical	3	8	8	
Medical Exam	6	6	6	
Tele-interview	10	10	10	
Blood Profile	4	11	11	
Dried Blood Spot	1	0	0	
HbA1C	5	3	4	
PSA	0	2	1	
NT pro-BNP	6	3	2	
Hemoglobin	1	1	2	
Lab Score	6	2	5	
Urine HIV	1	4	3	
Oral Fluid	2	3	3	
ECG	4	11	11	
ETT	1	3	3	
PFT	0	0	0	
APS Guidelines	3	7	4	
MVR	4	2	2	
IR	1	5	4	
eIR	5	4	3	
Credit Report/Scoring	10	7	5	
Predictive Analytics	14	15	14	
Mature Age Questions	1	0	0	
Cognitive Testing	1	0	0	
Functional Testing	0	0	0	
Prescription Database Query	9	9	6	
Other 1	1	1	1	
Other 2	0	0	0	

There were 24 respondents to this question, but please note not all requirements had a response. Results for each reason are summarized below under the bolded headings in the order of prevalence:

Protective Value (number of respondents followed by requirement(s) noted)

- 14 Predictive Analytics
- 10 Tele-interview, Credit Report/Scoring
- 9 Prescription Database Query
- 6 Medical Exam, NT pro-BNP, Lab Score
- 5 HbA1C, eIR

- 4 Paramedical Exam, Blood Profile, ECG, MVR
- 3 Abbreviated Paramedical, APS Guidelines
- 2 Non-Medical, Oral Fluid
- 1 Dried Blood Spot, Hemoglobin, Urine HIV, ETT, IR, Mature Age Questions, Cognitive Testing, plus one 'Other' (below)
  - o Prescription database scoring

### Faster (number of respondents followed by requirement(s) noted)

- 15 Predictive Analytics
- 11 Non-Medical, Paramedical Exam, Blood Profile, ECG
- 10 Tele-interview
- 9 Prescription Database Query
- 8 Abbreviated Paramedical
- 7 APS Guidelines, Credit Report/Scoring
- 6 Medical Exam
- 5 − IR
- 4 Urine HIV, eIR
- 3 HbA1C, NT pro-BNP, Oral Fluid, ETT
- 2 PSA, Lab Score, MVR
- 1 Hemoglobin, plus one 'Other' (below)
  - o Prescription database scoring

### **Competitive** (number of respondents followed by requirement(s) noted)

- 14 Predictive Analytics
- 12 Non-Medical, Paramedical Exam
- 11 Blood Profile, ECG
- 10 Tele-interview
- 8 Abbreviated Paramedical
- 6 Medical Exam, Prescription Database Query
- 5 Lab Score, Credit Report/Scoring
- 4 HbA1C, APS Guidelines, IR
- 3 Urine HIV, Oral Fluid, ETT, eIR
- 2 NT pro-BNP, Hemoglobin, MVR
- 1 PSA, plus one 'Other' (below)
  - o Prescription database scoring

### 3.2. Respondents were asked how frequently some or all of their underwriting requirements are updated.

Frequency of Updates to U/W Requirements	# of Respondents
0 – 6 months	2
7 – 12 months	2
1 – 2 years	13
3 – 5 years	7
Over 5 years	0
Total # of Respondents	24

Just over half (54%) of the respondents' companies made updates to their underwriting requirements every one to two years. Just over one quarter (29%) noted a time frame of three to five years for updates. Two groups of respondents (8% each) noted more aggressive update frequencies of 0 to 6 months or 7 to 12 months. None of the respondents indicated their company waited more than five years to update their underwriting requirements.

# 3.3. Respondents were asked to indicate who is involved in determining changes to underwriting requirements. (Check all that apply)

Involvement in Changes to U/W Requirements	# of Responses
Underwriting	23
Actuarial	21
Reinsurers	19
Medical	14
Competitive Intelligence	12
Marketing	7
Laboratories	6
Claims	5
Legal	5
External Consultant	3
Other*	2
Total # of Respondents	24

The resources involved in determining changes to underwriting requirements were fairly extensive and cross functional. Underwriting was involved 96% of the time. Next were actuarial areas and reinsurers at 88% and 79%, respectively. Over half (58%) of the respondents involved the medical department. Half of the respondents used competitive intelligence. To lesser degrees, the following areas contributed: marketing (29%), laboratories (25%), claims and/or legal (21%), and external consultant (13%).

### \*Other:

- the VP of Operations
- No comments included on second 'Other'

### Section 4: Underwriting Processes and Systems

This section of the Survey focused on how age and amount requirements (including APS guidelines) were ordered, received and reviewed, and asked about the systems used to support the underwriting function.

# 4.1. Respondents were asked who ordered age and amount underwriting requirements (other than APS) (Check all that apply)

Who Orders Age & Amount U/W Requirements	# of Responses
Underwriting/New Business	19
Producer/Producer's Staff	14
Tele-interview Vendor	5
Other*	6
Total # of Respondents	24

### \*Other:

- Majority of requests are automated including APS
- Auto ordered
- Orders are auto generated by our New Business system
- Vast majority is automated on e-submission
- Electronically upon transmission of application
- Automation

Just over three-quarters (79%) of respondents noted their company's underwriting/new business areas ordered the age and amount underwriting requirements, although over half (58%) noted the producer/producer's staff ordered these requirements. Almost one-quarter (21%) of respondents noted requirements were ordered by a tele-interview vendor.

### 4.2a. Respondents were asked who ordered APS requirements. (Check all that apply)

Who Orders APS Requirements	# of Responses
Underwriting/New Business	24
Producer/Producer's Staff	5
Tele-interview vendor	3
Other*	3
Total # of Respondents	24

### \*Other:

- Automated decision technology internal home grown based on interview answers
- A/A APSs are ordered automatically on e-submission
- Automation

All of the respondents noted their company's underwriting/new business areas ordered APS requirements. Almost one-quarter (21%) noted their producer or producer's staff ordered APS requirements, while only 13% noted their requirements were ordered by a tele-interview vendor.

### 4.2b. Respondents were asked, if the producer and/or producer staff ordered the APS, did they receive a copy of the APS.

Producer Received Copy of APS	# of Respondents
Yes	3
No	5
N/A	16
Total # of Respondents	24

A relatively small number (13%) of responding companies reported their producer received a copy of APS's, while 21% did not. Two-thirds of respondents noted it was not applicable, presumably because producers were only involved in the ordering of APS's 21% of the time (see question 4.2a).

# 4.2c. Respondents were asked to provide information normally obtained, when their company ordered an APS report from a doctor.

Normal Doctor's Report Information	# of Respondents
Complete Medical History all Ages/Amounts	15
Attending Physician's Summary of Records	5
Complete Medical History above certain Ages/Amounts	3
Impairment Questionnaire	0
Other*	1
Total # of Respondents	24

### \*Other:

### Automation

Almost two-thirds (63%) of respondents reported that complete medical records at all ages and amounts were normally included on the APS's they received. If you include select ages and/or amounts above certain ages/amounts, the percentage rises to 72%. A fifth of respondents reported that a summary of records was provided rather than complete records. No respondents noted that an impairment questionnaire was normally obtained as an APS requirement.

# 4.3a. Respondents were asked if their company used APS summaries (i.e., summaries created by someone other than an Attending Physician) as part of its underwriting process.

APS Summaries	# of Respondents
Yes	7
No – but considering	6
No – not considering	11
Total # of Respondents	24

Almost one-third (29%) of respondents noted current use of APS summaries created by someone other than the attending physician. Of the 71% not using APS summaries, 35% were considering their use.

### 4.3b. Respondents who used these APS summaries were asked who summarized the APS. (Check all that apply)

Who Summarizes the APS	# of Responses
Outsourced Domestic Firm	4
Domestic Contract Underwriter	3
Underwriting Department	0
Off-shore Resources	0
Other Internal Staff	0
Reinsurer	0
Other	0
Total # of Respondents	7

Of the seven responding companies who used APS summaries (from question 4.3a), four used an outsourced domestic firm and three used a domestic contract underwriter.

