

2018 HEALTH
MEETING
JUNE 25-27 • AUSTIN, TX



Session 42WS, Group Life and Disability Discussion Group

Moderator/Presenter:

Nina Han, FSA, MAAA, CERA

Presenters:

Thomas M. Casalena, FSA, MAAA

Anothony E. LaSala, FSA, MAAA

[SOA Antitrust Disclaimer](#)
[SOA Presentation Disclaimer](#)

Group Life & Disability Discussion Group

Session #42 June 25, 2018

Nina Han (Moderator)

Tony LaSala

Tom Casalena

SOCIETY OF ACTUARIES

Antitrust Compliance Guidelines

Active participation in the Society of Actuaries is an important aspect of membership. While the positive contributions of professional societies and associations are well-recognized and encouraged, association activities are vulnerable to close antitrust scrutiny. By their very nature, associations bring together industry competitors and other market participants.

The United States antitrust laws aim to protect consumers by preserving the free economy and prohibiting anti-competitive business practices; they promote competition. There are both state and federal antitrust laws, although state antitrust laws closely follow federal law. The Sherman Act, is the primary U.S. antitrust law pertaining to association activities. The Sherman Act prohibits every contract, combination or conspiracy that places an unreasonable restraint on trade. There are, however, some activities that are illegal under all circumstances, such as price fixing, market allocation and collusive bidding.

There is no safe harbor under the antitrust law for professional association activities. Therefore, association meeting participants should refrain from discussing any activity that could potentially be construed as having an anti-competitive effect. Discussions relating to product or service pricing, market allocations, membership restrictions, product standardization or other conditions on trade could arguably be perceived as a restraint on trade and may expose the SOA and its members to antitrust enforcement procedures.

While participating in all SOA in person meetings, webinars, teleconferences or side discussions, you should avoid discussing competitively sensitive information with competitors and follow these guidelines:

- **Do not** discuss prices for services or products or anything else that might affect prices
- **Do not** discuss what you or other entities plan to do in a particular geographic or product markets or with particular customers.
- **Do not** speak on behalf of the SOA or any of its committees unless specifically authorized to do so.
- **Do** leave a meeting where any anticompetitive pricing or market allocation discussion occurs.
- **Do** alert SOA staff and/or legal counsel to any concerning discussions
- **Do** consult with legal counsel before raising any matter or making a statement that may involve competitively sensitive information.

Adherence to these guidelines involves not only avoidance of antitrust violations, but avoidance of behavior which might be so construed. These guidelines only provide an overview of prohibited activities. SOA legal counsel reviews meeting agenda and materials as deemed appropriate and any discussion that departs from the formal agenda should be scrutinized carefully. Antitrust compliance is everyone's responsibility; however, please seek legal counsel if you have any questions or concerns.

Presentation Disclaimer

Presentations are intended for educational purposes only and do not replace independent professional judgment. Statements of fact and opinions expressed are those of the participants individually and, unless expressly stated to the contrary, are not the opinion or position of the Society of Actuaries, its cosponsors or its committees. The Society of Actuaries does not endorse or approve, and assumes no responsibility for, the content, accuracy or completeness of the information presented. Attendees should note that the sessions are audio-recorded and may be published in various media, including print, audio and video formats without further notice.

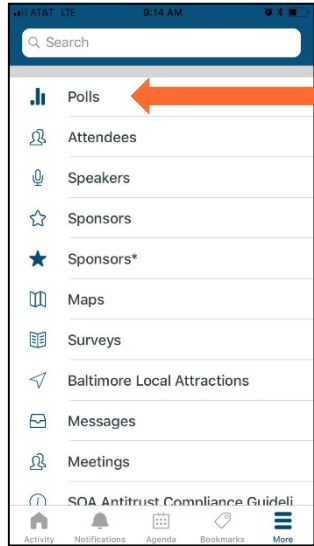
Note that this session (42) is not being recorded today

Housekeeping Items

- Introductions
- Today's Goals / Workshop Format
- Polling Devices – what you need to know

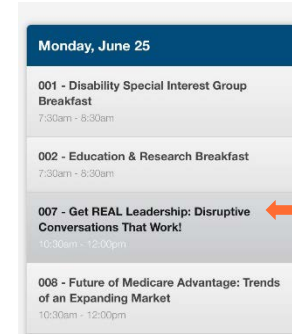
To Participate, look for Polls in the SOA Event App or visit health.cnf.io in your browser

Find The Polls
Feature Under **More**
In The Event App

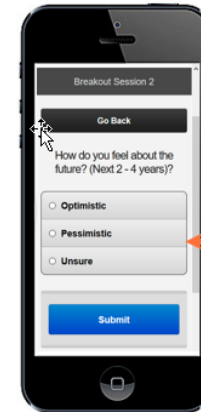


or

Type health.cnf.io In Your Browser



Choose your
session



Respond to
Polls when
they appear

Polling Questions: Agenda

- Introduction Questions
- Credibility / Experience Rating
- Mortality Improvement / Aging
- Disability Claim Management
- Premium Waiver
- Retiree Risk
- Societal Trends
- Experience Trends
- General Rating Trends
- Predictive Modeling

Introduction Questions

a.k.a. “Getting to Know You”

Question 1

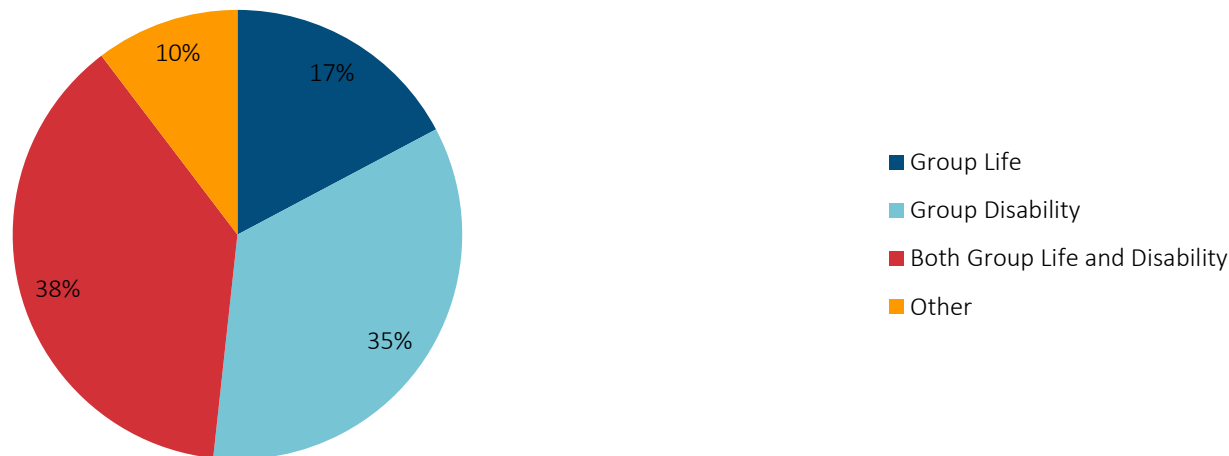
What is your primary area of expertise? Select **one**:

- a. Group Life
- b. Group Disability
- c. Both Group Life and Disability
- d. Other

(note: polling will start when we progress to the next slide)

Question 1 Results

What is your primary area of expertise? Select one:



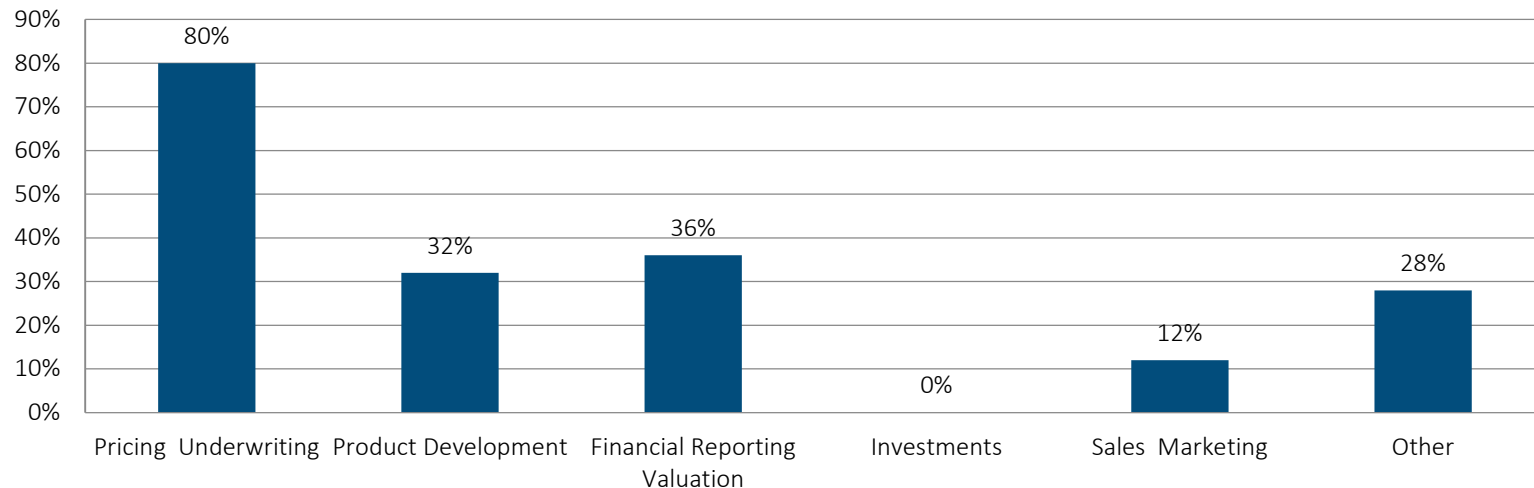
Question 2

Which of the following describes your job function? Select **ALL** that apply:

- a. Pricing / Underwriting
- b. Product Development
- c. Financial Reporting / Valuation
- d. Investments
- e. Sales / Marketing
- f. Other

Question 2 Results

Which of the following describes your job function? Select ALL that apply:



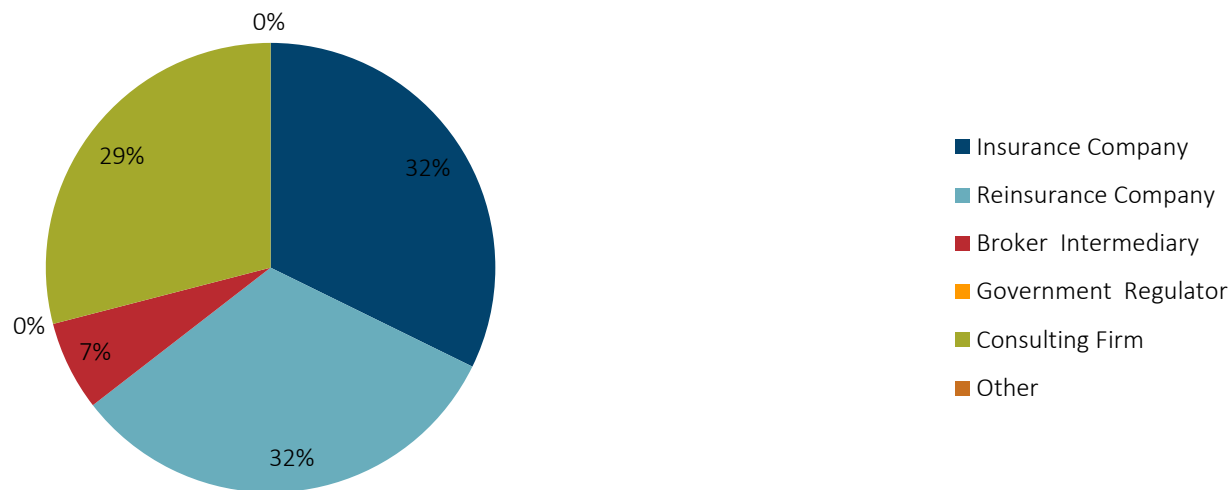
Question 3

What type of employer do you currently work for? Select **one**:

- a. Insurance Company
- b. Reinsurance Company
- c. Broker / Intermediary
- d. Government / Regulator
- e. Consulting Firm
- f. Other

Question 3 Results

What type of employer do you currently work for? Select one:



Credibility and Experience Rating

Credibility – General Approaches

- Limited Fluctuation / Square Root
 - More commonly used in the U.S.
 - Also referred to as the “Classical” or American approach
 - $Z = \sqrt{\frac{\text{actual or expected exposure}}{\text{exposure needed for full credibility}}}$
- Buhlmann
 - Also referred to as the “Greatest Accuracy” or “Least Squares” method
 - $Z = \frac{E}{E+K}$ where E = exposure measure and K = measure of variability
- Bayesian
 - Best theoretical method, but difficult to apply in practice
 - Uses Bayes Theorem in conjunction with conditional probabilities

Credibility: Exposure Considerations

- Group Size / Current Lives
 - Imprecise since doesn't reflect variations in length of experience period
 - May be used for refinements, e.g. $Z=0\%$ if current lives $< X$
- Life Years of Exposure (LYE)
 - Imprecise since doesn't fully reflect incidence rate differences by group
 - e.g., 20K LYE is more credible for retirees than for college students
 - Segmentation into risk groups can mitigate this limitation (low vs high age, low vs high male %, etc)
- Claims
 - Best approach to address above issues
 - Can use actual or expected claims (or a blend of the two)
 - Claim severity plays a role in expected volatility (and in theoretical credibility)

Question 4

Which credibility method would best describe the formula you currently use for **LIFE and LTD** experience rating purposes? Select **one**:

- a. Limited Fluctuation / Square Root
- b. Buhlmann
- c. Other
- d. I don't know

Question 4 Results

Which credibility method would best describe the formula you currently use for LIFE and LTD experience rating purposes? Select one:



Question 5

Which of the following factors are reflected in the calculation of your standard **LIFE** and **LTD** credibility formulas? Select **one**:

- a. Covered Lives
- b. Life Years of Experience
- c. Claims
- d. Combination of items above
- e. Other
- f. I don't know

Question 5 Results

Which of the following factors are reflected in the calculation of your standard LIFE and LTD credibility formulas? Select one:



Question 6

Does your LIFE or DISABILITY credibility formula currently take into account the statistical variability in covered benefit amounts? Select **one**:

- a. Yes
- b. No
- c. I don't know

Question 6 Results

Does your LIFE or DISABILITY credibility formula currently take into account the statistical variability in covered benefit amounts?

Select one:



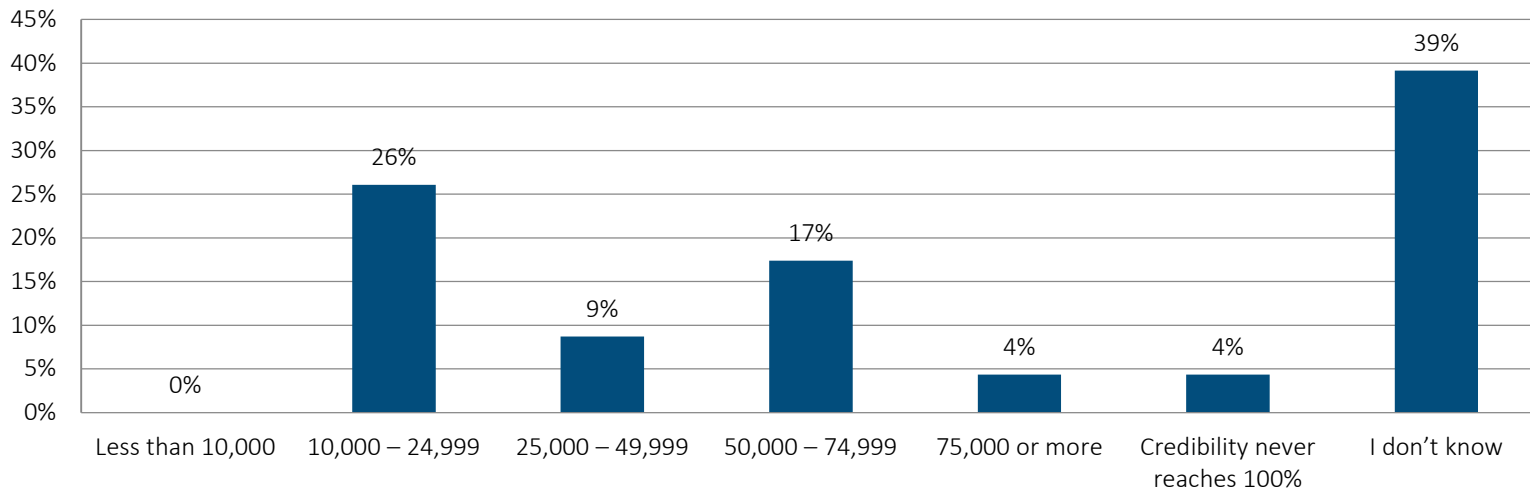
Question 7

For a typical **group life** case, how many life years of experience would it take to achieve 100% credibility in practice? Select **one**:

- a. Less than 10,000
- b. 10,000 – 24,999
- c. 25,000 – 49,999
- d. 50,000 – 74,999
- e. 75,000 or more
- f. Credibility never reaches 100%
- g. I don't know

Question 7 Results

For a typical group life case, how many life years of experience would it take to achieve 100% credibility in practice? Select one:



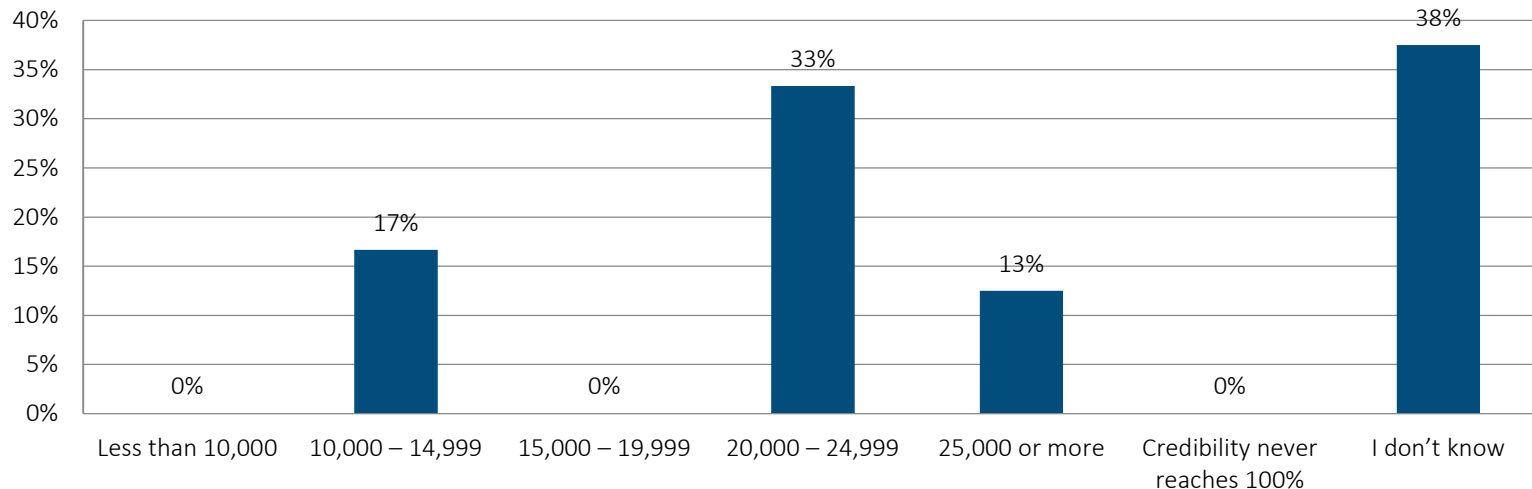
Question 8

For a typical **group LTD** case, how many life years of experience would it take to achieve 100% credibility in practice? Select **one**:

- a. Less than 10,000
- b. 10,000 – 14,999
- c. 15,000 – 19,999
- d. 20,000 – 24,999
- e. 25,000 or more
- f. Credibility never reaches 100%
- g. I don't know

Question 8 Results

For a typical group LTD case, how many life years of experience would it take to achieve 100% credibility in practice? Select one:



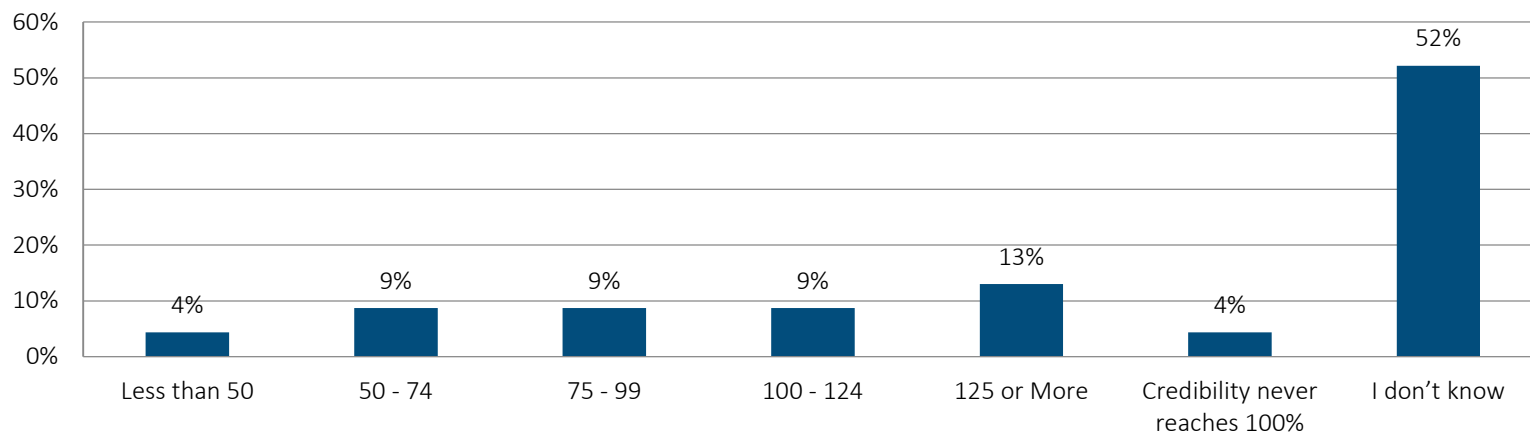
Question 9

For a typical **group life** case, how many expected claims in the experience period would it take to achieve 100% credibility in practice? Select **one**:

- a. Less than 50
- b. 50 - 74
- c. 75 - 99
- d. 100 - 124
- e. 125 or More
- f. Credibility never reaches 100%
- g. I don't know

Question 9 Results

For a typical group life case, how many expected claims in the experience period would it take to achieve 100% credibility in practice? Select one:



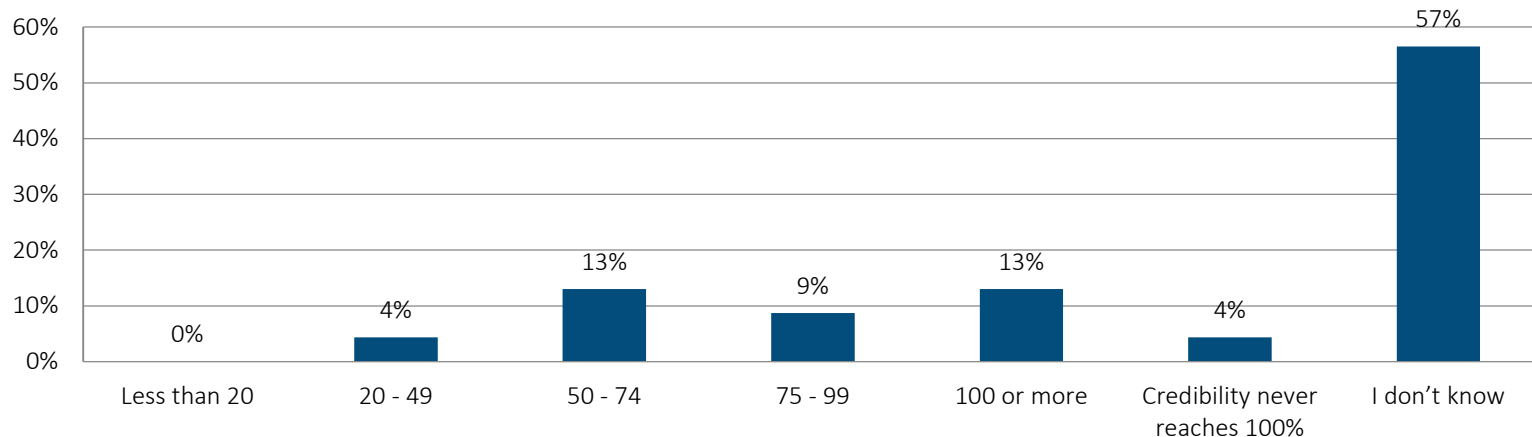
Question 10

For a typical **group LTD** case, how many claims in the experience period would it take to achieve 100% credibility in practice? Select **one**:

- a. Less than 20
- b. 20 - 49
- c. 50 - 74
- d. 75 - 99
- e. 100 or more
- f. Credibility never reaches 100%
- g. I don't know

Question 10 Results

For a typical group LTD case, how many claims in the experience period would it take to achieve 100% credibility in practice? Select one:



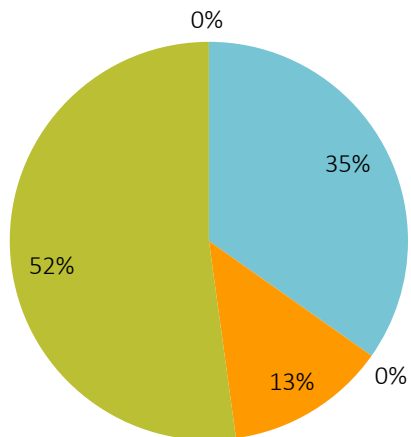
Question 11

Do you have a consistent process for handling large claims in the **GROUP LIFE** experience rating process? Select **one**:

- a. No, we never adjust for large claims
- b. No consistent process, but case-by-case adjustments
- c. Yes, but no pooling charge
- d. Yes, with a pooling charge
- e. I don't know

Question 11 Results

Do you have a consistent process for handling large claims in the GROUP LIFE experience rating process? Select one:



- No, we never adjust for large claims
- No consistent process, but case-by-case adjustments
- Yes, but no pooling charge
- Yes, with a pooling charge
- I don't know

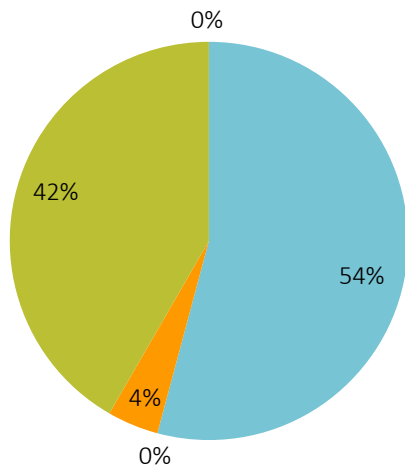
Question 12

Do you have a consistent process for handling large claims in the **GROUP LTD** experience rating process? Select **one**:

- a. No, we never adjust for large claims
- b. No consistent process, but case-by-case adjustments
- c. Yes, but no pooling charge
- d. Yes, with a pooling charge
- e. I don't know

Question 12 Results

Do you have a consistent process for handling large claims in the GROUP LTD experience rating process? Select one:



- No, we never adjust for large claims
- No consistent process, but case-by-case adjustments
- Yes, but no pooling charge
- Yes, with a pooling charge
- I don't know

Question 13

Does your standard experience rating process apply different weights by experience year (e.g. more weight to recent periods)? Select **one**:

- a. Yes for both Life and Disability
- b. Yes for Life, but no for Disability
- c. Yes for Disability, but no for Life
- d. No
- e. I don't know

Question 13 Results

Does your standard experience rating process apply different weights by experience year (e.g. more weight to recent periods)?

Select one:



Roundtable Discussion Time



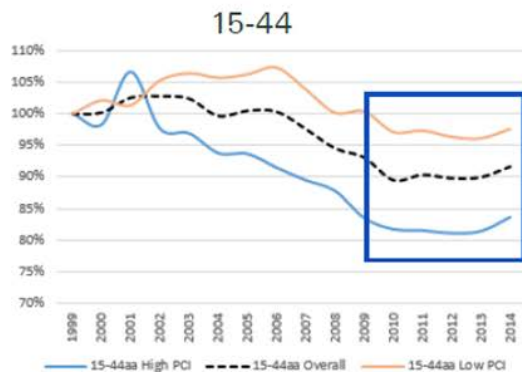
Mortality Improvement and Aging

Mortality Improvement Considerations

- Past trends have validated the use of mortality improvement in pricing
- Recent trends may be a reason for concern
 - Opioid crisis
 - Obesity trends
 - Distracted driving
- Historical improvement trends have varied by demographic group
 - Male vs Female
 - Age Cohort
 - Wealth and/or Income Level
 - Industry
- Risk is greater in projecting for the future versus normalizing for the past
 - Normalization of past experience through today = less risky
 - Projections of experience into the future = more risky

Mortality trends by PCI grouping

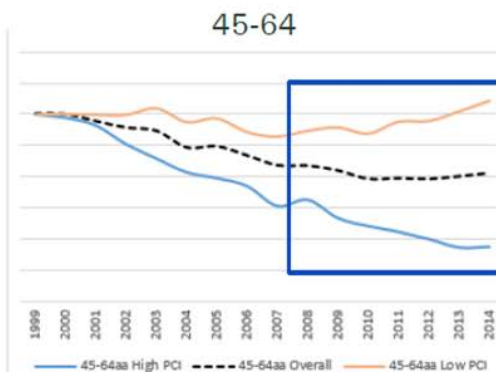
Relative change in death rates by PCI group: US population,
age adjusted rates 1999 is referent year



Annualized change in death rates

15-44	1999-2014	2004-2014	2009-2014	2012-2014
High PCI	1.18%	1.13%	-0.02%	-1.52%
Overall	0.58%	0.84%	0.31%	-1.02%
Low PCI	0.16%	0.79%	0.56%	-0.65%

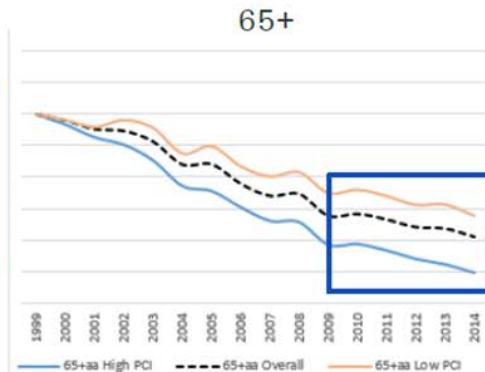
Flattening pattern
replicated in high
and low PCI subsets



Annualized change in death rates

45-64	1999-2014	2004-2014	2009-2014	2012-2014
High PCI	1.58%	1.41%	1.13%	0.77%
Overall	0.66%	0.44%	0.09%	-0.51%
Low PCI	-0.15%	-0.34%	-0.86%	-1.64%

Mortality divergence
observed in high
and low PCI subsets



Annualized change in death rates

65+	1999-2014	2004-2014	2009-2014	2012-2014
High PCI	1.92%	1.68%	1.14%	1.43%
Overall	1.44%	1.33%	0.81%	0.95%
Low PCI	1.17%	1.11%	0.84%	1.03%

Declining pattern
replicated in high
and low PCI subsets

The main differences in mortality rate trends appear to emerge in middle age with low and high per capita income population subsets showing opposite trends.