# 4.3c. Respondents who used these APS summaries were asked to report when these APS summaries were used by their company. (Check all that apply)

APS Summaries Used	# of Responses
APS meets Certain Parameters	7
All Cases with APS	0
Certain Business Segments only	0
Trials or Inquiries	0
Total # of Respondents	7

Of the seven responding companies who used APS summaries, all used them when certain parameters were met. While seven is a small sample, no respondents identified certain business segments or trials or inquiries as reasons they used APS summaries.

### 4.3d. Respondents who used these APS summaries were asked if the underwriter was able to review the original APS.

	# of Respondents	
U/W Review of APS Summaries	Yes	No
U/W can review original APS	7	0
Total # of Respondents		7

All seven respondents noted their company's underwriters were able to review the original APS, if they so desired.

### 4.3e. Respondents who used APS summaries were asked if their company audited their APS summary vendor.

	# of Respondents	
Company Audit APS Vendor	Yes	No
Company Audits Vendor	6	1
Total # of Respondents	7	1

A majority (86%) of respondents noted their company audited the APS vendor.

# 4.3f. Respondents who used APS summaries were asked if their company changed APS summary vendors in the last two years. (Check all that apply)

APS Summary Vendor Change in Last Two Years	# of Responses
Yes – change in practices	1
Yes – quality related	1
Yes – other	1
Yes – to improve costs	0
No	4
Total # of Respondents	7

Over half (57%) of respondents noted their company had not made an APS summary vendor change in the last two years. The remaining three respondents each noted a change in the last two years and identified three different reasons: change in practices, quality related, or 'Other,' i.e., "We just started using an APS summary service in the last year."

# 4.4a. Respondents were asked if their company had an automated underwriting system that makes underwriting decisions.

AUS Making U/W Decisions	# of Respondents
Yes	14
No	10
Total # of Respondents	24

Over half (58%) of responding companies had an automated underwriting system (AUS) that makes underwriting decisions.

# 4.4b. Respondents who did not have an AUS were asked if their company was planning on moving to an automated underwriting system in the near future (1-2 years).

Moving to AUS in near Future	# of Respondents
Yes	4
No	6
Total # of Respondents	10

Sixty percent of the responding companies who did not have an AUS planned to move to one in the near future, while 40% did not have such plans.

Of the 24 responding companies from question 4.4a, one-quarter reported no plans in the near future for an AUS.

# 4.4c. Respondents who had an AUS in place or planned to move to one in the near future were asked how their system was developed.

Automated Underwriting System	# of Respondents
Purchased – customization	10
Developed In-house	6
Purchased – no customization	0
Other*	2
Total # of Respondents	18

### \*Other:

- Not yet implemented
- We don't have a system currently. Our current system is being evaluated, and it has not been determined whether we will develop in-house or purchase.

There were 18 respondents who selected 'yes.' Fourteen had an AUS in place. Four had plans within one year.

Over half (56%) of responding companies purchased their AUS and customized it. One-third noted they developed their AUS in-house. No respondents noted they purchased an AUS with no customization.

# 4.4d. Respondents were asked what information was automatically fed into and assessed by their company's underwriting rules engine. (Check all that apply)

Data Automatically Fed to U/W Rules Engine	# of Responses
MIB	12
е-Арр	11
Lab Results	10
MVR	8
Prescription History	7
Tele-interviewing Results	7
Credit Scoring/Information	2
APS	1
Other*	3
Total # of Respondents	15

### \*Other:

- Physical measurements & lab ticket data, inspection alternative
- Clean applications that don't have any system edits may jet issue
- The items we would LIKE to feed into a system are labs, MIB, MVR, Rx

The most prevalent data received and assessed by the rules engine was MIB (80%), e-App (73%), and lab results (67%). Of moderate prevalence was the MVR (53%) and prescription history (47%). Much lower prevalence was noted for credit scoring/information (13%) and, lastly, the APS (7%), which was fed into an AUS by one respondent.

# 4.4e. Respondents were asked to indicate the maximum face amount the automated underwriting system approved.

Maximum Face Amount	# of Respondents							
Automatically Approved	Age 35	Age 45	Age 55	Age 65	Age 75			
\$24,999					1			
\$25,000					1			
\$49,999				2	1			
\$50,000					1			
\$75,000				1				
\$99,000	1	1	1	1				
\$99,999	1	2	2	1	1			
\$100,000		2	2	2	3			
\$150,000	1		3	2				
\$249,999	1							
\$250,000	1	1	1	1				
\$300,000	1	2						
\$400,000	1							
\$499,000	1	1						
\$500,000	3	3	3	1	1			
\$999,999	1							
\$1,000,000	1	1						
\$1,500,000				1				
\$2,000,000	1	1	1					
Total # of Respondents	14	14	13	12	9			

The easiest way to analyze the results is to look at the maximum amount distribution by the five ages: 35, 45, 55, 65, and 75.

Maximum	\$99,000	\$99,999	\$150,000	\$249,999	\$250,000	\$300,000	\$400,000	\$499,000	\$500,000	\$999,999	\$1,000,000	\$2,000,000
Age 35	1	1	1	1	1	1	1	1	3	1	1	1

At age 35, the lowest maximum face amount was \$99,000 and the maximum face amount was \$2,000,000. The greatest prevalence was at \$500,000 (21% of respondents).

Maxim	num	\$99,000	\$99,999	\$100,000	\$250,000	\$300,000	\$499,000	\$500,000	\$1,000,000	\$2,000,000
Age	45	1	2	2	1	2	1	3	1	1

At age 45, the lowest maximum face amount was \$99,000 and the maximum face amount was \$2,000,000. The greatest prevalence was at \$500,000 (21% of respondents).

Maximum	\$99,000	\$99,999	\$100,000	\$150,000	\$250,000	\$500,000	\$2,000,000
Age 55	1	2	2	3	2	3	1

At age 55, the lowest maximum face amount was \$99,000 and the maximum face amount was \$2,000,000. Greatest prevalence was at \$150,000 and \$500,000 (each reported by 28% of respondents).

Maximum	\$49,999	\$75,000	\$99,000	\$99,999	\$100,000	\$150,000	\$250,000	\$500,000	\$1,500,000
Age 65	2	1	1	1	2	2	1	1	1

At age 65, the lowest maximum face amount was \$49,999 and the maximum face amount was \$1,500,000. Other than the two respondents at \$49,999 (17% of respondents), the greatest prevalence (58%) was spread from \$75,000 through \$150,000.

Maximum	\$24,999	\$25,000	\$49,999	\$50,000	\$99,999	\$100,000	\$500,000
Age 75	1	1	1	1	1	3	1

At age 75, the lowest maximum face amount was \$24,999 and the maximum face amount was \$500,000. The only cell with more than one selection was \$100,000 with three respondents.

As expected, the results show higher maximum face amounts automatically approved at the younger ages and lower maximum face amounts for older ages.

# 4.4f. Respondents were asked to identify the actions or decisions the automated underwriting system made. (Check all that apply)

Actions or Decisions Made by Automated Underwriting System	# of Responses
Approved Preferred/Standard	13
Refer to U/W – Partial Assessment	11
Recommend U/W Requirements	9
Refer to U/W – No Assessment	8
Approved Substandard – no U/W Review	3
Declined – no U/W Review	3
Other*	3
Total # of Respondents	15

### \*Other:

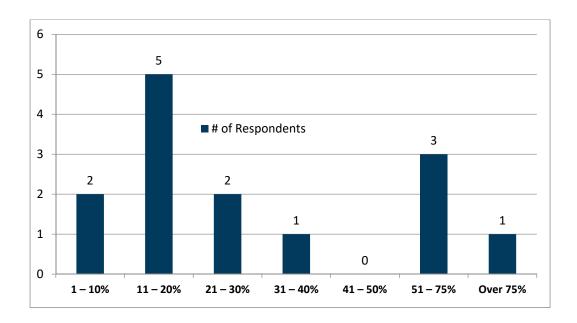
- No preferred included
- We don't currently have a system
- Cannot approve preferred just standard in that category

The following percentage of respondents noted their AUS made the types of actions or decisions noted below:

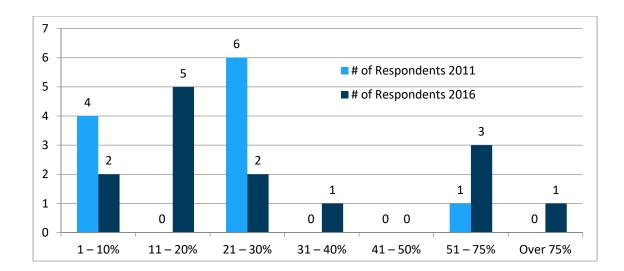
- 87% approved cases at either standard or preferred.
- 73% referred cases to an underwriter with a partial assessment.
- 60% recommended underwriting requirements.
- 53% referred cases to an underwriter without an assessment.
- 20% approved substandard cases with no underwriting review.
- 20% declined cases without an underwriting review.

# 4.4g. Respondents were asked what percentage of new life applications were approved by the automated underwriting system.

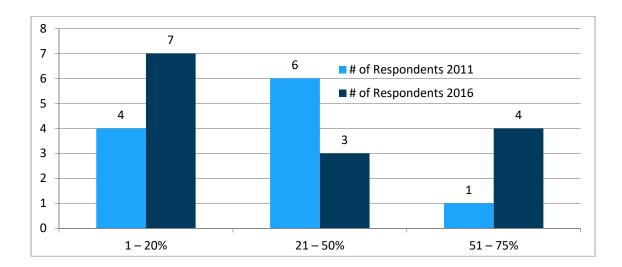
% of Applications Approved by U/W System	# of Respondents
1 – 10%	2
11 – 20%	5
21 – 30%	2
31 – 40%	1
41 – 50%	0
51 – 75%	3
Over 75%	1
Total # of Respondents	14



Results were fairly varied and might be due to the type of business being processed.

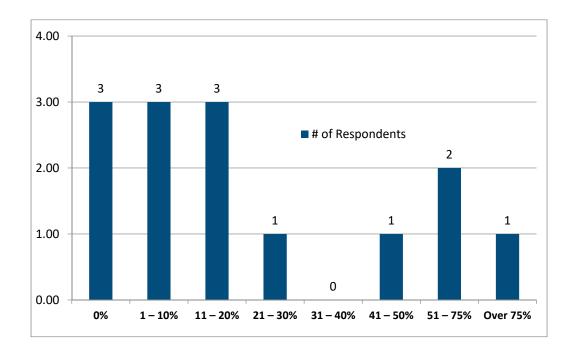


In the chart above, the percentage of new applications approved by the AUS reported in the 2016 Survey is compared with the 2011 Survey results. There were 11 respondents to this question from the 2011 Survey. Respondents to the 2016 Survey reported more decisions were made by the AUS than the 2011 respondents. As the use of underwriting engines continues to evolve, there is a corresponding increase in the number of decisions made by AUS. The chart below combines the percentile ranges to reemphasize the distribution and trend.

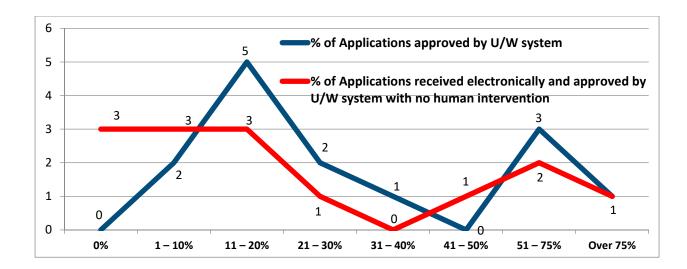


# 4.5. Respondents were asked to note, of the new life applications received electronically, what percentage was approved by the automated underwriting system and issued without human intervention.

% of Applications Received Electronically Approved	
by U/W System with no Human Intervention	# of Respondents
0%	3
1 – 10%	3
11 – 20%	3
21 – 30%	1
31 – 40%	0
41 – 50%	1
51 – 75%	2
Over 75%	1
Total # of Respondents	14



Results were varied and might be due to product type, distribution channel, maximum issue age, face amount, etc. Almost 80% of responding companies implemented a full electronic new business process, i.e., with no human intervention.



When question 4.4.g (percentage of new life applications approved by AUS) was compared to question 4.5 (percentage of new life applications received, approved and issued by AUS), the trends were similar.

## 4.6a. Respondents were asked if their company used Tele-interviewing.

Companies Using Tele-interviewing	# of Respondents
Yes – just Part 1	0
Yes – just Part 2	9
Yes – Part 1 and Part 2	7
No	8
Total # of Respondents	24

One-third of responding companies did not use tele-interviewing. Of the two-thirds that did, 56% used tele-interviewing for just their Part 2 and 44% used it for both Parts 1 and 2. No responding companies used tele-interviewing for just Part 1.

## 4.6b. Respondents were asked how Tele-interviewing was used at their company.

Business Targeted for Tele-interviewing	# of Respondents
Mandatory for New Business within Certain Parameters	8
Producer Optional	6
Mandatory for All Business	2
Total # of Respondents	16

Half of the responding companies made tele-interviewing mandatory for new business within certain parameters, while just over one-third (38%) made it optional for their producers. Two respondents (13%) noted that tele-interviewing was mandatory for all of their company's business.

## 4.6c. Respondents were asked who completed their company's Tele-interviewing.

Tele-interview Conducted By	# of Respondents
External Vendor	14
Internal Company Unit	2
Online Interview	0
Total # of Respondents	16

The majority (88%) of responding companies used an external vendor for their tele-interviewing. Two respondents (13%) used an internal company unit for tele-interviews. No respondents noted their tele-interview process was conducted online.

## 4.6d. Respondents were asked how sophisticated their company's Tele-interviewing model was.

Tele-interviewing Model Sophistication	# of Respondents
Straight Copy of Part 1 and 2	1
Expanded Questions – No Drill Down Capability	1
Expanded Questions – Drill Down Capability	13
Expanded Questions – Drill Down Capability and Additional Functionality	1
Total # of Respondents	16

The majority (88%) of responding companies used expanded questions with drill down capability in their tele-interviewing model. Only two respondents (13%) noted their companies' tele-interviewing models had no drill down capability.

## Section 5: Underwriting Resources

This section examines the use of remote underwriters, ECGs, and outsourcing.

5.1a Respondents were asked if any of their company's underwriters worked remotely from their home at least some of the time.

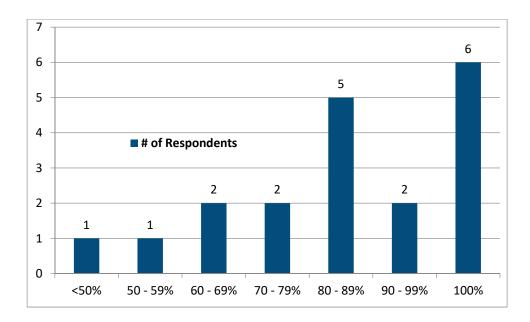
Work from Home Some of the Time	# of Respondents
Yes	19
No	5
Total # of Respondents	24

Over three-quarters (79%) of respondents noted their company's underwriters worked remotely some of the time. Almost one-quarter (21%) did not allow underwriters to work remotely.

5.1b Responding companies that allowed underwriters to work at home were asked what percentage of their underwriters worked remotely at least some of the time.

% of U/W's Working Remotely	# of Respondents
<50%	1
50 - 59%	1
60 - 69%	2
70 - 79%	2
80 - 89%	5
90 - 99%	2
100%	6
Total # of Respondents	19

Of those companies with underwriters who worked remotely, there was considerable variation as to what percentage of their overall underwriting staff worked remotely, although the results showed a large percentage of the underwriting staff working remotely. About two-thirds of these responding companies allowed at least 80% of their underwriting staff to work remotely. Almost one-third allowed 100% of their underwriters to work remotely. The graph below illustrates these findings.