Population Aging Considerations

- General population aging trends can arise from either of the following:
 - Changing patterns of fertility rates over time (e.g. baby boomers)
 - Changing patterns (or level) of life expectancy over time
- The aging of any smaller cohort of lives can be even more dynamic
 - Employment stability (hiring practices, layoffs, downsizing)
 - Industry or Occupational shifts (e.g. “labor intensity” of work performed)
 - Shifting exposures between rating classes (e.g. actives vs retirees)
 - Shifting exposures into separate rating pools (e.g. portability or conversion)
 - Smaller groups can experience much more dramatic impacts from aging
- As a practical matter, one should view mortality improvement and aging as separate (but sometimes offsetting) factors.

Question 14

What is your expectation for future mortality improvement on group life business over the next 3-5 years? Select **one**:

- a. More than slight deterioration
- b. Slight deterioration
- c. Unlikely to change / Level
- d. Slight Improvement
- e. More than slight improvement

Question 14 Results

What is your expectation for future mortality improvement on group life business over the next 3-5 years? Select one:



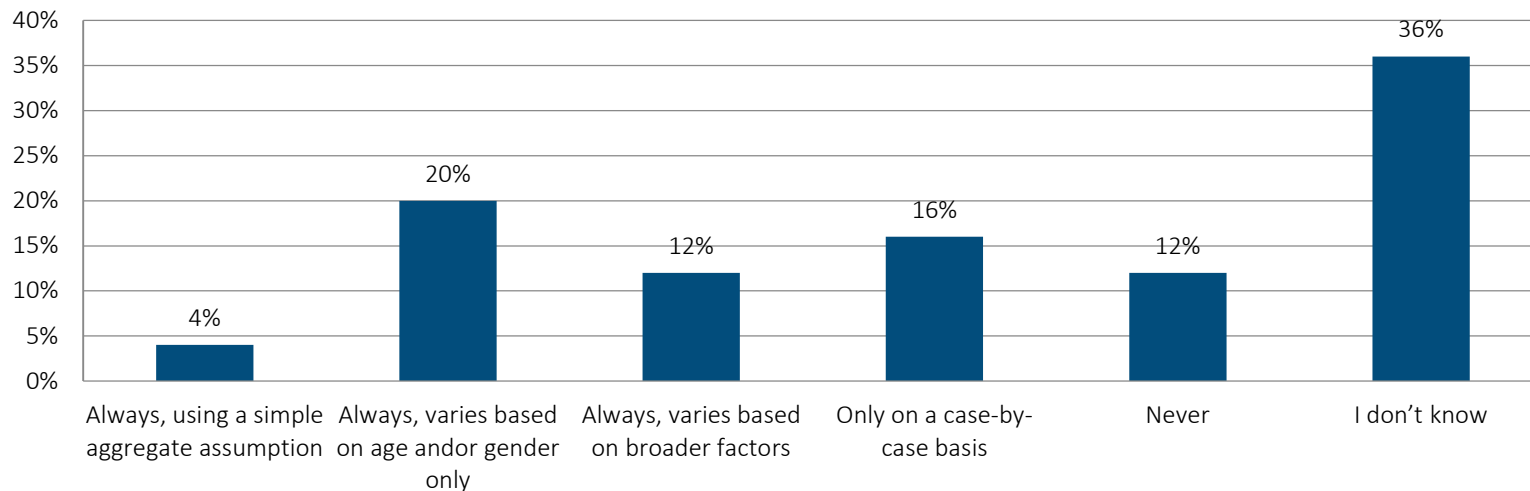
Question 15

Do you build **mortality improvement** into group life risk assessment? Select **one**:

- a. Always, using a simple aggregate assumption
- b. Always, varies based on age and/or gender only
- c. Always, varies based on broader factors
- d. Only on a case-by-case basis
- e. Never
- f. I don't know

Question 15 Results

Do you build mortality improvement into group life risk assessment? Select one:



Question 16

Do you build the impact of **aging** into your group life risk assessment for active employee groups (i.e. excluding retirees)? Select **one**:

- a. Yes, always
- b. Yes, but only for certain types of groups
- c. Only on a case-by-case basis
- d. Never
- e. I don't know

Question 16 Results

Do you build the impact of aging into your group life risk assessment for active employee groups (i.e. excluding retirees)?
Select one:



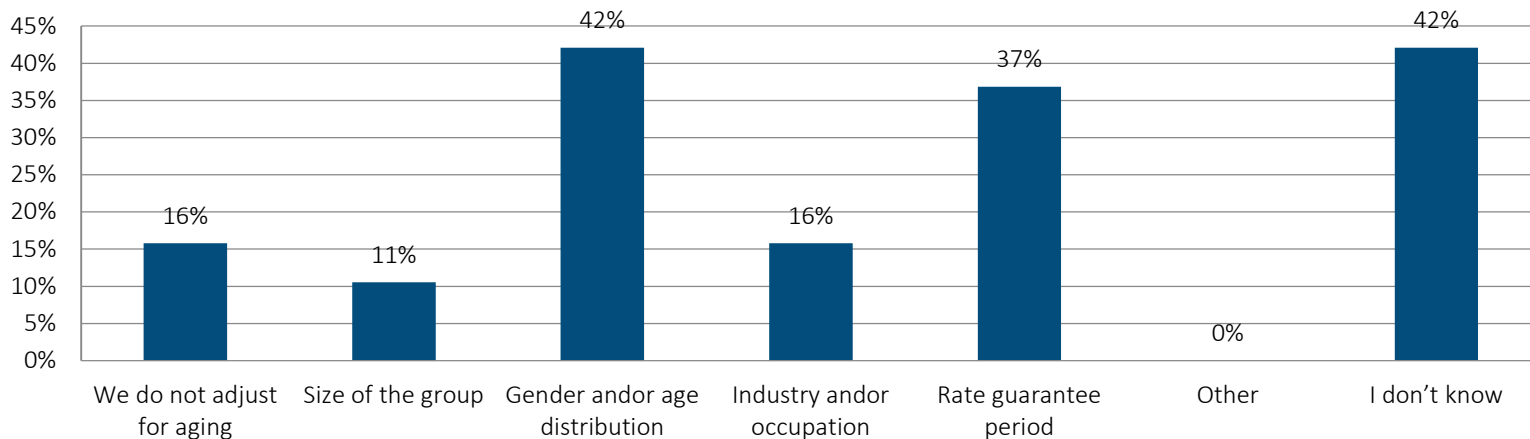
Question 17

The application of active employee aging to your group life risk assessment process varies based on which of the following factors? Select **ALL** that apply:

- a. We do not adjust for aging
- b. Size of the group
- c. Gender and/or age distribution
- d. Industry and/or occupation
- e. Rate guarantee period
- f. Other
- g. I don't know

Question 17 Results

The application of active employee aging to your group life risk assessment process varies based on which of the following factors? Select ALL that apply:



Roundtable Discussion Time



Disability Claim Management

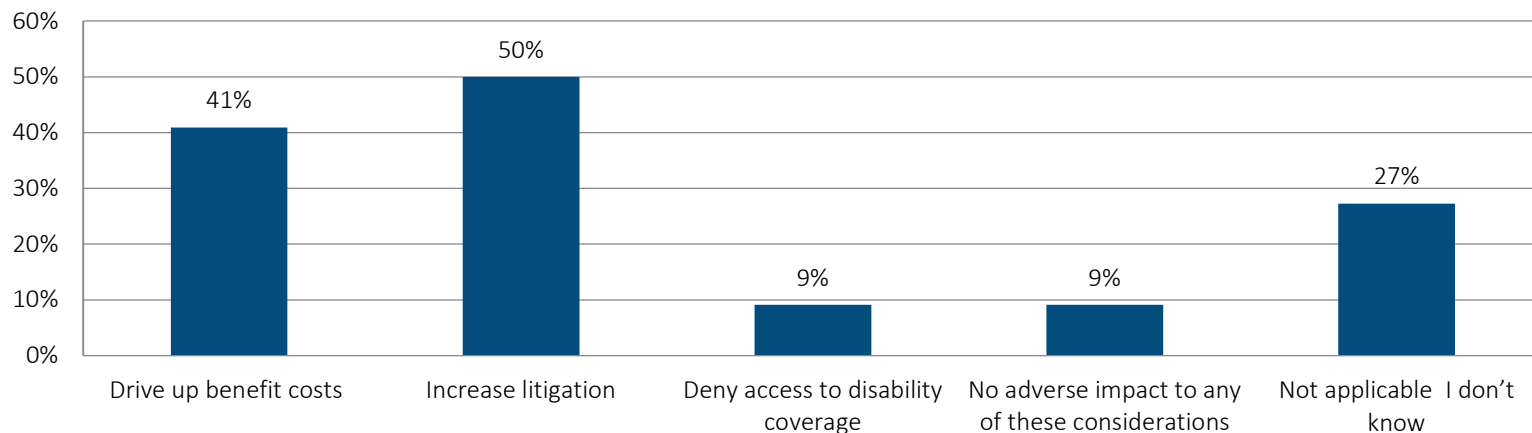
Question 18

The Department of Labor allowed the new group disability claim review standards to go in effect starting 4/1/2018. How will the new standards impact the disability market? Select **ALL** that apply:

- a. Drive up benefit costs
- b. Increase litigation
- c. Deny access to disability coverage
- d. No adverse impact to any of these considerations
- e. Not applicable / I don't know

Question 18 Results

The Department of Labor allowed the new group disability claim review standards to go in effect starting 4/1/2018. How will the new standards impact the disability market? Select ALL that apply:



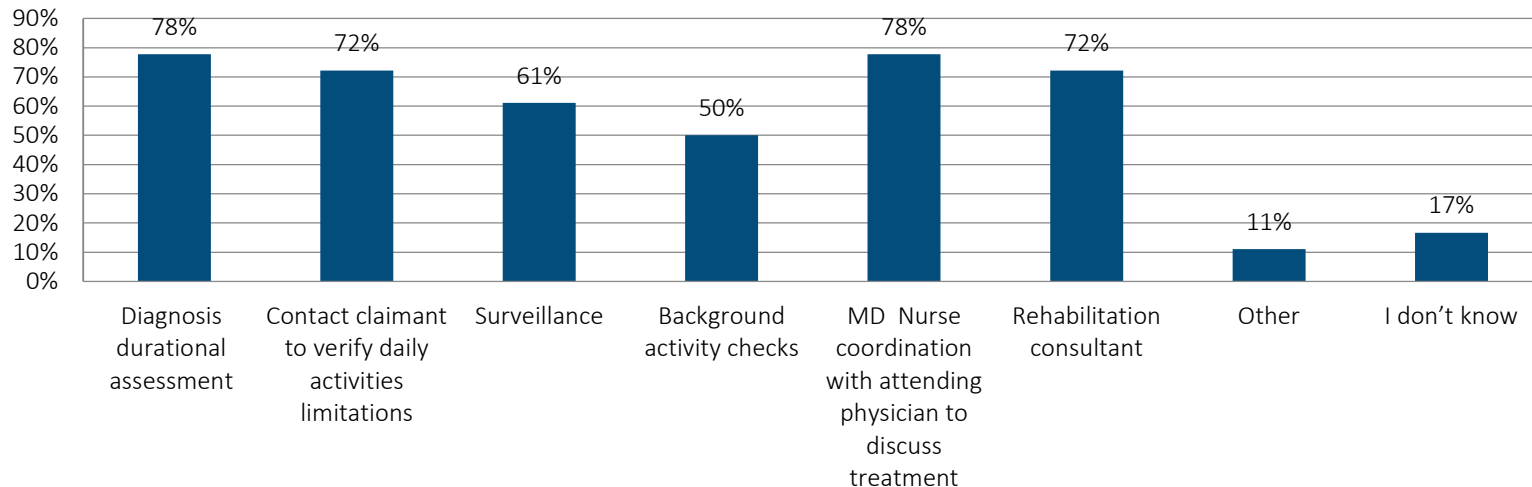
Question 19

What types of claim management practices are you using in managing LTD claims? Select **ALL** that apply:

- a. Diagnosis / durational assessment
- b. Contact claimant to verify daily activities / limitations
- c. Surveillance
- d. Background / activity checks
- e. MD / Nurse coordination with attending physician to discuss treatment
- f. Rehabilitation consultant
- g. Other
- h. I don't know

Question 19 Results

What types of claim management practices are you using in managing LTD claims? Select ALL that apply:



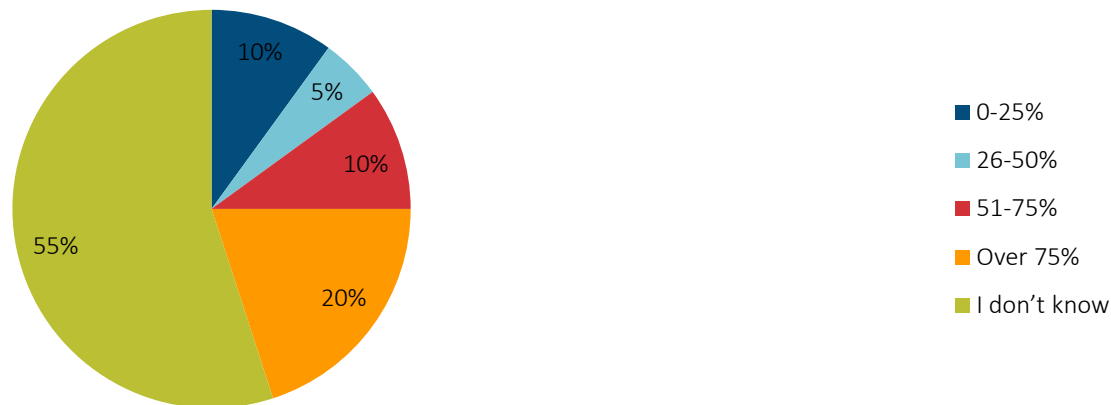
Question 20

How frequent is the use of these claim management practices? Select **one**:

- a. 0-25%
- b. 26-50%
- c. 51-75%
- d. Over 75%
- e. I don't know

Question 20 Results

How frequent is the use of these claim management practices?
Select one:



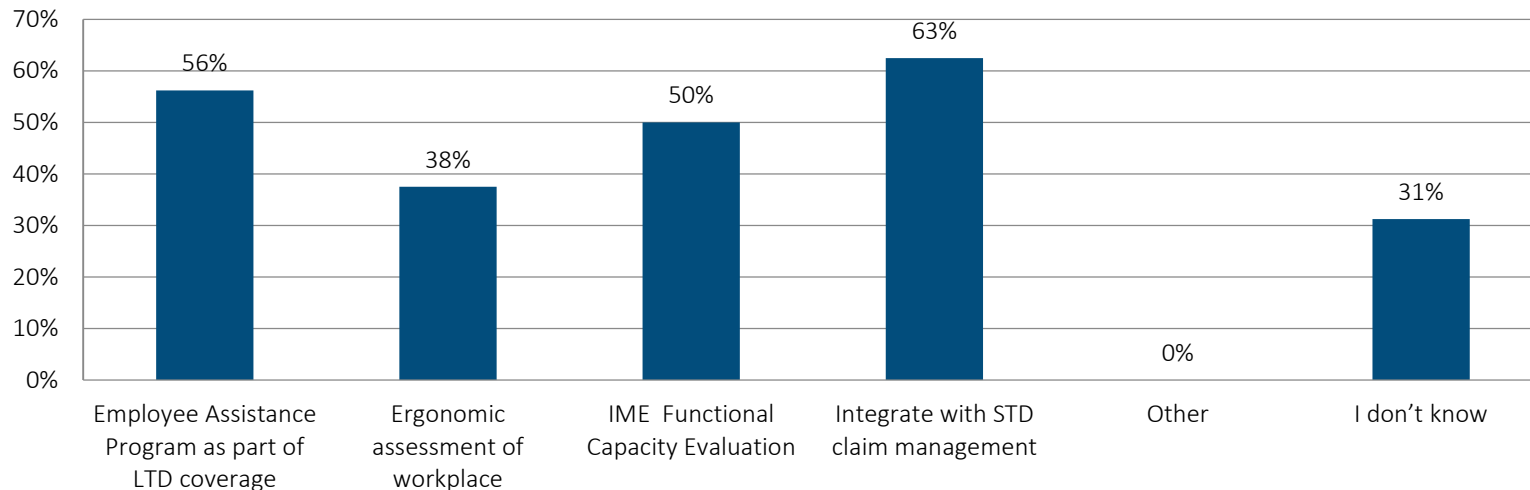
Question 21

What types of early intervention practices are you using in managing LTD claims? Select **ALL** that apply:

- a. Employee Assistance Program as part of LTD coverage
- b. Ergonomic assessment of workplace
- c. IME / Functional Capacity Evaluation
- d. Integrate with STD claim management
- e. Other
- f. I don't know

Question 21 Results

What types of early intervention practices are you using in managing LTD claims? Select ALL that apply:



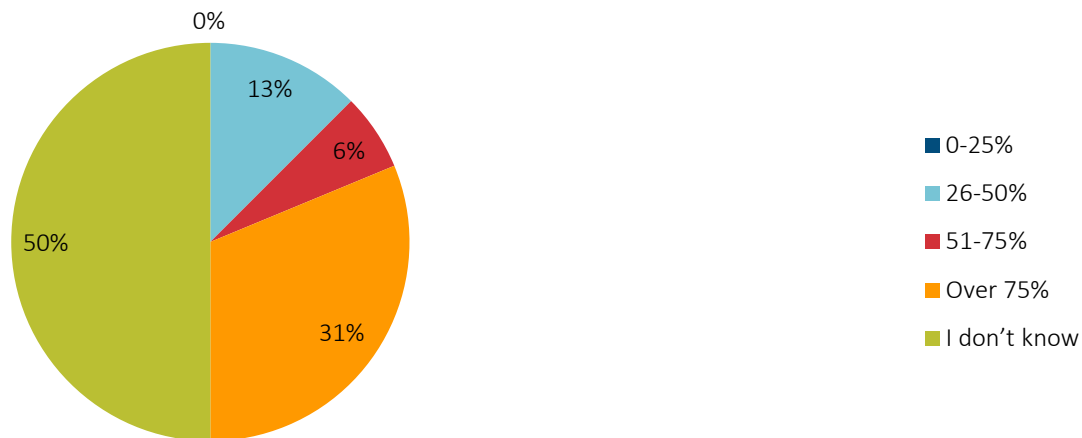
Question 22

How frequent is the use of these early intervention practices? Select **one**:

- a. 0-25%
- b. 26-50%
- c. 51-75%
- d. Over 75%
- e. I don't know

Question 22 Results

How frequent is the use of these early intervention practices?
Select one:



Roundtable Discussion Time



Premium Waiver

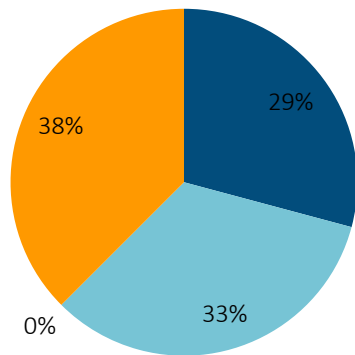
Question 23

How would you describe the trend towards coordinating the definitions of disability on Group Life waiver of premium and LTD plans? Select **one**:

- a. There has been no material change in the last 2-3 years
- b. There has been a trend towards making the definitions the same
- c. There has been a trend away from making the definitions the same
- d. I don't know

Question 23 Results

How would you describe the trend towards coordinating the definitions of disability on Group Life waiver of premium and LTD plans? Select one:



- There has been no material change in the last 2-3 years
- There has been a trend towards making the definitions the same
- There has been a trend away from making the definitions the same
- I don't know

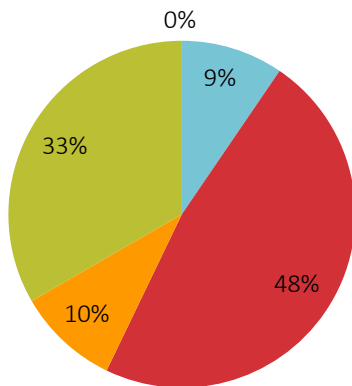
Question 24

Does your company coordinate the claims adjudication in situations where a claimant has both Life (with waiver of premium) and LTD coverages? Select **one**:

- a. No, there is not any claim coordination
- b. Yes, but only if the definitions of disability are the same
- c. Yes, there is always some degree of coordination
- d. We don't administer both Life and LTD claims
- e. I don't know

Question 24 Results

Does your company coordinate the claims adjudication in situations where a claimant has both Life (with waiver of premium) and LTD coverages? Select one:



- No, there is not any claim coordination
- Yes, but only if the definitions of disability are the same
- Yes, there is always some degree of coordination
- We don't administer both Life and LTD claims
- I don't know

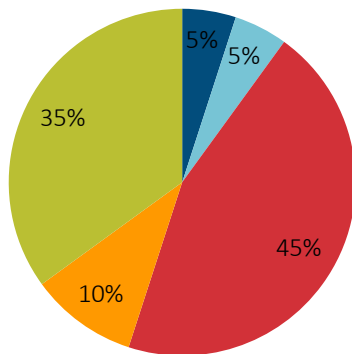
Question 25

Which of the following is true when calculating a **manual** rate for a Group Life plan with a waiver of premium provision that is cross-sold with an LTD plan? Select **one**:

- a. A rate discount is applied to the Group Life manual rate
- b. A rate load is applied to the Group Life manual rate
- c. No rating adjustment is applied
- d. Not applicable
- e. I don't know

Question 25 Results

Which of the following is true when calculating a manual rate for a Group Life plan with a waiver of premium provision that is cross-sold with an LTD plan? Select one:



- A rate discount is applied to the Group Life manual rate
- A rate load is applied to the Group Life manual rate
- No rating adjustment is applied
- Not applicable
- I don't know

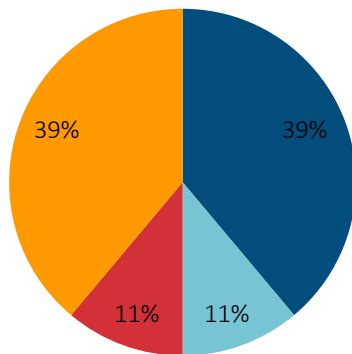
Question 26

Which of the following is true when calculating an **experience** rate for a Group Life plan with a waiver of premium provision that is (or will be) cross-sold with an LTD plan? Select one:

- a. No rating adjustment is applied
- b. We adjust to reflect any changes in the level of claim integration
- c. Not applicable
- d. I don't know

Question 26 Results

Which of the following is true when calculating an experience rate for a Group Life plan with a waiver of premium provision that is (or will be) cross-sold with an LTD plan? Select one:



- No rating adjustment is applied
- We adjust to reflect any changes in the level of claim integration
- Not applicable
- I don't know

Roundtable Discussion Time



Retiree Risk

Retiree Pricing Considerations

- There can be unique considerations for retiree risks
 - Open vs closed retiree groups
 - Retired vs disabled (particularly with early retirees)
 - Post-retirement “mortality spike”
 - Mortality rate slopes are generally steeper at retirement ages
 - Consider impact of age reduction schedules (or lack thereof!)
 - Shifts between active & retiree populations impact the aging dynamics
- Examples of shifting “cohort dynamics” on open retiree groups
 - Group-specific changing rates of retirement (e.g. early, delayed, “wave”)
 - Broader (societal) changes in average age at retirement
 - Plan design tightening or liberalization (esp. w/grandfathering)

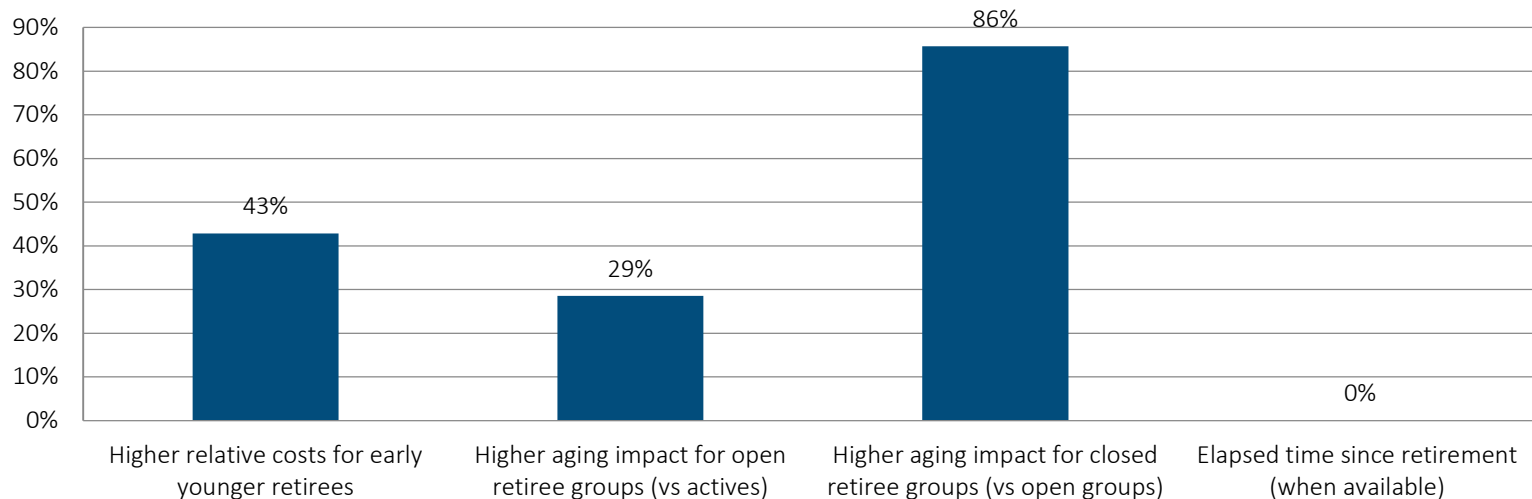
Question 27

Does your retiree life risk assessment process account for any of the following dynamics?
Select **ALL** that apply:

- a. Higher relative costs for early / younger retirees
- b. Higher aging impact for open retiree groups (vs actives)
- c. Higher aging impact for closed retiree groups (vs open groups)
- d. Elapsed time since retirement (when available)

Question 27 Results

Does your retiree life risk assessment process account for any of the following dynamics? Select ALL that apply:



Question 28

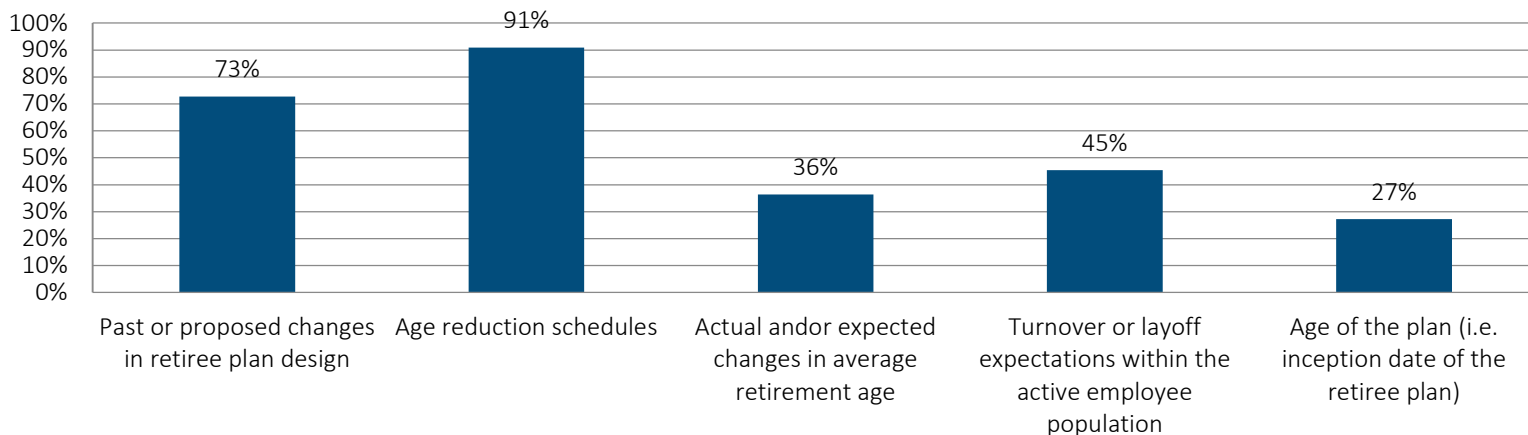
Which of the following considerations would factor into your evaluation of the potential aging impact for an open retiree group? Select **ALL** that apply:

- a. Past or proposed changes in retiree plan design
- b. Age reduction schedules
- c. Actual and/or expected changes in average retirement age
- d. Turnover or layoff expectations within the active employee population
- e. Age of the plan (i.e. inception date of the retiree plan)

Question 28 Results

Which of the following considerations would factor into your evaluation of the potential aging impact for an open retiree group?