5.1c Responding companies with underwriters who worked remotely were asked to report the maximum percentage of time that their company allowed an underwriter to work remotely.

Maximum % of Time Allowed	# of Respondents
50%	1
60%	1
80%	1
100%	16
Total # of Respondents	19

The majority (84%) of respondents noted their company allowed at least some underwriters to work remotely five days per week.

5.1d Responding companies with underwriters who worked remotely were asked what percentage of their company's underwriters generally work the maximum percentage remotely.

% of U/W's Working Remotely to Maximum Allowed	# of Respondents
25% and under	1
26 - 50%	0
51 - 75%	4
76 – 99%	3
100%	11
Total # of Respondents	19

Over half (58%) of respondents with underwriters who worked remotely noted all of their company's underwriters generally worked their maximum allowable amount remotely.

# 5.1e Respondents were asked how often remote underwriters were required to be in the office. (Choose one and provide the number)

U/W's Required to be in the Office	# of Respondents
No Specific Requirement; As Needed	11
Specific Requirement	8
Total # of Respondents	19

Over half (58%) of respondents indicated their company had no specific requirement for how often their underwriters needed to be in the office. They came into the office as needed. The remaining 42% had a specific requirement as noted below:

- 1. 1 day per week (2 respondents)
- 2. 2 days per week
- 3. 1 day per month
- 4. 2 days per month
- 5. 10 days per month
- 6. 7 days per year
- 7. Unspecified

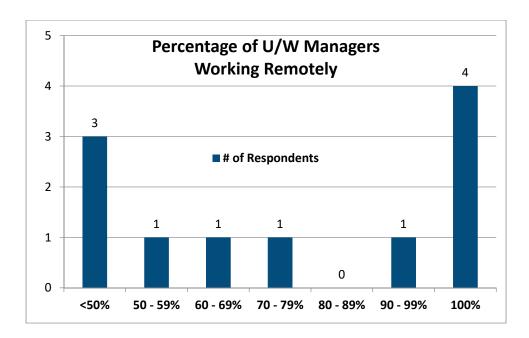
# 5.2a Respondents were asked if any of their company's underwriting managers worked remotely from their home at least some of the time.

Work from Home Some of the Time	# of Respondents
Yes	11
No	13
Total # of Respondents	24

Almost half (46%) of respondents noted their company allowed their underwriting managers to work remotely from home.

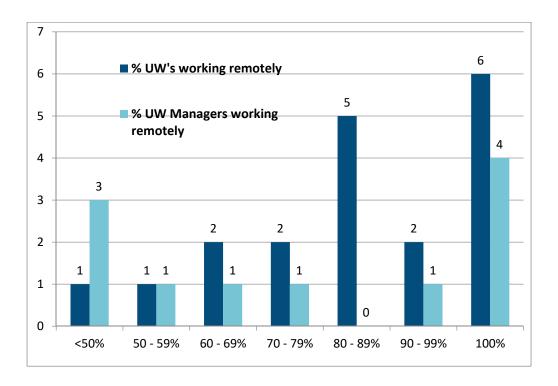
# 5.2b Respondents with underwriting managers who worked remotely were asked what percentage of their company's underwriting managers worked remotely at least some of the time.

% of U/W Managers Working Remotely	# of Respondents
<50%	3
50 - 59%	1
60 - 69%	1
70 - 79%	1
80 - 89%	0
90 - 99%	1
100%	4
Total # of Respondents	11



As the chart above shows, there was considerable variation as to what percentage of underwriting managers worked remotely. Almost half allowed at least 90% of their underwriting managers to work remotely. More than one-third allowed 100% of their underwriting managers to work remotely, while 27% reported less than 50% of their underwriting managers worked remotely.

The following graph plots the percentage of underwriters who worked remotely against the percentage of underwriting managers who worked remotely.



# 5.2c Respondents were asked to report the maximum percentage of time that their companies allowed an underwriting manager to work remotely.

Maximum % of Time Allowed	# of Respondents
Less than 50%	3
70-79%	2
90-99%	3
100%	2
N/A	1
Total # of Respondents	11

Seven of ten respondents' companies allowed its underwriting managers to work remotely 70% or more of the time. Just over one-quarter (27%) of respondents indicated the maximum percentage of time was less than 50%. In addition, one respondent reported the maximum percentage was not applicable.

# 5.2d Responding companies with underwriting managers who worked remotely were asked what percentage of them generally worked the maximum percentage remotely.

% of U/W's Working Remotely to Maximum Allowed	# of Respondents
25% and under	6
26 - 50%	0
51 - 75%	0
76 – 99%	1
100%	4
Total # of Respondents	11

Over half (55%) of respondents whose companies' underwriting managers worked remotely noted 25% and under generally worked remotely their maximum allowable amount. Just over one-third (36%) of respondents noted all of their companies' underwriting managers worked remotely the maximum allowable amount.

## 5.3a Respondents were asked if any of their underwriters interpreted ECGs.

U/W's Interpret ECGs	# of Respondents
Yes	13
No	11
Total # of Respondents	24

Just over half (54%) of the respondents noted their companies' underwriters could interpret ECGs.

# 5.3b Respondents with underwriters who interpreted ECGs were asked what percentage of their companies' underwriters interpreted resting ECGs.

% of U/W's Who Interpret Resting ECGs	# of Respondents
25% and under	7
26 - 50%	1
51 - 75%	3
76 – 99%	2
100%	0
Total # of Respondents	13

Just over half (54%) of the respondents noted 25% and under of their companies' underwriters interpreted ECGs. Almost one-quarter (23%) of respondents reported that 51-75% interpreted resting ECGs. No respondents had 100% who could interpret ECGs.

### 5.3c Respondents were asked how abnormal ECGs were handled.

Abnormal ECGs	# of Respondents
Always Refer to Medical Dept.	7
Interpreting U/W Makes Decision	3
Always Refer to Another U/W	0
Other*	3
Total # of Respondents	13

### \*Other:

- Interpreted by Chief Underwriter
- Interpreting Underwriter makes the decision if debits applied sent to Medical Director for review
- Could have another underwriter review and/or send to Medical Director for review

Just over half (54%) of the responding companies referred abnormal ECGs to the medical department. Almost one-quarter (23%) of them noted the interpreting underwriter made a decision on an abnormal ECG.

# 5.4a Respondents were asked if their companies had any of the following specialized underwriting teams. (Check all that apply)

Specialty Underwriting Team	# of Responses
Audit	12
Large Case	9
Training	7
Jet Underwriting	6
Product Line	5
Geographical	4
High Substandard	2
Concierge	2
Older Age	1
Corporate	1
Other*	3
None	5
Total # of Respondents	24

### \*Other:

- Risk Management that is part of actuarial contains underwriting staff
- Research Team
- Medical Specialty

Just over three-quarters (79%) of responding companies had one or more specialty underwriting teams. The most common was an audit team as noted by half of all the respondents. Next most common were specialty teams related to large case (38%), training (29%), jet underwriting (25%), product line (21%), or no teams at all (21%).

Of the 19 responding companies with specialty underwriting teams, the average number of teams was three, with a high of six and low of one.

# 5.4b Respondents were asked how new business was assigned to their companies' underwriters. (Check all that apply)

Business Assigned to U/W's	# of Responses
Face Amount	13
Random	10
Distribution Channel	7
Product Line	7
Age of Proposed Insured	4
Geographical Region	4
Producer Group	2
Other*	4
Total # of Respondents	24

### \*Other:

- Pull system underwriter pull electronic file based on their product line they can underwrite.
- We have just started to train a junior underwriter in house she is starting with the juvenile applications.
- Last 2 digits of policy number
- Medical Specialty

In most cases, new business was assigned to underwriters by either the face amount (54%) or randomly (42%). Some respondents noted assignment by distribution channel or product line (each at 29%). Assignment by age of the proposed insured or the geographical region where the business originated were less common (at 17% each). Respondents noted it was relatively rare to assign new business to underwriters by producer group (8%).

Fourteen of the respondents used multiple methods to assign cases.

## 5.5a Respondents were asked if their companies outsourced underwriting.

Outsource U/W	# of Respondents
Yes	8
No	16
Total # of Respondents	24

One-third of respondents noted their company outsourced some of their underwriting, while two-thirds did not.

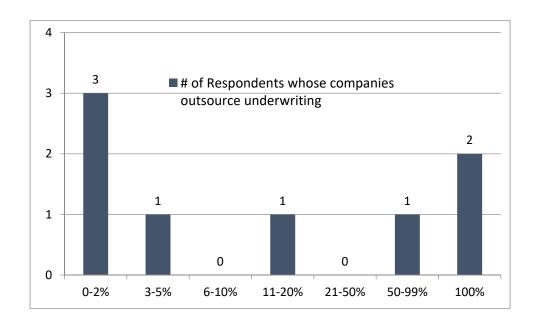
# 5.5b The Survey asked those responding companies who outsourced underwriting, to whom underwriting was outsourced.

Outsourced to	# of Respondents
Established Domestic Firms	7
Individual Contract Underwriters	1
Reinsurers	1
Offshore Firms	0
Total # of Respondents	8

The majority (88%) of respondents who indicated their company outsourced underwriting used an established domestic firm.

## 5.5c Respondents who outsourced were asked what percentage of underwriting was outsourced.

% of Business Outsourced	# of Respondents
0 - 2%	3
3 - 5%	1
6 - 10%	0
11 - 20%	1
21 - 50%	0
50 - 99%	1
100%	2
Total # of Respondents	8



Half of the respondents who indicated their company outsourced at least some of their underwriting noted they only did so for 1-5% percent of their overall business, while one-quarter outsourced 100% of their underwriting.

## 5.5d Respondents were asked what type of underwriting their companies outsourced.

Type of Business Outsourced	# of Respondents
No Differentiation – All Regular Business	4
Overflow during Peak Periods	4
Certain Ages	1
Underwriter Audits/Reviews	1
APS Summarization	0
By Face Amount	0
Project Work, No Actual Underwriting	0
Other*	2
Total # of Respondents	8

## \*Other:

- Simple Medical Cases
- All Adult New Applications

Half of the respondents indicated their company used outsourced underwriting for all regular business and half outsourced to handle overflow business during peak business periods. To a lesser extent, responding companies also outsourced underwriting for certain ages, underwriter audits/reviews, simple medical cases, or all adult new applications.

Four responding companies outsourced multiple types of business.

## 5.6a Respondents were asked if their Underwriting Approval Limits varied by underwriting experience.

U/W Approval Limits Vary	# of Respondents
Yes, some restrictions by age	15
Yes, no restrictions by age and/or rating	9
No	0
Total # of Respondents	24

All respondents indicated their underwriting approval limits varied by underwriting experience, with almost two-thirds (63%) of respondents noting their company imposed some restrictions of underwriting approval limits by age of proposed insured, and a lesser percentage (37%) with no restrictions by age and/or rating.

# 5.6b Respondents were asked, generally speaking, what percentage of new cases were within an underwriter's approval limit.

% of Business with U/W's Approval Limit	# of Respondents
100%	2
80 - 99%	17
60 - 79%	5
0 - 59%	0
Total # of Respondents	24

Over three-quarters (79%) of respondents indicated 80% or more of new cases seen by underwriters at their company were within their approval authority, while 21% of respondents noted 60-79% of new cases seen by their company's underwriters were within their approval authority.

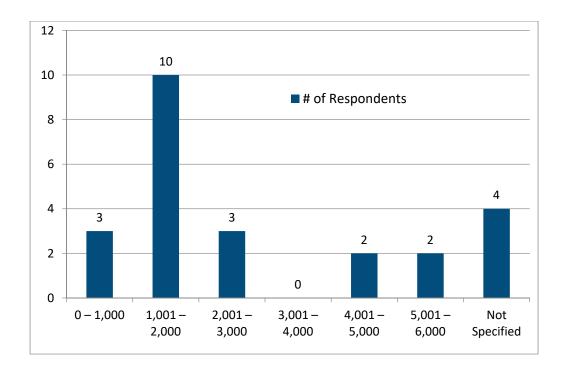
# 5.6c Respondents were asked if their companies allowed stacking of Approval Limits (i.e., ability to combine limits between underwriters).

Allow Stacking	# of Respondents
Yes	4
No	20
Total # of Respondents	24

Eighty-three percent of respondents noted their company did not allow stacking of approval limits between underwriters.

## 5.7 Respondents were asked to report the average number of new business cases annually underwritten by a life underwriter.

Average # of New Business Cases per U/W Annually	# of Respondents
0 – 1,000	3
1,001 – 2,000	10
2,001 – 3,000	3
3,001 – 4,000	0
4,001 – 5,000	2
5,001 – 6,000	2
Not Specified	4
Total # of Respondents	24



Of the 20 respondents who specified the number of cases underwritten annually, half selected between 1,001-2,000 cases a year.

5.8 If the responding company required more new business cases be underwritten by a life underwriter working from home versus an underwriter working in the company office, respondents were asked what productivity increase was expected.

% Increase in Productivity for Remotes	# of Respondents
0%	14
1 - 5%	1
6 - 10%	2
11 - 20%	2
Over 20%	0
Unknown	0
Not Applicable	5
Total # of Respondents	24

Over half (58%) of respondents noted their company did not expect production increases for remote underwriters. The results show it was relatively uncommon for a respondent to report a productivity increase for working remotely, i.e., 8% of respondents expected a 6-10% increase and another 8% expected an 11-20% increase, while 4% expected a 1-5% increase.

## Section 6: Impact of Past Changes

This section will gauge the impact of the changes that were made within the last two years to underwriting requirements (as described in Section 3), from a system or resource perspective.

### 6.1 The Survey asked what percentage of cases were approved within 30 days.

% Range	# of Respondents
90 - 100	6
80 - 89	5
70 - 79	5
60 - 69	2
50 - 59	2
<50	2
Total # of Respondents	22

Over one-quarter (27%) of respondents indicated their company approved at least 90% of its cases within 30 days and half of the respondents indicated their company approved at least 80% of its cases within 30 days.

# 6.2. Respondents were asked to provide and rank the top three changes their company made that increased the percentage of cases approved within 30 days.

		Rank		
Change Category	1	2	3	# of Responses
Age and Amount Requirements	4	4	4	12
Underwriting Rules Engine	4	2	3	9
APS ordering or management thereof	4	4	0	8
Electronic Application	4	2	1	7
Underwriting resource management	1	3	2	6
Tele-interview	1	3	0	4
Underwriting Image System	1	0	3	4
Electronic inspection reports	0	0	1	1
Other*	4	2	3	9
Total # of Responses	23	20	17	60

There were 23 responses to this question. Age and amount requirements, underwriting rules engine, APS ordering/APS management, and electronic application each received four responses as being the top change made that increased the percentage of cases approved within 30 days. These four categories also received the most mention (ranking of 1, 2 or 3).

The "\*Other" responses and their rankings are shown in the table below:

Response	Rank
Agent follow-up procedures	1
Changes to recent to know	1
Electronic delivery of requirements	1
Requirement review	1
Online U/W questionnaire	2
Service level agreement of entry team	2
Agent responsiveness	3
Modification in underwriting thinking	3
Underwriting training	3

# 6.3a. The Survey asked what one change to the new business process their company made in the last two years that had the most positive impact.

Change Category	# of Respondents
APS ordering or management thereof	5
Age and amount changes	4
Underwriting Rules Engine	4
Underwriting resource management	3
Electronic Application	2
Tele-Interview	1
Underwriting Image System	1
Electronic inspection reports	0
Other*	2
N/A	1
Total # of Respondents	23

## \*Other:

- Requirement Review
- Providing agents with updates of o/s requirements

The answer to this question was spread among several categories. Almost one-quarter (22%) of respondents cited APS ordering or management thereof as the top change that had the most positive impact. This was closely followed by age and amount changes (17%) and underwriting rules engine (17%).