Select ALL that apply:



Question 29

Which of the following best describes how you would evaluate the potential aging impact for a closed retiree group? Select **one**:

- a. We do not adjust for aging
- b. We use a high-level generalized assumption
- c. We model the expected case-specific impact
- d. We don't quote closed retiree groups
- e. I don't know

Question 29 Results

Which of the following best describes how you would evaluate the potential aging impact for a closed retiree group? Select one:



Roundtable Discussion Time



Societal Trends

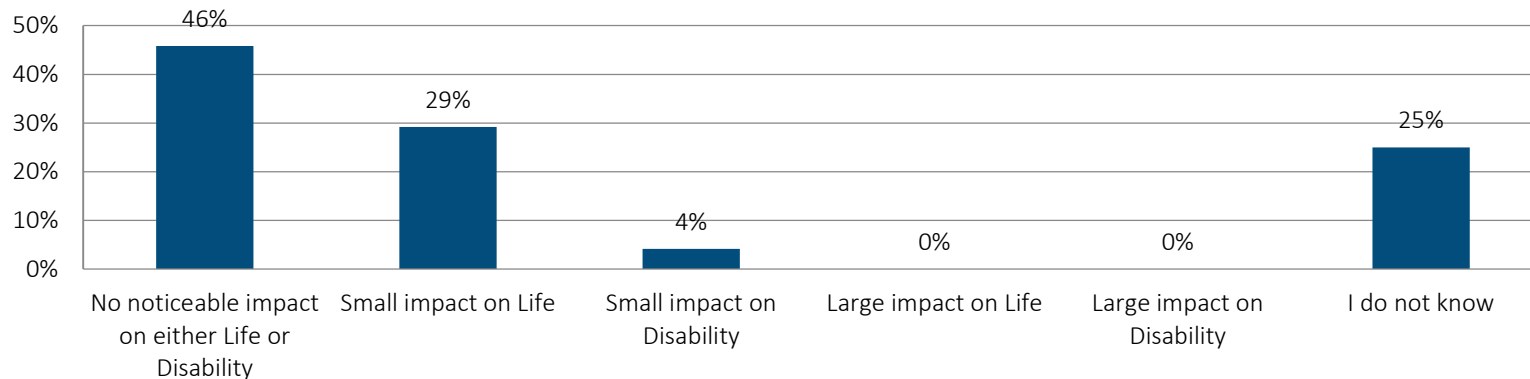
Question 30

The general population has seen a well-documented societal impact due to the so called "opioid crisis". Have you noticed a deterioration in Group Insurance claim experience as a result of this? Select **ALL** that apply:

- a. No noticeable impact on either Life or Disability
- b. Small impact on Life
- c. Small impact on Disability
- d. Large impact on Life
- e. Large impact on Disability
- f. I do not know

Question 30 Results

The general population has seen a well-documented societal impact due to the so called "opioid crisis". Have you noticed a deterioration in Group Insurance claim experience as a result of this? Select ALL that apply:



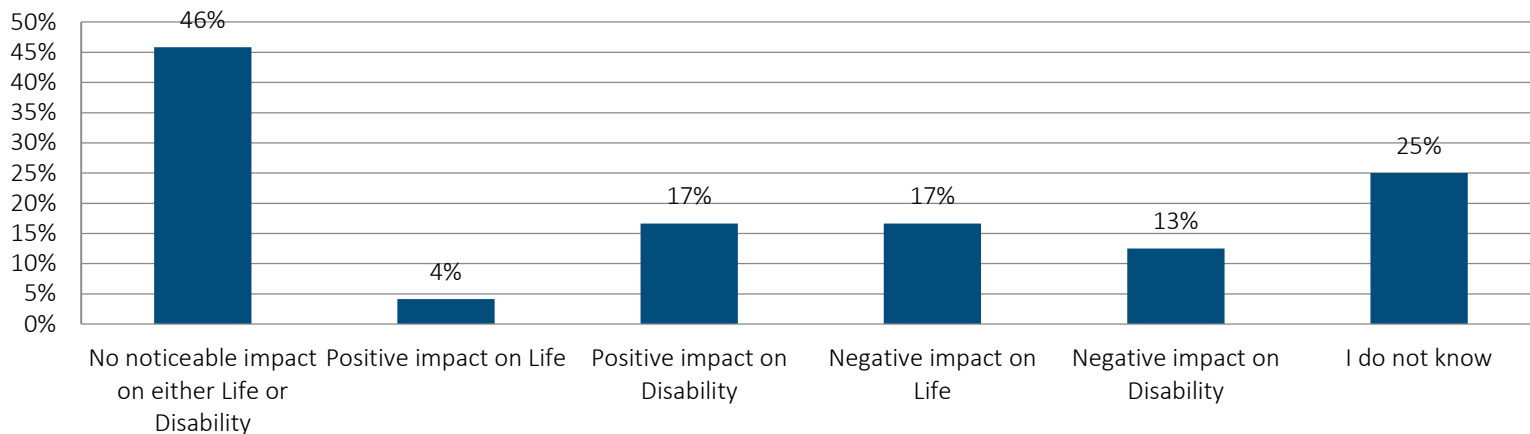
Question 31

The legalization of certain drugs, including marijuana, could have an impact on group insurance experience. Which best describes your view of the impact of this trend? Select **ALL** that apply:

- a. No noticeable impact on either Life or Disability
- b. Positive impact on Life
- c. Positive impact on Disability
- d. Negative impact on Life
- e. Negative impact on Disability
- f. I do not know

Question 31 Results

The legalization of certain drugs, including marijuana, could have an impact on group insurance experience. Which best describes your view of the impact of this trend? Select ALL that apply:



Question 32

Has the emergence of the “Gig Economy” (e.g. temporary, flexible work arrangements like Uber and TaskRabbit) changed your views on how insurers should approach the market for Group Insurance? Select **one**:

- a. Yes
- b. No
- c. I don't know

Question 32 Results

Has the emergence of the “Gig Economy” (e.g. temporary, flexible work arrangements like Uber and TaskRabbit) changed your views on how insurers should approach the market for Group Insurance?

Select one:



Roundtable Discussion Time



Experience Trends

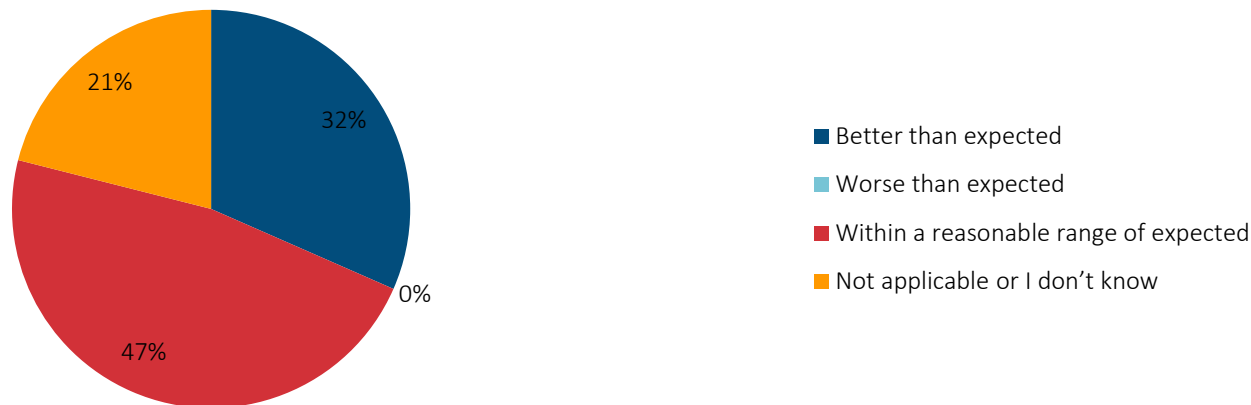
Question 33

How has your aggregate Group **Term Life** experience (excluding AD&D) performed over the last 3 years? Select **one**:

- a. Better than expected
- b. Worse than expected
- c. Within a reasonable range of expected
- d. Not applicable or I don't know

Question 33 Results

How has your aggregate Group Term Life experience (excluding AD&D) performed over the last 3 years? Select one:



Question 34

How has your aggregate Group **AD&D** experience performed over the last 3 years? Select one:

- a. Better than expected
- b. Worse than expected
- c. Within a reasonable range of expected
- d. Not applicable or I don't know

Question 34 Results

How has your aggregate Group AD&D experience performed over the last 3 years? Select one:



Question 35

How has your aggregate Group **Long-Term Disability** experience performed over the last 3 years? Select **one**:

- a. Better than expected
- b. Worse than expected
- c. Within a reasonable range of expected
- d. Not applicable or I do not know

Question 35 Results

How has your aggregate Group Long-Term Disability experience performed over the last 3 years? Select one:



Question 36

How has your aggregate Group LTD **overall claim termination** experience performed over the last 3 years? Select **one**:

- a. Better than expected
- b. Worse than expected
- c. Within a reasonable range of expected
- d. Not applicable or I do not know

Question 36 Results

How has your aggregate Group LTD overall claim termination experience performed over the last 3 years? Select one:



Question 37

How has your aggregate Group LTD **incidence rate** experience performed over the last 3 years? Select **one**:

- a. Better than expected
- b. Worse than expected
- c. Within a reasonable range of expected
- d. Not applicable or I do not know

Question 37 Results

How has your aggregate Group LTD incidence rate experience performed over the last 3 years? Select one:



Question 38

How has your aggregate Group LTD **SSDI approval rate** experience performed over the last 3 years? Select **one**:

- a. Better than expected
- b. Worse than expected
- c. Within a reasonable range of expected
- d. Not applicable or I do not know

Question 38 Results

How has your aggregate Group LTD SSDI approval rate experience performed over the last 3 years? Select one:



Roundtable Discussion Time



General Rating Trends

Question 39

Which of the following industry classifications does your current LIFE or DISABILITY rating process standardly use? Select **one**:

- a. Only SIC codes at this time
- b. Both NAICS and SIC codes
- c. Only NAICS codes at this time
- d. I don't know

Question 39 Results

Which of the following industry classifications does your current LIFE or DISABILITY rating process standardly use? Select one:



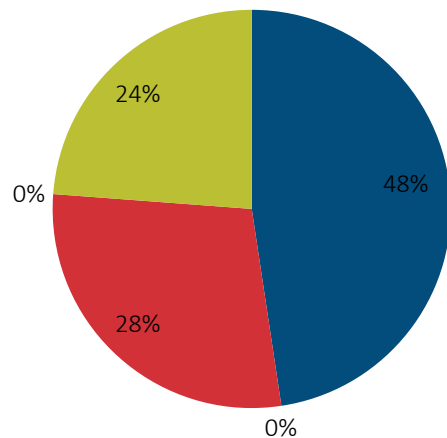
Question 40

Which best describes your standard process for handling industry and occupational classifications for **LIFE**? Select **one**:

- a. We vary manual rates by industry only
- b. We vary manual rates by occupation only
- c. We vary manual rates by both industry and occupation
- d. We do not vary manual rates by either industry or occupation
- e. I don't know

Question 40 Results

Which best describes your standard process for handling industry and occupational classifications for LIFE? Select one:



- We vary manual rates by industry only
- We vary manual rates by occupation only
- We vary manual rates by both industry and occupation
- We do not vary manual rates by either industry or occupation
- I don't know

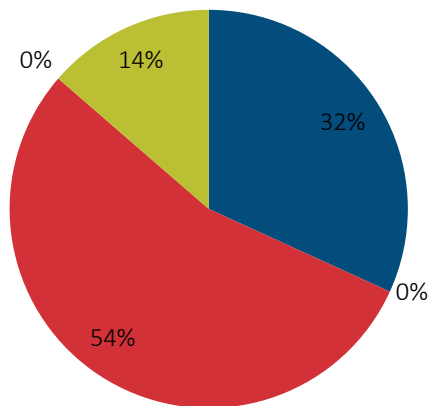
Question 41

Which best describes your standard process for handling industry and occupational classifications for **DISABILITY**? Select **one**:

- a. We vary manual rates by industry only
- b. We vary manual rates by occupation only
- c. We vary manual rates by both industry and occupation
- d. We do not vary manual rates by either industry or occupation
- e. I don't know

Question 41 Results

Which best describes your standard process for handling industry and occupational classifications for DISABILITY? Select one:



- We vary manual rates by industry only
- We vary manual rates by occupation only
- We vary manual rates by both industry and occupation
- We do not vary manual rates by either industry or occupation
- I don't know

Question 42

Does your LTD rate manual adjust for future economic outlook? Select **one**:

- a. No
- b. Yes via the industry rating factor
- c. Yes via a separate rating adjustment
- d. Other
- e. I don't know

Question 42 Results

Does your LTD rate manual adjust for future economic outlook?
Select one:



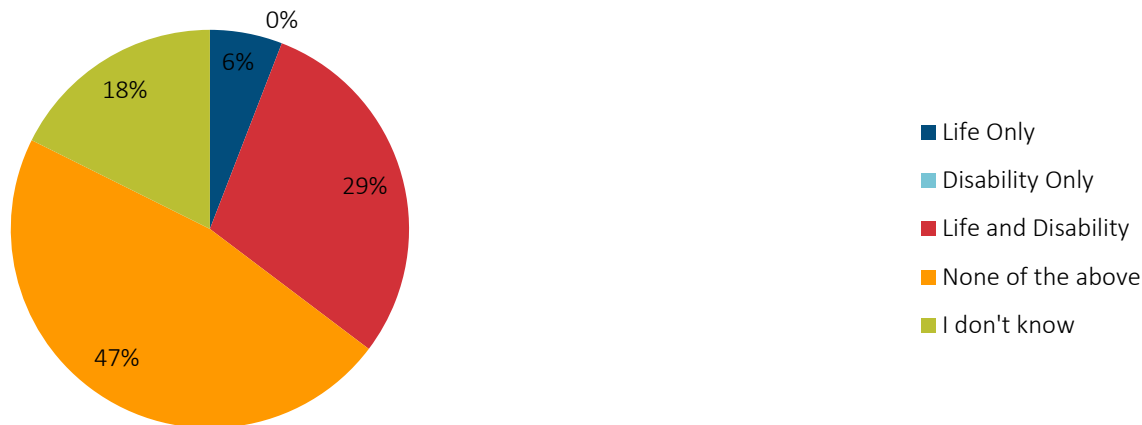
Question 43

Does your Life and/or LTD rate manual allow for underwriting discretion with respect to mortality and/or morbidity? Select **one**:

- a. Life Only
- b. Disability Only
- c. Life and Disability
- d. None of the above
- e. I don't know

Question 43 Results

Does your Life and/or LTD rate manual allow for underwriting discretion with respect to mortality and/or morbidity? Select one:



Roundtable Discussion Time



Predictive Modeling

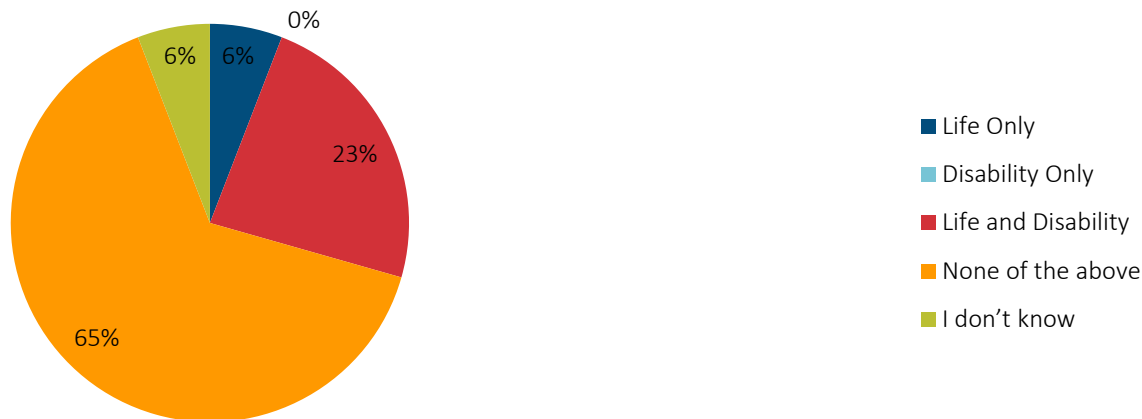
Question 44

Predictive modeling is currently reflected in our **rating** process for which of the following products? Select **one**:

- a. Life Only
- b. Disability Only
- c. Life and Disability
- d. None of the above
- e. I don't know

Question 44 Results

Predictive modeling is currently reflected in our rating process for which of the following products? Select one:



Question 45

Has predictive modeling been “predictive” for pricing purposes? Select **one**:

- a. Life Only
- b. Disability Only
- c. Life and Disability
- d. Inconclusive or too early to tell
- e. None of the above
- f. I don't know

Question 45 Results

Has predictive modeling been “predictive” for pricing purposes?
Select one:



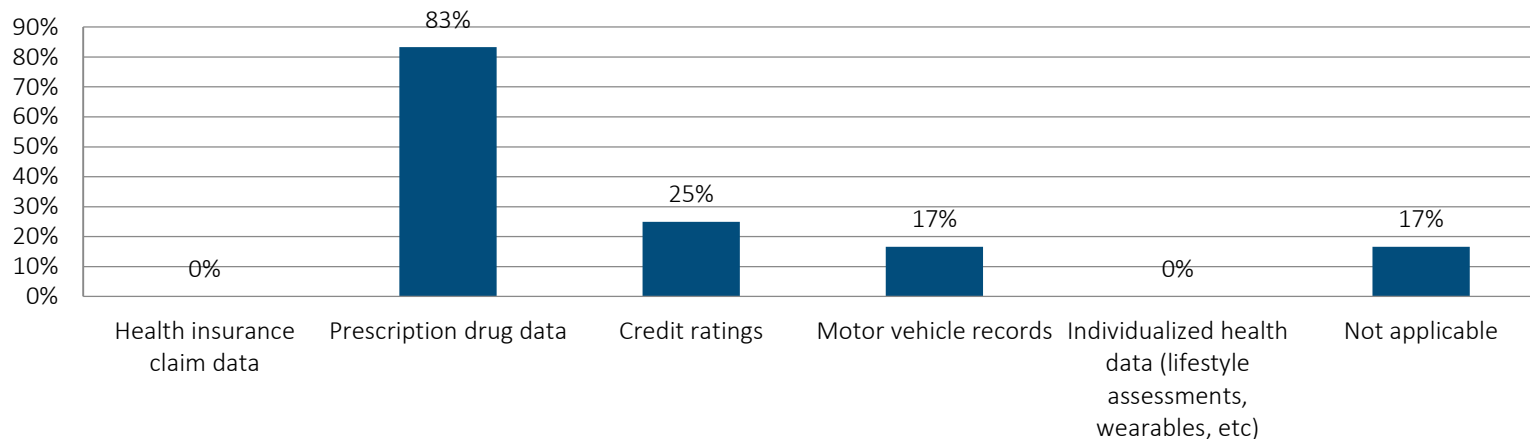
Question 46

Which of the following sources of data have you found to be helpful in predicting future **group life** mortality experience? Select **ALL** that apply:

- a. Health insurance claim data
- b. Prescription drug data
- c. Credit ratings
- d. Motor vehicle records
- e. Individualized health data (lifestyle assessments, wearables, etc)
- f. Not applicable

Question 46 Results

Which of the following sources of data have you found to be helpful in predicting future group life mortality experience? Select ALL that apply:



Question 47

Which of the following sources of data have you found to be helpful in predicting future **group disability** morbidity experience? Select **ALL** that apply:

- a. Health insurance claim data
- b. Prescription drug data
- c. Credit ratings
- d. Motor vehicle records
- e. Individualized health data (lifestyle assessments, wearables, etc)
- f. Not applicable

Roundtable Discussion Time





Legal notice

©2018 Swiss Re. All rights reserved. You are not permitted to create any modifications or derivative works of this presentation or to use it for commercial or other public purposes without the prior written permission of Swiss Re.

The information and opinions contained in the presentation are provided as at the date of the presentation and are subject to change without notice. Although the information used was taken from reliable sources, Swiss Re does not accept any responsibility for the accuracy or comprehensiveness of the details given. All liability for the accuracy and completeness thereof or for any damage or loss resulting from the use of the information contained in this presentation is expressly excluded. Under no circumstances shall Swiss Re or its Group companies be liable for any financial or consequential loss relating to this presentation.