The prior survey, conducted in 2010, asked a similar question. The 32 responses from that survey revealed age and amount changes, including APS (34%), electronic application (22%), and underwriting image system (22%) as the leading change factors that had the most positive impact.

## 6.3b.Respondents were asked why that one change had the most positive impact.

Change Made	Reasons
Age and amount changes	Increasing our non-med limits has improved turn- around time while still protecting the company.  The changes that have made the biggest impact (image system and e-App) were both implemented over 2 years ago. The age/amount requirements were changed in 2016 resulting in fewer exams and EKG's reducing the timeline a little.
APS ordering or management thereof	Aligning rules with orders. Significantly reduced orders and re-orders Less APS's reduce cycle time Reducing number of APS has had direct impact on issue time.
Electronic application	e-App includes: 1) link from illustration (data push to questionnaire) 2) electronic questionnaire (Part 1 and ancillary forms 3)e-submission (data push to vendor, admin systems and und systems) 4)e-signature (optional) esignature drove modest improvement in cycle time
Improved underwriting resource management	Targeted case assignment allows underwriters to make more decisions without second signature.  Underwriting team far too conservative and almost afraid of risk before I arrived.  We replaced an outdated Und system with a new much better system. Allowed automation and straight thru processing.
Tele-interview	Capture of more detailed information for improved risk selection.
Underwriting Rules Engine	Increased straight through process % Less time spend on a case, more complex case being referred, clean case done by the system We can now have several cases per month that can go straight through underwriting without a need for the underwriter to review
Other:	
Requirement review	Simplified UW requirements based on age and face amount but still control the risk
<ol><li>Providing agents with updates of outstanding requirements</li></ol>	This allows the agent to be pro-active with their clients in encouraging them to complete their u/w requirements

# 6.4a. Respondents were asked what one change to the new business process their company had made in the last two years that had been the biggest disappointment.

Change Category	# of Respondents
APS ordering or management thereof	3
Age and amount changes	1
Tele-Interview	1
Underwriting Image System	1
Underwriting resource management	1
Underwriting Rules Engine	1
Electronic Application	0
Electronic inspection reports	0
Other*	2
N/A	12
Total # of Respondents	22

#### \*Other:

- APS Summaries
- We had always ordered APS's in house but are now working to outsource all due to better turnaround time for the results.

There were 22 responses to this question, with 12 of those being "N/A." It is unclear if the "N/A" meant there were no changes made that were disappointments. The leading change category providing disappointment was APS ordering or management thereof (14%), which was also the leading change that led to the most positive impact (see question 6.3a).

## 6.4b. Respondents were asked why that one change had been the biggest disappointment.

Change Made	Reasons
	Increase in analysis for adding HbA1C on all
Age and Amount Changes	customers
APS Ordering and Management Thereof	Automation of the ordering has been beneficial however, we still manually order 50% of the time. Our order rate is dropping (this is positive as we were over ordering) adapting the question set and placing the order appropriately is challenging.
	This area continues to get worse - authorizations are routinely dismissed by health care providers adding unnecessary delays to NB and Claims.
Improved underwriting resource management	New initiatives have made it difficult to keep up with the demand for underwriting resources.
Tele-interview	Quality of interviews has deteriorated over time.
Underwriting Image System	THE IMAGING SYSTEM HAS NOT BEEN UPDATED YET IT IS A OLD VERSION
Underwriting Rules Engine	We need to upgrade

## Section 7: Delivering the Policy

A policy can be delivered to the policyowner in many ways. This section of the Survey investigates what methods companies used and how security and confidentiality were maintained during the process.

### 7.1 The Survey asked who decided how policies were delivered to the policyowner.

Who Decides	# of Respondents
The Company	15
Agent/broker/dealer	7
Policyholder	0
Other*	2
Total # of Respondents	24

#### \*Other:

- The company encourages personal delivery of the policy, but it is ultimately between the agent and policyowner how the delivery will be made.
- Varies by distribution channel. In one channel we allow the client/agent to decide and in the other all are delivered by the agent/broker.

There were 24 responses to this question. Almost two-thirds (63%) stated their company decided how policies were delivered. Just over one-quarter (29%) stated the agent/broker/dealer made the decision how the policy was delivered.

The prior survey asked a similar question and received 39 responses. Just over half (51%) stated policy delivery was decided by the company and 44% stated policy delivery was decided by agent/broker/dealer.

### 7.2a. Each respondent was asked how their company delivered its policies. (Check all that apply)

How Deliver Policy	# of Respondents
Mailed to the agent/broker/dealer	21
Mailed directly to policyowner	12
Sent electronically to agent/broker/dealer	6
Sent electronically directly to the policyowner	5
Other	0
Total # of Respondents	44

Twenty-four respondents answered this question with 44 delivery options. The majority (88%) stated their company delivered policies by mailing them to the agent/broker/dealer, while half mailed the policy directly to the policyowner. Electronic delivery was used less frequently, with one-quarter sending electronically to the agent/broker/dealer and 21% sending electronically directly to the policyowner.

However, delivering policies electronically has become more popular. The prior survey from 2010 showed only 5% sent electronically to the agent and 5% sent electronically to the policyholder out of 38 responses.

## 7.2b. Respondents were asked whether they used multiple methods to deliver the same policy.

Response	# of Respondents
Yes	2
No	22
Total # of Respondents	24

Almost all (92%) respondents stated their company did not use multiple methods to deliver a policy. Given the results in question 7.2a, this suggests companies have multiple methods of delivering a policy available, but use only one method per policy.

This is quite a drop from the 2010 Survey where 31% of the 35 respondents indicated their company used more than one method for policy delivery.

# 7.3. The Survey asked which of the following methods were used in the case of electronic delivery directly to the policyowner or to the agent / broker / dealer. (Check all that apply)

Method	# of Responses
Downloaded from a secure website	7
Encrypted e-mail	3
Regular e-mail	1
Other	0
Total # of Responses	11

Only eight respondents answered this question with 11 electronic delivery options. A majority (88%) of responding companies that electronically delivered the policy to the policyowner or the agent/broker/dealer indicated their company's use of downloading from a secure website. Just over one-third (38%) of respondents stated their company electronically delivered the policy via encrypted e-mail and one respondent's company used regular e-mail. The prior survey only had four responses to this question, so no comparisons have been made.

# 7.4. If the policy was personally delivered or sent via regular mail or courier service, then respondents were asked how confirmation of delivery to the client was received by the insurance company. (Check all that apply)

Confirmation Method	# of Responses
Delivery is not confirmed	15
Signed delivery receipt in the case of agent/broker/dealer physical delivery	9
Follow-up phone call from agent/broker/dealer in case of regular mail delivery	2
Mail-back delivery receipt in the case of regular mail delivery	1
Follow-up phone call from company in case of regular mail delivery	0
Other*	3
Total # of Respondents	23

## \*Other:

- A delivery receipt is sent with, but we do not track them to ensure they're returned.
- State delivery receipt requires signature.
- The signed delivery receipt is faxed back to Head Office for our records.

There were 23 respondents. Almost two-thirds (65%) indicated their company did not confirm policy delivery, while over one-third (39%) of respondents indicated their company received confirmation of policy delivery through a signed delivery receipt.

This compares to the prior survey where 55% of the 33 respondents indicated delivery was not confirmed and 58% of the respondents indicated their company confirmed policy delivery through a signed delivery receipt.

## **Appendix A: Participating Companies**

AAA Life

Colonial Life & Accident

Co-operators Life Insurance

Desjardins

**EMC National Life** 

Erie Family Life

FaithLife Financial

Federal Life

Fidelity & Guaranty Life

**Foresters Financial** 

**GPM** Life

Illinois Mutual

Ivari

Modern Woodmen of America

Patriot Life

Primerica, Inc.

**Protective Life Insurance Company** 

RiverSource Life

State Farm Insurance

Sun Life

**Thrivent Financial** 

TIAA

**USAA** 

WoodmenLife

## Appendix B: Improving the New Business Process Survey

## **Section 1 - Demographic Information**

In this section of the survey, some information about your company 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.

1.1. For which country will you be filling out this survey? If your company operates in both countries, please fill out a separate survey for each.

<b>United States</b>
Canada
Both

1.2. What type of Life Insurance Company do you work for?

Stock	
Mutual	
Fraternal	
Other (please describe) _	

1.3. Through what distribution channels does your company issue business? (Check all that apply)

Banks/Savings
Brokerage
Career Agent
Direct Response
Home Service
Multiple Line Exclusive
Online
Personal Producing General Agents
Stockbroker
Worksite Marketing
Other (please describe)

## Section 2 – The Application

This section examines paper, electronic ("e-App") and trial applications. Please state your answers relative to the percentage of applications, rather than by face amount or premium.

2.1a. How does your company accept applications?

Paper only Electronic only Both

If your company uses an e-app, please complete the following questions. Otherwise, skip to Question 2.3a.

2.1b. What is the percentage of your company's new business applications by application type? What is the future goal % (defined as 12-24 months). **Total must equal 100%**.

Туре	Current %	Future Goal %
Paper		
Disconnected e-app		
Web-Based e-app		
Other (please describe)		
Total		

2.1c. Please provide the percentage of e-apps received by channel. Total must equal 100%.

Distribution Channel	% e-app (Web + Disconnected)
Brokerage	
Career Agent	
Multiple Line Exclusive	
Banks/Savings	
Direct Response	
Personal Producing General Agents	
Stockbroker	
Worksite Marketing	
Home Service	
Online	
Other (please describe)	
Total	

2.1d. How was your company's e-app developed?

Home grown
Purchased with no customization
Purchased with customization
Other (please describe)

2.1e. What devices are your company's e-app available on? (Check all that apply)
PC-based (e.g. laptop, desktop) Tablet (e.g. iPad) Smart phone (e.g. iPhone) Other (please describe)
2.2. How are signatures obtained on e-apps? (Check all that apply)
Electronic signature Voice signature Wet signature Other (please describe)
2.3a. Does your company accept Trial applications (also known as Inquiries or Prelims)?
No Yes, from all producers Yes, from select distribution channels or producers Yes, but only on an exception basis Other (please describe)
2.3b. Who reviews Trial applications?
All underwriters Special unit or group of underwriters Outsourced Other (please describe)
2.3c. What percentage of Trials become a formal application?
0 to 2% 3 to 5% 6 to 10% 11 to 20% 21 to 30% 31 to 40%

Over 40% Unknown

## 2.3d. What is your company's ultimate placement percentage for Trials?

0 to 2%

3 to 5%

6 to 10%

11 to 20%

Over 20%

Unknown

2.3e. Does your company set parameters with producers to maintain the ability to send Trials?

Yes, they must achieve a certain placement to continue Yes, but we rarely enforce Yes, but they don't apply to top producers No set parameters Other (please describe)

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

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

3.1a. For the requirements listed below, please indicate whether your company has added, removed, increased, decreased, or left unchanged **within the last two years**. For the requirements that have changed, please indicate the reason.

			Action Ta	aken (Choo	Rationale	(Check al	ll that apply)		
	Not	Not No				Protective			
Requirement	Used	Add	Delete	Increase	Decrease	Change	Value	Faster	Competitive

Non-medical (NM)					
Paramedical Exam					
(PM)					
Vitals (abbreviated					
paramedical)					
Medical Exam					
Tele-interview/					
Teleapplication					
Blood profile					
Dried Blood Spot (DBS)					
HbA1C					
PSA					
NT pro-BNP					
Hemoglobin					
Lab Score					
Urine HIV					
Oral Fluid					
ECG					
ETT					
PFT					
APS Guidelines					
MVR					
IR					
eIR					
Credit Report/Scoring					
Predictive Analytics					
Mature Age					
Questionnaire					
Cognitive testing					
Functional testing					
Prescription database					
query					
Other 1 (please					
describe)					
Other 2 (please describe)					
acscribe)		<u> </u>	<u> </u>	<u> </u>	

3.1b. For the requirements listed below, please indicate whether your company anticipates adding, removing, increasing, decreasing, or leaving unchanged in the next two years. For the requirements that you anticipate changing, please indicate the reason.

			Action Ta	aken (Choo	Rationale	(Check a	ll that apply)		
	Not	Not No				Protective			
Requirement	Used	Add	Delete	Increase	Decrease	Change	Value	Faster	Competitive

Non-medical (NM)					
Paramedical Exam					
(PM)					
Vitals (abbreviated					
paramedical)					
Medical Exam					
Tele-interview/					
Teleapplication					
Blood profile					
Dried Blood Spot (DBS)					
HbA1C					
PSA					
NT pro-BNP					
Hemoglobin					
Lab Score					
Urine HIV					
Oral Fluid					
ECG					
ETT					
PFT					
APS Guidelines					
MVR					
IR					
eIR					
Credit Report/Scoring					
Predictive Analytics					
Mature Age					
Questionnaire					
Cognitive testing					
Functional testing					
Prescription database					
query					
Other 1 (please					
describe)					
Other 2 (please describe)					
acscribe)		<u> </u>	<u> </u>	<u> </u>	

0-6 mo
7-12 mo
1-2 yrs
3-5 yrs
>5 yrs
3.3. Who is involved in determining changes to underwriting requirements? (Check all that apply)
Actuarial
Claims
Competitive intelligence
External consultant
Laboratories
Legal
Medical
Reinsurers
Sales / Marketing
Underwriting
Other (please describe)

3.2. How frequently does your company update some or all of its underwriting requirements?

### Section 4 - Underwriting Processes and 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.

4.1. Who orders age and amount underwriting requirements (other than APS)? (Check all that apply) **Underwriting/New Business** Producer and/or producer staff Tele-interview vendor Other (please describe) 4.2a. Who orders APS requirement? (Check all that apply) **Underwriting/New Business** Producer and /or producer staff Tele-interview vendor Other (please describe) \_\_\_\_\_ 4.2b. If the producer and/or producer staff order the APS, do they receive a copy of the APS? Yes No Not applicable 4.2c. When your company orders a report from a doctor, what is normally obtained? Attending Physician's Summary of Records Above certain ages/amounts, Complete Medical Records All ages/amounts, Complete Medical Records Impairment Questionnaire Other (please describe) 4.3a. Does your company use APS summaries (i.e., summaries created by someone other than an Attending Physician) as part of its underwriting process? Yes No, but we are considering their use (Skip to 4.4a.) No, we are not considering their use (Skip to 4.4a.)

## 4.3b. Who summarizes the APS? (Check all that apply)

Members of our underwriting department
Internal area within the company but not our underwriters
Domestic outsourced firm specializing in APS summarization
Domestic outsourced or contract underwriter
Off-shore resources
Reinsurer
Other (please describe)

4.3c. When does your company use APS summaries? (Check all that apply)

All cases that have an APS
All cases but only on APSs with certain parameters (e.g., over a certain page limit)
Only on certain segments of business (e.g., low face amounts)
Use with Trials or inquiries

4.3d. If there is an APS summary, can the underwriter review the original APS?

Yes

No

4.3e. Does your company audit your APS summary vendor?

Yes

No

4.3f. Has your company changed APS summary vendors in the last two years? (Check all that apply)

Yes, to improve cost Yes, due to quality-related issues Yes, due to a change in our model/practices Yes, other (please specify) No

4.4a. Does your company have an automated underwriting system that makes underwriting decisions?

Yes (Skip to 4.4c.)

No

4.4b. If no, is your company planning on moving to an automated underwriting system in the near future (1-2 years)?

Yes

No (Skip to 4.6a)

## 4.4c. If yes, how was the system developed?

"Home grown" (developed in-house)
Purchased with no customization
Purchased with customization
Other (please describe)

4.4d. What information is automatically fed into and assessed by your company's underwriting rules engine? (Check all that apply)

E-app
APS
Credit scoring/information
Lab results
MIB
MVR
Prescription history
Tele-interviewing results
Other (please describe)

4.4e. In the chart below, indicate the maximum face amount the automated underwriting system can approve:

	Maximum Amount
35	
45	
55	
65	
75	

4.4f. What actions or decisions can the automated underwriting engine make? (Check all that apply)

Approved Preferred/Standard
Approved Substandard with no underwriting review
Declined with no underwriting review
Refer to underwriting Partial Assessment
Refer to underwriting w/no assessment
Recommend underwriting requirements
Other (please describe)

4.4g. What percentage of new life applications are approved by the automated underwriting engine?

4.5. What percentage of new life applications that are received electronically, are approved by the automated underwriting engine and issued without human intervention?

0% 1-10% 11-20% 21-30% 31-40% 41-50% 51-75% >75%

4.6a. Does your company use Tele-interviewing?

Yes, replaces just the Part 1 (non-med risk selection questions) Yes, replaces just the Part 2 (medical risk selection questions) Yes, replaces Parts 1 and 2 No (Skip to 5.1a.)

4.6b. How is Tele-interviewing used at your company?

Mandatory for all business

Mandatory for all new business within certain parameters (e.g., age or amount parameters)

Producer optional

4.6c. Who completes your company's Tele-interviewing?

Internal unit within our company (interview)
External Vendor (interview)
Online interview

4.6d. How sophisticated is your company's Tele-interviewing model?

Straight-forward copy of our Part 1 and/or Part 2
Expanded questions (but no drill-down capability)
Expanded questions (with drill-down capability)
Expanded questions (with drill-down capability) and additional functionality (e.g., ties to Rx results)

## **Section 5 - Underwriting Resources**

Γhis section examines the use of remote underwriters,	how ECGs are interpreted	and how new business ca	ses
are assigned.			

5.1a. Do any of your company's underwriters work remotely from their home at least some of the time?
Yes No (Skip to 5.2a.)
5.1b. If yes, what percentage work remotely at least some of the time?
5.1c. What is the maximum percentage of time that your company would allow an underwriter to work remotely?
5.1d. What percentage of your company's underwriters who work remotely generally work the maximum percentage remotely?
5.1e. How often are remote underwriters required to be in the office? (Choose one and provide the number)
No. of days per week: No. of days per month: No. of days per quarter: No. of days per year: No specific requirement, on an as needed basis Other (please describe)
5.2a. Do any of your company's underwriting managers work remotely from their home at least some of the time?
Yes No (Skip to 5.3a.)
5.2b. If yes, what percentage work remotely at least some of the time?
5.2c. What is the maximum percentage of time that your company would allow an underwriting manager to work remotely?
5.2d. What percentage of your company's underwriting managers who work remotely generally work the maximum percentage remotely?
5.3a. Do any of your underwriters interpret ECG's?
Yes No (If no, skip to 5.4a.)
5.3b. What percentage of underwriters interpret resting ECGs?

5.3c. How are abnormal ECGs handled?
Always refer to Medical Department
Always refer to another underwriter
Interpreting underwriter makes the decision
Other (please describe)
5.4a. Does your company have any of the following specialized underwriting teams? (Check all that apply)
Audit
Concierge
Corporate
Geographical
Highly substandard (impaired risk)
Jet underwriting
Large case
Older age
Product line
Training
Other teams (please describe)
No specialized underwriting teams
5.4b. How is new business assigned to underwriters? (Check all that apply)
Age of proposed insured
Distribution channel
Face amount
Geographical region
Product line
Randomly
Specific producer or producer groups

Other (please describe) \_\_\_\_\_

### 5.5a. Does your company outsource underwriting and who does it? (Check all that apply)

No (If no, skip to 5.6a.)

Yes, we use established Outsourced domestic firms

Yes, we use Offshore resources

Yes, to our reinsurers

Yes, individual contract underwriters

Yes, other (please describe)

## 5.5b. What percentage of your company's underwriting is outsourced?

0 to 2%

3 to 5%

6 to 10%

11 to 20%

21 to 50%

Over 50%, but not all

All underwriting is outsourced

## 5.5c. What type of underwriting does your company outsource? (Check all that apply)

#### Certain ages

Just project work, no actual underwriting

APS summarization

By face amount (i.e., lower face amounts)

Underwriter audits/reviews

No differentiation, all regular business

Overflow during peak periods

Other (please describe)

## 5.6a. Does your company vary Underwriting Approval Limits by underwriting experience?

No (If no, skip to 5.7.)

Yes, no restrictions by age and/or rating

Yes, some restrictions by age and/or rating

### 5.6b. Generally speaking, what percentage of new cases are within an underwriter's approval limit?

100%

80-99%

60-79%

40-59%

Less than 40%

### 5.6c. Does your company allow 'stacking' of Approval Limits (ability to combine limits between underwriters)?

Yes No

- 5.7. What is the average number of new business cases annually underwritten by a life underwriter?
- 5.8. If your company requires more new business cases be underwritten by a life underwriter working from home versus an underwriter working in the company office, what productivity increase is expected?

0 1-5% 6-10% 11-20% Over 20% Unknown Not applicable

### Section 6 - Impact of Past Changes

This section will gauge the impact of the changes that were made within the last two years to underwriting requirements (as described in Section 3), from a system or resource perspective.

- 6.1. What percentage of cases are approved within 30 days?
- 6.2. What were the top three changes your company made that increased the percentage of cases approved within 30 days? Please rank them 1-3.

Age and amount requirements

APS ordering or management thereof

E-app

Electronic inspection reports

Tele-interview

Underwriting Image System

Underwriting resource management

Underwriting Rules Engine

Other (please describe)

N/A

6.3a. What one change to the new business process has your company made in the last two years that has had the most positive impact?

Age and amount changes

APS ordering or management thereof

Electronic application

Electronic inspection reports

Improved underwriting resource management

Tele-interview

Underwriting Image System

Underwriting Rules Engine

Other (please describe)

N/A

6.3b. Why?

6.4a. What one change to the new business process has your company made in the last two years that has been the biggest disappointment?

Age and amount changes

APS ordering or management thereof

Electronic application

Electronic inspection reports

Improved underwriting resource management

Tele-interview

Underwriting Image System

Underwriting Rules Engine

Other (please describe)

N/A

6.4b. Why?

## **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.

7.1. Who decides how the policies are delivered to the policyowner?
Agent / broker / dealer
Policyowner
The company Other (places describe)
Other (please describe)
7.2a. How are your company's policies delivered? (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)
7.2b. Do you use multiple methods to deliver the <b>same</b> policy?
Yes No
7.3. In the case of electronic delivery directly to the policyowner or to the agent / broker / dealer, which of the following methods is used? (Check all that apply)
Regular e-mail
Secure / encrypted e-mail
Downloaded from a secure website
Other (please describe)
7.4. If the policy is personally delivered or sent via regular mail or courier service, how is confirmation of deliver
to the client received by insurance company? (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)

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The Society of Actuaries (SOA), formed in 1949, is one of the largest actuarial professional organizations in the world dedicated to serving 24,000 actuarial members and the public in the United States, Canada and worldwide. In line with the SOA Vision Statement, actuaries act as business leaders who develop and use mathematical models to measure and manage risk in support of financial security for individuals, organizations and the public.

The SOA supports actuaries and advances knowledge through research and education. As part of its work, the SOA seeks to inform public policy development and public understanding through research. The SOA aspires to be a trusted source of objective, data-driven research and analysis with an actuarial perspective for its members, industry, policymakers and the public. This distinct perspective comes from the SOA as an association of actuaries, who have a rigorous formal education and direct experience as practitioners as they perform applied research. The SOA also welcomes the opportunity to partner with other organizations in our work where appropriate.

The SOA has a history of working with public policymakers and regulators in developing historical experience studies and projection techniques as well as individual reports on health care, retirement, and other topics. The SOA's research is intended to aid the work of policymakers and regulators and follow certain core principles:

**Objectivity:** The SOA's research informs and provides analysis that can be relied upon by other individuals or organizations involved in public policy discussions. The SOA does not take advocacy positions or lobby specific policy proposals.

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Society of Actuaries 475 N. Martingale Road, Suite 600 Schaumburg, Illinois 60173 www.SOA.org